

**NOT MEASUREMENT
SENSITIVE**

**MIL-HDBK-248B
9 FEBRUARY 1989**

**SUPERSEDING
DOD-HDBK-248A
15 OCTOBER 1979**

MILITARY HANDBOOK

ACQUISITION STREAMLINING



AMSC D4639

AREA MISC

DISTRIBUTION STATEMENT A: Approved for public release, distribution is unlimited.

MIL-HDBK-248B

FOREWORD

1. This military handbook is approved for use by all Departments and Agencies of the Department of Defense.

2. Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be used in improving this document should be addressed to: Commanding Officer, Naval Air Engineering Center, Systems Engineering and Standardization Department (53), Lakehurst, NJ 08733-5100, by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

3. This handbook implements the policies of DOD Directive 5000.43, "Acquisition Streamlining," 15 January 1986. Its purpose is to prescribe uniform procedures for program managers in applying this policy during system acquisition.

4. The provisions of this handbook apply to the Office of the Secretary of Defense (OSD), the Military Departments, the Organization of the Joint Chiefs of Staff, the Unified and Specified Commands, the Defense Agencies, and activities administratively supported by OSD (hereafter called "DOD Components").

5. Heads of DOD Components may issue supplementary instructions only when necessary to provide for unique requirements within their respective Components. All supplementary instructions are to be listed as subsidiary handbooks to DOD-HDBK-248B (i.e., MIL-HDBK-248B/1 (Army), etc.).

MIL-HDBK-248B

CONTENTS

		<u>Page</u>
Paragraph 1.	SCOPE	1
1.1	Scope	1
1.2	Purpose	1
1.3	Abstract	1
2.	APPLICABLE DOCUMENTS	2
2.1	Government documents	2
2.1.1	Specifications, standards, and handbooks	2
2.1.2	Other Government documents, drawings, and publications	2
2.2	Order of precedence	4
3.	DEFINITIONS	5
3.1	Acronyms used in this handbook	5
4.	INTRODUCTION TO STREAMLINING	6
4.1	Common sense approach	6
4.2	Needs - the basis for system performance requirements	6
4.2.1	Documentation	6
4.3	User-pull and technology-push requirements	7
4.4	Requirements calling for materiel solution	7
5.	PERFORMANCE REQUIREMENTS	8
5.1	Developing requirements	8
5.1.1	Types of requirements	8
5.1.2	Functional requirements	8
5.1.2.1	Operational requirements	8
5.2	Importance of tradeoff studies	9
5.3	Environmental requirements	10
5.4	Developing recommendations	11
5.5	Balance between cost/performance	12
5.6	Design requirements	12
5.6.1	Application and tailoring of military specifica- tions and standards	12
5.7	Summary of program manager's considerations	13
5.7.1	Some cautions	13
6.	THE TECHNICAL PROCUREMENT PACKAGE	15
6.1	Technical procurement package	15
6.2	Approach to structuring the technical procurement package	15
6.2.1	Characteristics of technical procurement packages ..	15
6.2.2	Preparation checklist for technical data procure- ment packages	15
6.3	Defining technical requirements	16
6.3.1	Using specifications, standards, and related documents	17
6.3.2	Team approach	18

CONTENTS (continued)

		<u>Page</u>
Paragraph 6.3.2.1	Use contractor ingenuity and experience	18
6.3.2.2	Government responsibilities	18
6.3.2.3	Benefits	18
6.4	Developing program specifications	18
6.4.1	Concept Exploration and Demonstration and Validation	18
6.4.2	Full-Scale Development	20
6.4.3	Production	20
6.5	Summary of Program Manager responsibilities	21
6.5.1	Review technical procurement package	21
6.5.2	Schedule	21
6.5.3	Planning	21
7.	CONTRACTUAL REQUIREMENTS	22
7.1	Contracting overview	22
7.2	What is different about streamlined acquisition contracting?	22
7.3	The contract business strategy	22
7.3.1	Solicitation process	23
7.3.1.1	Contract terms	23
7.3.1.2	Cost-benefit analysis	23
7.3.1.3	Develop the solicitation in terms of need	24
7.3.1.4	Encourage challenges	24
7.3.2	Other streamlining provisions and clauses	24
7.3.2.1	Incentives	25
7.3.3	Necessary program office involvement	25
7.3.3.1	Specialized pricing support	26
7.3.4	Best-value source selection	26
7.3.4.1	Assuring source-selection fairness	26
7.3.4.1.1	Providing information to contractors	26
7.3.4.1.2	Alternative proposals	26
7.3.4.1.3	Source-selection procedures	27
7.3.4.2	Avoiding technical leveling	27
7.3.5	Best-value contract performance	27
7.3.5.1	Incentives and guarantees	27
7.3.5.1.1	Incentive/shared savings provision	27
7.3.5.1.2	Subcontract sharing provisions	28
7.3.5.1.3	Warranties	28
7.3.6	Conducting tradeoffs and relaxing requirements	28
7.3.6.1	Tradeoffs provided by offerors	28
7.3.6.2	Interpreting and complying with contract requirements	28
8.	STREAMLINING TOOLS AND TECHNIQUES	29
8.1	General	29
8.2	Acquisition streamlining tools	29
8.2.1	Requirements discipline	29
8.2.2	Market analysis	30
8.2.2.1	Market surveillance/investigation	30

CONTENTS (continued)

		<u>Page</u>
Paragraph 8.2.3	Independent feasibility studies	30
8.2.4	Postaward contract requirements review	31
8.2.5	Specification tailoring	31
8.2.5.1	Computer-assisted document preparation	31
8.2.5.1.1	Computer Generated Acquisition Documents System (CGADS)	32
8.2.5.1.2	Technical and Managerial Support Environment (TEMSE) Docwriter	32
8.2.5.1.3	Automated Specifications and Standards Information System (ASSIST)	32
8.3	Technical data application and tailoring	33
8.3.1	Tiger teams	33
8.4	Streamlining alternative to value engineering	33
8.5	RFP techniques	33
8.5.1	Draft RFP and preproposal briefings	34
8.5.2	Requests for alternative proposals	34
8.5.3	RFP executive summary	34
8.6	Streamlined source selection	34
8.7	Best-value contracting	35
8.7.1	Best-value with performance specification	35
8.7.2	Best-value demonstration	35
8.8	Acquisition streamlining responsibilities	36
9.	CASE STUDIES	38
9.1	Case studies	38
9.2	Initiating a new program	38
9.2.1	AAWS-M program description	38
9.2.2	Streamlining techniques, AAWS-M program	38
9.3	Tailoring specifications early	40
9.3.1	C-17 program description	40
9.3.2	Specification-tailoring approach	40
9.3.3	Streamlining techniques, C-17 program	41
9.4	Preparing for full-scale development	41
9.4.1	T-45 program description	42
9.4.2	Streamlining techniques, T-45 program	42
10.	NOTES	44
10.1	Intended use	44
10.2	Data requirements	44
10.3	Subject term (keyword) listing	44

FIGURES

		<u>Page</u>
Figure	1.	Illustrative cost-performance curves 9
	2.	Illustrative performance-performance curves 11
	3.	Defining technical requirements 16
	4.	Solicitation, provisions and contract clauses 60
	5.	SOW provision for acquisition streamlining 61
	6.	Data Item Description form 67
	7.	Award fee allocation by period 75
	8.	Award fee application chart 80

TABLES

Table	I.	Evolution of system specifications 19
	II.	Statement of work provision 24
	III.	Contract emphasis 25
	IV.	Acquisition streamlining tools 29
	V.	Methodology for the application and tailoring of technical data 33
	VI.	Responsibilities for acquisition streamlining 36
	VII.	Sample format for streamlining initiatives 86
	VIII.	Approval form 87

APPENDIXES

Appendix	A.	Methods of applying and tailoring specifications and standards, management systems and technical data 46
	B.	Acquisition streamlining contract clause, statement of work provision, and data item description 59
	C.	Sample acquisition streamlining award fee clause and plan 69
	D.	Acquisition streamlining Tiger Team charter 81
	E.	Acquisition streamlining initiative provision 89

MIL-HDBK-2488

1. SCOPE

1.1 Scope. This handbook provides guidance information pertaining to the implementation of Department of Defense acquisition streamlining policies as directed by DODD 5000.43.

1.2 Purpose. The purpose of acquisition streamlining is to promote innovative and cost-effective acquisition requirements and acquisition strategies that will result in the most efficient utilization of resources to produce quality weapons systems and products.

Acquisition streamlining is based on the concept that by applying pertinent contract requirements and allowing early industry involvement in recommending the most cost-effective solutions, the Department of Defense can reduce the cost and time of system acquisition and life cycle cost without degrading system effectiveness.

1.3 Abstract. The handbook is sectionalized with the text beginning with Section 4, Introduction to Streamlining, followed by three Sections (5, 6, 7) which describe how to formulate performance requirements, structure the program's technical data package, and implement contractual requirements. Section 8, then, describes streamlining tools and techniques and ways to shorten the acquisition process and reduce acquisition cost. Section 9 presents case studies that demonstrate acquisition streamlining policies, principles, and management tools and approaches. Appendix A describes methods of applying and tailoring specifications and standards, management systems, and technical data. Appendix B presents the acquisition streamlining contract clause contained in the DFARS, a contractual statement of work provision for acquisition streamlining, and a data item description. Appendix C presents a sample acquisition streamlining award fee clause and plan and Appendix D presents a charter and operating procedures for an acquisition streamlining Tiger Team. Appendix E presents an acquisition streamlining initiative provision that expedites payment under value engineering for contractor recommendations.

2. APPLICABLE DOCUMENTS

2.1 Government documents.

2.1.1 Specifications, standards, and handbooks. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, and are referenced for guidance only.

SPECIFICATIONS

MILITARY

MIL-S-83490 Specification, Types and Forms.

STANDARDS

MILITARY

MIL-STD-480 Configuration Control-Engineering Changes, Deviations and Waivers.

MIL-STD-490 Specification Practices.

MIL-STD-881 Work Breakdown Structures for Defense Materiel Items.

MIL-STD-961 Military Specifications and Associated Documents, Preparation of.

MIL-STD-962 Military Standards, Handbooks, and Bulletins, Preparation of.

MIL-STD-970 Standards and Specifications, Order of Preference for the Selection of.

(Unless otherwise indicated, copies of federal and military specifications, standards and handbooks are available from the Naval Publications and Forms Center (Attn: NPODS), 5801 Tabor Avenue, Philadelphia, PA 19120-5099.)

2.1.2 Other Government documents, drawings, and publications. The following other Government documents, drawings, and publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those in effect on the date of this Military Handbook and are identified for guidance only.

Federal Acquisition Regulation,
Part 1.602-2

Contracting Officers Responsibilities.

Federal Acquisition Regulation
Part 7.104

Acquisition Plans, General Procedures.

Federal Acquisition Regulation Part 15.6	Source Selection.
Federal Acquisition Regulation Part 27.401	Rights in Data and Copyrights.
Federal Acquisition Regulation Part 52.248	Value Engineering Clauses.
DOD Federal Acquisition Regulation Supplement, Part 7.103(f)	Agency-Head Responsibilities, Program Manager.
DOD Federal Acquisition Regulation Supplement, Part 27.475	Acquisition of Rights in Technical Data.
DOD Federal Acquisition Regulation Supplement, Subpart 46.7	Warranties.
DOD Federal Acquisition Regulation Supplement, Part 46.770-8	Cost-benefit Analysis.
DOD Federal Acquisition Regulation Supplement, Part 52.210-7005	Acquisition Streamlining.
DOD Directive 4105.62	Selection of Contractual Sources for Major Defense Systems.
DOD Directive 4120.3	Defense Standardization and Specifica- tion Program.
DOD 4120.3-M	Defense Standardization Manual.
DOD Instruction 4120.19	DOD Parts Control Program.
dod Instruction 4120.20	Use of Non-Government Specifications and Standards.
DOD Directive 4245.3	Design to Cost.
DOD Directive 4245.7	Transition from Development to Production.
DOD 4245.7-M	Transition from Development to Production Manual.
DOD Directive 4245.8	DOD Value Engineering Program.
DOD Directive 5000.1	Major Systems Acquisition.
DOD Instruction 5000.2	Major Systems Acquisition Procedures.

MIL-HDBK-248B

DOD Directive 5000.19	Policies for the Management and Control of Information Requirements.
DOD Instruction 5000.36	System Safety Engineering and Management.
DOD Directive 5000.37	Acquisition and Distribution of Commercial Products.
DOD Directive 5000.43	Acquisition Streamlining.
DOD Directive 5000.45	Baselining of Selected Major Systems.
DOD Instruction 5010.12	Management of Technical Data.
DOD 5010.12-L	Acquisition Management Systems and Data Requirements Control List (AMSDEL).
DOD Directive 5010.19	Configuration Management.

Copies of other Government documents required by contractors in connection with specific acquisition functions should be obtained from the contracting activity or as directed by the contracting activity. The documents listed may be obtained as follows:

- a. Copies of Federal Acquisition Regulations (FAR), and DOD Federal Acquisition Regulation Supplements (DFARS) are available from the Superintendent of Documents, U. S. Government Printing Office, Washington, DC 20402.
- b. Copies of DOD Instructions, DOD Directives, manuals and DOD 5010.12-L are available from the Department of Defense Single Stock Point, Commanding Officer, Naval Publications and Forms Center, 5801 Tabor Avenue, Philadelphia, PA 19120-5099.

2.2 Order of precedence. In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

MIL-HDBK-2488

3. DEFINITIONS

3.1 Acronyms used in this handbook. The acronyms used in this handbook are defined as follows:

AAWS-M	- Advanced Antitank Weapon System - Medium.
AMC	- Army Materiel Command.
ASD	- Aeronautical Systems Division.
AMSDL	- Acquisition Management Systems and Data Requirements Control List.
ASRB	- Acquisition Streamlining Review Board.
ASSIST	- Automated Specifications and Standards Information System.
BMO	- Ballistic Missile Office.
CDRL	- Contract Data Requirements List.
CE	- Concept Exploration.
CGADS	- Computer Generated Acquisition Documents System.
DPC	- Decision Coordinating Paper.
DEVAL	- Demonstration and Validation.
DFARS	- DOD Federal Acquisition Regulation Supplement.
DID	- Data Item Description.
DODD	- DOD Directive.
DODISS	- DOD Index of Specifications and Standards.
DRRB	- Data Requirements Review Board.
DSB	- Defense Science Board.
DSSP	- Defense Standardization and Specification Program.
ECP	- Engineering Change Proposal.
ESD	- Electronics System Division.
FAR	- Federal Acquisition Regulation.
FDO	- Fee Determination Official.
FFP	- Firm-Fix Price.
FSD	- Full-Scale Development.
IOC	- Initial Operational Capability.
IPS	- Integrated Program Summary.
MIL-HDBK	- Military Handbook.
MIL-SPEC	- Military Specification.
MIL-STD	- Military Standard.
NAEC	- Naval Air Engineering Center.
NAVAIR	- Naval Air Systems Command.
NDI	- Nondevelopmental Item.
NGS	- Non-Government Standard.
OMB	- Office of Management and Budget.
O&S	- Operating and Support.
PCO	- Procuring Contracting Officer.
P3I	- Preplanned Product Improvement.
RFP	- Request for Proposal.
SCP	- System Concept Paper.
SD	- Space Division.
SOW	- Statement of Work.
TEMSE	- Technical and Managerial Support Environment.
T45TS	- T45 Jet Flight Training System.
WBS	- Work Breakdown Structure.

4. INTRODUCTION TO STREAMLINING

4.1 Common sense approach. Acquisition streamlining is a common-sense approach to making DOD's acquisition programs more efficient and effective. Its ultimate goal, as stated in DOD Directive (DODD) 5000.43, is to reduce the cost and time it takes to field operationally suitable weapons systems and acquire their supporting services.

Acquisition streamlining is intended to provide a framework for meeting that goal. It deals with requirements definition, the use of specifications and standards, and contracting. The great potential of streamlining to ensure effectiveness in acquisition can only be realized if you, the program manager, fully integrate streamlining procedures into the weapons system development process; streamlining cannot be effective if you add it at the end of the process. You must make it an integral element of the program approach during the definition of requirements, the development of the acquisition strategy, the translation of that strategy to a contract, and the management of the contract, during the entire acquisition process.

This handbook is prepared to help you meet the goal of reducing cost and time while providing workable systems to the field. Not only can it help you, it can guide the entire acquisition community (contracting officer, legal officer, engineer, logistician, etc.) in applying the principles of streamlining to individual programs. It is particularly useful to those program office personnel who focus on specific acquisition functions (e.g., specification development, contracting, configuration management) at specific times in the life of the program.

Streamlining is not the only process designed to encourage effectiveness in the acquisition process. Baselineing (DODD 5000.45), value engineering (DODD 4245.8), design to cost (DODD 4245.3), data management (DOD Instruction, DODI 5010.12), and acquisition of commercial products and nondevelopmental items (DODD 5000.37) are comparable processes that you must consider. Those processes do not conflict; rather, they tend to reinforce one another. None should be considered more important than the real goal of the acquisition process: the efficient and effective acquisition of weapons systems that meet military operational objectives.

4.2 Needs - The basis for system performance requirements. User-defined needs initiate the acquisition process. In this handbook, we define need as the result of a mission area analysis; an analysis that considers such factors as threat, mission deficiencies, military strategy, operational concepts, and technology. The needs that result from such an analysis do not dictate a specific design solution; rather they permit enough flexibility for alternative solutions to be applied (including those that do not involve new development).

4.2.1 Documentation. Needs are documented to justify starting a new program. Documentation identifies the mission area and specific mission element need, including the basis of the need (such as changes in the threat); summarizes existing and planned capabilities; and discusses funding implications, such as affordability and gross cost estimates. It describes alternative concepts to be considered, including product improvements, and the

MIL-HDBK-2488

maturity and risk associated with the technology involved. If an alternative has been selected, the reasons for rejecting other alternatives are described and further tradeoffs that remain for the selected alternative are noted. The documentation also describes constraints, especially key boundary conditions for satisfying the need, that establish goals and thresholds and their priority. Providing such constraints allows for subsequent tradeoffs among the goals, if necessary, as the program matures. The documentation also describes any constraints arising from survivability, security, threat projections, operational support, logistics and manpower, computer resources, standardization and interoperability, and critical material and industrial base resources.

Once these needs are documented, approved, and funded, they become the initial functional requirements for your program, the system operational requirements and related environmental requirements stated in terms of desired performance for the system.

4.3 User-Pull and Technology-Push requirements. Analysis can identify fundamental deficiencies in mission areas or specific weapon systems and can lead to both the upgrading of existing systems and the fielding of entirely new systems and technologies. Often the terms requirements pull and technology push are used to describe this process. Requirements pull tends to be more evolutionary with the users identifying a need for an improved system or capability and requesting an engineering program to develop such an improvement. In contrast, technology push tends to be more revolutionary; a breakthrough in technology may, for example, give the capability to build a system beyond the imagination of the user. (The Manhattan Project for development of the atomic bomb is a classic technology push example.) Most systems tend to be a combination of the pull and push methods and both need to be used.

4.4 Requirements calling for a materiel solution. Before a system development is initiated, the potential for satisfying user needs and system operational requirements through changes in operations (i.e., tactics, doctrine, and/or training) must be assessed. If the mission need is found to require a materiel solution, a modification or improvement to an existing system (product improvement) should be considered; if that is not possible, the use of a nondevelopmental item (NDI) should then be considered. New development should be pursued only after those alternatives are explored.

Product improvement offers an alternative to the procurement of NDI or initiation of new development programs, an extension of the life of an existing weapons system, and a reduction in operating and support (O&S) costs. NDI are often available from a variety of sources and require little or no further development effort. They include materiel developed and in use by other U.S. Military Services or Government agencies, materiel developed and in use by other countries, and commercially available products. Using NDI can shorten acquisition time by eliminating most development steps within the acquisition process.

5. PERFORMANCE REQUIREMENTS

5.1 Developing requirements. In this section, the evolution of an operational need to a statement of capability and performance requirements that express the need in a documented form (specification) suitable for contractual application, will be discussed. As program manager, you do not determine the need but, rather, work with the user in an iterative process to define affordable requirements that will best satisfy it. You must strive to define those requirements that represent the best value, that is, those that best balance cost and performance.

5.1.1 Types of requirements. You may have to deal with several types of system performance requirements. Functional requirements are those derived directly from the statement of need. They include both system operational requirements and environmental requirements, which define the expected performance and the circumstances under which that performance must be attained. Functional requirements are the basis for the analysis that leads to design requirements (performance parameters such as speed and range as well as special considerations such as human factors, reliability, and maintainability) and then to specific contractual statements of work (SOWs).

Your knowing where, when, why, and how all the requirements originate is fundamental to any attempt to streamline them. A key message of this chapter is the need for an audit trail for clear documentation of the reason for each aspect of the requirements used in the development or production contract. Without that knowledge, you cannot rationally trade off requirements.

5.1.2 Functional requirements.

5.1.2.1 Operational requirements. It is useful here to repeat that as program manager you must work iteratively with the users to define the functional requirements that will best serve their needs. From that iterative process comes a system operational requirement, and it then leads to a general system specification expressed in terms of specific performance measures, operations concepts, and support concepts.

One of the major points of acquisition streamlining is that you should never permit this specification to be fixed or frozen in the early phases of a program. Instead, you should identify the various performance parameters as either goals (desirable attributes) or thresholds (vital attributes) so that tradeoffs can be made on the basis of cost and risk analysis as a program matures. You should provide the development community (industry, Government laboratory, etc.) with the rationale for these parameters and, where possible, an acceptable performance range for the key system performance requirements. With that information, the community will have a better understanding of the need and a greater insight into where tradeoffs can reasonably be made. This understanding and insight is especially critical during the initial phases of development.

Functional requirements must be documented to provide this understanding. The original need statement must be revised to provide more detail on the specific system alternatives that are under consideration and to incorporate details of emerging operating and support concepts. The revised documents are then

MIL-HDBK-2488

further updated on the basis of tradeoffs. Continually updating these documents enhances the audit trail as the program matures.

5.2 Importance of tradeoff studies. Tradeoff studies are the key to defining best-value requirements. You must identify cost-performance alternatives and system-performance values, especially those alternatives that require new technical approaches or new technologies. Tradeoffs should incorporate risk analysis; the process of subjectively determining whether performance, schedule, safety, supportability and cost should be attained as defined in DODD 4245.7, "Transition from Development to Production," and in DoD Instruction (DODI) 5000.36, "System Safety Engineering and Management." Tradeoffs should also incorporate design-to-cost goals, as defined in DODD 4245.3, "Design to Cost." Tradeoff studies should be continued throughout the acquisition process.

Both the user and developer must know the points at which added cost does not buy an equivalent value in added capability. You must evaluate each major parameter alone and in combination with others to determine the effect that an increase in performance has on cost. Then you can choose those requirements that offer the best value.

The notional plots in Figures 1 and 2 show two types of simplified tradeoffs; in the first, a single performance factor (energy adsorption) is plotted as a function of cost, and in the other, a performance factor (range) is plotted as a function of another performance factor (payload).

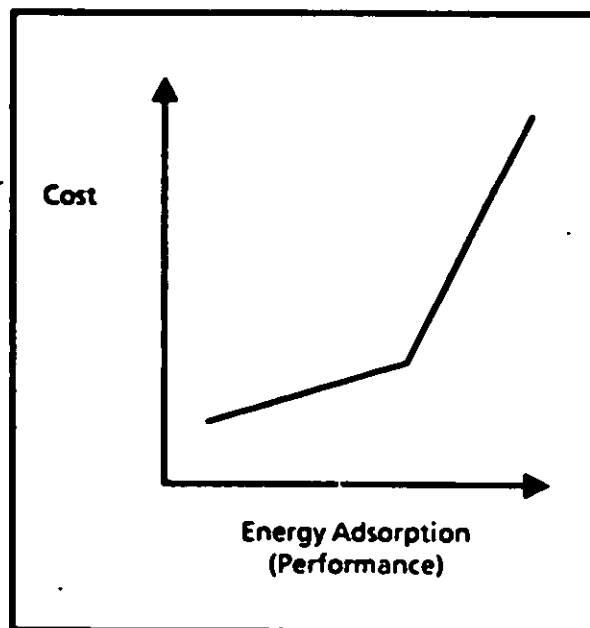


FIGURE 1. Illustrative cost-performance curves.

To understand Figure 1, consider a situation in which armor plating is a fairly linear function. To stop a more powerful bullet, a design requirement will exist for thicker armor at a predictably increasing cost. However, at a certain point, additional armor cannot simply be added (say, for example, the weight can no longer be supported by the chassis) and another solution must be sought. The solution could take many forms, possibly a change of material to a special alloy or even a change to a stronger chassis. What is clear is that a breakpoint exists in the performance-cost curve, the linear plot for more armor at a predictable cost just ended and the curve has a new slope that depends on which solution is chosen.

As program manager, you need a similar cost-performance plot of each major technical parameter to have enough information for an intelligent tradeoff decision. A program with several of its system operational requirements at or near curve inflection points is extremely sensitive to changes in the threat or in other program factors, especially cost and schedule. You can compare any one characteristic (parameter) on a similar two-dimensional chart with many others. What may seem optimal on one chart of this sort may imply a poor choice on the basis of some other relationship.

Figure 2 shows three notional plots of range versus payload, with cost and other performance variables held constant. The shape of such curves can take many forms depending on the system design and performance parameters. The important fact is that they are probably not linear and indeed can have very sharp inflection points (as the upper curve does). These points may be optimums if they are based on sound data. One of the most famous examples of such a curve was the B-36 curve of the early 1950s, which showed that the aircraft was at a technical limit and a very small increase in range would require a doubling of the aircraft size in order to carry the additional fuel and maintain the payload.

5.3 Environmental requirements. Inherent in the user's statement of a "job to be done" is the environment in which it must be done. Environmental requirements and constraints can be some of the toughest problems you must deal with, often because of the way they are generated. These problems are highly susceptible to worst-case analysis, and often the combination of worst cases, selecting the most demanding design requirement from each analysis, unnecessarily increases program costs.

Historically, many programs have merely extracted extremes of weather conditions from the user's needs documentation and listed them all as the system's environmental requirements. For example, consider the case in which an item being built has a small probability of being used in temperatures as low as -60 degrees Fahrenheit and a much higher probability of being used in a temperate climate. Rather than ask for 100 percent performance at -60 degrees Fahrenheit, it may be adequate to accept a 20 or 30 percent degradation at very low temperatures. Both you and the users must be cautious in specifying environments; you both must examine tradeoffs between cost and operational effectiveness and use judgement in establishing reasonable values for environmental requirements.

MIL-HDBK-248B

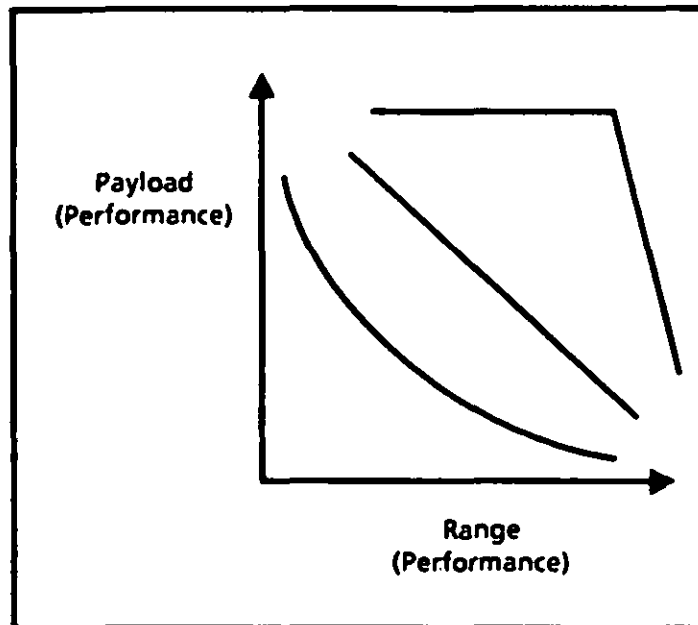


FIGURE 2. Illustrative performance-performance curves.

5.4 Developing recommendations. You must review all functional requirements that appear to add undue cost and risk to a program and adjust those that do not significantly affect the capability of the final system to counter the threat. You can probably adjust key performance parameter goals without seriously affecting the program; however, key performance parameter thresholds are a different case since the system will not work unless they are met. If you find that those thresholds add undue cost or risk, you must review the entire program and evaluate alternatives to ensure the Government does not continue with a program that is not technically feasible or that is doomed to operational failure. You should recommend those requirements that represent the best value.

Your review and evaluation should focus on developing recommendations for (1) system performance alternatives prior to initiating the Full-Scale Development (FSD) phase and (2) optimum program phasing to ensure that all essential development, test, production, facilities, and logistics tasks are phased to minimize acquisition time. You should evaluate factors that significantly affect cost, technology risk, and risk-reduction alternatives (including preplanned product improvement and system/subsystem and software prototyping) in order to arrive at preferred system alternatives (based on what developers can provide) and optimal system performance requirements (based on what users realistically need).^{1/} Your recommendations for system alternatives and their performance requirements should be based on program risks which, in turn, are based largely on the maturity of the technology. Your recommended performance requirements should consist of both goals and thresholds for key performance parameters. The range defined by goals and thresholds should define the region of uncertainty associated with forecasts of performance and cost. Your goals and thresholds should reflect the degree of risk you are willing to accept as reflected in your acquisition strategy. Thresholds then

^{1/} Actually, the best you can do is to evaluate and compare a very small number of alternatives that are developed after appropriate tradeoff studies and analyses and select the most acceptable among those few.

become the minimum system requirements part of the program baseline as defined by DODD 5000.45, first for development after Milestone II and then for production after Milestone III.

5.5 Balance between cost/performance. The relationships between cost and performance are important to all acquisition programs. In stating the functional requirements, you must be flexible enough to allow some analytical search for the best value through optimizing and refining particular parameters. That search should then result in a design whose configuration or characteristics provide the optimal balance between the user's need on the one hand and the range of system performance alternatives and their cost on the other. You must make sure that the user, and industry as well, participate in the process of balancing cost and performance.

Remember, the entire analysis process is iterative, and you must give recurring attention to the true mission orientation. As requirements are significantly revised, you must evaluate them in terms of mission effectiveness. In other words, continue to examine whether existing systems or other system alternatives may better meet the user's need. Look for the best values among the tradeoffs allowed in variable parameters, and reconsider, when it seems appropriate, the derivation of each rigidly established threshold. Be prepared to defer certain goals (especially those that require high-risk or high-cost technical approaches) until later in the program so that FSD is based on a foundation of mature technology. Plan to address deferred goals through product improvements. If analysis results suggest a major benefit from breaching an established limit, determine what additional review steps are appropriate to justify revising the limit.

5.6 Design requirements. Thus far, we have discussed only functional requirements. However, much of the cost and complexity of any program is imposed by the myriad specifications and standards that arise in developing system design requirements.

A system is almost always designed as a group of related subsystems and components. The processes of allocating and aggregating functions and requirements are important. In assigning functions and requirements to a specific subsystem, you should follow a system engineering approach, one that establishes a disciplined iterative process of definition, synthesis, analysis, design, test, and evaluation and leads to design requirements for major subsystems. If you assign conflicting functional requirements to the same subsystem, its design may be unreasonably skewed by one part of the functional requirement. You should guard against locking-in such requirements by applying specifications prematurely; rather, examine potential conflicts for tradeoffs such as a single integrated subsystem versus two separate subsystems. As a practical matter, then, you must continue the design task, arriving at reasonable assignments of functions and requirements through systems engineering. Even under that approach, you must monitor the allocation and aggregation for conflicts.

5.6.1 Application and tailoring of military specifications and standards. Although every item in a military specification or military standard may be appropriate for some program, every item does not make sense

for every program. Blanket application, although widely condemned, is perpetuated because of a widespread belief that it is best to err on the conservative side. You must avoid this tendency.

Tailoring military standards and selectively applying them to ensure only those parts applicable to your particular program are put on contract is a time-consuming job and must be done by very knowledgeable people. Tailoring must be a continuing process that begins early in the program and continues as the design matures. The contract must not preclude desirable alternatives in requirements but rather must allow for such flexibility.

Once military specifications and military standards are on contract, the only reviews they get are compliance audits to see whether the work is done; little reviewing is done to see whether the work is appropriate and applicable to meeting system performance requirements. You should continue reviewing to ensure that all military specifications and military standards contribute to satisfying the requirements.

5.7 Summary of program manager's considerations. As program manager, you must ensure that system operational requirements are developed through several iterations with the user to optimize the equipment for a military mission balancing performance and cost. That process should evaluate unrealistic or marginal requirements and adjust or eliminate them as long as that adjustment or elimination does not impair the basic goal of the program: the job to be done. The resulting requirements represent your judgment of the best value.

Systems engineering should be used to identify top-level design requirements to be allocated to lower-level subsystems and components. You must make sure that you provide an audit trail of how and why those design requirements are aggregated and allocated so that if a particular subsystem approaches its technical limit, you can consider reallocation of functions to relieve those constraints.

Analysis of functional requirements involves tradeoffs among conflicting goals, including cost, schedule, and various aspects of performance. You must be sure that the analyst recognizes the risks related to uncertainty in meeting any one of the goals. If failure to meet a design objective would have a severe detrimental impact on another aspect of the design, the success of the entire program could be at risk. The analysis must point that out.

5.7.1 Some cautions. In developing the performance requirements, be certain that:

- Your requirements are indeed requirements and not possible solutions.
- You do not freeze design requirements early in a program, for that leads to:
 - Inability to meet a changing threat.
 - Unduly constraining a program with technical demands that go beyond the practical state of the art.

- Technical solutions that are individually attainable but unachievable in combination.
- *Overly conservative application of specifications and standards.*
- You recognize that what is needed must be defined at many levels and the process is iterative. Therefore, maintain an audit trail to:
 - Provide adequate documentation of performance requirements offering the best value
 - Link detailed contractual SOWs to the mission analysis that led to program initiation.

6. THE TECHNICAL PROCUREMENT PACKAGE

6.1 Technical procurement package. The technical procurement package is defined as those portions of a purchase or procurement request containing technical requirements: the system specification, the SOW, and the schedule of deliverables (including the contract data requirements list). Technical requirements are the link among the user, the program manager, and the developer or producer.^{2/} They reflect the particular stage and acquisition phase of the program and become part of the system's specifications. This section describes general principles that you should follow in structuring the overall technical procurement package.

6.2 Approach to structuring the technical procurement package. Acquisition streamlining focuses on the performance that is desired in the system to be acquired and on the development of the detailed technical procurement package. The principal function of the technical procurement package is to communicate the user's mission and operational and support requirements to the developer or producer.

The technical procurement package should evolve through the design and development process to result in a set of system specifications for initial and follow-on production. In preparing the technical procurement package, describe what is needed by the Government; do not dictate how to satisfy the requirement.

6.2.1 Characteristics of technical procurement packages. Each program situation is unique, but the development of a contract technical procurement package will almost surely be characterized by:

- Technical requirements that evolve as the program progresses.
- Cost/performance/schedule tradeoff analyses that continue in each acquisition phase.
- Early cooperative Government and industry participation.

6.2.2 Preparation checklist for technical procurement packages. In preparing the technical procurement package, review the following checklist of actions that must be taken continuously throughout design and development:

- Refine performance requirements (using tradeoffs and other analyses) by eliminating nonessential requirements and adding any missing ones and by eliminating how to requirements.
- Obtain industry participation in analyses and tradeoff studies.
- Explore technical alternatives, including the use of NDI.
- Avoid premature application of military specifications and standards.

^{2/} The developer or producer, while usually a private contractor, may sometimes be a Government organization.

- Tailor specifications to the individual system during design and development.
- Use non-Government specifications and standards (e.g., those prepared by industry associations and professional societies).
- Control specification referencing.
- Refine requirements for management systems and technical data.
- Assess risk as early as possible.
- Focus on producibility, reliability, maintainability and supportability.
- Plan for product improvement.

6.3 Defining technical requirements. As development proceeds, design solutions emerge that satisfy performance requirements. They become successively more detailed in each acquisition phase. The solutions developed in one acquisition phase become detailed design requirements for the next phase. Figure 3 illustrates this progression.

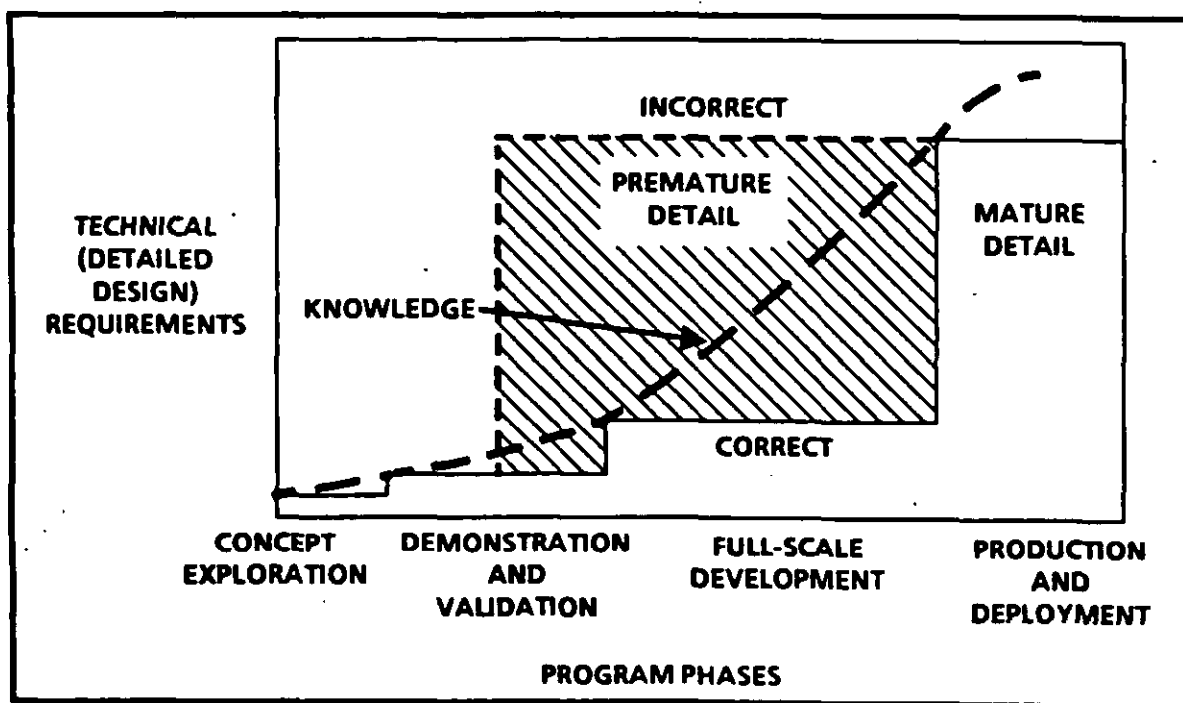


FIGURE 3. Defining technical requirements.

MIL-HDBK-2488

In each acquisition phase, progressively and systematically define technical requirements during contract performance (i.e., during the developer's actual design and development effort); do not defer them to contract definition (i.e., contract negotiations) at the beginning of the next phase. Neither anticipate nor estimate technical requirements while the contract is being negotiated and before you can justify including them in the program. Make sure they are defined by those closest to the design process: the developer's design engineers. The developer's functional expert must define the related system safety, testing, production, facilities, logistics, and management requirements early enough to resolve risk (preferably by the time of critical design review) and to permit timely transition to production. Timelines are presented in the DoD Manual, "Transition from Development to Production" (DOD 4245.7-M); follow them to ensure development of a fully integrated, producible, safe, and supportable system. Consider the total cost of ownership when deciding on technical requirements, in accordance with the policies for affordable systems acquisition (DODD 5000.1) and for establishing design-to-cost goals and thresholds (DODD 4245.3).

6.3.1 Using specifications, standards, and related documents. Military, Federal, and non-Government and commercial specifications, standards, and related documents (e.g., handbooks, engineering drawings) are necessary to help define technical requirements.^{3/} Non-Government specifications and standards should be used in preference to Government documents. Policy and guidance contained in DODI 4120.20 and MIL-STD-970 should be used when considering nongovernment specifications and standards. Streamlining calls for careful use of detailed specifications and standards. As design and development progresses, make sure that the developer selectively applies and tailors them to meet the technical requirements of the current phase of the program. Use those not listed in these sources only when they are essential and unique to your program. Ensure that requirements are consistent with other technical requirements and with data management policy (DODI 5010.12).

Use a zero-based approach to ensure all specifications earn their way into the technical procurement package based on need and justified by the performance requirements. Have teams of project managers, engineers, logisticians, and configuration managers review candidate lists of specifications on an item-by-item basis. Then, after those teams prepare a list of acceptable specifications, arrange for a functional review by outside experts selected for their understanding of the specifications and how they apply to the program. That review should ensure that no important requirements have been omitted. You may include some critical specifications to avoid problems encountered in the past, even though they specify design solutions rather than

^{3/} The existing system of specifications and standards is known as the Defense Standardization and Specification Program (DSSP), established by DODD 4120.3. The system of specifications and standards is used to establish the engineering and technical descriptions of items, materials, processes, methods, and practices relevant to DOD's contract acquisitions. The system includes military specifications (MIL-SPECs), military handbooks (MIL-HDBKs) and military standards (MIL-STDs), Federal specifications and standards, and adopted non-Government standards.

performance requirements. While you should justify the use of any specification on a case-by-case basis and selectively apply it for appropriate use, be particularly careful in examining those specifications or standards that increase costs. Added costs should be considered relative to the performance benefits they bring to the program. Specific guidelines for application and tailoring are given in Appendix A.

6.3.2 Team approach. Defining technical requirements this way requires a cooperative team approach involving both the contractor and the Government.

6.3.2.1 Use contractor ingenuity and experience. Most major contractors have been developing, producing, and marketing their products for commercial, industrial, and Government use for many years. Take advantage of that available source of expertise by specifying system-level requirements in the broadest functional/performance terms. Invoking detailed design specifications or standards in the early phases is counterproductive and limits the latitude for contractor ingenuity and experience in developing a quality and cost-effective design. Unless techniques are actually important to DOD, do not tell the contractor how to perform.

6.3.2.2 Government responsibilities. Preparing the technical procurement package involves a number of people of specialized skills from organizations at various levels, but the final responsibility and authority rests with you, the Government program manager. You have the ultimate responsibility for streamlining requirements for the program. Require justification for including requirements or tasks and require assurance that they reflect current technology and that they have been properly selected, applied, and tailored in a cost-effective manner.

6.3.2.3 Benefits. By following the acquisition streamlining approach, you can expect a better design with improved quality. You will have fewer and better-defined technical requirements applied in a timely fashion. You can expect significantly fewer engineering change proposals (ECPs).

6.4 Developing program specifications. Program specifications are developed in each phase of the acquisition process. You must prepare a system specification, a development specification, or a product specification for each unique system or equipment acquisition following the guidance shown in Table I. Selectively apply MIL-SPECS and other Government specifications, non-Government specifications and standards, and related documents following acquisition detailed streamlining policy as described below.

6.4.1 Concept Exploration and Demonstration and Validation. During the Concept Exploration phase, prepare a Type A; System/Segment Specification based on the functional requirements and concepts contained in the System Concept Paper. That specification is system oriented and defines mission and technical requirements, allocates functional requirements, and defines principal subsystem interfaces. During the Demonstration and Validation phase, prepare Type B; Development Specifications by allocating functional requirements by subsystem and describing system alternatives contained in the Decision Coordinating Paper (DCP) and Integrated Program Summary (IPS). These specifications are subsystem oriented and describe performance characteristics. Prepare individual tailored specifications needed to develop all unique configuration items.

MIL-HDBK-248B

TABLE I. Evolution of system specifications.

Results	Acquisition Phases			Guidance
Phase Activity	Concept Exploration	Demonstration and Validation	Full-Scale Development	Per DODD 5000.1 and DODI 5000.2
Results in	System Concept Paper	Decision Coordinating Paper/Integrated Program Summary	Decision Coordination Paper/Integrated Program Summary	Per DODD 5000.1 and DODI 5000.2
	Functional Baseline (at Milestone I)	Allocated Baseline (at Milestone II)	Production Baseline (at Milestone III)	Per DODD 5010.19
Defined by	Type A - System/Segment Specification	Type B - Development Specifications	Type C - Product Specifications Type D - Process Specification Type E - Material Specification	Per MIL-STD-490
In Terms of Specifications for	System or Segment	Type B1 - Prime Item Type B2 - Critical Item Type B3 - Noncomplex Item Type B4 - Facility or Ship Type B5 - Software	Type C1a - Prime Item Function Type C1b - Prime Item Fabrication Type C2a - Critical Item Function Type C2b - Critical Item Fabrication Type C3 - Noncomplex Item Fabrication Type C4 - Inventory Item Type C5 - Software	Per MIL-STD-490

During these phases, you should normally cite detailed specifications, standards, and related documents for guidance only. In the course of contract performance, the developer should evaluate them and, if they are found to be pertinent and cost-effective for the program, should tailor them for contractual application in the FSD phase.

However, there are two exceptions to the procedures just given. The first occurs when you decide to use items already developed, such as standard parts and off-the-shelf items. At that point, make all of the applicable specifications and standards that define the product baseline for those items' contract requirements, irrespective of acquisition phase. The second exception occurs when you (or higher authority) direct either early application of specifications and standards (that stipulate what is required and when, but not how to) for acquisition support planning or the imposition of specific design constraints. In those situations, ensure that such specifications and standards have already been tailored to the maximum extent practicable.

6.4.2 Full-Scale Development. It is necessary to develop a strategy for transition from FSD to Production during the initiation of FSD. The contractor should address specifically what he plans to accomplish during the Demonstration and Validation phase as it relates to the applicable templates of DOD 4245.7-M. During FSD, prepare Type C; Product Specifications based on the production baseline requirements describing the system contained in the DCP and IPS. These specifications define form, fit, and function; performance; and test requirements that must be met before Government acceptance. Prepare tailored individual specifications needed to produce prime items, critical items, noncomplex items, inventory items, and software. These specifications should either define how items function or how they should be fabricated. Prepare Type D; Process Specifications or Type E; Material Specifications if specific processes or materials are essential for production.

In FSD contracts, limit the application of specifications, standards, and related documents to documents cited in the contract as requirements and to specified portions of documents directly referenced therein (first-tier references). Make sure that the contract clearly states that all other referenced documents (second tier and below) are for guidance only unless specifically identified in the contract.

6.4.3 Production. For production contracts, make those specifications, standards, and related documents identified as the production baseline contractually applicable for procurement and reprourement purposes. Include all tiers that are part of the baseline. During the production phase, ensure that only essential requirements are carried forward into follow-on production contracts.

Note that even while following this approach, you are still responsible for the development and approval of complete and definitive design data and specifications to support production or any contemplated reprourement or follow-on procurement actions. You are also responsible for developing an economically producible, operationally suitable, and field-supportable design and for testing and evaluating it to ensure that it complies with all contractual requirements: performance requirements; SOW requirements; contract

data requirements; specifications, standards, and related documents; management systems requirements; and contract terms and conditions. If you ensure that all essential technical requirements are defined and adequately satisfied, you will meet those responsibilities.

Furthermore, you must comply with law and established DOD policy. However, you should propose changes to any laws and policies you feel are counter-productive. Provide these proposals to your acquisition streamlining advocate and be prepared to act on them once you receive the necessary waivers and approvals.

6.5 Summary of Program Manager responsibilities. In structuring the technical procurement package, evaluate all statements of requirements, eliminating or adjusting them as needed. Keep cost/capability tradeoff options open throughout all phases of development.

6.5.1 Review technical procurement package. Review all work done in structuring the technical procurement package. Read the entire technical procurement package and look for consistency and accuracy, as well as excess requirements, including deliverable data, while emphasizing common sense and eliminating redundancy. Include the Program Data Manager in the technical procurement package review process to ensure the Data Management procedures of DOD 5010.12-M are an integral part of the acquisition strategy.

6.5.2 Schedule. Schedule adequate time to develop and review the technical procurement package. Recognize that a properly prepared technical procurement package may take a little longer but will save time later.

6.5.3 Planning. Plan to capitalize on industry involvement and technical innovation. Whenever possible, follow an acquisition strategy using NDI as first choice. Finally, make sure that technical people have done their job, that they have read and tailored the specifications they invoked. Consider their advice but make final decisions keeping affordability in mind.

7. CONTRACTUAL REQUIREMENTS

7.1 Contracting overview. This section focuses on how the technical procurement package described in Section 6 is implemented through the acquisition process. It begins with preparation of the solicitation, includes specific acquisition streamlining solicitation provisions and contract clauses, and addresses the use of incentives and other issues that arise in the contract execution in each phase of system acquisition. It also addresses the concept of contracting for best value.

7.2 What is different about streamlined acquisition contracting? Acquisition streamlining implies a change in the balance of responsibilities between the Government and industry (the contractor); one in which the Government provides the contractor with more discretion, less-detailed guidance, and greater incentives and rewards for innovation. The contractor, in turn, assumes more responsibility for designing and developing a producible system and producing it on schedule and within budget. Acquisition streamlining emphasizes three important points:

- Source selection criteria, especially in a competitive environment, should reflect best value to the Government. Best-value contracting is focused not on selecting the contractor offering either lowest cost or best performance, but rather on selecting what represents the best value. Best-value selection implies some flexibility about requirements to allow for tradeoffs.
- The Government should employ a team approach in contract development and negotiation. Streamlining calls for judgment on the part of the Government, especially in dealing with cost and performance tradeoffs. Government contracting and technical personnel will need to work closely to clearly indicate where tradeoffs are acceptable so the contractor will know what is wanted and will be able to price it fairly.
- Contracting tools should be used to ensure that the requirements included in contracts are cost-effective and imposed at the most appropriate time. These tools include an acquisition streamlining clause that calls on the contractor to recommend selective application and tailoring of specifications, standards, and other contract requirements and to limit the tiering of specifications as described in the contract statement of work.

7.3 The contract business strategy. All aspects of the contract business strategy, i.e., testing, risk assessment, warranties, and contract incentives, are subject to acquisition streamlining and are interrelated. For example, focus the testing and evaluation to ensure that all pertinent performance requirements are met, and then consider the warranty coverage of those critical aspects of performance. Another strategy is to determine what a system could cost if RFPs and contracts were written to eliminate or minimize the non-value added work being imposed on a contractor, then work toward that as a goal of the acquisition. You must plan the total contracting strategy, including streamlining techniques, with the contracting officer before your first discussions with potential contractors. Your strategy

should address the solicitation process, the use of specific acquisition streamlining solicitation provisions and contract clauses, and the need for incentives.

7.3.1 Solicitation process. Draft solicitations and presolicitation conferences are encouraged as a means of getting industry views. After a draft request for proposals (RFPs) has been issued, encourage industry to focus on performance requirements. Your objective is to facilitate innovative solutions in response to the solicitation.

Solicitation provisions and contract clauses will be needed for tailoring the application of specifications and standards and restricting their tiering as described in Section 6. Insert the acquisition streamlining clause (DFARS 252.210-7005) in solicitations and contracts for all system acquisition programs (see Appendix B). The clause requires that the contractor submit acquisition streamlining recommendations in accordance with the statement of work of the contract. It also requires the contractor to flowdown the acquisition streamlining requirement in all subcontracts in excess of \$1 million.

7.3.1.1 Contract terms. Contract terms and conditions may also be the subject of streamlining proposals from the contractor. The Federal Acquisition Regulation (FAR) and Defense FAR Supplement (DFARS) deviations may be appropriate for requirements for management systems or contractual data (documentation) that can be shown to provide little benefit in light of their costs.

Include provisions in the solicitation through the statement of work that require the contractor to indicate in the early stages of planning how acquisition streamlining will be incorporated in the program. The solicitation should specifically call for conducting continuing tradeoffs to balance cost, performance, and schedule (especially prior to FSD) and for constructing proposals to meet minimum performance requirements based on the results of those tradeoffs that offer the Government best value. Make sure the solicitation also requires the contractor to use specifications, standards, and related documents cited by the Government prior to FSD for guidance only and to apply only those in FSD that are cited in the contract, including those specified portions of first-tier references. Fundamentally, the solicitation should be based on user need and should encourage contractors to challenge performance goals whose benefits are not commensurate with cost. Specific provisions that call for contractor actions are shown in Table II. They should be fully incorporated in the statement of work following the example Acquisition Streamlining Provision (see Appendix B).

7.3.1.2 Cost-benefit analysis. Cost-benefit analysis is central to deciding which requirements and specifications should be applied. One way to approach this decision is ask the contractor to quantify the impact of a particular requirement or specification in terms of its estimated impact on risk, production, operation, and support. Rough-order-of-magnitude cost estimates or budgetary pricing may be used, as appropriate, during this cost-benefit assessment process, following the guidelines contained in the Acquisition Streamlining Cost-Benefit Assessment Report data item description (DID) (see Appendix B).

TABLE II. Statement of work provision.

- Develop a comprehensive approach to acquisition streamlining early in planning process.
- Conduct common-sense tradeoffs to balance performance, cost and schedule.
- Construct proposals to offer the Government best value.
- Use specifications, standards and related documents for guidance only prior to FSD; limit application to those contractually cited and to specified portions of first-tier references in FSD.

7.3.1.3 Develop the solicitation in terms of need. Development of the solicitation based on user need is a key action early in the acquisition process. Industry should formally respond with alternative system design concepts to satisfy the approved mission need stated in terms of performance requirements. The contractors should be free to propose their own technical approaches; main design features; subsystems; and alternatives to schedule, cost, and capability goals. With this type of solicitation, you gain the benefits of industry innovation and competition and are not constrained by preordained or prematurely selected equipment approaches.

The solicitation should normally explain the need in mission or capability terms (not equipment terms), schedule objectives and constraints, program (not unit) cost objectives, and operating constraints. It should provide background information on prior studies, constraints inherent in the need, and technology developed by Government laboratories or at Government expense.

7.3.1.4 Encourage challenges. An offeror cannot challenge the stated requirement without risking a finding of nonresponsiveness. However, the contractor's proposal can show one price for complete compliance and can then include an alternative proposal that meets different requirements. The offeror must then be able to demonstrate that the new requirements meet the Government's basic need. However, if such an alternative is acceptable, the RFP must clearly indicate that such proposals are encouraged. The RFP should explain the evaluation criteria and that alternative proposals are encouraged without penalty to the contractor provided the contractor has also proposed against the solicitation requirements.

7.3.2 Other streamlining provisions and clauses. In the solicitation, require the contractor to describe the extent to which streamlining principles and procedures are integrated into the design/engineering process. Ask the contractor to identify the extent of the resources allocated to streamlining and to reveal the adequacy of his management review and coordination systems, information systems, and employee reward programs. Ask for information to indicate the suitability of the contractor's subcontractor management procedures and extent to which he shares incentive provisions with subcontractors. Ask the contractor to outline the application of his acquisition streamlining strategy for all acquisition phases. By using a specific clause in the contract and by including a comprehensive provision in the statement of work, you can ensure that all important aspects of acquisition streamlining

MIL-HDBK-2488

are included in the contractor's program as shown in Table III. Be sure that the contract identifies contractor (and Government responsibilities as required) for streamlining; incorporates the streamlining task in the SOW (goals, principles, and procedures for streamlining); and establishes incentives (if appropriate) to encourage streamlining. The specific acquisition streamlining clause, statement of work provision, and DID are contained in Appendix B.

TABLE III. Contract emphasis.

- Review contract requirements for pertinence and cost-effectiveness, including the schedule, SOW, data requirements, specifications, standards, related documents and contract terms and conditions.
- Recommend application and tailoring of all contract requirements.
- Limit applicability of requirements imposed by reference.
- Avoid overspecification and include only cost-effective contract requirements.
- Provide for subcontractor sharing in incentive awards.

7.3.2.1 Incentives. The need for incentives for streamlining is dependent on the extent of competition. If competition exists, source-selection credit for meaningful streamlining effort may be the most effective form of incentive. Making streamlining an integral part of an award fee is probably the best incentive and the contracting officer must:

- . Achieve the kind of program office involvement necessary to acquire best value;
- . Obtain best-value performance.

Recall that in striving to obtain best value, you and the contracting officer are seeking to balance cost and performance.

7.3.3 Necessary program office involvement. All phases of the acquisition process require participation by various people with specialized skills. While you, the program manager, have ultimate responsibility for the requirements in your program, final responsibility and authority for contracting rests with the contracting officer. (See FAR 1.602-2 for a statement of responsibilities, including the need to consult with specialists in various fields, as appropriate.) Preparation of an acquisition plan, as required by FAR 7.104 and DFARS 7.103(f), should begin as soon as a need is identified. The streamlining emphasis should have its greatest impact in the development of that acquisition plan. While the contracting officer, the engineer, and other technical and administrative people may participate in the writing and the maintenance of the plan, you usually have overall responsibility for it. Streamlining's emphasis on analysis of the relationships among cost, performance, and schedule may require more daily involvement and cooperation among specialized staff members than would be required if the program goals

and thresholds were inflexible, but the personnel relationships are not changed by any streamlining emphasis.

7.3.3.1 Specialized pricing support. The need for specialized pricing support, however, is increased by streamlining's emphasis on the flexibility of requirements and the desirability of various tradeoffs in specification writing. Both you and the contracting officer need to understand the likely relationships between cost (and therefore price) and the degree of attainment of various program goals; awareness of the pricing implications is particularly essential in negotiations in which the performance requirements and contract terms to be specified are flexible.

7.3.4 Best-value source selection. Prospective contractors who diligently examine requirements, conduct tradeoffs to evaluate the cost-effectiveness of alternatives, and challenge conventional wisdom and who submit their proposals following this approach should be recognized during source selection. Those contractors should be assured of source selection fairness through an evaluation process that reinforces these principles and safeguards against technical leveling, i.e., improperly releasing a contractor's proprietary ideas.

7.3.4.1 Assuring source-selection fairness. The flexibility of requirements inherent in acquisition streamlining calls for subjective evaluation criteria. Offerors can submit alternatives, and you must choose among proposals for diverse levels of mission satisfaction at diverse prices. The diversity is desirable and is inherent in streamlining. In selecting among a wide range, however, you must attempt to find the best value.

7.3.4.1.1 Providing information to contractors. The key is to provide clear, unequivocal information to all potential contractors on what are the important source selection criteria, those that are key to mission success. Information on the relative importance of technical aspects (performance, supportability, etc.) versus cost is essential. Carefully specify and clearly indicate the weighting to be given to each technical factor to encourage acquisition streamlining efforts and recommendations. For example, some contractor recommendations may advocate reductions in performance with significant offsetting reductions in cost, schedule, or risk. Heavy weighting of proposed technical performance would discourage such offers. Therefore, as part of the evaluation, you should cite the cost-effectiveness of the proposed design as the primary technical performance criterion. The effectiveness of cost-performance tradeoffs and application/tailoring of recommendations are also useful criteria. By including them, you demonstrate to offerors a real Government commitment to streamlining and to acquiring the best value.

7.3.4.1.2 Alternative proposals. It is important that the RFP encourage the submission of alternative proposals offering cost or performance benefits to help ensure that significant opportunities for best value are not overlooked. Such alternative proposals offer you and the source-selection board realistic options for program tradeoffs. If the RFP permits the use of alternative proposals, it must clearly state that such submission will not result in any penalty to the offeror. (Note: A resolicitation may be necessary if the Government chooses not to make an award on the basis of requirements in the original solicitation.)

7.3.4.1.3 Source-selection procedures. Develop source-selection procedures to maximize this kind of competition and to minimize the complexity of the solicitation and evaluation process. Ensure impartial and comprehensive evaluation of offerors' proposals, and select the source whose proposal has the highest degree of realism and whose performance is expected to best meet stated Government requirements. In summary, design source-selection procedures to ensure selection of the source whose proposal offers best value to the Government, price and other factors considered.

7.3.4.2 Avoiding technical leveling. Flexibility in requirements, one of the major features of streamlining, brings with it an increased potential for technical leveling. All contractors and potential contractors must receive equal treatment and have equal access to all relevant Government information about the requirements and any flexibility allowed. On the other hand, you must also avoid improper release of proprietary ideas presented in any proposal. This is especially true for those ideas based on the results of a contractor's cost and performance tradeoffs prepared in response to flexible requirements. If you fail to respect proprietary rights, you may impair the atmosphere of mutual trust that is essential if the Government is to benefit from a wide variety of original ideas provided by offerors.

7.3.5 Best-value contract performance. You may have to consider the use of incentives, award fees and guarantees to obtain the best value. You must also make a commitment to continually examine contract requirements and revise them if they are not cost-effective.

7.3.5.1 Incentives and guarantees. You may offer incentives to encourage the use of specific streamlining techniques. These incentives must be consistent with your contract strategy. Offer specific streamlining incentives to satisfy specific acquisition streamlining objectives. Streamlining incentives can also be used to reinforce implementation of other incentive-type programs such as value engineering and the use of warranties.

Use the incentive provisions of the contract to integrate the contract provisions that direct effective and efficient contractor planning and management of requirements, promote the submission of recommendations for elimination of noncost-effective technical requirements, and measure the contractor's overall performance in terms of price reductions and shared savings.

7.3.5.1.1 Incentive/shared savings provision. An incentive/shared savings provision for streamlining may take the form of a specific award-fee provision in a cost or fixed-price-type contract, or it may be included under the cost/performance incentives of an incentive contract or as part of the value engineering program. Whatever form it takes, the incentive provision should generate serious contractor motivation and provide for near-term shared savings and effect system price reductions. It should reward good planning, sound program management, and the quantity and quality of streamlining recommendations accepted and used in the program. The quality and effectiveness of the contractor's separately priced SOW-directed streamlining effort, proposals for succeeding phases, and ECPs for cost savings could all be rewarded in accordance with the incentive provisions of the contract.

7.3.5.1.2 Subcontract sharing provisions. The subcontract sharing provisions for all major subcontractors should include any streamlining principles, procedures, goals, and incentives that are incorporated in the prime contract. A significant streamlining response from all subcontractors can produce sizable cost reductions for the program. Incentive sharing provisions should also include incentive/shared savings arrangements to motivate subcontractor performance.

7.3.5.1.3 Warranties. Seek guarantees of performance by requiring warranties. The use of warranties in the procurement of weapons systems is mandatory pursuant to 10 U.S.C. 2403 unless a waiver is authorized (see DFARS Subpart 46.7). DOD policy (set forth in DFARS 46.770-8) is to evaluate the cost-effectiveness of each warranty and to initiate a waiver request whenever the system's life-cycle cost would be lower without the warranty. Streamlining's emphasis on off-the-shelf items (and components) may imply the acquisition of parts that are normally warranted in commercial trade.

Where the warranty provides the Government adequate assurance of a quality product, the contractor should not also be required to demonstrate detailed quality-control procedures nor should detailed standards be imposed to control manufacturing procedures.

7.3.6 Conducting tradeoffs and relaxing requirements. As noted in Section 5, the system performance requirements contained in the solicitation are the Government's best estimate of its need. Offerors should therefore construct their proposals with a balance of all factors that will offer the Government the best value. Performance requirements are designated as either thresholds or goals. Desired goals may still be traded off, and you should encourage those tradeoffs, on a single-element basis or in combinations. Tradeoff factors may include, but are not limited to, design performance, cost, schedule, application of MIL-SPECs /MIL-STDs, and use of off-the-shelf items or NDI.

7.3.6.1 Tradeoffs provided by offerors. Encourage offerors to provide the Government with common-sense tradeoffs to improve quality and effectiveness or to reduce the time and cost of system acquisition. Assess those tradeoffs to assure that an improvement in one factor does not adversely affect any threshold. Make an integrated, balanced assessment of the overall value of each proposal, measuring it in terms of system operational effectiveness and suitability and in context with cost and risk factors.

7.3.6.2 Interpreting and complying with contract requirements. During the performance of contracts for the design of major systems, contractors have sometimes found difficulties in interpreting and complying with some requirements. Under these circumstances, the contractor can be tasked to conduct a postaward detailed review of the requirements. Under such a task, have the contractor submit recommendations on how requirements might be changed to effect more economical and efficient performance. This approach requires contractors to find the most efficient method for meeting program objectives and provides you, the program manager, with an objective basis for determining the cost-benefit tradeoff. The pricing for the contractor's streamlining effort may be separately identified in the contract along with some indication of the nature of the effort expected. This contractual procedure is probably the best method for obtaining contractor recommendations for streamlining that should take place in succeeding phases of the program.

8. STREAMLINING TOOLS AND TECHNIQUES

8.1 General. This section describes streamlining tools and tabulates acquisition streamlining responsibilities.

8.2 Acquisition streamlining tools. Well-defined tools that can be applied to both ongoing and new acquisition programs are available. These tools can be used in developing practical, functional, performance requirements, in structuring streamlined technical packages, and in implementing contractual requirements. Table IV lists these tools, and each is described briefly in this section.

TABLE IV. Acquisition streamlining tools.

Area of Streamlining Emphasis	Streamlining Tool
Performance Requirements	Requirements discipline Market analysis Independent feasibility studies Post award contract requirements review
Technical Package	Specification tailoring Computer-assisted document preparation Technical data application and tailoring Tiger Teams
Contracting	Streamlining clauses RFP techniques Streamlined source selection Best-value contracting Contracting to reduce risk

8.2.1 Requirements discipline. A major problem that arises when the acquisition process is protracted is "requirements creep", i.e., the inability to stabilize performance requirements long enough for an acquisition program to satisfy them. To deal with that problem, you must impose a discipline on requirements. You can use the following straightforward nine-point approach:

- Clearly define performance requirements; distinguish between those that are nice to have and those that are essential. Recognize that if circumstances change (e.g., the threat) and original requirements are inconsistent with the change, the program should be restructured.
- Understand user needs and the technology that is available to meet them; use only mature technology that is ready for application.
- Know what is available and use it, use NDI and off-the-shelf equipment where applicable.
- Make simple enhancements to existing equipment to meet new requirements; begin with a preplanned product improvement (P³I) philosophy and build on it.

MIL-HDBK-248B

- Define requirements for a block capability improvement, one that satisfies several requirements at the same time, rather than addressing each requirement with a separate improvement program, and stand firm; a specific capability improvement that is fielded is worth more than a delayed additional improvement that is not.
- Use competition; block improvements are new opportunities for new ideas from new contractors.
- Support contractor understanding; make sure that the contractor knows the requirements, understands them, and has the opportunity to articulate ideas that affect the program.
- Agree early on testing and evaluation; agree on what and how to test and on criteria for knowing whether requirements are satisfied.
- Write clear contracts; make explicitly stated requirements the focus of the contract.

8.2.2 Market analysis. Better knowledge of what is available to satisfy user needs, available technologies, existing hardware, and industrial capabilities, is key to establishing the technical foundation of a program. Easy and early access to a wide range of qualified industry sources and prospective contractors can accelerate the contracting process and can bring to the program a variety of feasible technical approaches. You can best attain such access through a well-structured approach to market analysis. Conduct a market analysis to be aware of what is possible before you pick a specific acquisition strategy.

8.2.2.1 Market surveillance/investigation. Market analysis has two elements: early market surveillance that precedes program initiation and market investigation to gather sufficient data, including data on existing systems, that when coupled with the user's needs can form the basis for developing and carrying out the acquisition strategy. Use both.

Questions that should be answered in conducting market analysis include "Will NDI satisfy a user's need? Will products be available in sufficient quantities when needed? Are products fully compatible with existing assets?"

Depending on the needed product, collect information on product availability, industry structure, commercial product acceptability, and product support. Collect this information from other Government users, industry, test sites, and surveys of the literature.

8.2.3 Independent feasibility studies. During the initial phases of development, conduct studies to identify cost-performance tradeoffs. Those studies should identify cost-performance alternatives and system performance values that require new technical approaches or requirements for new technologies. Besides the studies done by contractors as part of normal design and development, additional tradeoff studies should be done to independently verify the feasibility of candidate system alternatives. With the users, you must continuously evaluate performance factors that drive the

cost or increase technology risk, and you must continuously assess risk-reduction alternatives (including P³I and system/subsystem prototyping considerations) to facilitate the selection of preferred system alternatives and optimum system performance requirements prior to initiating FSD.

8.2.4 Postaward contract requirements review. In the demonstration and validation phase and in FSD you should refine the requirements before undertaking major design and development activities. A streamlining technique under consideration by the Army is contract definition subsequent to award of the development contract, as recommended by the Army Materiel Command (AMC)/Industry Atlanta IX conference. This technique can augment normal source-selection procedure, where awards are based on the usual circumstances.

Under certain circumstances (such as when unrealistically low contractor bids are expected or where functional specialists impose requirements that may have unreasonably increased program cost), use a short contract definition subphase that focuses on further requirements definition subsequent to contract award. It will help the winning contractor to better clarify the requirements by meeting with both you and the user for an extended (e.g., 2-6 months) period. During this time, you should specifically focus on clarifying and finalizing specifications, SOW requirements, and the contract data requirements list (CDRL); on identifying risks and developing a plan to manage them; and on finding the most costly requirements and examining possible cost-performance tradeoffs. That subphase can help reduce the risk to the Government because you and the contractor can determine realistic tradeoffs while finalizing specifications. It also provides more accurate pricing of the remainder of the contract since the requirements are better defined.

8.2.5 Specification tailoring. All military specifications and standards are tailorable, some more easily than others. Many have been specifically formatted to facilitate tailoring and contain tailoring appendices to be used as guidance. An excellent process for developing tailored specifications is the Air Force Aeronautical Systems Division (AS) "MIL-PRIME" Program. The MIL-PRIME process involves identifying the significant specifications and standards used in ASD's acquisition. For each of these relatively few items, ASD prepares a MIL-PRIME document that:

- States requirements in operational/performance terms.
- Provides general criteria.
- Provides specific parameters (but omits values, for that forces tailoring).
- Provides, in an appendix, guidance on how to calculate values (fill in blanks) and lessons learned from prior experience.

8.2.5.1 Computer-assisted document preparation. Modern information management techniques can assist in the development of a tailored system specification or an RFP. These techniques can be applied to the complete technical package: SOW, CDRL, MIL-SPECs and MIL-STDs, and data item descriptions (DIDs). By using a menu and responding to a series of prompting questions, your contract and technical specialists can select specific

paragraphs from each tasking document, tailor them to meet the system specification, and update them on the basis of design and development experience.

8.2.5.1.1 Computer Generated Acquisition Documents System (CGADS). Two specific automated document preparation systems have been developed by the Air Force. The Computer Generated Acquisition Documents System was developed at the Electronics Systems Division (ESD) to prepare contract packages. With CGADS, documents are prepared by answering yes, no, or undecided to simple questions prepared by staff specialists. (Some user assistance is built in.) It generates a unique set of task and data requirements to create the SOW text and specify CDRL entries. DIDs are automatically identified, and references to MIL-STDs and MIL-SPECs are cited. A hard copy of the document can be printed out or the file can be downloaded from the central VAX computer to remote work stations for subsequent editing and distribution. CGADS can be accessed from a VT-100 terminal to dial into the ESD computer; alternatively, a tape can be furnished to interested users. CGADS is programmed in FORTRAN.

8.2.5.1.2 Technical and Managerial Support Environment (TEMSE) Docwriter. The TEMSE Docwriter was developed by the Air Force Space Division (SD) to structure the program technical package. This system provides both requirements and specification management and a document preparation capability. It provides standard outlines for system specifications and SOWs; prepares structured documents, verification and traceability matrices, and management summary reports; and maintains an audit trail of specification tailoring. It helps manage requirements by storing the requirement text and analyzing its content. It also offers detailed interpretation and guidance on tailoring MIL-SPECs and MIL-STDs. Currently about 50 MIL-SPECs are incorporated into the system. The system can be used to further refine the output of CGADS. It is programmed in PL-1 and PASCAL for an IBM 360 computer system.

8.2.5.1.3 Automated Specification and Standards Information System (ASSIST). The Naval Air Engineering Center (NAVAIRENGCEN) has developed the ASSIST to provide information and visibility on specifications, standards, and other standardization documents and to improve their currency, accuracy, and management. The ASSIST data base includes 33,000 military and other Government specifications, standards, bulletins, and handbooks with their primary references and another 10,000 without their references. The system operates on an International Business Machines (IBM) 4341 mainframe computer at NAEC. However, remote access is limited.

TABLE V. Methodology for the application and tailoring of technical data.

APPLICATION AND TAILORING PROCESS		
SEARCH (Focus on Performance, Operational Needs)	SELECT (Choose Proper Tools to Achieve Results)	TAILOR (Modify to Fit)
<ul style="list-style-type: none"> ● Use zero-base methodology to develop data requirements. ● Plan data requirements as an integral part of the overall planning for systems, materiel, and services. ● Use the data call process to identify essential data needed. 	<ul style="list-style-type: none"> ● Select data requirements from a list of authorized data, AMSDL. ● Compare the cost of data with the benefits to be derived from their intended use. ● Encourage uniformity in DOD component data requirements. 	<ul style="list-style-type: none"> ● Scrub all data requirements resulting from the data call at a Data Requirements Review Board (DRRB) ● Establish data requirements according to the streamlined provisions of requirements documents, such as specifications and standards. ● Establish data delivery dates that permit reasonable and timely accomplishment of program objectives and intended uses.

8.3 Technical data application and tailoring. Develop requirements for technical data in accordance with DODI 5010.12 and list them in the CDRL. Select and tailor technical requirements to acquire only that technical data essential to carrying out the acquisition strategy. The methodology for applying and tailoring technical data requirements is shown in Table V.

8.3.1 Tiger Teams. A Tiger Team is a dedicated team of Government and contractor program management, contracting, and technical personnel formed to accomplish an intensive short-term (e.g., a few months) streamlining task. It can be used to meet program affordability goals by continuing to look for areas in which costs can be reduced. Appendix D provides a sample Tiger Team charter and procedures.

8.4 Streamlining alternative to value engineering. Recognizing the importance of Value Engineering (VE) as an integral part of the design and development effort, an alternate provision (in lieu of VE clause FAR 52.248) to enhance and expedite the process of the VE principles is being considered by the Air Force. The provision is described in Appendix E and is provided as an option to the VE FAR clause stated above.

8.5 RFP techniques. Techniques are available to obtain more responsive contractor proposals. You can provide early information through draft RFPs and by preproposal briefings; you can suggest alternative proposals in the RFP; and you can highlight important points by using an RFP executive summary.

8.5.1 Draft RFP and preproposal briefings. Use informal techniques to encourage industry to comment on planned acquisitions. The objectives of these efforts are to improve requirements, identify and tailor applicable requirements, and meet system performance objectives efficiently and effectively.

Provide a draft RFP to potential offerors to encourage early industry involvement in identifying cost-effective requirements. Use such drafts to obtain valuable feedback from the source or sources involved. Make the draft RFP as complete as possible and be sure it contains key performance requirements, any essential specifications and standards, a CDRL, and/or a draft SOW that describes the acquisition.

In some instances, involve industry prior to releasing a draft RFP, perhaps through presolicitation conferences. Give the same information on the Government's interest to all industry contacts. Request contractors to provide information on how the Government can generally satisfy its needs most effectively, including by alternative methods that have not been considered. Ask contractors for information on how restrictive requirements can be tailored to foster competition. Give industry as much time as practicable to prepare responses.

8.5.2 Requests for alternative proposals. Alternative proposals can take different forms. One approach used by the Army is to encourage offerors to propose variations to the RFP that would be evaluated and incorporated if determined to be advantageous. (Note, however, that the alternative proposal must be accompanied by one that is responsive to the RFP.) Another approach used by the Naval Air Systems Command is to call for an alternative proposal that reflects the contractor's best efforts at streamlining.

8.5.3 RFP executive summary. Include an executive summary in the RFP to indicate to contractors the principal areas of emphasis. For example, to highlight cost-performance tradeoffs, an executive summary could read:

"In this procurement, the Government is primarily interested in selecting the offered design that satisfies the designated firm requirements (thresholds) and is judged to achieve the best combination of stated goals at the lowest total life-cycle cost. In this connection, offerors are encouraged to submit their recommendations on how to meet firm requirements and also to provide the best combination (based on trade-offs) of requirements for meeting technical, performance, and schedule goals at the most reasonable cost."

8.6 Streamlined source selection. Keep the time and effort devoted to selecting a contractor and awarding a contract to a minimum, but at the same time make sure that you select the source whose proposal is the most credible and whose performance can be expected to provide the best bargain for the Government. The Air Force Ballistic Missile Office (BMO) has developed a procedure to reduce the time required for source selection. The major differences from the traditional selection approach are that the BMO procedure uses:

MIL-HDBK-248B

- Fewer evaluation factors, not more than 10.
- Smaller proposals, not more than 100 pages.
- Fewer members of evaluation board, not more than 10.
- Oral presentations to evaluation board by offerors.
- Firm commitment to shorten the schedule, 9 weeks.

8.7 Best-value contracting. A prudent individual often compares the relative values involved in the choice between a satisfactory product at a reasonable price and a better product at a higher price. Streamlining, with its emphasis on flexibility in requirements, involves similar selections of best value. Where unlike offers are to be evaluated, use a rational evaluation technique and clearly describe it in the RFP (in Section M, "Evaluation Factors for Award"), following source selection guidance contained in FAR Part 15.6).

8.7.1 Best-value with performance specification. Best-value contracting works best with a performance specification rather than a detailed design specification. This encourages examining potential tradeoffs that satisfy requirements without imposing design solutions. Potential contractors must be clearly informed early if variations to the RFP are acceptable and how they will be evaluated and incorporated, if found to be more advantageous to the Government. Then source selection is based on initial evaluations that surface advantages, disadvantages, and high risk areas of competing proposals followed by comparing their relative value to their cost. Where difference in value offsets the difference in cost, the Government can base its selection on best value rather than lowest cost.

8.7.2 Best-value demonstration. The Army successfully demonstrated best-value contracting in NDI acquisition. In an RFP, it required the offerors to propose only total systems (hardware and software) that had been designed, developed, and tested and whose principal components were currently in production. The offer had to include a system performance specification describing the performance characteristics of the proposed system that would satisfy the general requirements presented in the RFP. Although it included the usual MIL-STD requirements in the RFP as desired features, the Army was prepared to accept less than a full MIL-STD system to gain the cost and schedule advantages of an NDI system. Potential bidders were informed that systems that varied from the requirements in the RFP would be evaluated and accepted if determined to be more advantageous to the Army.

To carry out best-value contracting, offerors must be allowed to bid what they feel is their best-value system. Since best value is subjective, it becomes a compromise between all the parties on the Government evaluation team. The best technical solution may not be the best operational solution, etc. With other members of the Government team, you must agree on criteria for the best-value system before entering negotiations, and best and final proposals must be evaluated on how close they meet those criteria.

MIL-HDBK-2488

8.8 Acquisition streamlining responsibilities. Responsibility for acquisition streamlining continues throughout the acquisition process. You, the program manager, along with the contracting officer and developer/contractor, each have responsibilities for streamlining performance requirements, the technical package, and contracting. These responsibilities are summarized in this section for ease of reference in Table VI.

TABLE VI. Responsibilities for acquisition streamlining.

Responsibility (of Program Manager (PM), Contracting Officer (CO) and Developer/Contractor (DC))	Impact ¹	Acquisition Phase			
		Concept Exploration	Demonstration and Validation	Full-Scale Development	Production
Provide requirements in terms of mission needs and operational and support capabilities (PM)	PR, C	●			
Challenge requirements and provide for review board approval (PM)	PR, TP	●	●	●	●
Apply operational test and evaluation requirements (PM)	PR		●	●	●
Establish accountability for requirements (PM)	PR, TP, C		●	●	●
Ensure schedules permit review of requirements by industry and program office (PM)	PR, TP, C	●	●	●	●
Use contractor ingenuity and experience (PM)	PR, TP	●	●	●	●
Consider NDI and commercial products (PM)	TP, C	●	●		
Develop support systems to simplify application and tailoring (PM)	TP, C	●	●		
Make sure that program office personnel are trained in application and tailoring methodology (PM)	TP, C	●	●		
Use zero-base methodology to develop contract requirements (PM)	TP	●	●		
Initiate management controls to assure cost-effective tailoring (PM)	TP	●	●	●	●
Maintain tailoring record for Integrated Program Summary (IPS) at milestone reviews (PM)	PR, TP, C		●	●	●
Conduct post-award design reviews (PM)	TP		●	●	
Develop program cost estimates for specifications, data, and management systems before including in RFP (PM)	TP, C			●	●
Use draft RFP and preproposal briefings for industry comment (CO)	C	●	●	●	●
Use source selection evaluation criteria to encourage contractor to recommendations for application and tailoring (CO)	TP, C	●	●	●	●
Require that tailoring objectives and incentives be shared by sub-contractors (CO)	C	●	●	●	●

¹ Streamlining responsibilities impact performance requirements (PR), the technical package (TP), and the contract (C).

MIL-HDBK-2488

TABLE VI. Responsibilities for acquisition streamlining (continued).

Responsibility (of Program Manager (PM), Contracting Officer (CO) and Developer/Contractor (DC))	Impact ¹	Acquisition Phase			
		Concept Exploration	Demonstration and Validation	Full-Scale Development	Production
Include selected list of candidate specifications for mandatory application and tailoring consideration in RFP (CO)	TP, C	•	•	•	
Obtain contractor application and tailoring plan (CO)	TP, C		•	•	•
Develop a separately priced contract item for prime and subcontractor application and tailoring activities after award (CO)	TP, C		•	•	•
Authorize use of contract internal methods, process and data (CO)	TP, C	•	•	•	•
Establish incentive/shared savings structure (CO)	C		•	•	
Provide incentive sharing to contractor in accordance with business arrangement (CO)	C			•	•
Conduct cost-benefit analyses of streamlining recommendations (CO)	TP, C	•	•	•	•
Apply contractual warranty provisions (CO)	TP, C				•
Conduct tradeoff studies (PM)	PR, TP	•	•	•	
Develop system-level requirements in functional terms (PM)	PR	•	•		
Use functional specifications - few, if any, "how to" specifications and standards (PM)	TP	•	•	•	•
Avoid premature application of specifications and standards (PM)	TP	•	•	•	•
Apply minimal formal requirement on documentation (PM)	TP	•	•	•	•
Ensure requirements documents used are specifically cited or directly referenced in contract (DC)	TP, C	•	•	•	•
Use flexibility inherent in specifications (PM)	TP	•	•	•	
Use standard parts and materials (PM)	TP			•	•
Emphasize economical producibility by using planned production methods and processes (PM)	TP			•	•

¹ Streamlining responsibilities impact performance requirements (PR), the technical package (TP), and the contract (C).

9. CASE STUDIES

9.1 Case studies. This section presents three individual case studies of streamlined acquisition programs, one each in the Army, Navy, and Air Force. They are offered as representative examples of progress at different phases of the acquisition process.

9.2 Initiating a new program. The Army's Advanced Antitank Weapon System-Medium (AAWS-M) program used a number of streamlining techniques in beginning a new acquisition program.

9.2.1 AAWS-M program description. The purpose of the AAWS-M program is to develop a weapon that is highly lethal against advanced threat armor and at the same time is able to engage hard-point targets (e.g., bunkers) and hovering helicopters. It will replace the current DRAGON by providing a portable, one-man system usable in all battlefield environments, including those with electronic and electro-optical countermeasures.

The initial AAWS-M statement of need was approved by the Army in early 1984. Subsequently, tradeoff studies of maximum range versus weight have refined lethality and weight requirements (both thresholds and goals). Contractors have been provided latitude to make additional tradeoffs within these specified ranges.

The acquisition strategy calls for assuring that all possible technologies are given adequate consideration and that competition is maintained throughout the program. An Army task force conducted concept exploration (including preparation of a draft RFP), culminating in a milestone review in April 1986 that authorized release of the RFP. Five proposals were subsequently received and three firm, fixed-price (FFP) contracts were awarded for demonstrating three differing guidance technologies: command line-of-sight, fiber-optic guidance, and imaging infrared seeker. Each contract has a \$30 million ceiling and requires prototype flight testing in 27 months.

Teaming will be required for FSD; the winning team will be selected based on performance during technology demonstration and on estimated costs of FSD and options for low-rate initial production. Team members will compete against each other for full-scale production.

9.2.2 Streamlining techniques, AAWS-M program. The AAWS-M program team successfully tailored the SOW in the RFP to eliminate how to's in program management, configuration management, systems engineering, and reliability and maintainability. Data items were minimized and tailored. Offerors were required to review all specifications and standards cited in the RFP and recommend deviations or substitutions that would result in cost savings. Performance requirements as originally defined by the user were reviewed and challenged, first in internal Army staff reviews and then again by Army acquisition executives following industry input. Nonessential performance and other contract requirements were eliminated, and overstated requirements were modified. Specific techniques followed in this case were:

MIL-HDBK-2488

- The program organization was staffed at its inception with a core group of personnel who understood streamlining principles and had all disciplines that would be required in the program office.
- Mature technology was prototyped in a technology demonstration, proof-of-principle phase that led into FSD. (If the technology is sufficiently mature and the threat projection is sufficiently stable, elements of the concept exploration and demonstration and validation phases can be combined.)
- Foreign alternatives were considered in terms of which foreign systems could satisfy user requirements and which required compromising requirements. Clear policy decisions encouraging foreign participation were obtained early.
- A detailed baseline cost estimate was developed on the basis of engineering data, and it served as a foundation for estimating the costs of system alternatives or enhancements.
- Specifications and standards were tailored to reflect realistic environmental requirements. Specific requirements were extracted from the statement of Required Operational Capability, actual requirements of fielded systems were used, and technical experts in specialty areas (e.g., nuclear survivability) were consulted.
- Functional requirements were established to minimize how-to direction, eliminate unnecessary tasks, and minimize data items. Guidance was provided to functional organizations, and they were required to examine how best to accomplish their objectives, to tailor data items, and to justify why data were needed and how they would be used. Specifications and references were used "for guidance only," and early participation of industry was obtained in formulating requirements.
- The Army decided early on acquiring data rights. It determined those data needed for subsequent competition and included a contract clause requiring contractors to provide the data to be delivered with limited rights.
- A minimal number of acceptable logistics support analysis tasks was specified to be completed by prospective bidders.
- Consistency between the RFP and Source Selection Evaluation Plan was ensured by designating the source selection participants early and matching the proposal preparation information requirements with those required for source selection.
- The draft RFP was revised on the basis of industry comment, and after receiving inputs from key Government decision-makers, only limited revisions were permitted.

9.3 Tailoring specifications early. The Air Force's C-17 heavy-lift transport aircraft program office conducted a continuing rigorous specification tailoring effort that began at program initiation and has continued into FSD.

9.3.1 C-17 program description. The purpose of the C-17 program is to provide next-generation intertheater and intratheater transport aircraft for the Military Airlift Command. The C-17 aircraft will be able to deliver forces over intercontinental distances directly to forward locations, thereby obviating the need for intratheater airlift. While planned as the final increment in long-term intertheater airlift capability, the C-17 will also have the flexibility to augment the C-130 tactical airlift fleet, providing a first-ever intratheater capability to carry outsize cargo.

The C-17 program, which began as the Advanced Medium Short Take-off and Landing Transport (AMST) program, entered FSD in 1985, and Initial Operational Capability (IOC) is planned for the early 1990s. The single prime contractor has been selected, and one contract covers development with options for production. That contract also includes key elements of the support concept; interim contractor support, concurrent acquisition of spare parts, and use of common support equipment. The contract limits the applicability of specifications to those that are explicitly stated in the contract; specifications that might otherwise be applicable by reference are not binding. Management plans, although required in the FSD RFP and offered by the contractor, were not included in the contract.

The contract has award-fee and incentive-fee provisions. It also incorporates a strong warranty whose key requirements will be tested during an operational readiness evaluation one month after establishing the IOC. If the C-17 fails to meet any single performance threshold included in the contract, the contractor will lose half of the total incentive fee and will still have to meet the threshold under terms of the warranty.

9.3.2 Specification-tailoring approach. The specification-tailoring effort was initiated on the AMST program and carried forward into the C-17 program. Experience on previous programs indicated that inappropriate application of MIL-SPECs would be costly and might even preclude the use of desirable approaches.

The first draft of instructions to go with the RFP included specifications (directly referenced or those required through tiering) that addressed such unnecessary requirements as steel filing cabinets, paper grocery bags, packaging and packing of thread, curling animal hair, and packaging procedures for submarine repair parts! Further examples of the tiering problem showed that four first-tier specifications (for packaging/handling/transportation, systems engineering, specification practices, and provisioning) called out 143 second-tier specifications, which in turn, called out 4,270 third-tier specifications, an overwhelming number of which contributed little to the quality of the C-17 design.

A three-part approach was used to tailor the specifications. Cost-performance tradeoffs were conducted to identify those requirements that increased the cost. They were then reviewed with the user and modified when necessary to

MIL-HDBK-248B

decrease cost. This iteration limited the number and scope of performance-related specifications. Second, a "zero-based" specification approach was employed. All commonly used specifications were individually justified to the program manager, and entire lists of specifications were eliminated. Finally, outside experts reviewed the proposed specifications to ensure that no important requirement had been inadvertently removed. The C-17 system specification now includes a total of 102 references at all tiers (39 MIL-SPECs, 30 MIL-STDs, 33 other references). Furthermore, subsystem requirements that traditionally have been incorporated by reference to numerous MIL-SPECs, such as those for landing gear, are directly incorporated into the air vehicle MIL-SPEC.

The C-17 procurement strategy calls for using performance-oriented tailored specifications. It reflects the philosophy, "Do not dictate design solutions." That philosophy applies to management systems as well.

9.3.3 Streamlining techniques, C-17 program. The C-17 program office has conducted a rigorous and continuous specification-tailoring effort, starting with the use of performance-oriented requirements. This effort has required a major management commitment, a willingness to invest the necessary time, and leadership by the Government. Specification tailoring has been reinforced through the C-17 procurement strategy. Some of the specific techniques used were:

- Performance-oriented requirements that reflect planned employment, maintenance, and support concepts were specified, ensuring that the user, developer, contractor, and support organization all understood the concepts. Because forecasting technology growth is difficult, requirements were stated in terms of thresholds and goals to permit controlling costs while striving for optimum requirements.
- Management commitment to specification tailoring was demonstrated at all levels and communicated to the functional specialists.
- The necessary time for proper tailoring was set aside early in the program. (The C-17 program took more than 20,000 man-hours and over a year for this tailoring.) Tailoring was recognized as an iterative process involving the program manager, user, contractor, and support organization.
- Government leadership was provided in tailoring all contract requirements, and it came from the procuring agency's upper management. While the Government had to take the lead in tailoring the initial requirements, it also had to follow through to ensure that, during the design process, contractor engineers did not reimpose specifications that had already been properly eliminated or tailored.

9.4 Preparing for full-scale development. The Navy's T45 Training System (T45TS) program office restructured its approach to FSD, reducing the original estimated development cost from \$810 million to \$438 million (in FY84 dollars).

9.4.1 T45 program description. The T45TS is designed to provide undergraduate jet pilot training for approximately 600 Navy and Marine Corps pilots per year through the year 2000. The program consists of aircraft, simulators, academic materials, integrated training, and logistics support. The T-45A Goshawk is a derivative of the British Aerospace Hawk aircraft, redesigned to provide aircraft carrier catapult and arrested landing capability. It will replace the T-2C and TA-4J aircraft.

Following approval of the original need in 1979, six contractors conducted competitive concept exploration leading to selection of a single contractor for development and limited production. A pre-FSD contract was awarded in 1981 (to a team led by Douglas Aircraft Company) and finally executed in 1982 after the requirement for aircraft carrier operational capability was reaffirmed. Alternatives were evaluated and the \$810 million initial cost of the development program (based on a new aircraft design) was reduced to \$727 million by deleting nonessential hardware, such as an aerial situation trainer, a head-up display, an airborne computer, and a multimedia display, by using contractor logistics support and by limiting the applicability of MIL-SPECS to the second tier (with the exception of third-tier specifications affecting operational safety).

The decision to authorize FSD in late 1983 included a \$450 million cost cap and required the use of an FFP contract in lieu of a cost-plus, incentive-fee contract. The cost cap and the use of an FFP contract required an intensive cooperative Government-contractor streamlining effort to restructure the program to be based instead on a derivative of an available aircraft design to fit within the cost cap prior to approval to proceed into FSD in August 1984. Ground-training system requirements were also redefined. An FSD contract for \$438 million was awarded in October 1984.

The restructuring was done by a Government "Tiger Team" working with the prime contractor in modifying SOWs, specifications, contract data requirements, and terms and conditions by relating them to specific work breakdown structure (WBS) elements. Because the T-45A is a derivative design of an existing aircraft and since prior applicable flight tests had already been completed on the original aircraft, the restructured contract reduced ground test articles from 3 to 2, flight test aircraft from 4 to 2, contractor flight test hours from 623 to 411, data requirements from 530 to 251 (142 are in contractor format), and specifications from 322 to 281; simplified the engine design; and simplified the training package. The program has remained in the low-to-medium risk category.

9.4.2 Streamlining techniques, T45 program. The T45TS program office restructured FSD by following a two-part streamlining approach. Initially, the program staff reexamined performance requirements and deleted nonessential hardware, selectively applied tailored MIL-SPECS and limited the tiering, and reduced data requirements and documentation. Once the Navy chose to modify an available aircraft, major restructuring called for the Tiger Team to lead in examining each WBS element to identify potential cost savings and to develop a revised FSD contract. The streamlining methodology required planning to establish a baseline, using an approach that focused on modifying WBS elements, executing the approach on schedule, communicating freely both within the Government team and between the team and the contractor, and providing sound leadership. The specific techniques used included:

MIL-HDBK-2488

- A systems approach to negotiation was followed. Organization wide support existed from the beginning. All proposed changes were reviewed from an engineering, systems integration, requirement fulfillment, cost, data, and contract viewpoint both by the Government and industry. Government plant representatives had sufficient design and industrial engineering and shop floor expertise to support the program manager.
- Negotiations were conducted from a WBS baseline with an attitude of cooperation and innovation rather than confrontation. A technically and verbally skilled small negotiating team had ready access to the program manager, and negotiating sessions were long enough to conclude discussions but short enough to prevent burnout.
- Both sides agreed on contract language that required the contractor to fix discrepancies found in testing at no cost to the Government.
- All changes were recorded and rigorous records of action items were maintained. (Be prepared to renegotiate items back into the program if the cost reduction target is exceeded. Make associated cost data available for engineering tradeoff analyses.)

10. NOTES

(This section contains information of a general or explanatory nature which may be helpful, but is not mandatory.)

10.1 Intended use. The information included in this handbook is intended as guidance for Program Managers and acquisition personnel in the implementation of Department of Defense acquisition streamlining policies. The intent of these policies is to aid in the development of strategies that will promote efficient utilization of resources to reduce the cost and time of system acquisition and life cycle cost without degrading system effectiveness in the production of quality weapon systems and products.

10.2 Data requirements. The following Data Item Description (DID) must be listed, as applicable, on the Contract Data Requirements List (DD Form 1423) when this handbook is applied on a contract, in order to obtain the data, except where DOD FAR Supplement 27.475-1 exempts the requirement for a DD Form 1423.

<u>Reference Paragraph</u>	<u>DID Number</u>	<u>DID Title</u>	<u>Suggested Tailoring</u>
7.3.1.2	DI-MISC-80344	Acquisition Streamlining Cost-Benefit Assessment Report	

The above DID was cleared as of the date of this handbook. The current issue of DOD 5010.12-L, Acquisition Management Systems and Data Requirements Control List (AMSDL), must be researched to ensure that only current, cleared DIDs are cited on the DD Form 1423.

10.3 Subject term (keyword) listing.

Acquisition
Application
Contracts
Requirements
Specifications
Standards
Streamlining
Tailoring
Tradeoffs

MIL-HDBK-248B

Custodians:

Army - MI
Navy - AS
Air Force - 11
DLA - DH

Preparing Activity:

Navy - AS
Project No. MISC-0022

Review Activities:

All SD-1 Activities

User Activities:

All DOD Components

MIL-HDBK-248B

APPENDIX A

METHODS OF APPLYING AND TAILORING SPECIFICATIONS
AND STANDARDS, MANAGEMENT SYSTEMS,
AND TECHNICAL DATA

10. GENERAL

10.1 Scope. This appendix describes in detail methods of applying and tailoring specifications and standards, management systems, and technical data consistent with DOD Directive (DODD) 5000.43. It describes techniques for referencing and for tailoring.

The development of customized specifications and standards for a contract is intended to ensure cost-effective weapons system acquisitions. Specifications and standards should be selected and tailored to impose only the essential needs for ensuring the effectiveness of the system performance. Data requirements should represent only those essential for supporting program management control of schedules and costs and for assessment of compliance with contract requirements.

10.2 The application and tailoring process. The application and tailoring process should provide for knowledgeable participation. A comprehensive review within the program management office should ensure that specifications, standards, and data item descriptions (DIDs, DD Form 1664) have been tailored appropriately. Additionally, comments and recommendations should be sought from prospective contractors to accomplish cost effective tailoring.

At the outset of any new development program, it is impractical to define and describe all technical requirements to the level of detail that will be required for quantity production. The development of the definitive detail is a progressive, evolutionary process. You, the program manager, must avoid excess detail in the early development stages but must plan ahead so that initial and follow-on production can be contracted for with adequate assurance of an acceptable product.

Don't overdo the tailoring process! Streamlining's strong emphasis on tailoring focuses on avoiding undue early application of specifications and standards. The benefits of proper tailoring, both deferral and total avoidance of requirements, can be impressive, but be reasonable. Standards are intended to control variety; they represent the best solutions for recurring design tasks. They are not acquisition documents, but they are called in by the specifications in which they are referenced to achieve interchangeability, compatibility, reliability, and/or maintainability. Specifications (and references to standards) can be essential; the tailoring process must arrange for their timely applications as well as to avoid inappropriate applications.

MIL-HDBK-248B

APPENDIX A

In recent years, a number of studies have concluded that, by and large, military specifications and standards are well written and generally adequate to meet DOD needs. These studies point out that problems arise when specifications and standards are misapplied. Underapplication, over-application, lack of tailoring, and excessive chain referencing are all examples of such misapplication.

The options for levels of applicability written into specifications seem to be ignored in many instances, and that results in inappropriate and/or excessive and costly requirements. Contractors and Government management are often equally at fault, but for different reasons. Government authorities are motivated toward maximum application to avoid the risks of failure and to fully protect Government interests. Contractors, on the other hand, are motivated to fully comply rather than risk nonconformance or nonresponsiveness in a highly competitive marketplace. This tendency for overly conservative application of MIL-SPECs and MIL-STDs can be alleviated and unnecessary costs avoided by the selective application and tailoring of all specifications and standards.

10.2.1 Overapplication of specifications and standards. Design and development contracts must include specific statements of work (SOWs). They do not, however, need each and every MIL-SPEC and MIL-STD. In developing technical packages for SOWs, be sensitive to utility and likely cost. Experience has shown that potential contractors may provide very useful advice in development of requests for proposals (RFPs). The preparation of a contractual SOW is an important aspect of the design and development process. It deserves all the ingenuity that can be brought to bear.

Avoid premature application of specifications and inadvertent incorporation of specifications and standards by reference. Early streamlining efforts have demonstrated the importance of attention to the cost implications of this latter effect of imposing layer after layer of documents invoked by reference. The tailoring process should usually include guidance to preclude inadvertent consequences of this sort.

Some specifications and standards describe basic approaches that have been found to be desirable for contract production. Even so, it is possible for a DOD contracting officer to require rigorous demonstrations of compliance, with resultant delays and increases in cost.

The requirements contained in many specifications and standards can be applied readily to systems acquisition programs by citing the titles and numbers of those documents in the system specification under the "applicable documents" section. This method of applying requirements, however, can frequently result in unnecessary work by the contractor. The preferred application of requirements includes deliberate selection of appropriate specifications and standards and careful review of those documents to select (i.e., tailor) requirements for unique application to the system specification or contract SOW. You must apply this tailoring process at each phase in the acquisition process.

APPENDIX A

10.2.2 Underapplication of specifications and standards. The consequences of underapplication of specifications and standards are as dire as those of overapplication. Underapplication is the inadvertent or deliberate omission of specifications or standards requirements. In attempting to reduce costs and compress schedules by limiting specifications and standards, you can end up with a system that fails to meet performance requirements. Failure to invoke specifications and standards at the appropriate milestones can also cause unnecessary contract costs because of last-minute efforts to catch up and meet the real requirement. Underapplication can result in reduced operational suitability, reduced performance, increased life-cycle cost, early obsolescence (underutilization of technology), and quality problems.

Fundamentally, specifications should be selected and tailored to require technical tradeoffs, using goals and thresholds, and referencing only useful specifications; taken together, they represent important parts of the methodology for specification selection and tailoring.

10.2.3 Other misapplications. Misapplication of specifications and standards may also take several other forms. They may be prematurely applied, they may be applied at the correct time but lack sufficient tailoring, wrong specifications and standards may be applied, obsolescent requirements may be imposed through application of overaged specifications and standards, and they may be proliferated through excessive chain referencing.

10.2.4 Proper application of specifications and standards. The acquisition streamlining approach is to integrate affordability considerations into the acquisition process. In order to streamline the use of specifications and standards, all DOD activities must institute and forcefully apply common sense and good business practices that will:

- Tailor all specifications and standards
- Apply only those specifications and standards that are mandatory
- Use commercial specifications or Commercial Item Descriptions (CIDs) where practical
- Eliminate automatic chain referencing of specifications and standards
- Apply performance specifications versus how-to specifications
- Maintain options on specifications until the latest possible phase in the development/design process

Above all, apply and tailor specifications to systems and equipment as though you were spending your own money.

APPENDIX A

Details on proper application of specifications and standards are provided in the Defense Standard Manual DOD 4120.3-M, "Defense Standardization and Specification Program Policies, Procedures and Instructions." Important points are summarized below.

10.2.4.1 The application process. The application process is a progressive, evolutionary procedure that continues throughout the development and production program and is unique for every acquisition. In essence, it is (1) the orderly process of reviewing and selecting from the total realm of available specifications and standards those that are considered to have application to the particular materiel acquisition program and (2) contractually invoking those specifications and standards wholly, or in part, at the most advantageous phase in the system development cycle. The cost-effective application of specifications and standards in materiel acquisitions is a desirable and effective engineering management tool. Thus, it should become a routine procedure to the extent of available resources.

The process of selecting and tailoring specifications and standards involves management as well as people with specialized skills from organizations at all levels. The task of applying requirements must be shared equally by the technology specialist, the component product specialist, the specification writer and the system integrator. Final responsibility and authority for application, however, rest with you, the program manager. All personnel involved in the process must be aware of their responsibilities and the consequences of their actions.

10.2.4.2 Basic steps for application. The application of specifications and standards for weapons systems acquisitions is accomplished by three basic steps: (1) selecting and imposing only those specifications and standards that contribute to requirements essential for the defined mission performance and the operational effectiveness and suitability of the system, (2) extracting from the selected specifications and standards only those requirements that are pertinent to the acquisition and eliminating those that are not absolutely essential and that can be eliminated with acceptable risks, and (3) citing specifications and standards in the early program phases as guidelines rather than as specified design solutions. In the full-scale development (FSD) phase, invoke only those selected specifications and standards referenced in the first tier that optimize the quantified values and requirements essential for the application. Use all other referenced documents, second tier and below, for guidance only unless specifically identified in the contract. Finally, for production contracts, make those specifications, standards, and related documents to the tiers identified as the baseline for production contractually applicable for procurement and reprourement.

Engineering management, technical design, performance, and logistic aspects of the end item must be considered. Establishing requirements for one aspect without considering the others is an invitation to future problems. To attain the desired degree of cost-effectiveness in application of specifications and standards, consider their relationship to cost, program schedule, and performance.

APPENDIX A

10.2.4.3 Other useful steps. A number of other steps are available to you. In the RFP for the system proposal, invite contractors to submit recommended, alternative, or streamlined approaches for those requirements having a history of imposed excessive costs with marginal benefits. Use performance and interface specifications in lieu of detailed design and fabrication specifications for most lower-tier components and equipments in the system design. Using tailored preferred parts lists in the design of weapon systems is an existing and convenient tailoring technique. Follow the parts selection and control procedures of DOD Instruction (DODI) 4120.19 in the design of weapons systems to avoid increased logistics cost and support problems during operational life cycles. Use of specification exception sheets is a convenient technique for tailoring reference specifications and standards. When amendments or revisions to MIL-SPECS cannot meet the RFP deadline, invoke the automatic update clause in the contract that allows the contractor to substitute upgraded revisions to specifications within established cost limitations. In the contract, require the contractor to provide a package of specification update changes that are incorporated as a deliverable item on the system contract. Use the Specification Change Notice (SCN) to propose, transmit, and record "tailoring" changes to a specification (see MIL-STD-480). Submit a separate SCN as an enclosure with an Engineering Change Proposal (ECP) for each specification to be changed.

10.3 Referencing and tailoring. MIL-SPECS and MIL-STDs are identified in the SOW in an RFP or contract, are included in DIDs or are referenced in the system specification. In addition, they are referenced in other MIL-SPECS and MIL-STDs. They, in turn, may reference other specifications and standards, and so on.

In a contract, include only those specifications and standards that are necessary, both those identified directly and indirectly (by reference).

10.3.1 Referencing techniques. Documents that explain the application of specifications and standards and how they are to be tailored will normally be specified in the SOW. However, a referenced MIL-SPEC or MIL-STD is a suggestion for the contractor to consider it. If the contractor determines the document to be appropriate, it should then be referenced in the system specification, including the extent to which it applies.

10.3.1.1 Reference to certain specifications in the contract. The system specification only establishes requirements, referring to other documents that define the form, fit, and function of the item described by the specification. A number of specifications and standards describe how the program meets requirements and not the requirements themselves. Reference those specifications and standards in the contract SOW.

10.3.1.2 Limiting second-tier referencing. In referencing a specification, give careful consideration to eliminating further Government or contractor references in the referenced document. If feasible, incorporate in those specifications referenced in the basic reference of the specification a paragraph similar to the following:

MIL-HDBK-248B

APPENDIX A

"Government documents. The following documents of the issue in effect on date of invitation for bids or request for proposal, form a part of the specification to the extent specified herein. Documents referenced within the documents cited herein shall not be applicable to this specification unless the extent is specifically delineated in this specification."

An alternative approach is to define or limit the applicability of second-tier documents as follows:

"The following documents of the exact issue shown form a part of this _____ to the extent specified herein. Only documents referenced within the specified requirements of documents cited are applicable, and only to the extent they specifically apply to the requirement. In the event of conflict between documents referenced and the contents of this _____, the contents of this _____ shall be considered the superseding requirement."

10.3.1.3 Extracting. Consider extracting desired requirements from MIL-SPECs and MIL-STDs in lieu of referencing. Normally, extracting reduces referencing and simplifies the understanding of requirements. In the application of lower-tier, reference specifications and standards, only a very few paragraphs of the referenced document will apply. In such instances, extract the applicable paragraphs from the referenced specification and write them into the system specification without reference to the lower-tier document. Incorporate the necessary tailoring (modification) of the extracted paragraph at the same time. Retain those documents that were meant to be referenced to ensure standardization. Do not inadvertently omit requirements.

10.3.2 Methods of tailoring. The generally used methods of tailoring are narrative, paragraphing, partitioning, and sectioning. They are merely different methods of documenting the tailoring for inclusion in the SOW.

The narrative method requires an extensive rewriting of the standard to specifically conform to a particular program. If done properly, it produces a superior SOW because you have specified exactly what you want directly in lieu of referencing a generalized standard. It does, however, produce a voluminous SOW.

You cannot use the narrative method on most problems because of the great number of pages that would be required on any sizable project. It should, however, be considered on a selective basis when a particular standard needs substantial rewriting for proper application. A basic requirement to use this narrative method is a full understanding of what the standard says, what you need in the program, and what you want the standard to say.

10.3.2.2 Paragraphing method. The paragraphing method, or specifying of standards by referencing particular paragraphs, is convenient for tailoring. It can be used by exception and, with the addition of notes, can be nearly as comprehensive as the narrative method.

APPENDIX A

Although the paragraphing method requires the same detailed knowledge of the program, it is much simpler to document. The judicious use of additions and deletions allows greater flexibility in the application of standards and can produce a well-tailored, yet much more concise SOW than the narrative method. It again requires a full understanding of the standards, but it offers an extremely good vehicle for proper program requirements.

10.3.2.3 Partitioning method. The partitioning method is based on the fact that most specifications are written to be general without regard to the type or phase of programs. Since contracts and SOWs are usually written for a specific program phase in the development of a particular item, the partitioning method involves identifying those portions of the total specification that are applicable to the present type of program (e.g., conceptual, validation, FSD, production) and the type and quantity of items being built (e.g., high quantity-low quantity, complex-noncomplex).

In theory, for a particular phase of a particular type of acquisition, only certain designated paragraphs of a standard or specification apply. The users must evaluate their programs in general and prepare a series of matrices designating how essential each paragraph is to each block.

A limitation of this method of tailoring is that military programs differ widely and many matrices are required. At a minimum, for example, separate matrices are required for electronic, space, and aircraft systems, and often they, too, must be expanded to account for the differences between programs in these general categories. If you keep the matrices broad and all encompassing, you are, by definition, not tailoring to the program; if you build a matrix that fits a particular program, you are really using the paragraphing method with a different accounting system.

Another limitation is that partitioning's designation of a paragraph as either essential or nonessential doesn't easily allow the option of adding, deleting, or modifying the items within that paragraph. A separate listing of footnotes must be maintained if a paragraph as written fits neither the essential nor nonessential categories. To use the partitioning method in its simplest form is not really tailoring and to expand it to the point at which it becomes tailoring is basically paragraphing.

10.3.2.4 Sectioning method. The sectioning method, like partitioning, recognizes that, generally, programs fall into broad categories where certain portions of specifications and standards are more likely to be applicable. It differs, however, in that rather than using the existing document, it requires the development of new or revised standards that tend to group or section the information, format it into mandatory and optional categories.

The intent of sectioning is to provide better engineering management tools and to facilitate the selective applications and tailoring of requirements. Sectioning is the structuring of requirements in a specification or book-form standard in several sections, each containing a separate and distinct group of requirements intended for a defined application. The requirements may be grouped in terms of a class or kind of weapons system or subsystem; a class or

MIL-HDBK-248B

APPENDIX A

type of equipment, components, parts, or materials; a range or level of performance; an engineering design function; a method, class, or level of quality testing; and/or a life-cycle phase.

Along with this formatting to align the particular areas based on various phases of a program, an important feature is structuring to make each requirement independent of the others. This structuring not only helps in extracting information for inclusion in an SOW, but also dramatically reduces the chances of inadvertently expanding the effort by unknowingly adding nonapplicable requirements and documents.

MIL-STD-962 implements this approach. In addition to the grouping of requirements, the format requires you to define the purpose and objective of each separately structured requirement and provide a statement of how it should be utilized in acquisition programs. The instructions and amplifications should be of great value to tailoring since they will assist in making some of the difficult SOW decisions early in the program.

Although sectioning and partitioning are both based on the premise that some requirements are optional and others mandatory for differing types of programs and differing phases of programs, they differ in execution. Partitioning, through the use of generalized matrices, tends to tailor the specification or standard to a general area of programs and not to the particular program. Sectioning reformats the standard to allow more streamlined and efficient tailoring. Sectioning retains emphasis on understanding the requirements and tailoring specifically to the program; partitioning, on the other hand, is directed more at identifying the program in a prearranged listing of program types. Both tend to group requirements based on phases of the programs.

10.4 Selecting and tailoring management systems. Management systems, as defined by DODD 5000.19, "Policies for the Management and Control of Information Requirements," direct or constrain the manner in which the contractor performs. A required management system is a detailed procedure that helps in defining or stating policy, objectives, and requirements; assigning responsibility; achieving efficient and effective utilization of resources; periodically measuring performance; comparing that performance against stated objectives and requirements; and taking appropriate action.

Management systems and related data are identified by functional area and listed in the Acquisition Management Systems and Data Requirements Control List (AMSDL) (DOD 5010.12-L, Volume II).

10.4.1 Responsibility for selecting management systems. You must give special attention to adequate application of specifications and standards, management systems, and data items to ensure against unnecessary program costs in each phase of the acquisition cycle. As Program Manager, you are responsible for:

MIL-HDBK-248B

APPENDIX A

- Limiting management systems selected for use in managing the contract/program to those that are essential to the fulfillment of the responsibilities of DOD by the contractor
- Specifying only one management system for each requirement on a single contract
- Formally approving management system and data requirements in a contract that meet the needs of the planned program management approach and are specifically identified on an individual item basis
- Ensuring that the management system and data requirements are listed in a single location in solicitations and contracts.

10.4.2 How to select and tailor management systems. In tailoring the management system, start from the top and structure it according to program objectives and desired management control and reporting needs rather than according to all directives, specifications, standards, manuals, regulations, etc. Define the frame of reference for conducting the program early.

Here are some guidelines for structuring management systems.

- Avoid the mandatory application of untailored requirements in such areas as general design requirements; environmental requirements and test methods; reliability/maintainability; quality control, inspection, and calibration; human engineering and safety; documentation/standardization; configuration control; and packaging, preservation, and packing. This body of specifications and standards must be tailored to the particular program if used at all; preferably, define the functional areas covered by these specifications in the SOW paragraphs and make the timing of requirements in these areas commensurate with program phase needs.
- Eliminate "how-to-manage" requirements (externally imposed management systems), technical requirements from premature design solutions (before development begins), untailored requirements (overspecified, unneeded provisions), and accidentally referenced requirements (unlimited pyramidal referencing).
- Specify the Project Summary Work Breakdown Structure (PSWBS) only to Level 3 as defined by MIL-STD-881, and permit contractor latitude in extending the PSWBS to the Contract Work Breakdown Structure (CWBS) levels commensurate with his system configuration approach and organizational and functional structures.
- Impose no additional management systems if contractors' internal systems are adequate to their needs and provide data sufficient for Government oversight purposes.

MIL-HDBK-248B

APPENDIX A

Management systems, in themselves, do not assure a successful product or economical program. Poorly defined or applied management systems can inhibit good people and prevent effective and economical achievements. You can realize a major payoff by establishing a management system that is effectively tailored and optimized to minimize effort and maximize success in meeting program objectives. In selecting management systems, consider the type of program, its complexity, and its life-cycle phase; the procurement approach being used and the type or types of contracts; contractor characteristics (strengths and weaknesses); and the planned operational usage.

Good management systems allow flexibility to permit tailoring to a specific program while responding to validated requirements. They are oriented to performance requirements and objectives rather than detailed procedures. They provide for recognition of differences in the degree of management suitable to the contract type, procurement methods, contract value, acquisition complexity/objectives, contractor characteristics, and life-cycle phase. They provide data compatible with other approved systems with which they interface while allowing maximum use of contractors' internal management systems. They comply with statutory requirements and make maximum use of uniform and common terminology and classifications.

Data and reports from management systems provide information needed at all echelons of management from a common data base. They also provide for a timely flow of data and the access to those data, which is essential to meeting the specific needs of users and providing for adequate maintenance of documentation and access to all pertinent records subject to audit review. They emphasize summary reporting levels as opposed to detailed reporting; however, the data base should be capable of providing sufficient detail for all necessary echelons of management.

Policies should be related to the system and no inconsistency should exist between the system and those policies. Variations among programs will influence to a large extent the methods employed. In addition, if a program has vital standardization requirements, the opportunity to tailor requirements may be considerably lessened.

10.5 Selecting and tailoring technical data. An important aspect of the streamlining emphasis on cost-effectiveness is the need to evaluate any contract provisions that require the contractor to submit data. In this context, be guided by DODI 5010.12, "Management of Technical Data," which requires that all deliverable data items be included in the Contract Data Requirements List (CDRL) and that individual DIDs be taken from AMSDL.

10.5.1 Technical data issues. Technical data involve a number of thorny issues. Data packages are needed if the Government is to obtain competition, but data packages are costly to acquire, and maintaining, retrieving, and distributing vast quantities of data are also costly. A further problem is that the acquisition of data implies some conflict with the proprietary interests and property rights of the developer. DODI 5010.12 recognizes the opposing interests and requires that data be acquired only when economically

APPENDIX A

justified. Proposed contract data requirements are to be reviewed and challenged by other than the requiring organizational element. The instruction emphasizes the potential usefulness of data for spare parts. It discourages the acquisition of "...unnecessary manufacturing data, such as flow charts, process sheets, tool designs, etc.,..." to support competitive procurement.

The conflicting data acquisition goals are recognized in the Federal Acquisition Regulation (FAR); the policy statement at FAR 27.475 requires agency regulations "...to strike a balance between the Government's need and the contractor's economic interest." The DOD FAR Supplement (DFARS) deals with these issues at DFARS 27.475. Guidance is provided about how to decide whether to acquire technical data with unlimited rights or with limited rights. The policy includes the early determination of the need for data with unlimited rights. It also offers several alternative techniques for use where the contractor insists on retaining some rights.

The Government has continually increased the variety and amounts of technical data required by contract. Reports to monitor design analysis efforts, program plans to document contractor implementation of contract requirements, test plans, test result reports, logistics support data, engineering data packages, the list seems endless. Growing technical data requirements contribute a significant percentage of the total cost of a contract.

To reduce the amount and cost of technical data, make an independent review of data requirements. Insist that requests for data be justified and properly phased. Consider any existing contractor data format if it provides the information needed; do not require unique and expensive formats. Provide candidate data requirements to contractors for tailoring just prior to contracting through a draft RFP.

In the computer and support equipment areas, where commercial equipment meeting Government needs is available, technical data often exist in the form of commercial manuals. If adequate, those data should be accepted for use without extensive restructuring into military format.

10.5.2 How to select and tailor technical data. Obtain technical data selectively, tailoring your request for timely delivery of data in contractor format and selecting DIDs that are tailored to address important technical issues. Do not request data before a thorough review by your Data Requirements Review Board (DRRB).

10.5.2.1 Tailoring. Tailoring data packages is important because over-application could lead to the acquisition of costly and ineffective data and underapplication may result in failure to acquire data essential to production, development, and support. Be sure that the data requirements imposed in the acquisition program are consistent with the selected and tailored tasking requirements imposed by the governing specifications and standards (source documents). Tailor DIDs (DD Forms 1664) to ensure that they do not reimpose requirements eliminated from the source document. Ensure that the delivery

MIL-HDBK-248B

APPENDIX A

schedule for data is compatible with design, development, or production schedules. Defer delivery of data, when possible, until the time of actual need.

10.5.2.2 Contractor data. Acquire data in the contractor's format rather than Government format whenever it is cost-effective. Much of the basic data, especially engineering documentation required by the Government in support of weapons system acquisitions, are prepared by the contractor in connection with the design, development, testing, and manufacturing of hardware. In such instances, the cost impact of a Government contract requirement for data becomes significant only if the data must be reformatted or delivered to meet unrealistic schedules. Classic examples of data that a contractor must prepare for his own use and is also required by the Government are engineering drawings. Both contractor and Government have many uses for engineering drawings. However, in some instances the Government requires drawings to assist in technology transfer to enhance competitive procurement. To meet that requirement, the contractor must include added detailed information on the drawings not normally required for his own use. Rather than dwell on the problems associated with this example (they concern proprietary innovative design and creative engineering), we merely point out that basic data prepared by the contractor will not always meet the Government requirement without additional efforts on the part of the contractor. Contractors should serve as a repository for data to the maximum extent possible. List all deliverable data requirements on the CDRL (DD Form 1423). That list constitutes the sole list of data requirements the contractor will be obligated to deliver except for data required by DFARS clauses.

10.5.2.3 Data Item Descriptions (DIDs). In many instances, specifications or standards will identify deliverable items of data in connection with the task requirements cited in other sections of the standards. The range, scope and format of these deliverable items of data are provided in the form of a DID selected from the AMSDL. In such instances, the standard will identify in a data appendix the items of data by paragraph number, DID number, and title. Any new or revised DIDs for existing specifications or standards (for drawings, quality, training, tests, technical manuals, etc.) are prepared by or in conjunction with the preparer of the document at the time it is revised or prepared, and it is circulated with the document through the coordination/approval cycle. Data items can be specified in the contract by a CDRL or, when a CDRL is optional (DFARS 27.475-1), by specifying them directly in the contract or purchasing documents. The preparation, revision, coordination, approval, printing, and distribution of new/revised DIDs and associated parent specifications or standards is a concurrent process.

10.5.2.4 Selection of DIDs from the AMSDL. When standardization documents contain a task requiring development of data, conduct a search of the AMSDL for an existing approved DID that will meet the data requirement as specified in the source document. Conduct this search before the preparation and promulgation of any new DID. The identification of data items to be procured by the various functional areas noted earlier is based on their intended uses of the data. Those data items identified in the functional areas and listed on the DD Form 1423 are those required to meet contract

MIL-HDBK-248B

APPENDIX A

needs. On some occasions, the review of the AMSDL may not result in finding an appropriate data item. In such cases, in order not to delay the procurement, have the Military Department prepare a one-time-use data item. The AMSDL Clearance Officer will expeditiously process such data items for use on the specific acquisition.

10.5.2.5 Tailoring of DIDs. Tailor the DID by the functional area requiring the data. The tasking requirements for data in a standardization document and the preparation instructions in a DID may only be tailored downward; the requirement placed on contractor may be less but may not be more extensive than that which is specified in an approved standardization document or DID. The functional area requiring the data has the option to delete any portion of the document or DID requirements without prior clearance in the tailoring process. However, any substantive revisions to the DID will require DOD approval prior to use and an additional approval by the Office of Management and Budget (OMB) in those instances in which further clearance is required. Examples of extensive tailoring changes to an approved DID that result in a requirement for further approval are:

- Modifications in the kind or amount of information sought
- Changes in the type of respondents or the survey coverage
- Increases in the timing or frequency of reporting
- Changes in the sample design or collection method
- Changes in the purpose for which the data are collected.

10.5.2.6 Deferred delivery of data. Deferred delivery of data is a technique to be utilized whenever practical to preclude the acquisition of unnecessary data, to ensure timely acquisition of necessary data, and the handling of revisions between the time the data are prepared and the time they are actually required for use by the Government. Data delivery should be scheduled to be in phase with the planned use.

10.5.2.7 Review and approval of contract data requirements. Upon receipt of completed CDRLs from each functional area, review the inputs, consolidate duplicative requirements, and where necessary, recommend additional tailoring by the functional area manager. When those actions are completed, convene a DRRB to review all solicitations/contracts having a total estimated value of \$5 million or more. The DRRB validates data requirements and maintains a written record of the rationale for the deletion, addition, or modification of any of them. In all instances, review each data requirement as well as the consolidated (total) data requirement for each contract to ensure no duplicate or unnecessary overlapping exists. Ensure that pre-contract award reviews for essentiality in programs of lesser amounts are performed by the personnel responsible for data management or by an individual or organization element in a position to evaluate data requirements objectively. The DRRB may recommend additional tailoring of the data requirements, if necessary, and the disapproval/approval of the data requirements package to be included in the solicitation/contract. You normally make the approval decision.

APPENDIX B

ACQUISITION STREAMLINING CONTRACT CLAUSE,
STATEMENT OF WORK PROVISION,
AND DATA ITEM DESCRIPTION

20. GENERAL

20.1 Scope. In order to contractually implement acquisition streamlining in all DOD system acquisition programs, the DOD Federal Acquisition Regulation Supplement (DFARS) has been modified to include a necessary contract clause. It is contained in DFARS Part 52, "Solicitation Provisions and Contract Clauses."

That clause requires the contractor to prepare and submit acquisition streamlining recommendations in accordance with the statement of work of this contract and to insert the clause in all subcontracts in excess of \$1.0 million.

20.2 Statement of Work (SOW). The SOW for the contract should include an acquisition streamlining provision that specifies basic contractor responsibilities and minimum program requirements. The provision should provide general information on acquisition streamlining objectives and necessary definitions, identification of essential acquisition streamlining procedures, direction to tailor the application of specifications, standards, and related documents by acquisition phase, and procedures for including acquisition streamlining in subcontracts. It also orders delivering of acquisition streamlining recommendations through the use of the contract data requirements list (CDRL), DD Form 1423, in conjunction with an acquisition streamlining data item description (DID), DD Form 1664.

20.3 Cost and Benefit Assessment Report. The Acquisition Streamlining Cost-Benefit Assessment Report DID, DI-MISC-80344, provides a format for preparing acquisition streamlining recommendations to be used as described in the DID.

20.3.1 DFARS clause, SOW provisions, and DID. Figures 4, 5 and 6 (Pages 60 thru 68) of this appendix provide the DFARS Part 52, Solicitation Provision and Contract Clause, SOW provisions, and the Cost-Benefit Assessment Report DID.

APPENDIX B

DFARS
PART 52 - SOLICITATION PROVISIONS
AND CONTRACT CLAUSES

DFAR 252.210-7005 Acquisition Streamlining

As prescribed in 10.011 (73), insert the following clause:

(ACQUISITION STREAMLINING (Date))

(a) It is the objective of the Government to acquire systems that meet stated performance requirements. The Government also desires to avoid over-specification and to ensure that cost-effective requirements are included in future acquisitions. The contractor shall prepare and submit acquisition streamlining recommendations in accordance with the statement of work of this contract. These recommendations shall be formatted and submitted as identified in the contract data requirements list (CDRL). However, recommendations may be accepted, modified or rejected by the Government.

(b) The contractor shall insert this clause, including this paragraph (b), in all subcontracts in excess of \$1.0 million.)

FIGURE 4. Solicitation provisions and contract clauses.

MIL-HDBK-248B

APPENDIX B

Date
<p>STATEMENT OF WORK PROVISION FOR ACQUISITION STREAMLINING</p>
<p>Preparing Activity</p>

FIGURE 5. SOW provision for acquisition streamlining.

APPENDIX B

TABLE OF CONTENTS

- 1. SCOPE.
 - 1.1 General.
 - 1.2 Definitions.

- 2. APPLICABLE DOCUMENTS.
 - 2.1 General.
 - 2.2 Application of Specifications, Standards, and Related Documents.

- 3. REQUIREMENTS.
 - 3.1 General.
 - 3.2 Detail.
 - 3.2.1 Review Specifications, Standards, and Related Documents.
 - 3.2.2 Review Other Contract Requirements.
 - 3.2.3 Format and Submit Recommendations.
 - 3.2.4 Flowdown to Subcontracts.

FIGURE 5. SOW provision for acquisition streamlining (continued).

MIL-HDBK-248B

APPENDIX B

STATEMENT OF WORK PROVISION
FOR
ACQUISITION STREAMLINING1.0 SCOPE.

1.1 General. It is the objective of the Government to acquire the best-value system that meets stated performance requirements. The Government desires to avoid overspecification and to ensure that only cost-effective requirements are included in this acquisition program, at the most appropriate time in the acquisition cycle, consistent with satisfying the performance requirements stated herein. The contractor, therefore, shall develop, prepare, and submit recommendations to this end.

1.2 Definitions.

1.2.1 Acquisition streamlining. Any effort that results in more efficient and effective use of resources to develop, produce, or deploy quality systems. This includes ensuring that only necessary and cost-effective requirements are included, at the most appropriate time in the acquisition cycle, in the design, development, or production of new systems or for modifications to existing systems that involve the redesign of systems or subsystems.

1.2.2 Application. The process of selecting requirements that are pertinent and cost-effective for the particular materiel acquisition and contractually invoking them at the most advantageous times in the acquisition cycle.

1.2.3 Contract requirements. In addition to specified performance requirements, contract requirements include those defined in the statement of work (SOW); specifications, standards, and related documents; the contract data requirements list (CDRL); management systems; and contract terms and conditions.

1.2.4 Instant contract. The contract in the phase of the acquisition cycle in which the contractor is currently performing or is proposing to perform.

FIGURE 5. SOW provision for acquisition streamlining (continued).

MIL-HDBK-248B

APPENDIX B

1.2.5 Performance requirements. Basic performance parameters (both goals and thresholds) for the system or equipment set forth in the contract specifications.

1.2.6 Specifications, standards, and related documents. Documents that establish and define requirements for purchased materiel, processes, procedures, practices, methods, and data. Such documents encompass all military, Federal, and Nongovernment specifications and standards; data item descriptions (DIDs) (DD Forms 1664); and other documents that have the same effect as specifications and standards when cited in solicitations and contracts.

1.2.7 Tailoring. The process of evaluating individual potential requirements to determine their pertinence and cost-effectiveness for a specific system or equipment acquisition, and modifying those requirements to ensure that each contributes to an optimal balance between need and cost.

1.2.8 Tiers and referenced documents. Specifications and standards cited in a contract normally reference other documents (first tier of referenced documents) which in turn reference yet other documents (second tier of referenced documents, third tier, etc.).

2.0 APPLICABLE DOCUMENTS.

2.1 General. All documents invoked in the Requirements Section of the entire SOW are applicable (not just those in this acquisition streamlining provision of this SOW). All other contract requirements are included, including specified performance requirements, specifications, standards, and related documents, the contract data requirements list (CDRL), management systems, and contract terms and conditions. Any document must be selectively tailored to meet the minimum needs in the Requirements Section.

2.2 Application of specifications, standards, and related documents.

FIGURE 5. SOW provision for acquisition streamlining (continued).

MIL-HDBK-2488

APPENDIX B

2.2.1 Alternate I. Prior to the (full-scale development) phase, all specifications, standards, and related documents cited in Section(s) _____ of this contract are for guidance only, except for minimum performance requirements and those documents specifically designated as mandatory.

2.2.2 Alternate II. For the (full-scale development) phase, all specifications, standards, and related documents cited in Section(s) _____ of this contract and specified portions of documents directly reference therein (first-tier reference) are mandatory. All other referenced documents (second tier and below) shall be for guidance only, unless specifically identified as mandatory.

2.2.3 Alternate III. For the (production) phase, all of the specifications, standards, and related documents cited in Section(s) _____ of this contract to the tier identified as the baseline for production shall be mandatory.

2.2.4 Other. Notwithstanding the above indicated requirements for application, all specifications, standards, and related documents that define the product baseline for items already developed, such as standard parts and off-the-shelf items, are mandatory, irrespective of acquisition phase.

3.0 REQUIREMENTS.

3.1 General. The contractor shall, as part of this contract (~~the instant contract~~), provide recommendations for the application and tailoring of contract requirements.

3.2 Detail. The contractor shall perform the following tasks.

3.2.1 Review specifications, standards, and related documents. Specifications, standards, and related documents shall be reviewed for application; those found pertinent and cost-effective shall then be tailored and recommended for application in the next phase (including reprocurement) of this acquisition (see 2.2 above).

FIGURE 5. SOW provision for acquisition streamlining (continued).

APPENDIX B

3.2.2 Review other contract requirements. This review shall also include the schedule, SOW, data requirements, management systems requirements, and contract terms and conditions.

3.2.3 Format and submit recommendations. Contractor recommendations shall be formatted and submitted as identified in the contract data requirements list (CDRL) using an approved DID. They may be marked as source selection sensitive if appropriate. The Government may accept, modify, or reject them.

3.2.4 Flowdown to Subcontracts. The contractor shall include an acquisition streamlining clause essentially the same as this streamlining provision in any subcontract involving system or subsystem design and development under this contract. Subcontractor recommendations shall be submitted in a convenient format pursuant to the acquisition streamlining clause of the subcontract and forwarded to the Government by the prime contractor. These recommendations shall be supported by technical and cost documentation to the extent necessary to evaluate the specific recommendations.

FIGURE 5. SOW provision for acquisition streamlining (continued).

MIL-HDBK-248B

APPENDIX B

DATA ITEM DESCRIPTION (DID)		Form Approved OMB No 0704-0168	
2 TITLE Acquisition Streamlining Cost-Benefit Assessment Report		1 IDENTIFICATION NUMBER DI-MISC-80344	
3 DESCRIPTION/PURPOSE <p>3.1 This report provides contractor recommendations for acquisition streamlining based on analyzing the costs and benefits of the application and tailoring of specifications, standards, and related contract requirements.</p> <p>3.2 During Concept Exploration and Demonstration/Validation program phases, streamlining recommendations can be included in periodic progress reports, program reviews or start-ups of MIL-STD-1521 reviews. During Full-Scale Development and Production, streamlining recommendations can be provided in normal configuration management or contract change submittals. This DID should be used only when these traditional data submittals are inappropriate.</p> <p>3.3 The Government will use this information to determine whether such recommendations are to be authorized and incorporated in the program. This report compiles and summarizes these recommendations for use in establishing a baseline for the next acquisition phase. The DID should be applied and tailored in each phase to provide a mechanism for making timely program management decisions and to avoid making piecemeal decisions on individual recommendations.</p>			
4 APPROVAL DATE (YYMMDD)	5 OFFICE OF PRIMARY RESPONSIBILITY (OPR) O/BASD(PAL)(PQ)	6a DTIC APPLICABLE	6b GIDEP APPLICABLE
7 APPLICATION/INTERRELATIONSHIP <p>7.1 This DID contains the format and content preparation instructions for the Acquisition Streamlining Cost/Benefit Assessment Report generated by the specific and discrete task requirement as delineated in the contract.</p> <p>7.2 This DID is applicable in contracts for all system acquisition programs requiring design, development, or production of new systems or modifications to existing systems that involve redesign of the system or subsystems.</p>			
8 APPROVAL LIMITATION		9a APPLICABLE FORMS	9b AMSC NUMBER
10 PREPARATION INSTRUCTIONS <p>10.1 <u>Reference documents.</u> The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendments, notices and revisions shall be as specified in the contract.</p> <p>10.2 <u>Format.</u> The Acquisition Streamlining Cost/Benefit Assessment Report shall be in contractor's format (see Figure 1 for sample).</p> <p>10.3 <u>Content.</u> The report shall contain the following information: 10.3.1 <u>Work Breakdown Structure (WBS) Element Numbers.</u> Where the WBS is adequately defined indicate to which WBS element the recommended action applies. Use alphabetical suffixes for multiple items in same WBS. 10.3.2 <u>Recommended action.</u> Recommend application and tailoring of detailed specifications, standards and related contract requirements. The recommendation should reference the existing contract requirement and state how the requirement should be applied and tailored in the subsequent plan phase of the acquisition cycle. Attach applicable contract provisions including all Specification Change Notices (SCNs) with recommended revisions. See MIL-HDBK 248 for additional guidance. 10.3.3 <u>Impact.</u> Discuss the impact of the recommendation in terms of risk (technical, schedule, cost production (schedule and cost) operations and support (capability and cost), and cost (indicate impact in general terms (high, medium or low) and, where available, in terms of cost by applicable fiscal year(s) and allocation between Government and contractor). 10.3.4 <u>Disposition.</u> Indicate whether the recommendation is approved, amended or deferred along with necessary elaborating comments. 10.3.5 <u>Applicant authority.</u> Provide authorization by both the Government and contractor for recommended action.</p>			
(Continued on page 2)			
11 DISTRIBUTION STATEMENT Distribution Statement A. Approved for public release, distribution is unlimited.			

FIGURE 6. Data Item Description Form.

APPENDIX B

10. PREPARATION INSTRUCTIONS (continued)

A. WBS ELEMENT NUMBER(S): _____

B. RECOMMENDED ACTION: _____

APPLICABLE CONTRACT PROVISIONS _____

C. IMPACT:

				<u>If yes, how?</u>
RISK				
TECHNICAL	NO	_____	YES	_____
SCHEDULE	NO	_____	YES	_____
COST	NO	_____	YES	_____
PRODUCTION				
SCHEDULE	NO	_____	YES	_____
COST	NO	_____	YES	_____
OPERATIONS & SUPPORT				
CAPABILITY	NO	_____	YES	_____
COST	NO	_____	YES	_____
ESTIMATED COST IMPACT (in FYXX \$)				
	Gov't	_____	Contractor	_____
			Joint	_____

D. DISPOSITION:

	Gov't	Contractor	Comments
APPROVED	_____	_____	_____
AMENDED	_____	_____	_____
DEFERRED	_____	_____	_____

E. COGNIZANT AUTHORITY:

Date _____

Gov't _____
 Contractor _____

FIGURE 6. Data Item Description Form Instructions (continued).

MIL-HDBK-248B

APPENDIX C

SAMPLE ACQUISITION STREAMLINING
AWARD FEE CLAUSE AND PLAN

30. GENERAL.

30.1 Award fee clause. A sample award fee clause has been developed that specifies essential contract terms and conditions. It incorporates the Award Fee Plan by reference.

30.1.1 Award fee plan. A sample Award Fee Plan has also been developed. It consists of general guidance as to purpose, evaluation areas, explanation of terms, and organization. It also describes evaluation procedures and the allocation of available fee. This plan also consists of formats for listing award fee monitors, itemizing award fee allocation by period, and applying award fee and a description of evaluation criteria.

30.1.2 Acquisition streamlining award fee clause and plan. Sample award fee clause and plan are provided on pages 70 thru 75 of this appendix.

APPENDIX C

ACQUISITION STREAMLINING AWARD FEE

Insert the following clause in solicitations and contracts for systems acquisitions that will incorporate an award fee incentive.

ACQUISITION STREAMLINING AWARD FEE CLAUSE (Date)

(a) The Contractor will be eligible for up to \$_____ of award fee for acquisition streamlining performance. The Contractor will be evaluated at _____ time periods with up to \$_____ available for each period. The base fee (when appropriate) for this Contract is \$_____.

(b) The fee awarded each period will be based on the Contractor's evaluated performance in the planning and management of acquisition streamlining, for the quantity and quality of acquisition streamlining proposals, and for the extent of Government acceptance of these proposals submitted by the Contractor. The evaluation criteria and procedures for administering the award fee process are set forth in the Acquisition Streamlining Award Fee Plan which is hereby incorporated by reference.

(c) The determination of award fee earned, either in whole or part, will be made unilaterally and in writing by the Fee Determination Official (FDO) in accordance with the reference Award Fee Plan. The FDO's determinations concerning award fee earned are binding on both parties and are not subject to appeal under the disputes clause of the contract. Award fee earned will be paid after each determination in accordance with the contract's normal payment procedures. A separate contract modification will not be used after each determination. Unearned award fee amounts will be accumulated and, at the discretion of the FDO, may be allocated to future periods or events. The Award Fee will not be equitably adjusted on account of change orders or other contract modifications that may be issued during performance.

(d) In the event of contract termination, either in whole or part, the amount of award fee available shall represent a pro rata distribution associated with evaluation period activities or events as determined by the FDO. Such determination shall be binding and not subject to appeal under the disputes clause of the contract.

(e) The FDO has the unilateral right to change the Award Fee Plan, except for conditions that otherwise require mutual agreement under the contract. The contractor shall receive notice of such change _____ calendar days prior to the beginning of the evaluation period to which the change will apply.

MIL-HDBK-2488

APPENDIX C

ACQUISITION STREAMLINING AWARD FEE PLAN

A. GENERAL.

1. Purpose. The purpose of the award fee provision incorporated into this contract is to establish the basis upon which award fee shall be made to the contractor by the Government and to encourage and reward the contractor for performing beyond the standard which is expected of a contractor of demonstrated capability. This plan provides specific policy and procedural guidance by which contract performance is evaluated and reported by award fee monitors, the contracting officer, and the contractor. The subjective assessment of this collective input will be the basis upon which fee may be awarded for each period. Allocation of the award fee is a unilateral determination by the Government which is not subject to the disputes clause of the contract.

2. Areas subject to evaluation. The contractor's performance will be evaluated in the areas of the planning and management of acquisition streamlining and the quantity, quality, and Government acceptance of his acquisition streamlining proposals.

3. Explanation of terms.

a. Award Fee: The amount of fee set forth in the contract which can be awarded in accordance with this plan.

b. Award fee evaluation plan: A plan which identifies categories of performance and clearly describes the criteria utilized to evaluate the contractor's performance. The plan also allocates the fee pool among the performance periods.

c. Award fee monitor: Government representatives who observe, assess, and report the performance of the contractor in accordance with the procedures set forth in this plan. The monitor may be required to receive, analyze, collate, and report data from other sources.

d. Acquisition Streamlining Review Board (ASRB): A group of Government officials responsible for evaluating Award Fee Monitor reports and recommending an appropriate award fee to the Fee Determination Official. The ASRB also reviews and approves significant changes to the Award Fee Plan such as changes in criteria and/or associated weighted factors.

e. Criteria: The significant divisions or objectives of performance to be rated under this plan.

MIL-HDBK-2488

APPENDIX C

f. Fee Determination Official (FDO): The official designated to review the recommendation of the ASRB in order to make the final determination of the Award Fee.

g. Performance report: A formal, written report on an approved form(s) of the contractor's performance that has been prepared and submitted by award fee monitors. The report sets forth an assessment of applicable criteria. Numeric ratings are also inserted based on performance for each reporting period and by the ASRB to determine their recommended award fee to the FDO.

h. Numeric and adjective rating scales: Adjective ratings and an associated numeric rating scale are used in conjunction with one another to define the various levels of performance under the contract. Adjective ratings that may be assigned are Poor, Satisfactory, and Excellent. Each adjective rating has an associated numeric rating range from which a specific numeric score is assigned and used to compute the amount of available award fee to be awarded the contractor.

4. Organization.

a. The FDO will be the _____. There will be no substitutions for the FDO.

b. The ASRB shall be composed of the following members:
_____.

c. Award Fee Monitors will generally be various functional experts within the _____, including all contract management personnel responsible for functional areas and all contracting officers who have authority under the contract. (See Attachment 1 for identification of monitors for each criterion.)

d. If members of the ASRB are absent, persons with like qualifications may be substituted.

e. Technical and functional experts will be used as required as advisors only and not as voting members of the ASRB.

B. EVALUATION PROCEDURES.

For the purpose of award fee determination of this contract, the procedure set forth below will be utilized.

1. General.

a. The award fee will be paid to the contractor based on his performance during each award fee period. Each award fee period shall

MIL-HDBK-2488

APPENDIX C

be ___ months long (with the exception of transition period #1 which shall be ___ months long). With the exception of award fee period #1, which shall be From ___, award fee periods will consist of the following period for each contract year:

The total award fee pool available for each period is listed in Figure 7.

b. The Government shall furnish to the contractor written notification of any performance criteria changes and/or weights no later than 15 calendar days prior to the first day of the new award fee evaluation period. However, the Government reserves the right to evaluate all elements and aspects of the contractor's performance and, in doing so, may consider other areas of performance and use additional criteria and measurements as necessary, without issuing an administrative change to the plan.

c. Any proposed changes to this plan shall be sent in writing to the procuring contracting officer (PCO). Changes shall not be retroactive unless the PCO determines and the ASRB concurs it to be in the best interest of the Government. (Retroactive changes may be made to administrative and/or procedural requirements only.) Nothing in this plan shall excuse the contractor from complying with the terms and conditions of the contract. The PCO shall resolve, in writing, any conflict, apparent or actual, between the Award Fee plan and the contract within 7 working days after written notification.

d. It is the intent of the Government to maximize communications regarding contract performance throughout each award fee performance period. In this regard the Government and contractor should explore multiple avenues, i.e., face-to-face meetings and formal written assessments of performance (not more than bimonthly), to report any overall or specific area of performance considered to be less than satisfactory. The Government will evaluate the responsiveness of the contractor to resolve identified deficiencies and to proclude recurrence as part of the formal award fee evaluation board process.

2. Fee Determination Process.

a. Within 10 days after the end of each evaluation period, the contractor may submit/present to the ASRB a formal presentation of his performance during the evaluation period. The material shall also contain any information which may be reasonably expected to assist the ASRB in evaluating the contractor's performance during the evaluation period.

b. Within 20 days after the end of each evaluation period, the Award Review Board shall meet to evaluate the contractor's performance during the evaluation period. The Board shall use the criteria to evaluate the contractor's performance. The Board may use any person as an advisor it deems

APPENDIX C

necessary to assist in evaluating the contractor's performance during that period. Based on this evaluation, the weighting assigned to each criteria, and Award Fee Application Chart (Figure 8), the Board shall recommend to the FDO the amount of award fee to be awarded.

c. Within 30 days after the end of each evaluation period, the FDO shall (1) unilaterally determine, considering the ASRB's recommendations, the amount of award fee to be paid and (2) notify the contractor through the PCO in writing of his decision along with an evaluation of the contractor's performance as measured against the award fee criteria.

d. Within 30 days after receiving written notification from the FDO, the PCO shall unilaterally amend the contract to authorize payment of any fee awarded by the FDO. The award fee determined is not subject to the Disputes clause.

C. ALLOCATION OF AVAILABLE FEE.

1. Figure 7 sets forth the allocation of available fee for each award fee period. Figure 8 sets forth the weighting assigned to each criteria for a given period.

2. In the event the ASRB does not recommend all the available allocated award fee amount for that period, the amount remaining shall be available to the FDO to be used at his discretion. For example, the FDO could use this amount to provide the contractor additional fee above that recommended by the ASRB if, in the opinion of the FDO, the ASRB was too harsh in its evaluation.

3. The total available award fee for each discrete period that is not awarded the contractor shall not be carried forward to the next period.

MIL-HDBK-248B

APPENDIX C

Period	Allocation (\$)	Percent Total
1 Jan 19____ - 31 Mar 19____		
1 Apr 19____ - 30 Sep 19____		
1 Oct 19____ - 31 Mar 19____		
1 Apr 19____ - 30 Sep 19____		
1 Oct 19____ - 31 Mar 19____		
1 Apr 19 - 30 Sep 19____		
Total Award Fee Available		

FIGURE 7. Award fee allocation by period.

APPENDIX C

DESCRIPTION OF ACQUISITION STREAMLINING AWARD FEE EVALUATION CRITERIA

I. Planning for Acquisition Streamlining.

a. Excellent: Acquisition streamlining principles and objectives as described in Military Handbook 248B are fully integrated into the design engineering process. Training on proper optimization techniques is given to all personnel who generate contract requirements. Such personnel are fully aware of the need to emphasize optimizing requirements while at the same time maintaining an affordable, producible, reliable, and maintainable system. Submission of proposals to delete noncost-effective requirements is done so as to make the maximum impact on the requirement generation process.

b. Satisfactory: Acquisition streamlining principles and objectives as described in Military Handbook 248B are integrated into the design engineering process. Training on proper optimization techniques is given to some personnel who generate contract requirements. Such personnel are aware of the need for optimizing requirements. Proposals to delete noncost-effective requirements is done so as to make an impact on the requirement generation process.

c. Poor: Acquisition streamlining principles and objectives as described in Military Handbook 248B are not integrated into the design engineering process. Training on proper optimization techniques is not given to personnel who generate contract requirements. Such personnel are not aware of the need for optimizing requirements. Proposals to delete noncost-effective requirements are not done so as to impact the requirement generation process.

II. Management of Acquisition Streamlining.

Organization and Resources.

a. Excellent: Contractor procedures preclude automatic use of requirement documents. Contractor utilizes dedicated teams consisting of a sufficient number of knowledgeable personnel to perform requirement reviews, challenge imposed requirements, and perform advance coordination of acquisition streamlining proposals. Engineering talent/expertise is adequate to permit full consideration of acquisition streamlining in the design process.

b. Satisfactory: Contractor procedures discourage automatic use of requirement documents. Contractor usually utilizes teams consisting of a sufficient number of knowledgeable personnel to perform requirement reviews. Engineering talent/expertise is adequate to allow consideration of acquisition streamlining in the design process.

MIL-HDBK-248B

APPENDIX C

c. Poor: Contractor procedures allow automatic use of requirement documents. Contractor does not utilize dedicated teams to perform requirement reviews. Engineering talent/expertise is not adequate to permit consideration of acquisition streamlining in the design process.

Management Emphasis.

a. Excellent: Acquisition streamlining achievements are strongly encouraged and adequately rewarded by the contractor's program manager. These achievements are emphasized in contractor briefings and reports to the Government program office.

b. Satisfactory: Acquisition streamlining achievements are usually recognized by the contractor's program manager. These achievements are described in contractor briefings and reports to the Government program office.

c. Poor: Acquisition streamlining achievements are not recognized by the contractor's program manager. These achievements are mentioned in contractor briefings and reports to the Government program office.

Subcontract Management.

a. Excellent: Contractor structures subcontract statements of work (SOWs) so as to encourage optimizing next phase system and subsystem contract requirements. Contractor includes flow-down of acquisition streamlining incentive provisions in subcontracts or otherwise fully recognizes subcontract acquisition streamlining achievements. Contractor actively oversees and coordinates subcontractor acquisition streamlining efforts.

b. Satisfactory: Subcontract SOWs permit optimizing next-phase system and subsystem contract requirements. Contractor usually includes flow-down of acquisition streamlining incentive provisions in subcontracts or otherwise recognizes subcontract acquisition streamlining achievements. Contractor monitors subcontractor acquisition streamlining efforts.

c. Poor: Subcontract SOWs do not include optimizing next-phase system and subsystem contract requirements. Contractor does not include flow-down of acquisition streamlining incentive provisions in subcontracts or otherwise recognize subcontract acquisition streamlining achievements. Contractor does not monitor or coordinate subcontractor acquisition streamlining efforts.

III. Optimization Proposals.

Quantity and Quality of Acquisition Streamlining Proposals.

a. Excellent: Number of acquisition streamlining proposals and timeliness of their submission fully support achievement of acquisition streamlining objectives. Proposals submitted reflect complete sensitivity to necessity for tradeoffs between instant contract cost, producibility,

APPENDIX C

production costs, operational needs, reliability, supportability, and life-cycle costs. Proposals demonstrate a full awareness of the applicable background for a particular requirement and incorporate experience with similar past programs, analysis of relevant data bases and use of expert opinion. All relevant risks inherent in accepting proposals were concisely identified and considered. Levels of implementation of specification and standard documents were fully utilized in acquisition streamlining proposals. Requirement documents produced reflect full understanding of the manner in which proposed requirements impact the flexibility of the contractor for the next phase.

b. Satisfactory: Number of acquisition streamlining proposals and timeliness of their submission allow achievement of acquisition streamlining objectives. Proposals submitted usually reflect sensitivity to necessity for tradeoffs between instant contract cost, producibility, production costs, operational needs, reliability, supportability, and life-cycle costs. Proposals demonstrate an awareness of the applicable background for a particular requirement and usually incorporate experience with similar past programs, analysis of relevant data bases, and use of expert opinion. Relevant risks inherent in accepting proposals were identified and considered. Levels of implementation of specification and standard documents were ordinarily considered in acquisition streamlining proposals. Requirement documents produced reflect an understanding of the impact of proposed requirements on the flexibility of the next-phase contractor.

c. Poor: Number of acquisition streamlining proposals and timeliness of their submission do not permit achievement of optimization objectives. Proposals submitted did not reflect sensitivity to necessity for tradeoffs between instant contract cost producibility, production costs, operational needs, reliability, supportability, and life-cycle costs. Proposals do not demonstrate an awareness of the applicable background for a particular requirement and did not incorporate experience with similar past programs, analysis of relevant data bases, and use of expert opinion. Relevant risks inherent in accepting proposals were not identified and considered. Levels of implementation of specification and standard documents were not utilized in acquisition streamlining proposals. Requirement documents produced do not demonstrate an understanding of the impact of proposed requirements on the flexibility of the next-phase contractor.

Government Acceptance of Acquisition Streamlining Proposals.

a. Excellent: The vast majority (over 75 percent) of proposals submitted are accepted. Proposal justifications are completely adequate to support the requirement reduction or change recommended. Validity of proposal cost-saving projections is entirely supportable. Value of proposals accepted is completely demonstrated in subsequent phases.

b. Satisfactory: The majority (over 50 percent) of proposals submitted are accepted. Proposal justifications are adequate to support the requirement reduction or change recommended. Validity of proposal cost-saving projections is usually supportable. Value of proposals accepted is ordinarily demonstrated in subsequent phases.

APPENDIX C

c. Poor: More than three-quarters of the proposals submitted are not accepted. Proposal justifications are not adequate to support the requirement reduction or change recommended. Validity of proposal cost-saving projections is not supportable. Value of proposals accepted is not demonstrated in subsequent phases.

APPENDIX C

RATING SCALE:

0-49 = Poor

50-80 = Satisfactory

81-100 = Excellent

Evaluation Period _____

	RATING	WEIGHTING	WEIGHTED RATING
A. PLANNING FOR ACQUISITION STREAMLINING	_____	X .20	= _____
B. MANAGEMENT OF ACQUISITION	_____	X .20	= _____
1. Organization and Resources			
2. Management Emphasis			
3. Subcontract Management			
C. ACQUISITION STREAMLINING PROPOSALS	_____	X .60	= _____
1. Quantity and Quality of Optimization Proposals			
2. Government Acceptance and Experience with Acquisition Streamlining Proposals			

FIGURE 8. Award fee application chart.

MIL-HDBK-248B

APPENDIX D

ACQUISITION STREAMLINING TIGER TEAM CHARTER

GENERAL. In order to implement the Acquisition Streamlining Tiger Team approach, follow the charter and operating procedures contained in this appendix. The operating procedures define Government team responsibilities in detail.

PURPOSE. To find cost-reduction initiatives from the (program name) current contract.

SCOPE. The scope of the Tiger Team is unlimited. They have the authority to review, evaluate, and recommend any initiative which satisfies the purpose of this effort.

SCHEDULE. The Tiger Team will be formed after preliminary design review (PDR) and will not function any longer than 3 months unless specifically extended by the undersigned.

MEMBERSHIP. To be determined as described in the following text of this appendix.

DOCUMENTATION. The Tiger Team will prepare two documents. The first is a Final Report describing each recommended initiative. The second is a Briefing which summarizes the Final Report.

DISBANDMENT. Upon acceptance of the Final Report, the Tiger Team will be disbanded and all resources returned to sponsor organizations. Documentation will be maintained by the Office of Primary Responsibility (OPR) within the Program Office.

Program Executive Officer

Program Manager

Contractor

MIL-HDBK-248B

APPENDIX D

ACQUISITION STREAMLINING TIGER TEAM PROCEDURES

PURPOSE. To find means for cost reduction in the _____ program through innovative actions by the Program Office and the contractor, _____ Corporation, including its employees, subcontractors, and subcontractor employees.

OBJECTIVE. The objective of acquisition streamlining is to communicate clearly what is required in functional terms and to allow flexibility for the application of contractor's experience, judgment, and creativity in recommending application and tailoring of detailed military specifications (MIL-SPECs), military standards (MIL-STDs), and other contractual requirements as the weapon system evolves from full-scale development (FSD) to production and deployment. The streamlining Tiger Team initiative will be managed by phase.

In Phase 1, the current contract will be reviewed to find means of streamlining the present development effort. A Tiger Team is formed jointly between the Program Office and the contractor to identify and estimate costs of initiatives for evaluation, review, and recommendation to the program managers for the Government and contractor. Phase 1 will conclude with the acceptance of the Final Report for action.

In Phase 2, efforts will continue to identify and accept items for streamlining the current contract and look for those items which should be included in the production contract. Phase 2 will be ongoing through the remainder of FSD and into production and deployment.

GENERAL: Streamlining is the evolutionary development and optimization of acquisition program requirements for cost-effective contracts. It means doing whatever is necessary to preclude or eliminate noncost-effective contract requirements in design, development, production, or procurement.

There are many ways that this can be done:

- Specify requirements in terms of mission performance.
- Preclude premature requirements.
- Tailor requirements.
- Limit the contractual applicability of referenced documents.

DOD Directive (DODD) 5000.1 supports this approach. It states that "effective design ... shall be obtained to the maximum extent practical to ensure that defense systems are cost-effective and are responsive to mission needs."

MIL-HDBK-248B

APPENDIX D

Specifications and standards reference others that when added to each other increase costs in excess of benefit. Some things can be done:

- Challenge requirements in specifications and standards.
- Conduct technical reviews and assess reasonableness of cost.
- Conduct value engineering throughout the life cycle.
- Upgrade the quality of technical review during program reviews.

The streamlining initiative requires an open mind and a change of attitudes. There is now a greater opportunity for innovation. If attitudes change, the barriers can be removed that impede progress, reduce or eliminate turbulence in daily management, make things simple and efficient, reduce regulatory requirements to a minimum, and strip away nonessentials.

The acquisition streamlining initiative contains the following:

- Utilize contractor ingenuity and experience in Government program manager's decision-making authority.
- Encourage contractors to critique draft requests for proposals (RFPs).
- Specify what is needed, rather than how to.
- Specify system-level functional requirements at onset of development.
- Require contractors to tailor during one phase for application to the next.
- Preclude premature application of MIL-SPECs and MIL-STDs; identify them for guidance for demonstration/validation and tailor them for FSD.
- Limit contractual applicability to one level of reference in FSD.
- Pursue economically producible, operationally suitable, and field-supportable designs.
- Assure complete production specifications while providing contractor flexibility to optimize design.

RESPONSIBILITIES. The overall responsibility for the streamlining initiative lies with the program managers for the Government and contractor, with the Government having final responsibility for approving initiatives that are within its authority and for carrying forward to the Program Executive Officer those that are not.

MIL-HDBK-248B

APPENDIX D

The Government program manager will establish a Tiger Team for Phase 1 in accordance with the charter. During Phase 2, he will review, approve or disapprove, and implement changes as required.

The contractor will be responsible for evaluation, sponsorship, and expedient processing of those items that he generates. During Phase 1 the contractor will provide sufficient manpower to staff a Tiger Team and support the streamlining initiative.

The Government program manager will have overall functional responsibility for the formulation, execution, and ongoing management of the streamlining program. He will designate an Office of Primary Responsibility (OPR). In Phase 1, the OPR will lead a Tiger Team starting after preliminary design review (PDR) and culminating with a Final Report to the program managers. Individuals assigned to the Tiger Team will functionally report to the OPR but maintain administrative assignment to the sponsor office.

The Government program manager's engineering division ("Engineering") will be responsible for the initial review and ongoing validation of those MIL-SPECs and MIL-STDs that are nominated for removal or change in application. In addition, any proposal that involves system engineering aspects of the program must be concurred with by this division unless overridden by the Government program manager. During Phase 1, Engineering will provide two full-time positions to the Tiger Team.

The Government program manager's configuration management division ("Configuration") will be responsible for the review of all changes that occur and schedule these changes through the Configuration Control Board (CCB) for action. During Phase 1, Configuration will provide one full-time position to the Tiger Team.

The Government program manager's system integration, operations, logistics, and test divisions will be responsible for evaluation and recommendation of each initiative that is brought to the CCB. During Phase 1, each division will provide one full-time position to the Tiger Team.

The Government contracting officer ("Contracts") will provide guidance on each initiative and, if approved, will implement the appropriate changes or modifications in the contract. In Phase 1, Contracts will provide one full-time position to the Tiger Team.

All functions in the matrix organization in the Program Office are responsible for upward information processing of initiatives that are specific to their function. These matrices will be responsible for coordinating each initiative in an expedient manner after approval by the CCB. Approval for any initiative lies with the program manager.

The Government auditor will audit and verify all costs relating to the streamlining initiative. Contractor initiatives will be forwarded by the contractor to the auditor for costing with an information copy to the contracting officer. The auditor will evaluate each proposal in a timely

APPENDIX D

manner and forward it to the contracting officer in time to meet the CCB. The contracting officer will notify the auditor of all upcoming CCB items. During Phase 1, the auditor will provide sufficient resources to promptly process cost information for the Tiger Team.

CONFIGURATION CONTROL BOARD. The CCB will process all initiatives to ensure that, like other contract changes, they are controlled and monitored in a manner that can be audited and tracked. Each initiative will be handled and processed separately and will not be allowed to be combined with other items for the sake of convenience. Streamlining initiatives must be segregated so that a cost track can be specifically identified when requested.

ACTION BEYOND THE AUTHORITY OF THE GOVERNMENT PROGRAM MANAGER. Any streamlining initiative determined by the program manager to be beyond his authority will be first approved by the CCB and then converted into a decision package and forwarded to the Program Executive Office (PEO). The initiative will be described in detail to allow the PEO to make a decision. If the PEO lacks authority for such a decision, then the PEO must forward it to the Service Acquisition Executive.

During Phase 1, the entire Tiger Team effort will be documented in a Final Report and presented to the PEO for approval in to or for any combination of initiatives recommended.

DOCUMENTATION. During Phase 1, a Formal Report will be presented to the program managers for the Government and the contractor. The report will list each initiative, its estimated cost and schedule, its impact, and an assessment of its risk. The Tiger Team will use the format in Table IX or follow the Sample Acquisition Streamlining Cost-Benefit Government Report Data Item Description (DID) for each initiative item.

During Phase 2, streamlining initiatives will be submitted in the format shown in Table IX (or the sample streamlining DID) and Table X. The initiative will be submitted to "Configuration" for staffing, review, and coordination. The initiative will be processed in the same manner as a change request. It will have a sponsor, an assessment of cost and schedule impacts, and a description of the proposed change. The sponsor will present a short oral presentation on the recommended change to the CCB for their consideration and action.

CONTRACTOR PROCEDURES. Contractor-generated proposals will be prepared using Tables IX (or similar) and X formats. Proposals will be forwarded to the Program Office with information copies to the Government auditor. During Phase 1, the contractor will participate in the development of the Final Report following procedures within the Tiger Team charter.

CONTRACTOR INCENTIVE. (See Appendix E)

APPENDIX D

TABLE VII. Sample format for streamlining initiatives.

INITIATIVE: Provide a brief description of the initiative and identify the applicable SOW/specification paragraph, MIL-SPEC/MIL-STD, or other applicable references.

IMPACT: Describe the impact to the program in the FSD phase to include cost, schedule, performance, and supportability considerations. Also describe future impact which could occur in production, spares acquisition, or reprocurement. If there are work-arounds, describe these.

COST: Break out savings in each of the FSD contract years and estimate total savings in production.

SCHEDULE: Show when the initiative could begin and when it would be integrated into the design or management of the contract. Include any time required for approval that is not within the authority of the Government program manager.

PERFORMANCE: Show impact against presently known performance requirements, if performance is measurable.

SUPPORTABILITY: Show impact on maintainability, availability, readiness, reliability, and supportability in an operational environment. Consider impact on reprocurement and spares acquisition.

CONTRACTUAL IMPACTS: Detail complexity of the change, verify cost impacts, and make a recommendation. This section will be filled in by the contracting officer.

MIL-HDBK-248B

APPENDIX D

TABLE VIII. Approval form.

Number 8X-YY (Configuration Management to provide)	DATE:
CATEGORY: STREAMLINING INITIATIVE	
TITLE:	
DESCRIPTION OF TASK:	
Cost Est: High (\$500K Plus) Medium (150K to \$500K) Low (\$0 to \$150K)	
Need data at Program Office:	
Impact of not doing so:	
Signed by:	
Sponsor (OPR): _____	Approved by: _____
Contracting Officer _____	Program Manager _____
Engineering Director _____	Date _____
Functional Director _____	

CONTRACTOR STRUCTURE. Phase 1 of the contractor part of streamlining initiative will also use a Tiger Team approach. The Tiger Team will be organized in the following manner: (Describe contractor's organizational approach and how it will work with the Government team.)

SCHEDULE. The Tiger Team will be on the following schedule: Phase 1 will have a limited life of not more than 3 months.

Phase 2 will continue to refine the current contract within the provisions of this plan. Additionally, begin to review and study what will be required in a production contract.

CONCLUSION. A Final Report and a Briefing will be provided at the end of Phase 1.

APPENDIX D

SIGNATURES:

Government

Program Manager

Engineering Director

Contracting Officer

Configuration Management Director

Project Director
(Office of Primary Responsibility)

Auditor

Contractor

Contractor (Program Manager)

Contractor (Project Director)

MIL-HDBK-248B

APPENDIX E

ACQUISITION STREAMLINING INITIATIVE PROVISION

In order to contractually implement acquisition streamlining on those programs on which the contractor chooses expeditious payment for his recommendations under acquisition streamlining rather than under Value Engineering, or on which the Government and contractor choose to adopt a Tiger Team approach, use the acquisition streamlining initiative provision that follows.

Insert the following provision in solicitations and contracts for systems acquisitions that will use a Tiger Team approach or when the contractor seeks expedited payment for streamlining recommendations.

ACQUISITION STREAMLINING INITIATIVE PROVISION (Date)

This provision implements current DOD direction to streamline major weapon system acquisition programs. To this end, the Government and contractor agree:

a. The contractor may identify contract requirements that are not cost-effective in design, development, or production and submit recommended changes as streamlining proposals for approval.

b. For any contractor-initiated streamlining proposals which are accepted by the Government and implemented by changes to the contract, the Government will share resulting cost savings to this contract according to the formula specified below.

c. Definitions:

"Cost savings," as used in this clause, means the net amount by which the target cost of the contract is reduced as the result of Government acceptance of a specific streamlining proposal. The computation of such net target cost adjustments shall include the cost of work added and work deleted, so as to compute net cost savings and the resulting adjustment to the contract target cost.

"Streamlining Proposal," as used in this clause, means a proposal that:

- (1) Requires a change to this contract to implement.
- (2) Results in reducing the target cost to the contract without impairing essential functions or characteristics, provided that it does not involve a change in:
 - (i) Deliverable end-item quantities only. (However, reduction in technical, management, or financial data requirements may qualify as a streamlining proposal.)
 - (ii) The contract type only.

APPENDIX E

- (3) Is prepared by the contractor prior to the Government taking affirmative contractual action to implement the same change (such as issuing a change order or directing contractor preparation of a specific Engineering Change Proposal). Government-initiated streamlining proposals implemented by the Government without prior contractor suggestion shall not be subject to the sharing arrangement of this provision.

d. The contractor shall submit any streamlining proposal in sufficient detail to allow for a thorough and detailed audit and technical analysis by the Government. The proposal shall follow the Acquisition Streamlining Cost-Benefit Assessment Report Data Item Description (DID) or the following format:

INITIATIVE: Provide a brief description of the initiative and identify the applicable statement of work (SOW)/specification paragraph, military specification/ military standard (MIL-SPEC/MIL-STD), or other applicable references.

IMPACT: Describe the impact to the program in the full-scale development (FSD) phase to include cost, schedule, performance, and supportability considerations. Also describe future impact which could occur in production, spares acquisition, or reprocurement. If there are work-arounds, describe these.

COST: Break out savings in each of the FSD contract years and estimate total savings in production. Each streamlining proposal submitted must also identify the impact that acceptance of such change will have on the contract target cost, target profit, target price, and ceiling price for each of the contract line items affected. In addition, describe the impact, if any, on contract funding schedule.

SCHEDULE: Show when the initiative could begin and when it would be integrated into the design or management of the contract.

PERFORMANCE: Show impact against presently known performance requirements, if performance is measurable.

SUPPORTABILITY: Show impact on maintainability, availability, readiness, reliability, and supportability in an operational environment. Consider impact on reprocurement and spares acquisition.

CONTRACTUAL IMPACTS: Detail complexity of the change, verify cost impacts, and make a recommendation.

e. The Government will process streamlining proposals expeditiously. However, it shall not be liable for any delay in acting upon a streamlining proposal. The contracting officer's decision to accept or reject all or part of any streamlining proposal shall be final and not subject to the Disputes Clause or otherwise subject to appeal under the Contract Disputes Act of 1978.

APPENDIX E

f. Upon successful conclusion of negotiations of individual streamlining proposals, the contractor and Government will execute a contract modification to adjust target cost, target profit, target price, and ceiling price to reflect Government/contractor sharing of the cost savings pursuant to the formula below.

g. Contract Adjustment. The modification accepting the streamlining proposal (or a subsequent modification which reflects the outcome of any price negotiations following the possible issuance of a change order) shall:

(1) Equitably adjust the contact target cost, target profit, target price, and ceiling price in accordance with the Changes clause to reflect the full cost savings (and applicable profit) associated with acceptance of the proposed change.

(2) After the above downward adjustments, add an amount equal to one half (50 percent) of the negotiated target cost adjustments to the target profit, target price, and ceiling price.

h. If a proposal is offered by the Contractor and accepted by the Government under this provision, it cannot be subsequently submitted under the Value Engineering clause (Federal Acquisition Regulation (FAR) 52.248-1).

i. For proposals submitted under this streamlining initiative provision, the contractor shall be entitled to only the adjustments provided above. Future contract savings, concurrent contract savings, or collateral savings (as defined in FAR 52.248-1b) are not applicable. Nor shall the contractor be entitled under this provision to any incentive payments or sharing of cost savings associated with additional items or work added to the contract after acceptance of the streamlining proposal except to the extent that priced existing options were contained in the contract as of the date of accepting the streamlining proposal that results in cost savings to such items. The target cost, target profit, target price, and ceiling price of such option items will be adjusted under paragraph (g) above incident to the negotiation of the equitable adjustment and incentive adjustments resulting from acceptance and implementation of streamlining proposal(s).

j. In the event agreement between the Government and the contractor cannot be reached concerning the amount of the equitable adjustment(s) or other contract adjustments associated with acceptance of a streamlining proposal, the Government may issue a final decision of the contracting officer and unilaterally issue a contract modification making those adjustments determined appropriate under this provision. Any such final decision shall be subject to appeal by the contractor in accordance with the Disputes clause.

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL*(See Instructions - Reverse Side)***1. DOCUMENT NUMBER****2. DOCUMENT TITLE****3a. NAME OF SUBMITTING ORGANIZATION****4. TYPE OF ORGANIZATION (Mark one)****VENDOR****USER****MANUFACTURER****OTHER (Specify):** _____**b. ADDRESS (Street, City, State, ZIP Code)****5. PROBLEM AREAS****a. Paragraph Number and Wording:****b. Recommended Wording:****c. Reason/Rationale for Recommendation:****6. REMARKS****7a. NAME OF SUBMITTER (Last, First, MI) - Optional****b. WORK TELEPHONE NUMBER (Include Area Code) - Optional****c. MAILING ADDRESS (Street, City, State, ZIP Code) - Optional****8. DATE OF SUBMISSION (YYMMDD)**

TO DETACH THIS FORM, CUT ALONG THIS LINE.

**NOTICE OF
CANCELLATION**

**NOT
MEASUREMENT
SENSITIVE**

**MIL-HDBK-248B
NOTICE 1
31 July 2003**

**MILITARY HANDBOOK
ACQUISITION STREAMLINING**

MIL-HDBK-248B, dated 9 February 1989, is hereby canceled without replacement.

Custodians:

Army - MI
Navy - AS
Air Force - 11
DLA - DH

Preparing activity:

Navy - AS

(Project MISC-0276)

Review activities:

ARMY – AI, AM, AR, AT, AV,
CD, CE, CR, EA, GL,
MR,PT,QM, SM, SY,
TE, TM

NAVY – CG, EC, MC, MS, NC,
ND, NI, NM, NP, NU,
OS, PE ,SA, SH, TD,
YD

AIR FORCE - 01, 02, 04, 05, 06, 10,
13, 16, 19, 22, 33, 40,
50, 51, 68, 70, 80, 82,
84, 93, 94, 99

DLA – CC, CT, DA, DM, DP,
GS, IS, LS, PS, SS

AMSC N/A

AREA MISC

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.