APPENDIX A

LIST OF ACRONYMS

This appendix provides a list of acronyms used in this guidebook, with their associated meanings.

ACAT	Acquisition Category
AIS	Automated Information Systems
API	Application Program Interface
BAFO	Best-and-Final-Offer
BPR	Business Process Reengineering
CAE	Component Acquisition Executive
CALS	Continuous Acquisition and Life-cycle Support
CASE	Computer-Aided Software Engineering
CCB	Configuration Control Board
CDRL	Contract Data Requirements List
CIA	Central Intelligence Agency
CLIN	Contract Line Item Number
COM	Computer Operation Manual
COTS	Commercial-off-the-shelf
CPAF	Cost Plus Award-Fee
CPFF	Cost Plus Fixed-Fee
CPIF	Cost Plus Incentive-Fee
CPM	Computer Programming Manual
CR	Clarification Report
CRLCMP	Computer Resources Life Cycle Management Plan
CRM	Computer Resource Management
CRWG	Computer Resources Working Group
CSC	Computer Software Component
CSCI	Computer Software Configuration Item
CSU	Computer Software Unit
DAL	Data Accession List
DBDD	Database Design Description
DBMS	Database Management System
DCMAO	Defense Contract Management Area Operations
DepSO	Departmental Standardization Office
DFARS	Defense FAR Supplement
DID	Data Item Description
DLL	Dynamic Link Library
DoD	Department of Defense
DoDI	Department of Defense Instruction
DoDISS	Department of Defense Index of Specifications and Standards
DoDD	Department of Defense Directive
DR	Deficiency Report

ECN	Engineering Change Notice
ECP	Engineering Change Proposal
EPROM	Erasable Programmable Read Only Memory
FAR	Federal Acquisition Regulation
FFP	Firm Fixed-Price
FIPS	Federal Information Processing Standard
FPI	Fixed-Price Incentive
FSM	Firmware Support Manual
GOTS	Government-off-the-shelf
GUI	Graphical User Interface
HCI	Human-Computer Interface
HMI	Human-Machine Interface
HWCI	Hardware Configuration Item
HWG	Harmonization Working Group
ICWG	Interface Control Working Group
IDD	Interface Design Description
IE	Information Engineering
ILSP	Integrated Logistic Support Plan
IPSC	Information Processing Standards for Computers
IPT	Integrated Product Team
IRS	Interface Requirements Specification
IV&V	Independent Verification and Validation
JAD	Joint Application Development
JLC	Joint Logistics Commanders
JPCG	Joint Policy Coordinating Group
LAN	Local Area Network
LCM	Life Cycle Management
NDI	Non-developmental Item
NDS	Non-developmental Software
NS	National Security
NSA	National Security Agency
NSC	National Security Council
OCD	Operational Concept Description
ORD	Operational Requirements Document
OSD	Office of the Secretary of Defense
OT&E	Operational Test and Evaluation
PEO	Program Executive Officer
PROM	Programmable Read Only Memory
QA	Quality Assurance

RAD	Rapid Applications Development
RAM	Random Access Memory
RFP	Request For Proposal
RFQ	Request For Quotation
ROM	Read Only Memory
SCIF	Sensitive Compartmented Information Facility
SCM	Software Configuration Management
SCOM	Software Center Operator Manual
SDD	Software Design Description
SDE	Software Development Environment
SDF	Software Development File
SDL	Software Development Library
SDP	Software Development Plan
SEE	Software Engineering Environment
SEI	Software Engineering Institute
SEMP	System Engineering Management Plan
SIE	Standards Improvement Executive
SIOM	Software Input/Output Manual
SIP	Software Installation Plan
SLOC	Source Lines Of Code
SOW	Statement of Work
SPAWAR	Space and Naval Warfare Systems Command
SPS	Software Product Specification
SRS	Software Requirements Specification
SSDD	System/Subsystem Design Description
SSS	System/Subsystem Specification
STAR	System Threat Assessment Report
STD	Software Test Description
STE	Software Test Environment
STP	Software Test Plan
STR	Software Test Report
STrP	Software Transition Plan
SUM	Software User Manual
SVD	Software Version Description
S/W	Software
T&M	Time And Material
TEMP	Test and Evaluation Master Plan
TEWG	Test Evaluation Working Group
TPWG	Test Planning Working Group
WAN	Wide Area Network
WBS	Work Breakdown Structure

APPENDIX B

SOURCES OF RELATED INFORMATION

This appendix is intended as an aid to an acquirer seeking additional information about a specific topic. The acquirer is cautioned that these related sources may contain outdated, conflicting, or nonapplicable information. No recommendation is intended.

Guidebook Topic	Related Information
Acceptance by the acquirer	FAR 46.101, April 1984, Definitions FAR 46.102, April 1984, Policy FAR 52.246-19, Warranty of Systems and Equipment under Performance Specifications or Design Criteria
Approval by the acquirer	FAR 9.301, April 1984, Definitions FAR 46.101, April 1984, Definitions MIL-STD-498 Overview and Tailoring Guidebook, 5.4.12
Behavioral design	MIL-HDBK-761, Human Engineering Guidelines for Management Information Systems MIL-STD-1801, User Computer Interface
Builds	MIL-STD-498 Overview and Tailoring Guidebook DCMS Evolutionary Acquisition Guidebook
CASE tools	Agents of Change, Barbara Bouldin Decline and Fall of the American Programmer, Edward Yourdon IEEE Std 1209-1992, Recommended Practice for the Evaluation and Selection of CASE Tools IEEE P1348, Recommended Practice For the Adoption of CASE Tools MIL-STD-498 Overview and Tailoring Guidebook Peopleware, Tom DeMarco and Tim Lister
Contract	Contracting with the Federal Government, Frank M. Alston, Margaret M. Worthington, Louis P. Goldsman FAR 14.201, Preparation of invitations for bids FAR 15.406, Preparing requests for proposals (RFPs) and requests for quotations (RFQs) MIL-STD-498 Overview and Tailoring Guidebook
Contract data requirements list	DFARS 227.7103, Noncommercial items or processes DFARS 227.7203, Noncommercial computer software and noncommercial computer software documentation MIL-STD-498 Overview and Tailoring Guidebook
Corrective action	IEEE Std 1044-1993, Standard for Classification of Software Errors, Faults, and Failures

FIGURE 162. Guidebook topic to related information.

Guidebook Topic	Related Information
Cost estimation	Assessment and Control of Software Risks, Capers Jones Guidelines for Successful Acquisition and Management of Software Intensive Systems, Software Technology Support Center Software Engineering Economics, Barry W. Boehm "Cost Models for Future Software Life Cycle Cost Models for Future Life Cycle Processes: COCOMO 2.0," Barry Boehm et al., in Annals of Software Engineering Special Volume on Software Process and Product Measurement, The Netherlands, 1995
Critical requirements	DoD 5200.28-STD "Department of Defense Trusted Computer System Evaluation Criteria" ["Orange Book"] IEEE Std 1228-1993, Standard for Software Safety Plan Joint Services Software System Safety Handbook (when published) MIL-STD-882 System Safety Program Requirements
Data accession list	DI-MGMT-81453, Data Accession List FAR 52.227-16, Additional Data Requirements
Data rights	DFARS 227.7103-14, Conformity, acceptance, and warranty of technical data DFARS 227.7203-14, Conformity, acceptance, and warranty of computer software and computer software documentation DFARS 252.211, Commercial items DFARS 252.227-7013, Rights in Technical Data - Noncommercial Items, June 1995 DFARS 252.227-7014, Rights in Noncommercial Computer Software and Noncommercial Software Documentation DFARS 252.227-7015, Technical Data - Commercial Items
Data standardization	DoD 8320.1-M, Data Administration Procedures DoD 8320.1-M-1, Data Element Standardization Procedures DoDD 8320.1, DoD Data Administration
Documentation (Preparing documents)	MIL-STD-498 Overview and Tailoring Guidebook
Documentation (Recording information)	MIL-STD-498 Overview and Tailoring Guidebook
Executable software	MIL-STD-498 Overview and Tailoring Guidebook, 4.3.16.b
Independent verification and validation	ESA PSS-05-0-ISSUE 2, ESA Software Engineering Standards

FIGURE 162. Guidebook topic to related information - *(continued)*.

Guidebook Topic	Related Information
Joint technical and management reviews	ANSI/IEEE Std 1028-1988 (Reaff 1993), Standard for Software Reviews and Audits
Licenses (Software)	DFARS 252.227-7013, Rights in Technical Data - Noncommercial Items, June 1995
Operational concept	DoD 5000.2-M, Defense Acquisition Management Documentation and Reports, February 1991
Oversight	DoDI 5000.2, Defense Acquisition Management Policies and Procedures
Process improvement	Out Of The Crisis, W. Edwards Deming.
Programming languages	ANSI-1815A-1983, Ada Programming Language FIPS PUB 119, Ada MIL-STD-1815A, Ada Programming Language ISO 8652-1987, Ada
Qualification testing	ANSI/IEEE Std 829-1983 (reaff 1991), Standard for Software Test Documentation ANSI/IEEE Std 1012-1986 (Reaff 1992), Standard for Software Verification and Validation IEEE Std 1059-1993, Guide for Software Verification and Validation
Reengineering	MIL-HDBK-SRAH (Draft), 1 February 1994, Technical Report, Software Engineering Assessment Handbook Reengineering Technology Report, Volume 1, August 1993, Software Technology Support Center
Requirements	ESA PSS-05-0-ISSUE 2, ESA Software Engineering Standards
Requirements of the standard	ANSI/IEEE Std 830-1993, Recommended Practice for Software Requirements Specifications MIL-STD-498 Overview and Tailoring Guidebook
Risk management	DoDI 5000.2 Defense Acquisition Management Policies and Procedures Software Risk Management, Barry W. Boehm
Safety	AFISC SSH 1-1 (5 SEPT 85), Software System Safety ARP 4754, Systems Integration Requirements ARP 4761 (Draft #8A), Guidelines and Methods for Conducting the Safety Assessment Process on Civil Airborne Systems and Equipment DO-178B, Software Considerations in Airborne Systems and Equipment Certification IEC Publication 65A, Functional Safety: Safety-related Systems IEC Publication 880, Software for Computers in the Safety Systems of Nuclear Power Stations

FIGURE 162. Guidebook topic to related information - *(continued)*.

Guidebook Topic	Related Information
Safety *(continued)*	Joint Services Software System Safety Handbook (when published) JPL D-10058, Jet Propulsion Laboratory Software Systems Safety Handbook MIL-HDBK-272, Safety Design and Evaluation Criteria for Nuclear Weapons Systems MIL-HDBK-764, System Safety Engineering Design Guide for Army Material, Chapter 7, Software Analysis MIL-STD-498 Overview and Tailoring Guidebook MIL-STD-882, System Safety Program Requirements SC 45A, Nuclear Power Plants - Instrumentation and Control Systems Important to Safety - First Supplement to IEC Publication 880 SEB 6-A, System Safety Engineering in Software Development SEB 65A, System Aspects UK DEF STAN 00-55, The Procurement of Safety Critical Software in Defence Equipment UK DEF STAN 00-56, Safety Management Requirements for Defence Systems Containing Programmable Electronics UL1998, Standard for Safety Related Software
Schedules	MIL-STD-498 Overview and Tailoring Guidebook
Security and privacy	DoD 5200.28-STD "Department of Defense Trusted Computer System Evaluation Criteria" ["Orange Book"]
Software configuration management	ANSI/IEEE Std 828-1990, Standard for Software Configuration Plans ANSI/IEEE Std 1042-1987 (Reaff 1993), Guide to Software Configuration Management MIL-STD-973, Configuration Management MIL-HDBK-61, Guidelines for Configuration Management
Software development environment	MIL-STD-498 Overview and Tailoring Guidebook
Software development files	DI-MGMT-80614, Project Folders MIL-STD-498 Overview and Tailoring Guidebook, 5.4.4.c
Software development process	MIL-STD-498 Overview and Tailoring Guidebook
Software engineering environment	MIL-STD-498 Overview and Tailoring Guidebook
Software life cycle processes	DoDI 5000.2 Defense Acquisition Management Policies and Procedures DoDI 8120.2 Automated Information System (AIS) Life-Cycle Management (LCM) Process, Review and Milestone Approval Procedures

FIGURE 162. Guidebook topic to related information - *(continued).*

Guidebook Topic	Related Information
Software life cycle processes *(continued)*	MIL-STD-498 Overview and Tailoring Guidebook ISO/IEC 12207, Information technology - Software life cycle processes
Software management indicators	Measurement Adoption and Risk Assessment, Software Productivity Consortium Practical Software Measurement: A Guide to Objective Program Insight, Joint Logistics Commanders, Joint Policy Coordinating Group on Computer Resources Management Software Measurement Guidebook, Software Productivity Consortium
Software product evaluation	MIL-STD-498 Overview and Tailoring Guidebook
Software quality assurance	ANSI/IEEE Std 730-1989, Standard for Software Quality Assurance Plans DOD-STD-2168, Defense System Software Quality Assurance Program ESA PSS-05-0 ISSUE 2, ESA Software Engineering Standards IEEE Std 1298-1992/(AS 3563.1-1991), Software Quality Management System, Part 1: Requirements MIL-STD-498 Overview and Tailoring Guidebook ISO 9000-3, Guidelines for the Application of ISO 9001 to the Development, Supply, and Maintenance of Software ISO 9001, Quality Systems - Model for Quality Assurance in Design, Development, Production, Installation, and Servicing MIL-HDBK-286, A Guide for DOD-STD-2168, Defense System Software Quality Program
Software support	DoDI 5000.2 Defense Acquisition Management Policies and Procedures, (See chapter 7 on Integrated Logistics Support (ILS)) MIL-HDBK-347, Mission-Critical Computer Resources Software Support
Software support manuals	DI-IPSC-81447, Computer Programming Manual DI-IPSC-81448, Firmware Support Manual
Software test environment	MIL-STD-498 Overview and Tailoring Guidebook
Source files	Ada Information Clearinghouse: adainfo@sw-eng.falls-church.va.us MIL-STD-498 Overview and Tailoring Guidebook, 4.3.16.b
System/subsystem	MIL-STD-498 Overview and Tailoring Guidebook, 4.3.16.b

FIGURE 162. Guidebook topic to related information - *(continued)*.

Guidebook Topic	Related Information
System/subsystem-wide and CSCI-wide design	MIL-HDBK-761, Human Engineering Guidelines for Management Information Systems MIL-STD-1801, User Computer Interface
Statement of work	MIL-STD-498 Overview and Tailoring Guidebook
Standards for software products	FIPS PUB 119, Ada

FIGURE 162. Guidebook topic to related information - *(continued)*.

Related Information	Guidebook Topic
Ada Information Clearinghouse: adainfo@sw-eng.falls-church.va.us	Source files
AFISC SSH 1-1 (5 SEPT 85), Software System Safety	Safety
Agents of Change, Barbara Bouldin	CASE tools
ANSI-1815A-1983, Ada Programming Language	Programming languages
ANSI/IEEE Std 730-1989, Standard for Software Quality Assurance Plans	Software quality assurance
ANSI/IEEE Std 828-1990, Standard for Software Configuration Plans	Software configuration management
ANSI/IEEE Std 829-1983 (Reaff 1991), Standard for Software Test Documentation	Qualification testing
ANSI/IEEE Std 830-1993, Recommended Practice for Software Requirements Specifications	Requirements of the standard
ANSI/IEEE Std 1012-1986 (Reaff 1993), Standard for Software Verification and Validation	Qualification testing
ANSI/IEEE Std 1028-1988 (Reaff 1993), Standard for Software Reviews and Audits	Joint technical and management reviews
ANSI/IEEE Std 1042-1987 (Reaff 1993), Guide to Software Configuration Management	Software configuration management
ARP 4754, Systems Integration Requirements	Safety
ARP 4761 (Draft #8A), Guidelines and Methods for Conducting the Safety Assessment Process on Civil Airborne Systems and Equipment	Safety
Assessment and Control of Software Risks, Capers Jones	Cost estimation
Contracting with the Federal Government, Frank M. Alston, Margaret M. Worthington, Louis P. Goldsman	Contract
"Cost Models for Future Software Life Cycle Cost Models for Future Life Cycle Processes: COCOMO 2.0," Barry Boehm et al., in Annals of Software Engineering Special Volume on Software Process and Product Measurement, The Netherlands, 1995	Cost estimation
DCMS Evolutionary Acquisition Guidebook	Builds
Decline and Fall of the American Programmer, Edward Yourdon	CASE tools
DFARS 227.7103, Noncommercial items or processes	Contract data requirements list

FIGURE 163. Related information to guidebook topic.

Related Information	Guidebook Topic
DFARS 227.7203, Noncommercial computer software and noncommercial computer software documentation	Contract data requirements list
DFARS 227.7103-14, Conformity, acceptance, and warranty of technical data	Data rights
DFARS 227.7203-14, Conformity, acceptance and warranty of computer software and computer software documentation	Data rights
DFARS 252.227-7013, Rights in Technical Data - Noncommercial Items, June 1995	Data rights Licenses (Software)
DFARS 252.227-7014, Rights in Noncommercial Computer Software and Noncommercial Software Documentation	Data rights
DFARS 252.227-7015, Technical Data - Commercial Items	Data rights
DI-MGMT-80614, Project Folders	Software development files
DI-MGMT-81453, Data Accession List	Data accession list
DI-IPSC-81447, Computer Programming Manual	Software support manuals
DI-IPSC-81448, Firmware Support Manual	Software support manuals
DO-178B, Software Considerations in Airborne Systems and Equipment Certification	Safety
DOD-STD-2168, Defense System Software Quality Assurance Program	Software quality assurance
DoD 5000.2-M, Defense Acquisition Management Documentation and Reports, February 1991	Operational concept
DoD 5200.28-STD "Department of Defense Trusted Computer System Evaluation Criteria" ["Orange Book"]	Critical requirements Security and privacy
DoD 8320.1-M, Data Administration Procedures	Data standardization
DoD 8320.1-M-1, Data Element Standardization Procedures	Data standardization
DoDD 8320.1, DoD Data Administration	Data standardization
DoDI 5000.2 Defense Acquisition Management Policies and Procedures	Oversight Risk management Software life cycle processes Software support

FIGURE 163. Related information to guidebook topic - *(continued)*.

Related Information	Guidebook Topic
DoDI 8120.2 Automated Information System (AIS) Life-Cycle Management (LCM) Process, Review and Milestone Approval Procedures	Software life cycle processes
ESA PSS-05-0-ISSUE 2, ESA Software Engineering Standards	Independent verification and validation Requirements Software quality assurance
FAR 9.301, April 1984, Definitions	Approval by the acquirer
FAR 14.201, Preparation of invitations for bids	Contract
FAR 15.406, Preparing requests for proposals (RFPs) and requests for quotations (RFQs)	Contract
FAR 46.101, April 1984, Definitions	Acceptance by the acquirer Approval by the acquirer
FAR 46.102, April 1984, Policy	Acceptance by the acquirer
FAR 52.227-16, Additional Data Rights	Data accession list
FAR 52.246-19, Warranty of Systems and Equipment under Performance Specifications or Design Criteria	Acceptance by the acquirer
FIPS PUB 119, Ada	Programming languages Standards for software products
Guidelines for Successful Acquisition and Management of Software Intensive Systems, Software Technology Support Center	Cost estimation
IEC Publication 65A, Functional Safety: Safety-related Systems	Safety
IEC Publication 880, Software for Computers in the Safety Systems of Nuclear Power Stations	Safety
IEEE Std 1044-1993, Standard for Classification of Software Errors, Faults, and Failures	Corrective action
IEEE Std 1059-1993, Guide for Verification and Validation	Qualification testing
IEEE Std 1209-1992, Recommended Practice for the Evaluation and Selection of CASE Tools	CASE tools
IEEE Std 1228-1993, Standard for Software Safety Plans	Critical requirements
IEEE Std 1298-1992/(AS 3563.1-1991), Software Quality Management System, Part 1: Requirements	Software quality assurance
IEEE P1348, Recommended Practice For the Adoption of CASE Tools	CASE tools

FIGURE 163. Related information to guidebook topic - *(continued)*.

Related Information	Guidebook Topic
ISO/IEC 12207, Information technology - Software life cycle processes	Software life cycle processes
ISO 8652-1987, Ada	Programming languages
ISO 9000-3, Guidelines for the Application of ISO 9001 to the Development, Supply, and Maintenance of Software	Software quality assurance
ISO 9001, Quality Systems - Model for Quality Assurance in Design, Development, Production, Installation, and Servicing	Software quality assurance
Joint Services Software System Safety Handbook (when published)	Critical requirements Safety
JPL D-10058, Jet Propulsion Laboratory Software Systems Safety Handbook	Safety
Measurement Adoption and Risk Assessment, Software Productivity Consortium	Software management indicators
MIL-HDBK-61, Guidelines for Configuration Management	Software configuration management
MIL-HDBK-272, Safety Design and Evaluation Criteria for Nuclear Weapons Systems	Safety
MIL-HDBK-286, A Guide for DOD-STD-2168, Defense System Software Quality Program	Software quality assurance
MIL-HDBK-347, Mission-Critical Computer Resources Software Support	Software support
MIL-HDBK-761, Human Engineering Guidelines for Management Information Systems	Behavioral design System/subsystem-wide and CSCI-wide design
MIL-HDBK-764, System Safety Engineering Design Guide for Army Material, Chapter 7, Software Analysis	Safety
MIL-HDBK-SRAH (Draft), 1 February 1994, Technical Report, Software Engineering Assessment Handbook	Reengineering
MIL-STD-498 Overview and Tailoring Guidebook	Approval by the acquirer Builds CASE tools Contract Contract data requirements list Documentation (Preparing documents) Documentation (Recording information)

FIGURE 163. Related information to guidebook topic - *(continued)*.

Related Information	Guidebook Topic
MIL-STD-498 Overview and Tailoring Guidebook *(continued)*	Executable software Requirements of the standard Safety Schedules Software development environment Software development files Software development process Software engineering environment Software life cycle processes Software product evaluation Software quality assurance Software test environment Source files System/subsystem Statement of work
MIL-STD-882, System Safety Program Requirements	Critical requirements Safety
MIL-STD-973, Configuration Management	Software configuration management
MIL-STD-1801, User Computer Interface	Behavioral design System/subsystem-wide and CSCI-wide design
MIL-STD-1815A, Ada Programming Language	Programming languages
Out Of The Crisis, W. Edwards Deming	Process improvement
Peopleware, Tom DeMarco and Tim Lister	CASE tools
Practical Software Measurement: A Guide to Objective Program Insight, Joint Logistics Commanders, Joint Policy Coordinating Group on Computer Resources Management	Software management indicators
Reengineering Technology Report, Volume 1, August 1993, Software Technology Support Center	Reengineering
SC 45A, Nuclear Power Plants - Instrumentation and Control Systems Important to Safety - First Supplement to IEC Publication 880	Safety
SEB 6-A, System Safety Engineering in Software Development	Safety
SEB 65A, System Aspects	Safety
Software Engineering Economics, Barry W. Boehm	Cost estimation

FIGURE 163. Related information to guidebook topic - *(continued)*.

Related Information	Guidebook Topic
Software Measurement Guidebook, Software Productivity Consortium	Software management indicators
Software Risk Management, Barry W. Boehm	Risk management
UK DEF STAN 00-55, The Procurement of Safety Critical Software in Defence Equipment	Safety
UK DEF STAN 00-56, Safety Management Requirements for Defence Systems Containing Programmable Electronics	Safety
UL1998, Standard for Safety Related Software	Safety

FIGURE 163. Related information to guidebook topic - *(continued)*.

APPENDIX C

INTERNET SOURCES OF RELATED INFORMATION

Figure 164 lists Internet locations for information related to MIL-STD-498. The list is not meant to be exhaustive, but provides some World-Wide Web starting points. Included in the list are sites for software development information, sites for acquisition and standards reform information, and standards development organizations' sites.

Electronic copies of MIL-STD-498 may be downloaded from the SPAWAR site (http://www.spawar.navy.mil/gradyp/mil-498.html) or the DISA Center for Standards site (http://www.itsi.disa.mil/cfs/std498.html). Hardcopies of MIL-STD-498 may be ordered from the Department of Defense Single Stock Point (DoDSSP) (http://www.dtic.dla.mil/dps-phila/).

Electronic copies of MIL-STD-498 and this guidebook are also available via anonymous FTP from ftp.spawar.navy.mil (directory /mil498) and ftp.logicon.com (directory /pub/standards/498).

World-Wide Web Site	URL (http://)
SPAWAR: MIL-STD-498 electronic files	www.spawar.navy.mil/gradyp /mil-498.html
DISA Center for Standards	www.itsi.disa.mil/cfs/std498.html
Defense Printing Service Detachment Office (DPSDO) Philadelphia	www.dtic.dla.mil/dps-phila/
Department of Defense Single Stock Point (DoDSSP) for Military Specifications and Standards	www.dtic.dla.mil/dps-phila/
DefenseLINK - DoD WWW Information Service	www.dtic.dla.mil/defenselink/
DoD Directives and Instructions	www.dtic.dla.mil/adm/
Defense Technical Information Center (DTIC)	www.dtic.dla.mil/
Software Technology Support Center (STSC) - Hill AFB	stsc.hill.af.mil
NASA's Software Technology Transfer Center (COSMIC)	www.cosmic.uga.edu
Ada Information Clearinghouse	sw-eng.falls-church.va.us/
Software Acquisition Best Practice Initiative	spmn.com:8080/
Software Engineering Institute (SEI)	www.sei.cmu.edu/

FIGURE 164. Internet locations for information related to MIL-STD-498.

World-Wide Web Site	URL (http://)
Software Productivity Consortium	software.software.org/
Southern California Software Process Improvement Network (SPIN)	www.ics.uci.edu/IRUS/spin.html
WWW Virtual Library - Software Engineering	rbse.jsc.nasa.gov/virt-lib /soft-eng.html
ISO - International Organization for Standardization	www.iso.ch/welcome.html
IEEE Standards	stdsbbs.ieee.org/
American National Standards Institute (ANSI)	www.ansi.org
National Institute of Standards and Technology (NIST)	www.nist.gov/welcome.html
Association for Computing Machinery (ACM)	www.acm.org/
IEEE Computer Society	www.computer.org/
Defense Standardization Program (DSP) - military specifications and standards information	www.acq.osd.mil/es/std /stdhome.html
Departmental Standardization Offices (DepSOs) points of contact	www.acq.osd.mil/es/std /depso.html
Standards Improvement Executives (SIEs) points of contact	www.acq.osd.mil/es/std /sie.html
DSP policy memos and other guidance	www.acq.osd.mil/es/std /stdmemo.html
Dr. Perry's memo on MILSPEC & MILSTD reform: "Specifications & Standards - A New Way of Doing Business", 29 June 1994	www.acq.osd.mil/es/std /perry.html
Frequently asked questions (FAQ) about MILSPEC reform	www.acq.osd.mil/es/std /stdfaq.html
Exempted documents - military and federal specifications and standards which do not require a waiver to be cited as a requirement by the military department which granted the exemption)	www.acq.osd.mil/es/std /exempt.html
ACQWeb - Office of the Under Secretary of Defense for Acquisition and Technology (USD(A&T))	www.acq.osd.mil/
Deputy Undersecretary for Acquisition Reform	www.acq.osd.mil/ar/
Navy Acquisition Reform	www.acq-ref.navy.mil/

FIGURE 164. Internet locations for information related to MIL-STD-498 - *(continued)*.

World-Wide Web Site	URL (http://)
SPAWAR Acquisition Policy, Process, and Procedures	www.spawar.navy.mil:80 /~wrynns/
HQ AFMC Standardization	www.afmc.wpafb.af.mil:12000 /organizations/HQ-AFMC /EN/spec_std.htm
Defense Software Repository System (DSRS)	ssed1.ims.disa.mil/srp /dsrspage.html
Army Reuse Center (ARC)	arc-www.belvoir.army.mil /default.htm
Asset Source for Software Engineering (ASSET)	source.asset.com/background.html
Software Technology for Adaptable, Reliable Systems (STARS)	www.stars.ballston.paramax.com /index.html
A Comprehensive Approach to Reusable Defense Software (CARDS)	dealer.cards.com/

FIGURE 164. Internet locations for information related to MIL-STD-498 - *(continued)*.

APPENDIX D

CONTENTS OF MIL-STD-498'S DIDS

The following pages contain listings of the paragraph titles of each of MIL-STD-498's twenty-two DIDs. The DID contents are in the same order found in the standard with page footers containing the DID title and acronym to assist the reader in locating information.

COMPUTER OPERATION MANUAL (COM) (DI-IPSC-81446)

Contents

COMPUTER PROGRAMMING MANUAL (CPM) (DI-IPSC-81447)

Contents

DATABASE DESIGN DESCRIPTION (DBDD) (DI-IPSC-81437)

Contents

FIRMWARE SUPPORT MANUAL (FSM) (DI-IPSC-81448)

Contents

INTERFACE DESIGN DESCRIPTION (IDD) (DI-IPSC-81436)

Contents

INTERFACE REQUIREMENTS SPECIFICATION (IRS) (DI-IPSC-81434)

Contents

OPERATIONAL CONCEPT DESCRIPTION (OCD) (DI-IPSC-81430)

Contents

SOFTWARE CENTER OPERATOR MANUAL (SCOM) (DI-IPSC-81444)

Contents

SOFTWARE DESIGN DESCRIPTION (SDD) (DI-IPSC-81435)

Contents

SOFTWARE DEVELOPMENT PLAN (SDP) (DI-IPSC-81427)

Contents

Software Development Plan (SDP) - *(continued)*

- 5.2 Establishing a software development environment
  - 5.2.1 Software engineering environment
  - 5.2.2 Software test environment
  - 5.2.3 Software development library
  - 5.2.4 Software development files
  - 5.2.5 Non-deliverable software
- 5.3 System requirements analysis
  - 5.3.1 Analysis of user input
  - 5.3.2 Operational concept
  - 5.3.3 System requirements
- 5.4 System design
  - 5.4.1 System-wide design decisions
  - 5.4.2 System architectural design
- 5.5 Software requirements analysis
- 5.6 Software design
  - 5.6.1 CSCI-wide design decisions
  - 5.6.2 CSCI architectural design
  - 5.6.3 CSCI detailed design
- 5.7 Software implementation and unit testing
  - 5.7.1 Software implementation
  - 5.7.2 Preparing for unit testing
  - 5.7.3 Performing unit testing
  - 5.7.4 Revision and retesting
  - 5.7.5 Analyzing and recording unit test results
- 5.8 Unit integration and testing
  - 5.8.1 Preparing for unit integration and testing
  - 5.8.2 Performing unit integration and testing
  - 5.8.3 Revision and retesting
  - 5.8.4 Analyzing and recording unit integration and test results
- 5.9 CSCI qualification testing
  - 5.9.1 Independence in CSCI qualification testing
  - 5.9.2 Testing on the target computer system
  - 5.9.3 Preparing for CSCI qualification testing
  - 5.9.4 Dry run of CSCI qualification testing
  - 5.9.5 Performing CSCI qualification testing
  - 5.9.6 Revision and retesting
  - 5.9.7 Analyzing and recording CSCI qualification test results

Software Development Plan (SDP) - *(continued)*

5.10 CSCI/HWCI integration and testing
- 5.10.1 Preparing for CSCI/HWCI integration and testing
- 5.10.2 Performing CSCI/HWCI integration and testing
- 5.10.3 Revision and retesting
- 5.10.4 Analyzing and recording CSCI/HWCI integration and test results

5.11 System qualification testing
- 5.11.1 Independence in system qualification testing
- 5.11.2 Testing on the target computer system
- 5.11.3 Preparing for system qualification testing
- 5.11.4 Dry run of system qualification testing
- 5.11.5 Performing system qualification testing
- 5.11.6 Revision and retesting
- 5.11.7 Analyzing and recording system qualification test results

5.12 Preparing for software use
- 5.12.1 Preparing the executable software
- 5.12.2 Preparing version descriptions for user sites
- 5.12.3 Preparing user manuals
- 5.12.4 Installation at user sites

5.13 Preparing for software transition
- 5.13.1 Preparing the executable software
- 5.13.2 Preparing source files
- 5.13.3 Preparing version descriptions for the support site
- 5.13.4 Preparing the "as built" CSCI design and other software support information
- 5.13.5 Updating the system design description
- 5.13.6 Preparing support manuals
- 5.13.7 Transition to the designated support site

5.14 Software configuration management
- 5.14.1 Configuration identification
- 5.14.2 Configuration control
- 5.14.3 Configuration status accounting
- 5.14.4 Configuration audits
- 5.14.5 Packaging, storage, handling, and delivery

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- 5.15 Software product evaluation
  - 5.15.1 In-process and final software product evaluations
  - 5.15.2 Software product evaluation records, including items to be recorded
  - 5.15.3 Independence in software product evaluation
- 5.16 Software quality assurance
  - 5.16.1 Software quality assurance evaluations
  - 5.16.2 Software quality assurance records, including items to be recorded
  - 5.16.3 Independence in software quality assurance
- 5.17 Corrective action
  - 5.17.1 Problem/change reports, including items to be recorded
  - 5.17.2 Corrective action system
- 5.18 Joint technical and management reviews
  - 5.18.1 Joint technical reviews, including a proposed set of reviews
  - 5.18.2 Joint management reviews, including a proposed set of reviews
- 5.19 Other software development activities
  - 5.19.1 Risk management, including known risks and corresponding strategies
  - 5.19.2 Software management indicators, including indicators to be used
  - 5.19.3 Security and privacy
  - 5.19.4 Subcontractor management
  - 5.19.5 Interface with software independent verification and validation (IV&V) agents
  - 5.19.6 Coordination with associate developers
  - 5.19.7 Improvement of project processes
  - 5.19.8 Other activities not covered elsewhere in the plan

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7. Project organization and resources
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