DOD-HDBK-287, TAILORING GUIDE FOR DOD-STD-2167A, DEFENSE SYSTEM SOFTWARE DEVELOPMENT

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ABSTRACT

This paper will present some of the background as to why and how the handbook was developed, the role of industry in its development, what it contains, and when it will be published. It will explain why tailoring of DOD-STD-2167A is needed, briefly how to tailor the standard, and it will address the requirements in DOD-STD-2167A for development of software and for quality evaluations. Additionally, the paper will describe the role of the software support organization during the acquisition phase in the development of software for mission critical computer resources (MCCR), and briefly, how AFLC performs software support to MCCR. Finally, a few paragraphs will be dedicated to the projects in process by the Joint Logistics Commanders' Computer Software Management and Post Deployment Software Support Subgroups.

DOD-HDBK-287, A TAILORING GUIDE FOR DOD-STD-2167A

WITH EMPHASIS ON SOFTWARE SUPPORT

(GRAPHICS AND PICTURES NOT INCLUDED HERE. WILL BE SHOWN DURING PRESENTATION)

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DOD-HDBK-287, A TAILORING GUIDE FOR DOD-STD-2167A

0 - WHY THE HANDBOOK WAS DEVELOPED

0 - DOD POLICY TO TAILOR STDs AND DATA ITEM DESCRIPTIONS (DIDs)

0 - DOD-STD-2167A IS A MAX STD

0 - MUST BE TAILORED OR DEVELOPMENT COSTS WILL BE EXCESSIVE

0 - ALL STDs AND DIDS REFERRED TO IN STD MUST BE TAILORED

0 - TO PROVIDE GUIDANCE ON HOW TO TAILOR DOD-STD-2167A

HOW DOD-HDBK-287 WAS DEVELOPED

0 - THE JOINT LOGISTICS COMMANDERS' COMPUTER SOFTWARE MANAGEMENT GROUP (CSM)

0 - AFLC, AFSC, ARMY/AMC AND NAVY/SPAWAR REPRESENTATIVES

0 - CSM REWROTE 2167 AT CSM MEETING, AND IN THE ATLANTA AIRPORT

0 - COORDINATED WITH INDUSTRY AND GOVERNMENT

0 - OVER 5000 COMMENTS

0 - COMMENTS RESOLVED IN AN INDUSTRY AND GOVERNMENT WORKSHOP IN WASH DC

0 - FINAL MEETING WITH COSDIA IN WASH DC, RESULT WAS PLAN FOR 2167A

0 - PUBLISHED IN JUN 85

HOW DOD-HDBK-287 WAS DEVELOPED (CONT)

0 - HANDBOOK WAS PART OF THE DOD-STD-2167 PACKAGE

0 - INCLUDED THE STD, DIDS, HANDBOOK AND TRAINING COURSE

0 - ALL WERE COMPLETED BEFORE JUN 85 EXCEPT THE HANDBOOK

0 - HANDBOOK WAS IN DRAFT IN JUN 85 BUT NOT REVIEWED OR COORDINATED

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0 - KEY CONCEPTS OF DOD-STD-2167A
  0 - FEATURES THAT SUPPORT TAILORING
  0 - "SHELL" REQUIREMENTS
  0 - ADDRESSES:
     0 - COMPATIBILITY OF STD WITH ADA
     0 - DESIGN METHODOLOGIES
     0 - RELATED DATA ITEM DESCRIPTIONS
  0 - DOCUMENT IN CRILCMP
     0 - ASSIGN A DPML AND AN SPM
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SUPPORT ACTIVITIES DURING ACQUISITION (CONT)
  0 - ACTIVITIES DURING DEM VAL
     0 - ASSIST IN IV&V DECISION
     0 - DETERMINE SUPPORT RESOURCES REQUIREMENTS
        0 - INCLUDE IN CRILCMP
     0 - INTERACT WITH CONTRACTOR THROUGH THE SPO
     0 - DEFINE SUPPORT REQUIREMENTS AND TOOLS
     0 - CONTRACTOR DOCUMENTS IN CRISD
     0 - ASSIST IN TAILORING DOD-STD-2167A AND 2168
        FOR FSD
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WHAT THE HANDBOOK CONTAINS (CONT)
  0 - OVERVIEW OF TAILORING
     0 - WHY TAILOR
     0 - WHO PERFORMS TAILORING
     0 - WHERE TAILORING DECISIONS ARE SPECIFIED
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WHAT THE HANDBOOK CONTAINS (CONT)
  0 - KEY CONSIDERATIONS IN TAILORING DOD-STD-2167A
     0 - SYSTEM LIFE CYCLE PHASES
     0 - ACQUISITION AND NEW DEVELOPMENT
     0 - ACQUISITION AND SUPPORT REQUIREMENTS
        0 - DELIVERABLE AND NON-DELIVERABLE
           SOFTWARE
        0 - DOCUMENTATION AND ENGINEERING DATA
        0 - WHY IT IS NEEDED BY THE SUPPORT
           AGENCY
     0 - OTHER IMPOSED REQUIREMENTS AND POLICIES
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WHAT THE HANDBOOK CONTAINS (CONT)
  0 - DETAILED TAILORING PROCEDURES
     0 - SOFTWARE QUALITY
        0 - DOD-STD-2168 SOFTWARE QUALITY PROGRAM
        0 - DOD-STD-2167A QUALITY PLAN
        0 - DOD-STD-2167A EVALUATION CRITERIA
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SUPPORT ACTIVITIES DURING ACQUISITION (CONT)
  0 - ACTIVITIES DURING FSD
     0 - PARTICIPATE IN PROGRAM REVIEWS
     0 - PERFORM IV&V
     0 - MEMBER OF TEST TEAMS DURING DT&E AND OT&E
     0 - HELP FINALIZE CRILCMP
     0 - DEVELOP A SOFTWARE SUPPORT ENVIRONMENT
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HOW AFLC SUPPORTS SOFTWARE

(PICTURE OF A 1950S WAREHOUSE)

SOFTWARE COSTS
(PIE CHART)
MCCR SUPPORT PROCESS

THE SUM OF ALL ACTIVITIES THAT TAKE PLACE TO ENSURE THAT THE IMPLEMENTED AND FIELDED SOFTWARE CONTINUES TO FULLY SUPPORT THE OPERATIONAL MISSION OF THE SYSTEM.

0 - HARDWARE MODIFICATIONS
0 - SOFTWARE CHANGES
0 - HARDWARE AND SOFTWARE

(TAILORING DOD-STD-2167A FOR SOFTWARE SUPPORT CONTRACTS)

0 - A DIFFERENT APPROACH FROM ACQUISITION
0 - GOVERNMENT FURNISHED SOFTWARE (GFS)
   0 - CORRECT ERRORS
   0 - MODIFY OR CHANGE GFS
   0 - BLOCK CHANGES
   0 - ENHANCE GFS - (NEW DEVELOPMENT)
0 - CHANGES MUST BE RESPONSIVE
0 - CHANGING DIDS
0 - KINDS OF SUPPORT CONTRACTS

CATEGORIES OF SOFTWARE SUPPORTED

0 - AVIONICS SOFTWARE (ALSO CALLED OPERATION FLIGHT SOFTWARE)
0 - AIRBORNE ELECTRONIC WARFARE
0 - GROUND ELECTRONIC WARFARE
0 - AUTOMATIC TEST EQUIPMENT
0 - COMMUNICATIONS-ELECTRONICS
0 - TRAINING DEVICES
0 - MISSILES
0 - SMART MUNITIONS

SOFTWARE SUPPORT FUNCTIONS

0 - CORRECT DESIGN ERRORS (SOFTWARE, HARDWARE, DOCUMENTATION)
0 - DEVELOP CHANGES (ENHANCEMENTS, NEW CAPABILITY, EFFICIENCY)
0 - INTERFACE WITH OTHER SYSTEMS
0 - DELETE UNNEEDED CAPABILITY
0 - ENGINEERING (CIRCUIT DESIGN)
0 - MAINTAIN DOCUMENTATION
0 - SOFTWARE DISTRIBUTION AND SECURE STORAGE
0 - SUPPORT ACQUISITION COMMAND AND USING COMMANDS
0 - TESTING (INTEGRATION, SIMULATION, ANECHOIC, RETOK)

CONCLUSION

0 - TAILOR ALL STDs AND DIDs
0 - DOD-STD-2167A IS A MAX STD AND MUST BE TAILORED
0 - SUPPORT PHASE IS LONGER THAN DEVELOPMENT
0 - DESIGN SYSTEMS FOR SUPPORTABILITY
0 - SOFTWARE DEVELOPMENT AND SUPPORT ENVIRONMENTS VERY COSTLY
0 - USE EXISTING SUPPORT AGENCY ENVIRONMENT
0 - THERE IS LITTLE SOFTWARE KNOWLEDGE TRANSITIONED TO SUPPORT AGENCY
0 - DO GOOD DOCUMENTATION DURING DEVELOPMENT

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