

SPECIFICATIONS BRANCH

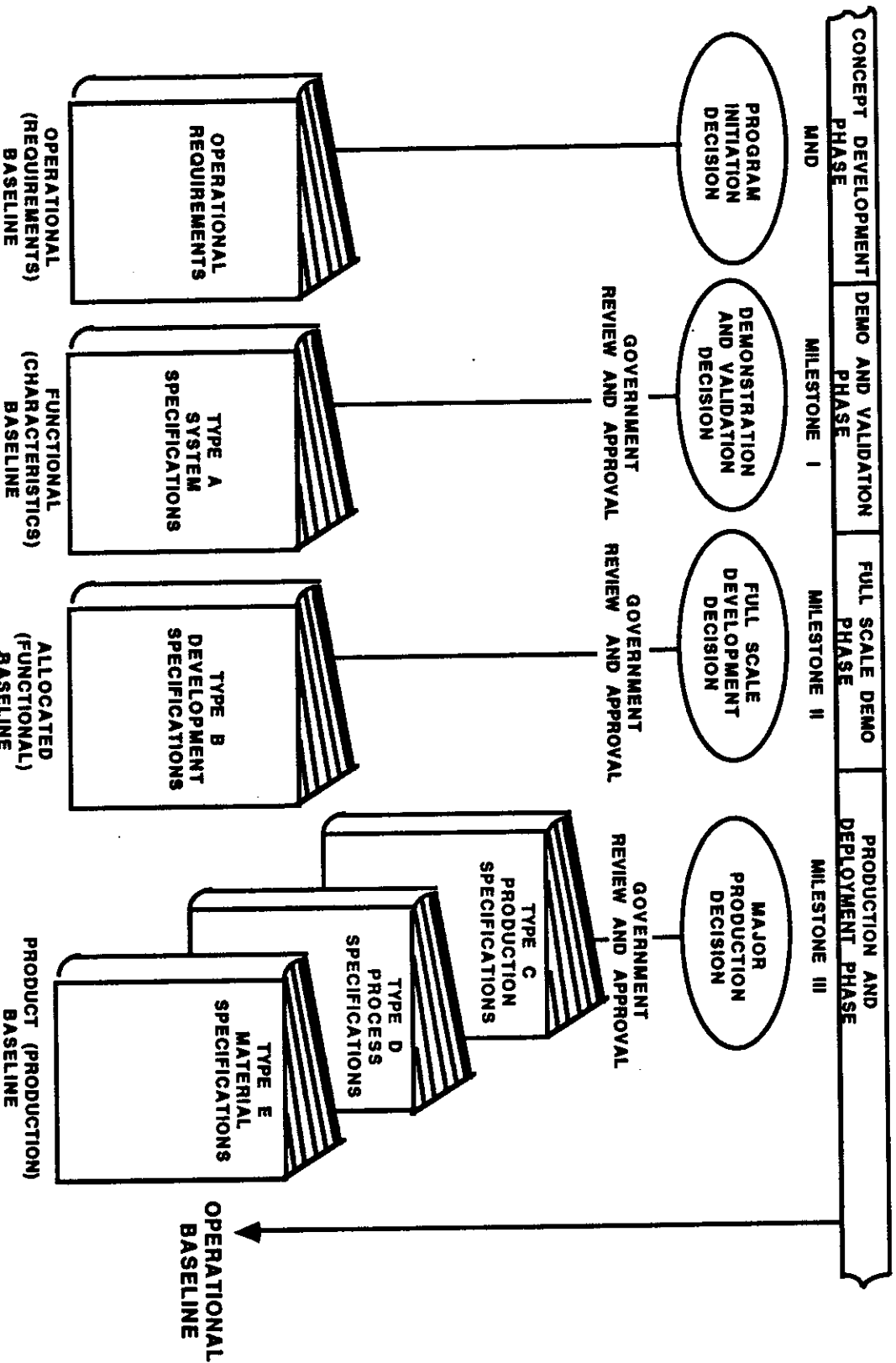


CODE 3656



3656-89-8-0002

SPECIFICATION EVOLUTION





3656-89-A-0021

WHAT THE SPEC WRITER DOES

- PREPARE NEW SPECS FROM ENGINEERING NOTES
- COORDINATE REVIEW OF NEW/REVISED SPECS WITH
ILITIES FOR VALIDATION PRIOR TO AUTHENTICATION
- SET UP REVIEW MEETINGS FOR NEW DOCUMENTS
- PREPARE NWC GENERATED ECPS/NORs/SCNs
- REVIEW CONTRACTOR PREPARED DOCUMENTATION
- COORDINATE WITH NAVAIR ON MIL-SPECS
- MAINTAIN MASTERS UNTIL DISTRIBUTION



3656-89-A-0005

RESPONSIBILITIES

- REVIEW SOW FOR PROPER MIL-STDs USED IN THE PREPARATION OF SPECIFICATIONS AND ASSOCIATED DOCUMENTS
- REVIEW DOCUMENT CONTROL PLAN FOR PROPER VALIDATION AND AUTHENTICATION AND OTHER SPECIFICATION IMPACTS
- REVIEWS NEW CONTRACTOR PREPARED SPECIFICATIONS AND DOCUMENTS (BOTH MILITARY AND NWC SPECIFICATIONS). PROVIDES SPECIFICATION NUMBERS FOR NWC SPECIFICATIONS AND COORDINATES WITH NAVAIR FOR MILITARY SPECIFICATION NUMBERS. COORDINATES AUTHENTICATION OF MILITARY SPECIFICATION WITH NAVAIR



3656-89-A-0004

FUNCTIONS OF THE SPECIFICATION BRANCH

- **WRITES/EDITS SPECIFICATIONS IAW APPROPRIATE STANDARDS AND GUIDELINES**
 - **MIL-STD-961**
 - **MIL-STD-490**
- **COORDINATES AND ENSURES THAT A SPECIFICATION HAS THE FOLLOWING:**
 - **PROPER FORMAT**
 - **BEEN COMPILED IAW REQUIRED STANDARDS/GUIDES**
 - **COMPLETED FIGURES, ILLUSTRATIONS, AND TABLES**
 - **PROPER SECURITY MARKING THROUGHOUT**
 - **VALIDATES NORs; SIGNS SPECIFICATIONS**
- **INTERFACES WITH OTHER COGNIZANT DEPARTMENTS/ GROUPS IN ORDER TO COMPLETE THE SPECIFICATION**



3656-89-A-0002

WHAT IS A SPECIFICATION

- A SPECIFICATION IS A DOCUMENT PREPARED SPECIFICALLY TO SUPPORT ACQUISITION OF A PRODUCT WHICH CLEARLY AND ACCURATELY DESCRIBES THE ESSENTIAL TECHNICAL REQUIREMENTS FOR THE PURCHASED MATERIAL AND ESTABLISHES INSPECTION PROCEDURES NECESSARY TO DETERMINE THAT THE REQUIREMENTS FOR THE PURCHASED MATERIAL COVERED BY THE SPECIFICATION HAVE BEEN MET



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WHY A SPECIFICATION

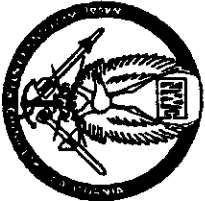
- **FEDERAL ACQUISITION REGULATIONS (FAR) IS MANDATORY FOR USE IN ALL FEDERAL CONTRACTS WITH ANYONE OUTSIDE THE GOVERNMENT**
- **FAR, PART 10 IS TITLED "SPECIFICATIONS, STANDARDS, AND OTHER PURCHASE DESCRIPTIONS"**
- **FAR STATES, "AGENCIES SHALL DEVELOP SPECIFICATIONS AND PURCHASE DESCRIPTIONS ..."**



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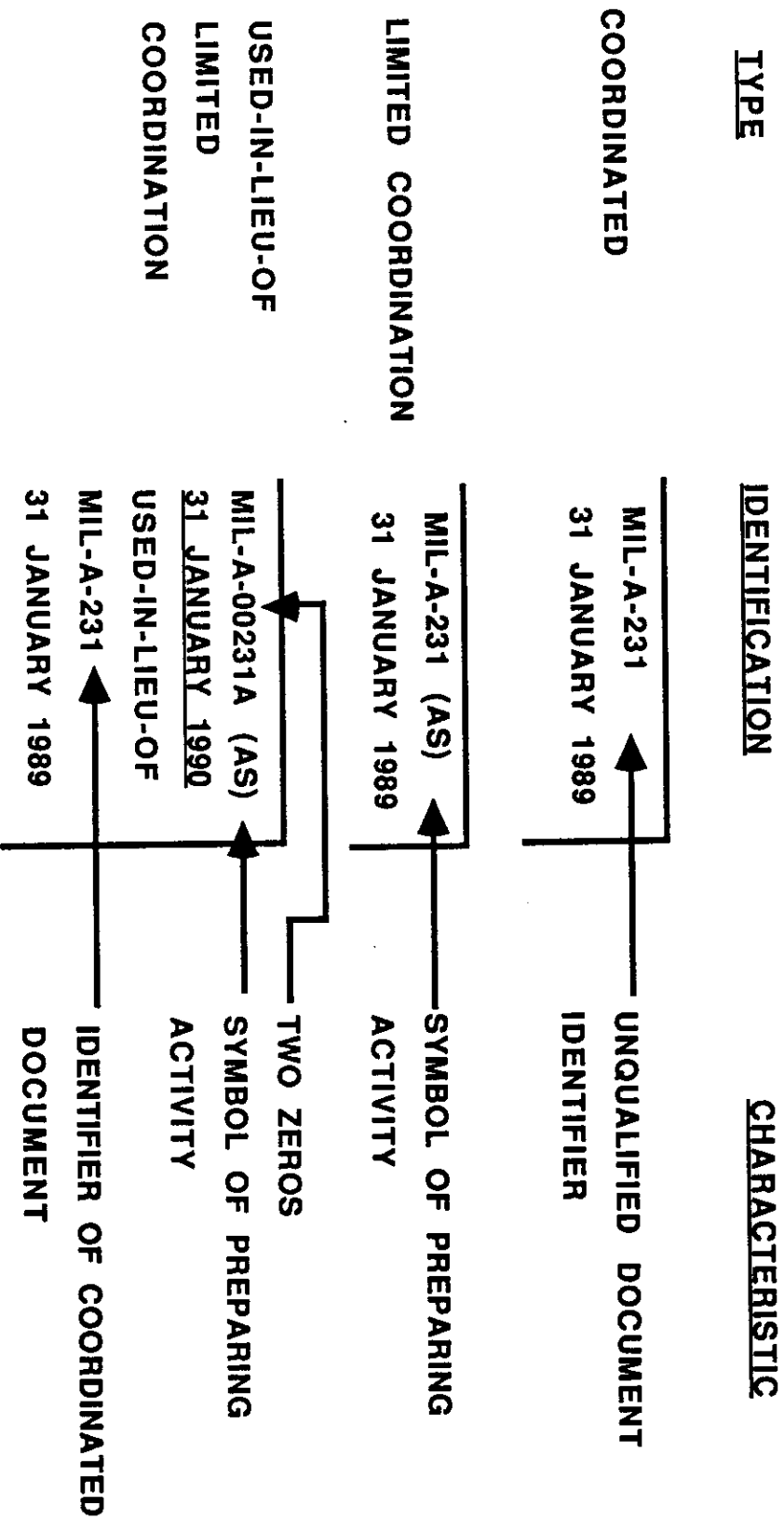
**WELL, IF WE MUST HAVE A SPECIFICATION,
I GUESS WE MUST, BUT ...**

- **IS THERE MORE THAN ONE KIND OF
SPECIFICATION, AND IF SO, WHICH
KIND DO WE USE?**
- **WHAT DOES IT CONSIST OF?**
- **WHERE DO WE START?**
- **HOW DO WE KNOW WHEN IT IS COMPLETE?**



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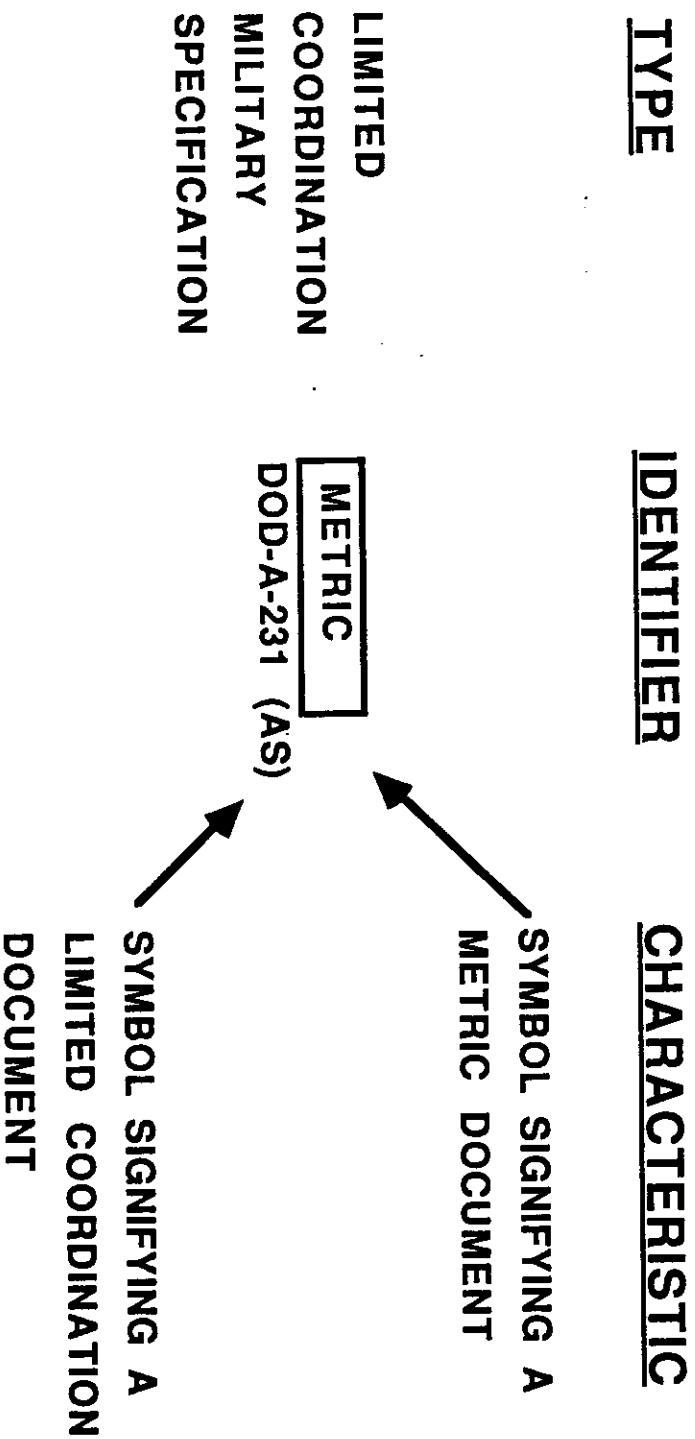
DOCUMENT IDENTIFIER





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"METRIC" DOCUMENT IDENTIFIER





3656-89-A-0014

WHAT KIND

- DEFENSE STANDARDIZATION MANUAL
DOD 4120.3-M STATES
 - MIL-SPECS SHALL BE IN ACCORDANCE
WITH MIL-STD-961 (I.E., MIL-E-85462)
 - PROGRAM PECULIAR SPECIFICATIONS
SHALL BE IN ACCORDANCE WITH
MIL-STD-490 (I.E., AS-5027, WS-4562)



3656-89-A-0007

MILITARY SPECIFICATIONS/STANDARDS/HANDBOOKS PREPARED AND MAINTAINED AT NWC

TYPE

USE

● SPECIFICATION
(IAW MIL-STD-961, USING
MIL-STD-490 AS A GUIDE)

TO DESCRIBE MINIMUM REQUIREMENTS NEEDED
TO SATISFY GOVERNMENT'S INTENDED USE
AND INSPECTIONS TO ENSURE THE REQUIRE-
MENTS ARE MET

● STANDARDS
(IAW MIL-STD-962)

TO ESTABLISH ENGINEERING AND TECHNICAL
REQUIREMENTS FOR PROCESSES, PROCEDURES,
PRACTICES, AND METHODS ADOPTED AS
STANDARD

● HANDBOOK
(IAW MIL-STD-962)

TO CONTAIN STANDARD PROCEDURAL, ENGINEERING,
OR DESIGN DATA RELATING TO MATERIAL AND
ASSOCIATED PROCESSES, PRACTICES, AND METHODS



3656-89-A-0020

PROGRAM PECULIAR SPECS

- PREPARED IN THE SAME MANNER AS MIL-SPEC
(COMBINATION OF MIL-STD-490 AND MIL-STD-961)
(NWC-1820, AS-4125, AND WS-4125)
- PREPARED IN ACCORDANCE WITH MIL-STD-490 ONLY
(AS-5027, WS-4562)



3656-89-A-0008

PROGRAM PECULIAR SPECIFICATIONS PREPARED AND MAINTAINED BY NWC

TYPE

USE

- NAVAL WEAPONS CENTER (NWC) TO PREPARE SYSTEM, DEVELOPMENT AND PRODUCT SPECIFICATIONS FOR ONE TIME PROCUREMENT OR PROGRAM PECULIAR SPECIFICATIONS
 - AIR SYSTEM (AS)
 - WEAPON SYSTEM (WS)
-

- ORDNANCE SYSTEM (OS)

- AIR DATA (AD) TO DOCUMENT ADVISORY INFORMATION SUCH AS AN ASSEMBLY PROCEDURES

- ORDNANCE DATA (OD)

- AIR REQUIREMENTS (AR) PREPARED BY NAVAIR FOR SPECIFIC PROCUREMENT PURPOSES

- WEAPON REQUIREMENT (WR)



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SPECIFICATION FORMS

- MIL-S-83490 GIVES THE OPTION OF MIL-STD-490 OR DOD MANUAL 4120.3-M FOR PREPARATION OF SPECIFICATIONS
- DOD MANUAL 4120.3-M, CHAPTER III SAYS, "SPECIFICATIONS SHALL BE PREPARED IN ACCORDANCE WITH MIL-STD-961; STANDARDS AND HANDBOOKS SHALL BE PREPARED IN ACCORDANCE WITH MIL-STD-962
- THE SPECIFICATION FORM IS ALSO ADDRESSED IN ACCORDANCE WITH MIL-S-83490

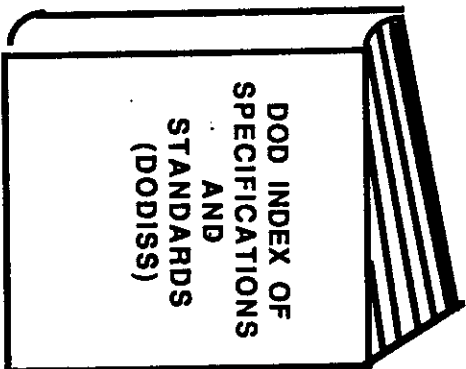
DOC LEVEL	FORM 1a	FORM 1b	FORM 2	FORM 3
LEVEL 1			X	X
LEVEL 2		X		
LEVEL 3	X			

- FORM 1 - SPECIFICATIONS TO MILITARY STANDARDS
 - FORM 1a - WITH MAXIMUM FORMAT CONTROL (MIL-STD-490 OR DOD 4120.3M)
 - FORM 1b - WITH LIMITED FORMAT CONTROL (MIL-STD-490 OR DOD 4120.3M)
- FORM 2 - SPECIFICATIONS TO COMMERCIAL PRACTICES WITH SUPPLEMENTAL MILITARY REQUIREMENTS
- FORM 3 - SPECIFICATIONS TO COMMERCIAL PRACTICES

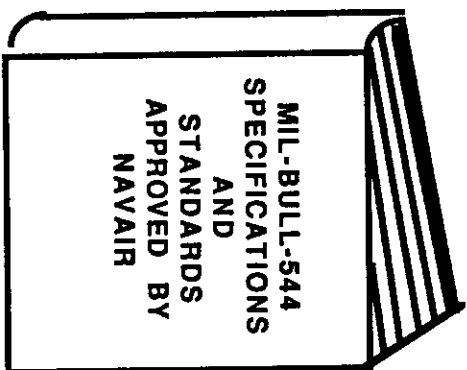


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SPECIFICATION AVAILABILITY



LISTS FEDERAL AND MILITARY
SPECIFICATIONS AND STANDARDS
AND ADOPTED INDUSTRY DOCUMENTS



LISTS FEDERAL AND MILITARY
SPECIFICATIONS, STANDARDS
ADOPTED INDUSTRY DOCUMENTS
AND PURCHASE DESCRIPTIONS
IN WHICH NAVAIR HAS AN INTEREST



3656-89-A-0016

**WHICH ONE
DO WE USE!**

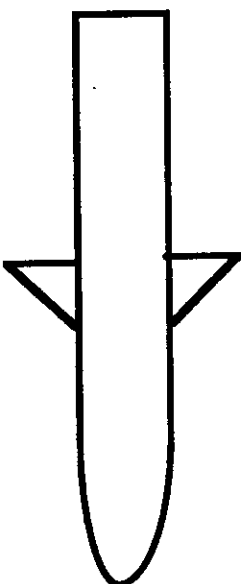


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PRIME AND CRITICAL ITEMS

● PRIME ITEM

- THE ENTIRE (WHOLE) OF SOMETHING THAT CONSISTS OF CRITICAL ITEMS (SUCH AS ALL-UP-ROUND)

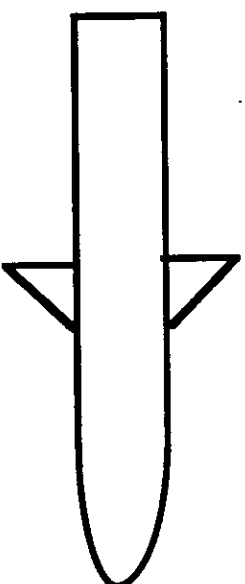


THE ENTIRE MISSILE IS A PRIME ITEM

- A COMPLEX CRITICAL ITEM COULD BE A PRIME ITEM

● CRITICAL ITEM

- A COMPONENT OR GROUP OF COMPONENTS THAT A PRIME ITEM CANNOT FUNCTION WITHOUT
- PRIME ITEMS ARE COMPRISED OF CRITICAL ITEMS



THE GUIDANCE SECTION IS A CRITICAL ITEM TO THE MISSILE. HOWEVER, THE GUIDANCE SECTION ITSELF IS MADE UP OF CRITICAL ITEMS; SO, THE GUIDANCE SECTION COULD ALSO BE A PRIME ITEM



3656-89-A-0016

TYPES OF SPECIFICATIONS

- SYSTEM
- DEVELOPMENT
 - PRIME, CRITICAL, AND NONCOMPLEX ITEMS
 - COMPUTER PROGRAM
- PRODUCT
 - FUNCTION
 - PRIME AND CRITICAL ITEMS
 - FABRICATION
 - PRIME, CRITICAL, AND NONCOMPLEX ITEMS
- PROCESS
- MATERIAL

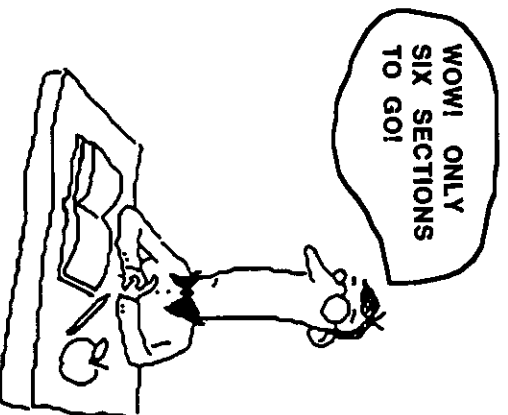


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WHAT DOES A SPECIFICATION CONSIST OF?

**SIX SECTION SPECIFICATIONS SHALL
CONTAIN SECTIONS FOR:**

- **SCOPE**
- **APPLICABLE DOCUMENTS**
- **REQUIREMENTS**
- **QUALITY ASSURANCE PROVISIONS**
- **PACKAGING**
- **NOTES**





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SECTION ONE - SCOPE

- A GENERAL INFORMATION STATEMENT SUCH AS:

"THIS SPECIFICATION ESTABLISHES THE PERFORMANCE, DESIGN, DEVELOPMENT, AND TEST REQUIREMENTS FOR THE RF TRANSMITTER, HEREAFTER REFERRED TO AS THE SET."

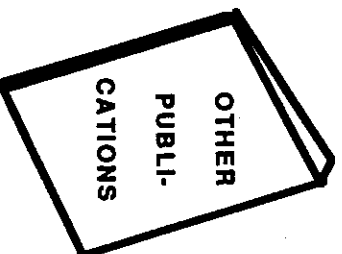
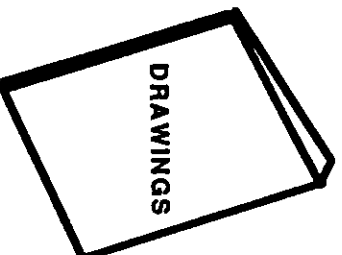
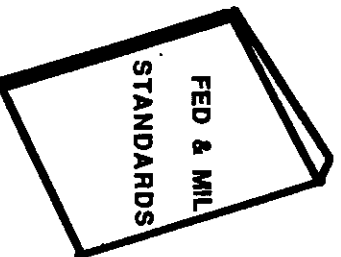
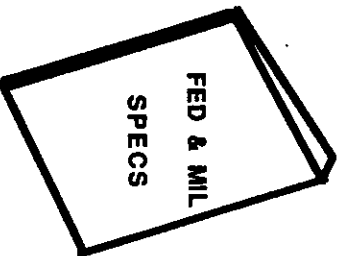
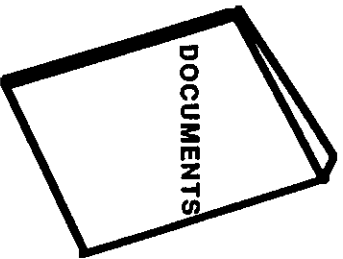


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SECTION TWO - APPLICABLE DOCUMENTS

- THIS SECTION IS A LISTING OF ALL OF THE
DOCUMENTS REFERENCED IN THIS SPEC-

IFICATION





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SECTION THREE - REQUIREMENTS

- **THE ESSENTIAL REQUIREMENTS AND DESCRIPTIONS THAT APPLY TO PERFORMANCE, DESIGN, RELIABILITY, ETC. OF THE CONFIGURATION ITEM, MATERIAL OR PROCESSES COVERED BY THE SPECIFICATION**