

10.1 SCOPE.

10.1.1 Purpose. This section establishes the requirements and procedures to be observed in the preparation of a parts list integral with or separate from the drawing. Lists may be prepared manually or from digital data.

10.1.2 Type of Parts Lists (PL). The type of Part List to be prepared whether it be integral or separate from the drawings shall be as contractually specified.

10.2 APPLICABLE DOCUMENTS. Note: DoD Policy Memo 05-3 "Elimination of Waivers to Cite Military Specifications and Standards in Solicitation and Contracts" has eliminated the need for waivers to use MIL-SPECS and MIL-STDS on DoD contracts. (See PREFACE 1, Section 2)

MIL-STD-804	Formats and Coding of Aperture, Camera, Copy and Tabulating Cards (INACTIVE)
MIL-STD-961	Military Specifications and Associated Documents, Preparation of
H4/H8	Cataloging Handbook Commercial and Government Entity (CAGE)
H4/H8 Sect A H4/H8 Sect B	Name to Code Code to Name
ASME Y14.1	Inch Drawing, Sheet Size and Format
ASME Y14.1M	Metric Drawing, Sheet Size and Format
ASME Y14.34M	Parts Lists, Data Lists, Index Lists and Indentured Lists
ASME Y14.100	Engineering Drawing Practices
ANSI / IEEE STD 200	Electrical and Electronic Parts and Equipment
ANSI/IEEE STD 315	Graphic Symbols for Electrical and Electronic Diagrams

10.3 DEFINITIONS. (Alphabetically Listed)

10.3.1 Alphanumeric Arrangement. For a designation in a list, a grouping of mixed symbols, numbers and letters used to form the designation. These are arranged so that the first character in the designation aligns in the furthest leftmost position in the column. For each designation in the column, the first position characters are arranged by symbols, e.g., a dash symbol, then numerically, then alphabetically, as applicable. Succeeding characters in the second position (and subsequent positions) are next arranged by symbol, then numerically, then alphabetically, is applicable of single characters shall be arranged first within a column list, followed by those with a dash in the second character position. Next, after the dash second characters, then the alphabetical second position characters. These positions are applicable for all remaining character positions with designations.

10.3.2 Application Data. The next assembly (ies), and the model number, nomenclature, or equivalent designator of the assembled unit(s), of which a part or assembly is a component.

10.3.3 Application List (AL). Application data presented in a separate list.



10.3.4 Bulk Item. "Bulk items" are those necessary constituents of an assembly or part such as oil, wax, solder, cement, ink, damping fluid, grease, powdered graphite, flux, welding rod, thread, twine and chain for which the quantity required is not readily pre-determinable; or if knowing the quantity, the physical nature of the material is such that it is not adaptable to depiction on a drawing; or which can be cut to finished size by the use of

such hand or bench tools as shears, pliers, knives, etc., without any further machining operations, and the configuration can be fully described in writing without an illustration.

10.3.5 CAGE Code (Commercial And Government Entity Code). A code assigned by the government to identify a firm which designs, manufactures or supplies items.

10.3.6 Data List (DL). A data list is a tabulation of all engineering drawings, documents referenced thereon, associated parts lists and special lists, specifications and subordinate data lists pertaining to the item to which the data list applies and essential in-house documents necessary to meet the technical design disclosure requirements except for those in-house documents referenced parenthetically.

10.3.7 Design Activity. An activity having, or having had, responsibility for the design of an item. The activity may be a government activity or a contractor, vendor or other.

10.3.8 Design Activity, Current. An activity currently having responsibility for the design of an item, and the preparation and maintenance of the drawings and associated documents. Current design activity could be the original design activity or new activity when that responsibility is transferred from another design activity.

10.3.9 Design Activity, Original. An activity that initially had responsibility for the design of an item and the preparation and maintenance of the drawings and associated documents.

10.3.10 Digital Data. Data created and stored on a company system which employs a display on which the user and the computer interact to create entries for producing layouts, drawings, numerical control tapes, disks or other engineering data.

10.3.11 Document Change Notice (DCN). Authorization document to make change(s) to a drawing. Also referred to as NOR (Notice Of Revision), EO (Engineering Order), EN (Engineering Notice), ECO (Engineering Change Order), ECN (Engineering Change Notice), CID (Change In Design), ADCN (Advance Drawing Change Notice) or AN (Alteration Notice).

10.3.12 Find (Item) Number. Find numbers (item numbers) are assigned to every line entry, occupied or not, of an assembly parts list to facilitate the location of that item in the field of the drawing. They are not used for other identification purposes. Reference designations in accordance with IEEE 200 may be used as find numbers or item items.

10.3.13 Flagnote. A note whose text is prefixed by a note identification enclosed within a symbol (flag). The note is cross referenced to a specific area on a drawing, or associated list, by entering the flag at the point of application.

10.3.14 Identification Cross-Reference Drawing. An administrative type drawing which assigns unique identifiers to provide a cross-reference to the original incompatible identifiers.

10.3.15 Indentured Data List (IDL) An indentured data list is a list of all documents required to define a complete system or end item listed in a top-down (generation tree) order.

10.3.16 Index List (IL). An index list is a tabulation of data lists and subordinate index lists pertaining to the item to which the index list applies.

10.3.17 Integral Parts List (IPL or PL). A parts list prepared and revised on the drawing.

10.3.18 Item. A nonspecific term used to denote any unit or product, such as a part, material, assembly, equipment, accessory or attachment.



10.3.19 Parts List (PL). A tabulation of parts and bulk materials required to fabricate or procure the item(s) shown on a drawing. Reference documents may also be tabulated on a Parts List. The term "List of Materials" (LM) is no longer used interchangeably with parts list (PL).

10.3.20 Revision Authorization Document. A document recognized as the authority for making a change to a drawing or associated documentation. Revision authorization documents are frequently identified as listed in PARAGRAPH 10.3.11

10.3.21 Separate Parts List (SPL). A Parts List prepared separately from the drawing and may be revised independently of the drawing.

10.4 LIST PREPARATION.

10.4.1 Method Of List Preparation. Parts Lists, Data Lists, Indentured Lists and Index Lists may be prepared manually or by use of Automatic Data Processing System (ADPS) techniques.

10.5 LIST DETERMINATION.

10.5.1 Integral Or Separate Parts List Determination. The type of lists to be prepared and whether the parts list shall be prepared integral or separate from the drawing shall be determined by contract or procurement activity.

10.5.1.1 Drawing Identification Of "Separate Parts List". When a "Separate Parts List" (SPL) is cited, a note "SEE SEPARATE PARTS LIST" shall be located above the title block of the parent engineering drawing. See FIGURE 10-1. When application data is included on a Separate Parts List, the note shall be expanded to read "SEE SEPARATE PARTS LIST FOR PARTS AND APPLICATION DATA".

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE: DECIMALS ANGLES .XX ± 03 ±2° .XX ± 01 CONTRACT NO. DECIMALS ANGLES .XX ± 03 ±2° .XX ± 01 APPROVALS DATE	_			.19 MINIMUM LETTERS	<u>~</u>
DIMENSIONS ARE IN INCHES. TOLERANCES ARE: DECIMALS ANGLES .XX±.03 ±2° .XXX±.010 ±2° APPROVALS DATE TITLE				SEE SEPARATE PARTS LIST	
XX±.03 ±2° APPROVALS DATE TITLE		DIMENSIONS ARE IN INCHES. TOLERANCES ARE:	CONTRACT NO.		
DO NOT SCALE DRAWING DRAWN	\bigwedge	XX±03 ±2° XXX±010			
TREATMENT		TREATMENT		-	
USED ON DESIGN ACTIVITY	USED ON		DESIGN ACTIVITY	SIZE CAGE CODE DWG NO.	REV.
SIMILAR TO SPECIAL MARKING SYM SCALE CALC.WT ACT.WT SHEET				SCALE CALC.WT ACT.WT SHEET	

SEPARATE PARTS LIST NOTATION.
FIGURE 10-1

10.5.1.2 Manually Prepared "Separate Parts List" Sizes. Manually Prepared "SEPARATE PARTS LIST" (SPL) shall utilize a format size of either "A" (8.50 x 11) or "B" (11 x 17) for decimal inch size or "A4" (210mm X 297mm) or "A3" (297mm X 420mm) for metric sizes and follow formal design and preparation requirements as provided in PARAGRAPH 10.11 and FIGURE 10-14.

10.5.1.3 Machine Prepared "Separate Parts List" Sizes. "Automatic Data Processing System" (ADPS) shall not require preprinted formats if normal machine operations can duplicate format headings and listings. The size of format print-outs shall be commensurate with machine capability and blank computer standard-sized marginally punched, continuous, paper stock. See PARAGRAPH 10.16 and FIGURE 10-22.



10.5.1.4 Minimum Margin for Separate Lists. The minimum margins sizes given for the format shown in FIGURES 10-14, 10-15, 10-16, 10-17, 10-21, and 10-21.1 now include .50 inch to agree with Table 1 in ASME Y14.1-2005, which was revised to set the minimum margin width on A-size and B-size formats to .50 inch. The old values of .25 inch, .38 inch, and .62 inch have been changed to optional values. Permission should be obtained from the procurement activity if it is desired to continue to use formats with margins set to the old values. These values do not apply to metric size formats (e.g. A3 & A4).

10.5.2 Parts List Security Classification. Separate parts lists for classified drawings are not classified unless they also contain classified information.

10.6 GENERAL REQUIREMENTS FOR INTEGRAL PARTS LIST (PL or IPL)

10.6.1 Parts List (PL) Format. When part lists are prepared integral with the drawing, they shall include, as a minimum, columns shown on FIGURE 10-2. Columns may be preprinted to proportions shown in SECTION 6. Mandatory columns shall appear and additional columns may be added as required.

	MANDATORY					MANDATORY					VAUTAUNAV		OPTIONAL	OPTIONAL	AS REQUIRED
QTY REQD	CAGE SY	M IDENTIFYI	OR NG NO.			NOMENC OR DESC	LATURE RIPTION				MATE SPECIFI	RIAL CATION	WT.	ZONE	FIND NO.
						PARTS	LIST								
Al D	ND PA ISTRI S APP	SUITABI IRTS LIS BUTION ROPRIA	T FOR State	SECU	RITY N	OTAT	IONS,								
DIMENSIONS ARE TOLERANCES AR DECIMALS	RE:	s.													
XX±.03 .XXX±.010	±2°		APPROVA	LS	DATE	TITLE									
DO NOT SCAL	DO NOT SCALE DRAWING DRAWN														
TREATMENT		CHECK	KED												
FINISH		ENGR				SIZE CAGE CODE DWG NO.							REV.		
	PECIAL MARK		N ACTIVIT	Y											
SIMILAR TO SF						SCALE				CALC.WT	ACT.WT	SHEET			

INTEGRAL PARTS LIST FORMAT. FIGURE 10-2

10.6.2 Parts List (PL) Location.

10.6.2.1 Rules Regarding Integral Parts List Location. The parts list is located in the lower right hand corner of the drawing, allowing suitable distance above the title block for mandatory Distribution Statement, Security Classification (when required), Nuclear Critical Safety, Electrostatic, etc. markings as applicable. On detail drawings with brief parts lists, this space may be utilized for drawing. On multiple sheet drawings, the parts list starts on Sheet 1 and continues on as many sheets as necessary. See SECTION 6, FIGURE 6-4.



10.6.2.2 Additional Space Allotted For Long Parts List. When the space allotted for the parts list has been filled, (see SECTION 6), additional blocks may be added to the left of the original block, leaving a minimum space of 1.0 inch [25.4mm] between blocks. See SECTION 6, FIGURE 6-4.

10.6.3 Parts List (PL) Columns.

10.6.3.1 Parts Lists (PL). Part Lists are made up of mandatory and optional columns as shown in FIGURE 10-2.

10.6.3.2 Mandatory Columns. Mandatory Columns are described further in this section under detail drawings, assembly drawings, multiple assembly drawings, etc.

10.6.3.3 Optional Columns. Optional columns are provided as required to clarify or enhance the parts list illustrated in FIGURE 10-2.

- e.g. SYM = Symbol Column used to identify type of part (Assigned or internally assigned)
 - a. VICD Vendor Item Control Drawing (Formerly Specification Control Drawing (SCD)
 - b. SOCD Source Control Drawing (Formerly SCD)
 - c. PP Purchased Part
 - d. BI Bulk Item
 - e. etc.

10.6.4 Parts List (PL) Entries. Each is entered only once in the parts list. Part materials referenced from another drawing are not entered on the parts list of assembly drawings. See FIGURES 10-9 and 10-10.

10.6.4.1 Entry Space Size Of Parts List. The parts list entry spaces are normally .50 inch high. When additional space is required, the height of the entry spaces is increased in increments of .50 inch. See FIGURE 10-4.

10.6.5 Parts List Entry Groupings. Parts entered in the parts list usually follow the order listed below, but this order and the need for grouping, though preferred, is not mandatory. See FIGURES 10-8, 10-9 and 10-10.

- a. Suffix Identifier (dash) Numbered Parts of the Parent Drawing Number
- b. Subassemblies detailed on the same drawing
- c. Parts and assemblies detailed on other drawings
- d. Company Numbered parts listed in numerically ascending order
- e. Company Standard Parts
- f. Military Standard Parts (AN, MS, etc.)
- g. Industry Standard Parts (AS, NAS, etc.)
- h. Commercial Parts (Suppliers Items)
- i. Bulk Items
- j. Customer Furnished and Controlled Items

10.6.6 Substitute/Alternate Material Or Item.

10.6.6.1 Acceptable Substitute/Alternate. A material or item is an acceptable substitute/alternate for another material or item when it possesses interchangeable physical and functional characteristics. See FIGURES 10-3, 10-4 and 10-4.1.

10.6.6.2 Restricting Use Of Substitute/Alternates. The use of substitutes/alternates shall be kept to a minimum. Substitutes/alternates are specified on the drawing only or parts list upon instruction from the responsible designer. Substitutes/alternates may require an identity different from the preferred part or material, but do not require a new identity for the assembly in which they are used. Only the substitutes/alternates listed on the drawing or parts list may be used.

10.6.6.3 Rules Governing Use of Substitutes/Alternates On Drawings. The following drafting practice is used when substitutes/alternates are specified on the drawing.

10.6.6.3.1 Single Substitute/Alternate Call Out. A single substitute/alternate may be specified in a general note and cross-referenced to the preferred item in the parts list.

Example:

PERMISSIBLE TO USE (substitute/alternate part number and Commercial and Government Entity (CAGE) when required) IN PLACE OF (parts list part identification number (PIN)).

10.6.6.3.2 Multiple Substitute/Alternate Call Out for Integral Parts List. Two or more substitute/alternate items are specified in a tabulation block and qualified by a general note cross referenced to the parts list entries. On "C" size and smaller drawings, the tabulation may be located wherever for convenience on the field of the drawing. On "D" size and larger drawings, the tabulation is located adjacent to the lower border and to the left of the title block. See FIGURES 10-3 and 10-4.1.

FOR ALL SIZE GENERAL NOTES:

/X SUBSTITUTES PERMISSIBLE, SEE TABULATION.

STANDARD PARTS	14	AN1234		
SUPPLIER PRODUCTS	8	D3456	34567	
COMPANY ITEMS-OTHER PLANTS	5	1250046 -1	13310	FIELD OF
COMPANY ITEMS	3	1534798 -1		DRAWING
	ITEM NO. REF	SUBSTITUTE PART NO.	CAGE CODE	("C" SIZE & SMALLER
	ACCE	PTABLE SUBSTI	TUTES	DRAWING)

/	("D"	SIZE	OF TITLE BL & LARGER	ОСК	QTY REQD CODE SYM	PART OR DENTIFYING NO.		NOMENCLATURE OR DESCRIPTION PARTS LIST	$\overline{}$
	DRA		<i>J)</i>		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE:	CONTRACT NO.			\neg
14	AN1234				DECIMALS ANGLES			-	
8	D3456	34567				APPROVALS	DATE	TITLE	7
5	1250046 -1	13310			DO NOT SCALE DRAWING	DRAWN			
3	1534798 -1				TREATMENT	CHECKED		-	
ITEM NO.	SUBSTITUTE	CAGE			ENGR			SIZE CAGE	
REF	PART NO.	CODE	NEXT ASSY	USED ON		ISSUED			\langle
	PTABLE SUBSTI	TUTES	APPLICA	ATION	DESIGN ACTIVITY			SCALE	1
\rangle)

<u>"ACCEPTABLE SUBSTITUTES" TABULATION BLOCK LOCATION.</u> FIGURE 10-3

10.6.6.3.3 Multiple Substitutes/Alternates Without Preference For Use. When there is no preference between two or more materials or items, enter them together in a single space in the parts list. See FIGURE 10-4.



PARTS LIST ENTRY FOR SUBSTITUTES WITHOUT PREFERENCE. FIGURE 10-4

10.6.6.4 Use of Substitute/Alternate Parts or Bulk Items on a Separate Parts List. The find number column on the parts list and the quantity required column can be used to indicate substitute/alternate parts or bulk items. An applicable sequence find number will be shown for the preferred item in the find number column, and the actual quantity required will be shown in the "Quantity Required" column. The substitute/alternate item is indicated by entering the same applicable find number in the find number column, and the abbreviation "SUBST" for substitute part will be shown in the "Quantity Required" column. See FIGURE 10-4.1.

P/	ART	'S L	IST ^{1.}	DESIGN ACTIVI	ΤY	1a. CONT	RACT NO		AGE CODE CURRENT ORIGINAL	3. ORG DATE YR-MO-DA	۲L			5. REV
6. LIS	T TITLE		I	7. END ITEM		8. /	APPROV	AL		9. RE	V AUTH NO.		10	D. SHEET OF SHEET
I1. TEM OR FIND IUMBER	QTY	13. UNIT OF MEASURE	14. CAGE CORE	15. PART OR IDENTIFYING NUMBER	16. D 16a. SIZE	RAWING/DOCUMENR NUMBER	17. REV LTR	18. SHT NO.	19.	NOMENCLATURE OR DESCRIPTION		WT HC OR SSY HC	TRI	
3 4 5	1 SUBST			AB12345-7 AB56789-7	D D	AB12345 AB56789				SPACER SPACER				

9 10 AR 10 SUB5 11		MMM-A-131T1 MMM-A-131T1		MMM-A-131 MMM-A-131		OPTICAL E CLASS 1 AM	EMENT	-TO-METAL FOR		
24. 25. LTR	NOTE: DESCRIPT/AUTH		27. APVD	 AYALSO BE AR	PPLIED T	27.		EGRAL PART	TS LIST	

LISTING SUBSTITUTE PARTS AND BULK ITEMS. FIGURE 10-4.1



10.6.6.5 Identifying Substitute/Alternate Parts on Drawings. Drawings that show parts, materials or methods as substitute/alternate to permit establishment of substitute/alternate sources of supply, permit production of parts by alternate methods of manufacture or permit fabrication of items with substitute/alternate parts or materials. If parts are identified on the field of the drawing by part number (PIN) callout, the substitute/alternate parts or assemblies shall be identified directly or by reference, by on assembly or installation drawings as follows:



NOTE: The use of the word "ALTERNATE" is acceptable if used on existing drawings.

10.6.7 Bulk Items (BI).

10.6.7.1 Materials Used As Bulk Items. Bulk items used to produce an inseparable assembly and/or nonpermanent surface protection (e.g., solder, weld rod, paint, primer, etc.) are entered in the parts lists. The quantity required is not pre-determinable. The application method is established by a local note, general note, or in the finish block. The physical nature of the material does not require a pictorial representation.

10.6.7.1.1 Estimated (EST) Quantity. Enter a numerical amount in the "Nomenclature or Description" Column and place "EST" (Estimate) in the "QTY REQ" Column. See FIGURE 10-10. The finished size can be described in writing without a pictorial representation.

(i.e. Lock-wire 98.0 inches)

10.6.7.1.2 Bulk Materials Requiring Separate Part Number and Drawing. Separate engineering drawings shall not be prepared for specific quantities of bulk materials unless the bulk material requires assignment of a National Stock Number (NSN) for provisioning purposes and not having an associated part or identifying number system shall require a drawing. Bulk materials, which have a finite shape (such as wire, tubing, cable, chain, tape and hose) and are required to support provisioning requirements, shall be identified as a component on assembly or installation drawings by a discrete part number. The part number consists of a document number and suffix identifier (dash) numbers, as applicable, to identify size, length or quantities used in the assembly or installation. Accordingly, the absence of controlling documentation and Part or Identification Numbering systems shall require a separate drawing. Separate drawings shall not be prepared for bulk materials covered by existing specifications or standards except where required to support provisioning or maintenance and a part or identification numbering system is absent.

10.6.7.2 Materials Used For Surface Protection. Materials used to produce permanent surface protection (e.g., electroplating, passivating, anodizing, chromate conversions, etc.) are not entered in the parts list. The call out of the appropriate specification, either on the field of the drawing or referenced to a General Note as appropriate, will suffice for these materials.

10.6.7.2.1 Materials Used As Part Of A Process. When materials used are part of a process or process specification and are called out in the process or process specification, they are not entered in the parts list, e.g., anodize, chromium plate, cadmium plate, etc.

10.6.7.2.2 Materials Used As Thinning, Cleaning Agents. Thinning, reducing, cleaning agents, etc.; required in conjunction with the application of a protective coating, are not entered in the parts list.

10.7 DRAWING APPLICATION.

10.7.1 Detail Drawings. (See FIGURE 10-5.)

10.7.1.1 "QUANTITY REQUIRED" Columns. These columns are left blank. When a bulk item is required, the letters "AR" (for "As Required") are inserted to signify usage of a quantity that cannot be exactly defined. See PARAGRAPH 10.7.3.1.4. When explosives are called out in the parts list, the maximum amount is entered in the "quantity required" column. "As required" shall not be used for explosives.



10.7.1.2 "COMMERCIAL AND GOVERNMENT ENTITY" (CAGE) Column. No call out required, except when purchased bulk items (such as primer, paint, etc.) are listed in the parts list. CAGE Code Column entry is omitted when the parent company is the Design Activity. See FIGURES 10-5, 10-8, 10-9 and 10-10.

10.7.1.3 "PART OR IDENTIFYING NUMBER" Column. Enter the parent company part number's odd suffix identifier (dash) number or bulk item identification number. See SECTION 7 PARAGRAPH 7.9.1 and FIGURE 10-5. When a bulk item without an identification number is also required, this column is left blank opposite the bulk item. See FIGURES 10-5, 10-8, 10-9 and 10-10.

10.7.1.4 "NOMENCLATURE OR DESCRIPTION" Column. Enter the assigned noun or noun phrase of the item whose identifying number appears in the Part or Identifying Number Column. See PARAGRAPH 10.7.1.3. And FIGURES 10-5 thru 10-12.

10.7.1.5 "MATERIAL" Column. The material name shall be entered and the type designation may be listed when not part of the specification column. List stock size and form only when required by design. See FIGURES 10-5, 10-6, 10-7, 10-8 and 10-10.

e.g.,

- a. CRES 321
- b. AL ALLOY 2024-T4 .25 THK PLATE
- c. CRS 1020

When bulk items of supplier items are used, this column may be used for trade names of material and/or material identification numbers. See FIGURE 10-10.

10.7.1.6 "SPECIFICATION" Column. Call out complete material specification information as required. The call out shall include the "grade, condition, class, etc.," as required. See FIGURES 10-5, 10-6, 10-7, 10-8 and 10-10.

-															
	AR		Ы					SOLDER				v	SN63 VRAP 2	QQ-S-571	
				-1				BRACKET				COPI	PER ALLON	Y QQ-C-530 TÊMP A	
QTY	REQD	CAGE CODE	SYM	PART OR IDENTIFYING NO.			NC OF	MENCLATURE DESCRIPTION					MATER	RIAL CATION	FIND NO.
							PARTS	LIST							
						— See F.	IGUR.	E 10-2							
DIMEN TOLE	SS OTHE NSIONS A RANCES / DECIMAL	RE IN IN ARE: S ANGI	CHES LES			1									
	.XX±.03 .XXX±.0			APPROVAL	.S	DATE	TITLE								
			RAWI	NG DRAWN											
TREA	TMENT			CHECKED											
FINIS	Н			ENGR			SIZE	CAGE COD	E	DWG N	10.				REV.
				DESIGN ACTIVITY	,		1								
							SCALE				CALC.WT	ACT.WT	SHEET		

PARTS LIST FOR DETAIL DRAWING. FIGURE 10-5

PARTS LIST FOR TABULATED DETAIL DRAWING, DIFFERENT MATERIALS. FIGURE 10-7

				-1				BRACKET			C	RES	QQ-S-7 CL 32 COND	1
QTY	REQD	CAGE CODE	IDEN	PART OR NTIFYING NO.			N(OF	DMENCLATURE R DESCRIPTION				M/ SPEC	ATERIAL CIFICATION	FIN
							PARTS	LIST						
						— See F	TIGUR	Е 10-2						
DIME	NSIONS A RANCES / DECIMAL	S ANGLE	IES.	CONTRACT NO										
DO	XX± 03 XXX± 0 NOT SC	±2° 10 ALE DRA	WING	APPRO DRAWN	VALS	DATE	TITLE							
TRE.	ATMENT			CHECKED										
FINI	SH			ENGR DESIGN ACTIV	ITY		SIZE	CAGE CODE	DWG N	10.				RI
							SCALE		·	CALC.WT	ACT.WT	SHEE	Т	I

PARTS LIST FOR TABULATED DETAIL DRAWING, IDENTICAL MATERIALS. FIGURE 10-6

BRACKET

BRACKET

				-5												Τ
				-3												
				-1				BRACKET				CF	RES	QQ-S CL CON	-763 321 ND A	
QTY	REOD	CAGE CODE	IDEI	PART OR NTIFYING NO.			NC OR	MENCLATURE DESCRIPTION					MA SPEC	TERIAL IFICATIO	N	FIND NO.
							PARTS									
DIMEN	ISIONS A	RE IN IN	CHES.	CONTRACT NC	<u>).</u>	500 1		E 10-2								
	XX± 03 XXX± 0	±2		APPRO\	VALS	DATE	TITLE									
DON	NOT SC	ALE DF	RAWING	DRAWN												
TREA	TMENT			CHECKED												
FINIS	Н			ENGR			SIZE	CAGE COD	E	DWG I	NO.					REV.
				DESIGN ACTIV	ITY											
1							SCALE				CALC.WT	ACT.WT	SHEE ⁻	Г		

10.7.2.1 Column Entries. Column entries are the same as for detail drawings except for entering in the part number column. List only the part suffix identifier (dash) numbers in ascending order (e.g., -1, -3, -5, -7, -9, etc.). See SECTION 7, PARAGRAPH 7.9.4.1 and FIGURES 10-6, 10-7, 10-8, 10-10 and 10-13.

BRACKET

10.7.1.7 "UNIT WEIGHT" Column. This column contains the actual weight (or calculated weight if actual weight is unknown). This column is shown and filled in only when directed by the responsible engineer. See FIGURE 10-2.

10.7.1.8 "ZONE" Column. No callout required. Use is optional.

-9 -7

-5

-3

10.7.1.9 "FIND" NUMBER Column. No callout required. Use is optional.

10.7.2 Tabulated Drawing.

QQ-S-763 CL 321 COND A

QQ-S-763 CL 321 COND A

MIL-S-6758 COND D4 QQ-S-763

CRES

STL 4130

CRES



10.7.3 Assembly Drawings. See FIGURES 10-8, 10-9, 1-10 and 10-11 and SECTION 7, PARAGRAPH 7.9.3.2.

10.7.3.1 "QUANTITY REQUIRED" Column. Insert the assembly suffix identifier (dash) number in right hand column. Each parts list entry reflects the quantity required for one assembly. See FIGURE 10-8.

BULK ITEMS		AR		BI				COM	POUND, SEAI	LING			MIL-S CLA	S-8802		14
																13
COML PARTS		1	35108		C-7653			V	ALVE, NEEDL	E						12
																11
Г		2			MS35334-2				WASHER							10
MIL-STD -		2			MS29513-28				PACKING							9
L		2			AN10038				COVER							8
																7
COMPANY STD		1			AS1012-6				SEAT							6
																5
COMPANY PART NO.		2			1135108				VALVE ASSY							4
																3
DASH NO. OF BASIC DWG NO.		1			-5				FITTING				CRES 316	MIL-S-7720 COMP A		2
DWG NO.		2			-3				BRACKET				CRES 321	MIL-S-6721 COMP T		1
	QTY I	-1 REQD	CAGE CODE	SYM	PART OR IDENTIFYING NO.			PARTS	IOMENCLATURE R DESCRIPTION	N			SPECIF	ERIAL	ZONE	FIND NO.
							— See FI	IGUR	Е 10-2							
	DIMEN TOLEF	ISIONS A RANCES .	RWISE SI RE IN IN ARE: S ANGL	CHES.	ED CONTRACT NO.											
		.xx±.03 .xxx±.0	±2 10	0	APPROVAL	s	DATE	TITLE								
		NOT SC	ALE DR	AWIN	IG DRAWN CHECKED											
	FINIS	Н			ENGR			SIZE	CAGE CODI	E	DWG N	Ю.	4465			REV.
					DESIGN ACTIVITY						<u> </u>	041 0 11-	1135			
								SCALE				CALC.WT	ACT.WT SHE	EÍ		

PARTS LIST FOR ASSEMBLY DRAWING. FIGURE 10-8 (Also see FIGURE 10-10.) **10.7.3.1.1** "SHOWN AND OPPOSITE ASSEMBLY QUANTITY REQUIRED" Column. For "Shown" and "Opposite" assembly drawings, insert assembly dash numbers in right and left hand columns. Each column reflects the "quantity required" of each parts list entry to make one assembly. See FIG. 10-9 & SECTION 7, FIGURE 7-2.

4 4 4 4 1 1 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 1 1 2 2 -2 -1 QTY REQD		E SYM	MS35456-23 MS20365-428A MS9014-11 AN122584 AN122584 AS1118DZ-118 256781-2 256781-2 256780-1 PART OR IDENTIFYING NO.			CKING R B B B B B CKING CKING CKING R CKING R CKING R CKING R CKING R CKING R CKING R CKING R CKING R CKING R CKING R CKING R CKING R CKING C					4 4 C 4 C 4 C 4 C	11 10 9 8 7 6 5 4 3 2
1 1 1 1 2 2 1 1 1 2 2 -2 -2 -1		E SYM	MS9014-11 // // // // // // // // // // // // /		RING WASHER PACKING HOUSING HOUSING PLUNGER	2 3 3 6					C 4 C 4 C 4 C 3 B 3 B 3 B	9 8 7 6 5 4 3
1 1 2 2 1 1 1 2 2 2 2 1 2 2 -2 -1		E SYM	AN122584		WASHER PACKING HOUSING HOUSING PLUNGER	6					C 4 C 4 C 3 B 3 B 3 B	8 7 6 5 4 3
2 2 1 1 2 2 2 2 1 2 2 2 -2 -1	CAGE	E SYM	AS1118DZ-118		PACKING HOUSING HOUSING PLUNGER	6				1 1 1 1	4 C 4 C 3 B 3 B	7 6 5 4 3
2 2 1 1 2 2 2 2 1 2 2 2 -2 -1	CAGE	E SYM	AS1118DZ-118		PACKING HOUSING HOUSING PLUNGER	6				1 1 1 1	4 C 3 B 3 B	6 5 4 3
1 1 2 -2 -1	CAGE	E SYM	256781-2 256781-1 256780-1		HOUSING HOUSING PLUNGER	6				1	3 B 3 B	5 4 3
1 1 2 -2 -1	CAGE	E SYM	256781-2 256781-1 256780-1		HOUSING HOUSING PLUNGER	6				1	3 B 3 B	4 3
1 2 2 -2 -1	CAGE	E SYM	256781-1 256780-1		HOUSING	3				1	3 B 3 B	3
1 2 2 -2 -1	CAGE	E SYM	256781-1 256780-1		HOUSING	3				1	3 B	
2 2 -2 -1	CAGE	E SYM	256780-1		PLUNGE					+	В	2
-2 -1	CAGE	E SYM				२					3	
		E SYM	PART OR IDENTIFYING NO.		NOMENCLAT	PLUNGER						1
				-1 CAGE CODE SYM PART OR IDENTIFYING NO. NOMENCLATURE OR DESCRIPTION MATERIAL SPECIFICATION ZON							ve F N	FIND NO.
	PARTS LIST											
UNLESS OT DIMENSION TOLERANCE	THERWISE SF IS ARE IN INC ES ARE:	E SPECIFIEI INCHES.	CONTRACT NO.	See I	FIGURE 10-2							
	XXX ± 010 Z APPROVALS DATE TITLE											
TREATME	NT		CHECKED		-							
FINISH					SIZE CAGE CO	DE	DWG NO.	2567	 750		R	REV.
			DESIGN ACTIVITY		SCALE							

PARTS LIST FOR SHOWN AND OPPOSITE ASSEMBLY. FIGURE 10-9

10.7.3.1.2 "**MULTIPLE ASSEMBLY QUANTITY REQUIRED**" Column. For multiple assembly drawings, insert the suffix identifier (dash) number of the lowest numbered assembly in the right hand column and progress to the next numbered assembly in sequence, making all entries to the left of the original entry. The entry of "quantity required" of each parts list entry appears in the column headed by its assembly suffix identifier (dash) number. See FIGURE 10-10.

10.7.3.1.3 Multiple Assembly Suffix Identifier (Dash) Number Assignment. When subassemblies are detailed on parent assembly drawings, the suffix identifier (dash) number of the subassembly is entered in the next open "Quantity Required" column. The parts list entries required to make one subassembly are reflected in this column. See FIGURE 10-10.



	4			1//00		400454							VEN	DOR ITEM:	SEE VENDOR	2	5	05
	1			VICD		408151				ACTUATOR			ITEM	CONTROL	DRAWING(VICE	2	С	25
		1		SOCD		408150-1	.1			ACTUATOR			CO	NTROL DR/	WING (SOCD)	2	5 C	24
			1	SOCD		408149-1	408149-1			ACTUATOR			NTROL DR.	: SEE SOURCE AWING (SOCD)	2	5 C	23	
AR				37124	B1	1202				LACQUER					L CLEAR -136			22
AR				64112	B1				PF	RIMER COATI	NG				PIGMENT ESEAL			21
	AR	AR	AR	36131	B1	815				ADHESIVE				EPOXY	RESIN		_	20
	EST	EST	EST		B1	MS20995C32	LOCKWI			WIRE 98.0 IN	RE 98.0 INCHES					1	4 C	19
AR					B1		WELD ROD					C	CRES 347	MIL-R-5031 CLASS 5A			18	
	1	1	1	41161	PP	BZ-2RL	SWITC			H, FLEXIBLE	LEAF			MICROSV	/ITCH CO.	1	3 C	17
																		16
	1	1	1			MS28720-8				FILTER						1	3 D	15
	1	1	1			AN944-103				FITTING						1	3 B	14
																		13
																12		
																	11	
																		10
	1	1	1			408148-1	ELBOW							1	3 B	9		
	1	1	1			408147-1				FLANGE						1	3 B	8
																		7
						-19	FLANGE						CRES 347 MIL-S-6721			6 B	6	
2						-17	GUSSET						CRES 547 COMP Cb			4 C	5	
1						-15				SUPPORT			CRE	ES QQ-S-76	3 CL 321 COND A	1	4 C	4
		1	1			-13				EXTENSION				MIL-P-1144 CRES TYPE 1, CL 3			3 C	3
	1	1	1			-11				ELBOW				UNEO	COMP 316	1	3 B	2
	1	1	1			-9				RACKET ASS						1	2 C	1
-7	-5	-3 QTY I	-1 REQD	CAGE CODE	SYM	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION PARTS LIST					SPE M	ATERIAL CIFICATION	ZC	ONE	FIND NO.		
	UNLESS OTHERWISE SPECIFIED CONTRACT NO. DIMENSIONS ARE IN INCHES.																	
		L D	ANCES ECIMAL	S ANG	ES													
			XX± 03 XXX± 0 IOT SC	ALE DF		APPROVALS		DATE	TITLE									
		TREA	TMENT			CHECKED												
		FINIS	Н			ENGR			SIZE	CAGE COD	E	DWG N	0.	408	100			REV.
		<u> </u>				DESIGN ACTIVITY			SCALE			i	CALC.WT					
						1												

DRAWING REQUIREMENTS MANUAL 10-13

PARTS LIST FOR MULTIPLE ASSEMBLY DRAWING. FIGURE 10-10



10.7.3.1.4 Multiple Assembly Quantity Required For Bulk Items. The quantity for bulk items may be indicated as "AR" (As Required) under the following conditions, provided the item is not normally subject to replacement as a spare part:

- a. The amount required is less than one of the smallest applicable units of measure.
- b. The amount required is indeterminate because of variations in manufacturing or tooling.

10.7.3.1.5 Items Used By Weight Or Volume. Items that are used by weight or volume may be called out as such or "AR" (As Required).

10.7.3.1.6 Vendor Item Control Drawing (VICD) and Source Control Drawing (SOCD). When vendor item control or source control drawings are used (in accordance with ASME Y14.100 and Appendix D) and it is necessary to refer to the articles depicted thereon on the next assembly, another applicable drawing or list, reference shall be made to the VICD or SOCD number on the field of the assembly drawing and in the part or identifying number column of the assembly parts lists. For vendor item control drawings such reference shall be accompanied by the following note placed in the Material Specification Column: "VENDOR ITEM: SEE VENDOR ITEM CONTROL DRAWING", or "VENDOR ITEM: SEE SOURCE CONTROL DRAWING", whichever is applicable. See FIGURE 10-10.

10.7.3.2 "COMMERCIAL AND GOVERNMENT ENTITY" (CAGE) Code Column. This column lists the design activity's identification code for each item without a identification code common to the parent drawing. It is a mandatory column except when on non-government contracts or where the contractor uses only his own part numbers or part numbers which do not require CAGE Code identification. e.g., Government Standard Parts. For identification code, see Handbooks H4-1 and H4-2. The supplier's name and address may also be specified in addition to the supplier's identification code. When no identification codes are available, show supplier's name and address in the parts list as shown in FIGURE 10-11. The Commercial and Government Entity (CAGE) Code for manufactures listed in this column applies to the part whose part or identifying number appears in the part number column.

	INSERT CAGE CODE WHEN AVAILABLE							INCLUDE ADDRESS WHEN CAGE CODE IS NOT AVAILABLE							
	2	•		7201K			BEARING, BALL						FAFNIR BEARING NEW BRITAIN, CT 06050		
			_									1		10	
\square	\square					\checkmark								1^2	
														1	
QTY I	-1 CAGE PART OR QTY REQD CODE IDENTIFYING NO.						NC OR	MENCLATURE DESCRIPTION					MATERIAL SPECIFICATION	FIND NO.	
							PARTS	LIST							
					+	– See F	IGUR	E 10-2							
DIMEN	NSIONS / RANCES	ARE IN IN ARE:		CONTRACT NO											
	DECIMALS ANGLES .XX±.03 ±2° .XXX±.010 DO NOT SCALE DRAWING TREATMENT			APPRO\	TITLE										
				DRAWN	1										
TREA				CHECKED											
FINIS	FINISH			ENGR			SIZE	CAGE COD	E	DWG NO.					
				DESIGN ACTIVI	TY		1								
							SCALE			•	CALC.WT	ACT.WT	SHEET		

PARTS LIST ENTRY FOR COMMERCIAL PRODUCT.

FIGURE 10-11

(NOTE: Figure represents only the subject being treated.)

10.7.3.3 "PART OR IDENTIFYING NUMBER" Column.

10.7.3.3.1 Parts List Entry Groupings. The identifying number of the item is entered as applicable. See PARAGRAPH 10.6.5 for types and order of precedence.

10.7.3.3.2 Parent Part Numbered Suffix Identifier (Dash) Number Entry. When entering suffix identifier (dash) numbered parts of the parent drawing, the parent drawing number is omitted and only the suffix identifier (dash) number entered. Parts originated elsewhere than the parent drawing must have the complete part number entered. See FIGURES 10-4 thru 10-8, 10-10 and 10-13.

10.7.3.3.3 Standard Government, Industry or Company Part Number Entry. When a standard part number is entered, all identifying letters and/or numbers are called out. See FIGURES 10-8, 10-9 10-10 and 10-13.

10.7.3.3.4 Vendor Bulk Item Entry. For Vendor developed bulk items, enter applicable manufacturer's CAGE Code in CAGE Code Column with Part or Identifying number in Description Column and formula number in Material Specification Column, when they exist. See FIGURES 10-10 and 10-13.

10.7.3.3.5 Customer Furnished and Controlled Items. See PARAGRAPH 10.9 and FIGURE 10-12.

10.7.3.4 "NOMENCLATURE OR DESCRIPTION" Column.

10.7.3.4.1 Suffix Identifier Dash Numbered Parts Of Parent Drawing. Determine and enter a basic name for each part or subassembly per SECTION 8. e.g., "BRACKET". See FIGURES 10-4 thru 10-8, 10-10 and 10-13.

10.7.3.4.2 Other Company Numbered Parts. List only the basic name of the part as it appears on the drawing where it is detailed. Modifiers are not entered unless necessary for clarity. See FIGURE 10-10, FIND No. 17.

10.7.3.4.3 Military Standard Parts (MS, AN) And Other Industry And Company Standard Parts. List basic name only of the part as it appears on standard sheet, omitting the modifiers. See FIGURES 10-8, 10-9, and 10-10.

10.7.3.4.4 Commercial Parts. See PARAGRAPH 10.8.

10.7.3.4.5 Customer Furnished And Controlled Items. See PARAGRAPH 10.9 and FIGURE 10-12

10.7.3.4.6 Other Parent Company Parts. List basic name only. See FIGURE 10-10.

10.7.3.4.7 Standard Parts. List basic name only. See FIGURES 10-8, 10-9, and 10-10.

10.7.3.4.8 Commercial Parts. List basic name only.

10.7.3.4.9 Bulk Item. List basic name only.

10.7.3.5 "SPECIFICATION" Column.

10.7.3.5.1 Suffix Identifier (Dash) Numbered Parts Of Parent Drawing. List the material specification information as required per the specification. See FIGURES 10-5, 10-6, 10-7, 10-8 and 10-10.

10.7.3.5.2 Other Parent Company Numbered Parts. No entry required. See FIGURES 10-8, 10-9 and 10-10.

10.7.3.5.3 MS, AN, and OTHER STANDARD PARTS. No entry required. For electronic parts such as resistors, capacitors, etc., this column may be used for helpful information in the form of ratings, values, tolerances, etc. See FIGURES 10-8, 10-9 and 10-10.

10.7.3.5.4 Commercial Parts And Other Design Activity Numbered Parts. Use space, if needed, for additional information such as name of manufacturer, reference to control drawings, etc. See PARAGRAPH 10.8 and FIGURES 10-10 and 10-11.

10.7.3.5.5 (BI). Enter specification, if required. Also may be used for trade name entry. See FIGURE 10-10.

10.7.3.6 "UNIT WEIGHT" Column. When directed by the responsible engineer, the unit weight is listed in a column located to the right of the Parts List (PL). See FIGURE 10-2.



10.7.3.7 "ZONE" Column. This column may be used for indicating the zero location of the specific detail or subassembly callout on the field of the drawing See FIGURES 10-2, 10-9 and 10-10.

10.7.3.8 "FIND (ITEM) NUMBER" Column. This column, utilized only on assembly drawings, contains the numbers assigned to the line entries in numerically ascending order, e.g., 1, 2, 3, etc. No number may be omitted or removed. See FIGS. 10-8, 10-9, & 10-10.

10.8 COMMERCIAL PRODUCTS.

10.8.1 Commercial Product Entry Commercial products are specified on drawings as Follows:

- On Assembly Drawings. See FIGURE 10-10, Find No. 17.
- b. On Vendor Item Control Drawings (VICDs) formerly Specification Control Drawings (SCDs) See FIGURE 10-10 and SECTION 4.
- On Source Control Drawings (SOCDs). See FIGURE 10-10 and SECTION 4 C.
- d. On Altered or Selected Item Drawings. See SECTION 4.

10.9 CUSTOMER FURNISHED AND CONTROLLED ITEMS.

10.9.1 Customer Furnished Parts. Parts which are furnished by the customer and cannot be controlled by company documentation are subject to the following procedure.

10.9.1.1 Customer Furnished And Controlled Parts List Entry. Customer Furnished and Controlled Items should appear at the top of the parts list, last in the order of sequence. See FIGURE 10-12.

10.9.2 Vendor Item Control And Source Control Parts List Entry. Parts which are governed by Vendor Item Control Drawings (VICD) (formerly called Specification Control Drawings (SCD)) or Source Control Drawings (SOCD) appear in the parts list as shown in FIGURES 10-10 and 10-12.

	1	A	2	7242-507			NOZZLE CONTROL UNIT					
		<u></u>	FLAG	SYMBOL TO	GENERAL	NOTE						13
	1	VICD		408235			SWITC	H, THROW TYPE		VENDOR ITEM: SEE VENDOR ITEM CONTROL DRAWING (VICD)		
			_							_		11
						\checkmark	<u> </u>		\sim	<u> </u>		2
												1
QTY I	-1 CAGE PART OR QTY REQD CODE IDENTIFYING NO.					NC OF	MENCLATURE DESCRIPTION			MATERIAL SPECIFICATION	FIND NO.	
						See F	IGUR	Е 10-2				
DIMEN TOLEF	ISIONS A		HES.	CONTRACT NO).							
	DECIMALS ANGLES .XX±.03 ±2° .XXX±.010 DO NOT SCALE DRAWING			APPRO	ALS	DATE	TITLE					
DON				DRAWN			1					
TREA	TMENT	-		CHECKED			1					
FINIS	INISH			ENGR			SIZE	CAGE CODE	DWC	G NO.	408200	REV
<u> </u>				DESIGN ACTIV	ITY							
							SCALE			CALC.W	I ACT.WT SHEET	

CUSTOMER FURNISHED AND CONTROLLED, AUTONETICS DIV., CAGE CODE ROCKWELL INTERNATIONAL, LOS ANGELES, CA 91235.

PARTS LIST ENTRY FOR CUSTOMER FURNISHED AND CONTROLLED ITEMS. **FIGURE 10-12**

(NOTE: Figure represents only the subject being treated.)



10.10 PARTS LIST (PL) FOR CONCEPTUAL DESIGN DRAWINGS. See FIGURE 10-13

- **10.10.1 Controls.** Minimum controls are required.
- 10.10.2 Specifications. Materials and process specifications may be omitted.
- **10.10.3** Commercial Quality. Hardware is described as commercial quality.
- **10.10.4 Substitutes.** Substitutes are left to the discretion of production.

	AR							SOLDER				SN63 WR	AP QQ-S	6-571		15
							WI	RE STRANDE	D							14
	AR										NYLO	ON JACKE	TED, WHITE	E, 22 AWG		13
																12
																11
	1 8001A-2						TER	MINAL BOAR	D		USEC	O OR EQU	IIV		10	
																9
	1 IN726A				DIODE											8
	3		F	RC076F100J		RESISTOR										7
																6
	8				NUT							NO. 8 CAD PL STL				5
	8					SCF	REW, PAN HE	AD		8-32 X .50 LG CAD PL STL				4		
																3
	1			-5				PANEL				AI	L 6061-T6			2
	1			-3				PLATE				AL 6061-T6				1
-1 CAGE PART OR QTY REQD CODE IDENTIFYING NO.							N C	NOMENCLATURE OR DESCRIPTIO	E N			SPE	MATERIAL ECIFICATION	N	ZONE	FIND NO.
								PARTS LIST								
					s	See FI(GURI	E 10-2								
DIMEN TOLER	ISIONS A RANCES . DECIMAL	RE IN IN ARE: S ANGL		CONTRACT NO.	i											
	.XX±.03 .XXX±.0	±2 10	0	APPROVAL	.s DA	ATE -	TITLE									
	IOT SC		AWING	DRAWN CHECKED												
FINIS	H			ENGR			SIZE	CAGE COD	=	DWG NO	D.					REV.
				DESIGN ACTIVITY	,							40	8100			· 、
						S	SCALE			c	ALC.WT	ACT.WT	SHEET			

PARTS LIST FOR CONCEPTUAL DESIGN DRAWING ONLY. (FORMERLY LEVEL 1 AND BEFORE THAT, FORM 3.) FIGURE 10-13



10.11 GENERAL REQUIREMENTS FOR MANUALLY PREPARED "PARTS LIST" (PL) SEPARATE FROM THE DRAWING.

10.11.1 Separate Parts List Use Authorization. A separate parts list shall be made when contractually required. In doing so, the following requirements and procedures are to be followed:

10.11.2 Format.

10.11.2.1 Company Forms Used For Manual Prepared Separate Parts List. Company forms are used when preparing a manual parts list separate from drawings (See FIGURE 10-14), except when using automatic data processing techniques.

10.11.2.2 Title (Top) Sheet For Manual Prepared Separate Parts List. A title sheet, when used, will be Page 1 of all Parts Lists (PL) (see FIGURES 10-15 and 10-15M). The title sheet may contain signatures, revision record of reissue of multiple sheets in their entirety and "Notes". "Next Assembly" and "Used On", columns are left blank and are entered beginning on sheet 2.

10.11.3 Limitations For Separate Parts List.

10.11.3.1 End Product Assembly. Assemblies listed on Parts lists separate from the drawing should be limited to end product assemblies.

10.11.3.2 Single Drawing Separate Parts List. Multi-assemblies are not recommended on a single drawing when a Separate Parts List is required.

10.11.3.3 Parts List Requirement For Each Level Of Assembly. If Parts Lists are required, a Parts List shall be prepared for each assembly regardless of the level on which the assembly is used within the equipment or system.

10.11.4 Identification. Parts lists separate from drawings are identified by a document number including the basic drawing number preceded by the prefix "PL." Assemblies requiring separate identification should have different "PL" identifications including "shown" and "opposite" assemblies, e.g., PL1234567-1, PL1234567-2.

10.11.5 Cross Reference to a Separate Parts List. When the parts list is separate from the drawing, a reference to the parts list document is made with a note in the parts list area. See FIGURE 10-1.

Example: SEE SEPARATE PARTS LIST.

10.11.5.1 Cross Reference to Include Application List (AL). When application data is included on the a separate parts List (PL), the note shall be expanded to read;

Example: SEE SEPARATE PARTS LIST FOR PARTS AND APPLICATION DATA.

10.11.6 Parts List (PL) Entries.

10.11.6.1 Order Of Precedence. Items are entered in separate parts lists starting at the top of the list and proceeding downward. The items should be listed in the order prescribed by PARAGRAPH 10.6.5.

10.11.6.2 Entries. Entries are made by computer, hand lettering or typing. Blank spaces may be left in the parts list between the category groupings to allow for later additions. Find (Item) numbers are assigned to each line whether an item is listed on the line or not. Horizontal separating lines between item entries are not mandatory. When separating lines are used, the spacing will be suitable for the height of the entry; no standard increment is required. New or superseding items may be either added chronologically in the list or added at the end of the list. Initial sequence need not be maintained after list revision. Entries are made in the blocks and columns of the Parts List (FIGURE 10-14) and listed as follows:



BLOCK 1, DESIGN ACTIVITY (Optional)) Block. The original design activity of a Government procurement activity or the name and address of the Contractor (or design activity) whose Commercial and Government Entity (CAGE) Code appears in block 2 shall be entered.

BLOCK 1(a), CONTRACT NUMBER (Optional) Block. Enter contract number under which the list is initially prepared Subsequent contract numbers to which the list may apply may be omitted from this block.

BLOCK 2, CAGE CODE (Optional) Block. Enter the Commercial and Government Entity Code designating the original design activity whose CAGE Code (if applicable) assigned to the associated drawing appears on all sheets.

BLOCK 3, ORIGINAL DATE (Mandatory) Block. Enter the date the Parts List was originally released. Express the date by YR-MO-DAY e.g. 94-06-21

BLOCK 4, PARTS LIST (PL) NUMBER (Mandatory) Block. Enter the identifying number of the assembly drawing prefixed with the letters PL to which the list applies on each sheet of the list.

BLOCK 5, REVISION (Mandatory). See SECTION 23 herein.

BLOCK 6, LIST TITLE (Optional) Block. On sheet 1 enter the basic noun or noun phrase from the title of the drawing to which the list applies. When more than a single sheet is required to prepare or revise a list, the list title may be shown on each sheet; however, it is required only on the first sheet.

BLOCK 7, END ITEM or SYSTEM DESIGNATOR (Mandatory). Enter the end item or system designator to which the list applies. When no designator has been assigned, the top assembly part number of the end item shall be entered.

BLOCK 8, APPROVAL SIGNATURE (Optional) Block). An approval signature, hand written or lettered, is entered in this block or cover sheet if used, at initial release of manually prepared lists. Signatures are not required on subsequent sheets or when entered on an optional cover sheet. Signatures are not required for machine (ADPS) prepared lists or may be mechanically printed.

BLOCK 9 REVISION AUTHORIZATION NUMBER (Mandatory) Block. The number of the revision authorization document, Drawing Change Notice (DCN), shall be entered when a revision description or revision record is not provided.

BLOCK 10, SHEET NUMBER (Mandatory) Block. Enter the appropriate sheet number on each sheet. The total number of sheets in the list shall be specified on the first sheet only. On Automatic Data Processing Systems (ADPSs) prepared sheets, the first or last sheet shall indicate the total number of sheets. Sheets 2, 3, etc., shall bear a sheet number only in this block.

e.g. SHEET 1 OF 6 - First Sheet SHEET 3 - Third Sheet

COLUMN 11, FIND NUMBER (Optional) Column. When find numbers are used to identify items on the field of the drawing, enter the assigned find number for each item. If find numbers are not used on the field of the drawing, this column may be omitted. Reference designations per IEEE 200 and IEEE 315/315A may be used as find numbers.

COLUMN 12, QUANTITY REQUIRED (Mandatory) Column. Enter the number which denotes the exact quantity or amount of each item required to complete a single article of the item to which the list applies. The symbol "AR" (As Required) may be used in lieu of the exact quantity of bulk materials (such as solder, oil or grease). When the exact quantity of a bulk material is expressed, enter the unit measure in this column or in column 13, if used. Symbols other than "AR" may be used for other conditions, provided that they are explained by an appropriate note at the end of the list or referenced to an explanatory document furnished in the set of engineering data.



COLUMN 13, UNIT OF MEASURE (Optional) Column. When the exact quantity of a bulk material is expressed in column 12, the unit of measure may be entered in this column in lieu of making the entry in column 12. If this column is not used, it may be omitted.

COLUMN 14 COMMERCIAL AND GOVERNMENT ENTRY (CAGE) (When Applicable) Column. Enter the appropriate CAGE Code assigned to the original design activity whose part or identifying number appears in Column 15. When a Government or Industry standard part or specification number appears in Column 15, no entry need be made in Column 14. When the CAGE Code for an item is identical to that entered in Block 2, it is not necessary to repeat the Code in Column 14.

COLUMN 15, PART OR IDENTIFYING NUMBER (PIN) (Mandatory) Column. Enter the part number and suffix identifier (dash) number (when applicable) for each item on the Parts List (PL) and bulk material. When the identifying number applies to an item detailed on the engineering drawing with which the list is associated, and a suffix identifier system is used, only the suffix identifier need be entered. When the item is controlled by a MILITARY STANDARD, enter the MS or AN number (MS25630C416, AN360B6). When controlled by a MILITARY SPECIFICATION and individually identified by a designation (such as RC20GF031J or MR25W010DCUA), enter this designation. When type, grade, class, condition, etc. are required for identification, such information may be entered in this or another appropriate column. When the part or identifying number exceeds 15 characters, it may be entered in the nomenclature or description column, or may be reidentified using an Identification Cross Reference Drawing. When several items from the same tabulated drawing appear consecutively on the list, the complete identifying number shall be recorded for each entry. A line, arrow, or ditto marks may be used between the identical portions of the first and last entries. See FIGURE 10-6. When the use of substitute/alternate parts are acceptable and listed. See PARAGRAPH 10.6.6.4 and FIGURE 10.4.1.

COLUMN 16, DRAWING OR DOCUMENT NUMBER (Optional) Column. When this column is used, the following may be entered.

- a. The document number applicable to the material from which a listed part delineated on the corresponding drawing is fabricated.
- b. The document number applicable to a listed item for which a type designation, class condition, etc. has been entered in Column 15.
- c. The drawing number applicable to a listed item in column 15.

COLUMN 16a, DRAWING SIZE (Optional) Column. When this column is used, enter the drawing size letter. No letter size is required for Military Specifications and Standards and book form documents.

COLUMN 17, REVISION LETTER OR ISSUE SYMBOL (Mandatory) Column. Enter the latest revision letter or issue symbol applicable to the document whose number appears in Column 16.

NOTE: When revision symbols applicable to specific configuration identifications are maintained and provided as required through ADPS or EAM systems, the use of COLUMN 17 is optional.

COLUMN 18, SHEET NUMBER (Mandatory) Column. Book-form and multi-sheet drawings recording revision status on sheet one (1) need only record total number of sheets in this Column. Drawings recording revisions on sheets affected shall have each sheet listed. However, specifications and standards shall not have total number of inclusive sheets listed.

COLUMN 19, NOMENCLATURE OR DESCRIPTION (Mandatory) Column. The assigned noun or noun phrase shall be entered describing the item whose part or identifying number appears in Column 15.

COLUMN 20, WEIGHTS OF UNITS AND ASSEMBLIES (Optional) (Mandatory Column for Ship Construction Drawings). Parts lists for ship construction drawings shall list the unit weight for each distinct component, except for the following bulk items: steel, insulation, piping, pipe fittings, valves under 50 pounds (22 kg), electrical cable, electrical fittings, and other standard items or hardware. See SECTION 4 for Ship Equipment Drawing.



COLUMN 21, NUCLEAR HARDNESS CRITICAL ITEMS (Mandatory) Column. Enter the type of information as specified in SECTION 9, PARAGRAPH 9.7.21.

COLUMN 22, SUPPLEMENTAL LIST (Optional) Column. A supplemental list column may be included in which "X" entries are made in line with each item (assembly) that has its own associated list.

COLUMN 23, NOTES (Optional) Column. For referencing notes elsewhere to clarify the line entry. Notes may be identified by letters, codes or symbols.

For Example:

10 = DRAWING FLAGNOTE TEXT.

COLUMN 24, **REVISION LETTER (Mandatory) Column.** Parts List shall include a Revision History Block at the bottom of the applicable list per FIGURE 10-14. Entries for revision letter, description, date and approval would be made in accordance with SECTION 23 of this DRM. A description of every change, addition or deletion processed shall be recorded either on a sheet of the affected list or on a separate revision notice referred to as a Document Change Notice (DCN). When the list is initially released, enter a dash (-) and release date on each sheet of the list. Each time a sheet of the list is revised, enter the appropriate Revision Letter and revision date on the revised sheet. When the revised list is reissued in its entirety, a new revision letter shall be entered on all sheets, including those that have not been revised. When an optional cover sheet is used, the release date need be entered on that sheet only. Separate parts lists are changed independently from the applicable drawings. There is no requirement that the drawing and a separate PL maintain the same revision letter.

COLUMN 25, DESCRIPTION/AUTHENTICATION (Mandatory) Column. A brief description of the change or a reference to the identity of the revision authorization document describing the change. (DCN or NOR).

COLUMN 26, DATE (Mandatory) Column. Date entered at time approval column 27 is entered. Date shall be entered as YR-MO-DAY. e.g. 94-06-21

COLUMN 27, APPROVED (Mandatory) Column. Certification of revision shall be entered in the Approval Column and date entered in the Date Column 26.

COLUMN 28, Suffix (DASH) NUMBER (Mandatory When Application List (AL) is Used) Column. Enter the suffix identifier (dash) for each item detailed or assembled on the engineering drawing which is a component of an assembly detailed on another drawing. When the item is identified on the engineering drawing by an identifier suffix (dash) system, only that suffix need be entered.

COLUMN 29, NEXT ASSEMBLY (Mandatory When Application List (AL) is applied)) Column. Enter the part number of the engineering drawing detailing the next assembly of which the item is a component. When the drawing depicts the final deliverable item, enter the word "FINAL". When a Title (Top) Sheet is used, the "Next Assembly" column may be used in lieu of column 29 of the Parts List (PL).

COLUMN 30, USED ON (Mandatory When Application List (AL) is Applied) Column. Enter the model number or other designation of the assembled unit(s) or end item assigned to the program of which the item is a component. When a Title (Top) Sheet is used, the "Used On" Column may be used in lieu of Column 30 of the Parts List (PL).













FIGURE 10-15M



10.11.7 Miscellaneous Revision Procedures For Manually Prepared Separate Parts List.

10.11.7.1 Adding New Items. New or superseding items may be either added chronologically at the end of a list or inserted in the list. Initial alpha-numerical sequence need not be maintained after list revision.

10.11.7.2 Adding Additional Sheets. Additional sheets may be added when the last sheet will not accommodate additions. When additional sheets are inserted midway in the total number of sheets, decimal numbered sheets may be added in sequential order between existing sheets.

e.g. Sheet 6.1 is added between sheets 6 and 7; therefore, SHEET 1 OF 8" would become "SHEET 1 OF 9".

10.11.7.3 Deleting Items. Items to be deleted shall retain the same Find number. The nomenclature shall be erased, or, the word "DELETED" may be inserted in the nomenclature or description column.

10.12 GENERAL REQUIREMENTS FOR MANUALLY PREPARED "DATA LIST" (DL) SEPARATE FROM THE DRAWING. (ALSO APPLIES TO LISTS PREPARED USING CAD APPLICATIONS THAT APPEAR ON A DRAWING FORMAT)

10.12.1 Data Lists (DL) Separate From The Drawing Requirements. A Data List is a tabulation of all engineering drawings, documents referenced thereon (except in-house documents referenced parenthetically), associated lists, specifications, and subordinate data lists pertaining to the item to which the Data List applies. Data List may consist of five sections, each of which shall be identified with a sub-title in the Nomenclature of Document Title column. Each section of the DL will begin on a new page; however, all five sections will be combined into a single DL document and pages will be numbered consecutively for the entire document. The five sections shall be titled as follows: (See FIGURE 10-23.)

- a. Product Drawings and Lists.
- b. Package Drawings and Associated Documents.
 - (1) This section is a cumulative listing of the drawings and documents associated with the packaging, packing and shipping requirements for the item for which the list is prepared. The sequence and format of data, notes and codes are the same as those used for the product drawings and lists section.
- c. Inspection Equipment (IE) Drawings and Lists.
 - (1) This section is a cumulative listing of the drawings and their associated documents required to inspect and/or test the item for which the list is prepared. All assembly drawings will be treed down through sub-assemblies to the lowest detail component; i.e. drawings cited in Sections 2 and/or 4 of the performance specification for the item for which the DL is prepared shall be included in this section of the DL.
- d. Specifications and Standards and Other Documents (as referenced on drawings and parts lists).
- e. Other Documents (as referenced on drawings and parts lists).

Under each of the above headings, the drawings, documents, and associated lists pertaining to the item for which the Data List is prepared shall be listed thereon.

10.12.1.1 ADPS Data List. ADPS Data Lists shall contain the section as specified in PARAGRAPH 10.12.1 a., b., c., d and e, but may be a continuous runout of the applicable documents, i.e. each document category need not begin a new page.



10.12.2 Format.

10.12.2.1 Company Forms Used For Manually Prepared Separate Data Lists. Company forms are used when preparing a manual Data List (DL) separate from drawings (See FIGURE 10-16) except when using "Automatic Data Processing System" (ADPS) techniques.

10.12.2.2 Title (Top) Sheet For Manually Prepared Separate Data List. A title sheet may be used as Page 1 of all "Data Lists" (DL). (See FIGURE 10-15 and 10-15M) and substitute "PL" with "DL" in the Drawing Number Block. The Title sheet may contain signatures, revision record of reissue of multiple sheets in their entirety, Notes, etc., are to be entered on this sheet.

10.12.3 Identification. Data Lists (DL) are identified by a document number including the basic drawing number preceded by the Prefix "DL". Assemblies requiring separate identification should have different "DL" identifications including "shown" and "opposite" assemblies, e.g., DL1234567-1, DL1234567-2.

10.12.4 Data List (DL) Entries.

10.12.4.1 Sequence Of Documents. Drawings and other documents shall be arranged within each section by CAGE Code and further arranged in alpha-numeric sequence when applicable. Government and non-Government specifications and standards are listed without CAGE Codes. This sequence need not be maintained after list revision.

10.12.4.2 Order of Precedence. The drawings and other documents to be listed shall start at the top of the list of each section and proceed downward. They shall be segregated into groups in the order of precedence prescribed as follows:

- a. Drawings
- b. Lists: Parts Lists (PL), Data Lists (DL), Special Lists (usage inspection equipment, etc.)
- c. Specifications
- d. Standards
- e. Publications
- f. Other documents referenced on drawings and Parts List (PL)

Alternate Sequence: Lists may follow associated drawings when the base number of each is identical. Drawings and other documents shall be arranged within each group by CAGE Code and further arranged in alpha-numeric sequence when applicable. Government and non-Government specifications and standards are listed without CAGE Code.

10.12.4.3 Entries. Entries are made by either hand lettering or typing. Blank spaces may be left in the DATA List between the category groupings to allow for later additions. Horizontal separating lines between item entries are not mandatory. When separating lines are used, the spacing will be suitable for the height of the entry; no standard increment is required. New or superseding items may be either added chronologically in the list or added at the end of the list. Initial sequence need not be maintained after list revision. Entries are made in the blocks and columns of the Data List (FIGURE 10-16) and listed as follows:

BLOCK 1, DESIGN ACTIVITY (Optional)) Block. The original design activity of a Government procurement activity or the name and address of the Contractor (or design activity) whose Commercial and Government Entity (CAGE) Code appears in block 2 shall be entered.

BLOCK 1(a), CONTRACT NUMBER (Optional) Block. Enter contract number under which the list is initially prepared Subsequent contract numbers to which the list may apply may be omitted from this block.

BLOCK 2, CAGE CODE (Optional) Block. Enter the Commercial and Government Entity Code designating the original design activity whose CAGE Code (if applicable) assigned to the associated drawing appears on all sheets.



BLOCK 3, ORIGINAL DATE (Mandatory) Block. Enter the date the Parts List was originally released. Express the date by YY-MM-DD (Year-Month-Day) e.g. 08-06-21

BLOCK 4, DATA LIST (DL) NUMBER (Mandatory) Block. Enter the identifying number of the assembly drawing prefixed with the letters PL to which the list applies on each sheet of the list.

BLOCK 5, REVISION. (Mandatory) See SECTION 23 herein.

BLOCK 6, LIST TITLE (Optional) Block. On sheet 1 enter the basic noun or noun phrase from the title of the drawing to which the list applies. When more than a single sheet is required to prepare or revise a list, the list title may be shown on each sheet; however, it is required only on the first sheet.

BLOCK 7, END ITEM or SYSTEM DESIGNATOR (Mandatory) Enter the end item or system designator to which the list applies. When no designator has been assigned, the top assembly part number of the end item shall be entered.

BLOCK 8, APPROVAL SIGNATURE (Optional) Block. An approval signature, hand written or lettered, is entered in this block or cover sheet if used, at initial release of manually prepared lists. Signatures are not required on subsequent sheets or when entered on an optional cover sheet. Signatures are not required for machine (ADPS) prepared lists or may be mechanically printed.

BLOCK 9, REVISION AUTHORIZATION NUMBER Block. (Mandatory) The number of the revision authorization document, Drawing Change Notice (DCN), shall be entered when a revision description or revision record is not provided.

BLOCK 10, SHEET NUMBER (Mandatory) Block. Enter the appropriate sheet number on each sheet. The total number of sheets in the list shall be specified on the first sheet only. On Automatic Data Processing Systems (ADPSs) prepared sheets, the first or last sheet shall indicate the total number of sheets. Sheets 2, 3, etc., shall bear a sheet number only in this block.

e.g. SHEET 1 OF 6 – First Sheet SHEET 3 – Third Sheet

COLUMN 11, CAGE CODE (Optional) Column. Enter the appropriate CAGE Code assigned to the original design activity whose document number appears in Column 13. When a Government or non-Government specification or standard appears in Prefix Code Column 13, no entry need be made in Column 12. When the CAGE Code is identical to that entered in block 2, do not repeat the code in Column 11.

COLUMN 12, PREFIX CODE (Mandatory) Column. Provides means of identification for documents other than drawings.

e.g. DL for Data List.

COLUMN 13, DOCUMENT NUMBER (Mandatory) Column. Enter the assigned number of each document applicable to the item. See PARAGRAPH 10.12.4.2 for order sequence listing.

COLUMN 13a, DRAWING SIZE (Optional) (Mandatory if Drawing Sizes are Different) Column). Enter the proper letter for the drawing size of all drawings listed in Column 13. No letter size is required for Military Specifications, Standards and book form documents.

COLUMN 14, REVISION STATUS or ISSUE SYMBOL (Mandatory) Column. Enter the latest revision letter or issue symbol applicable to the document whose number appears in Column 13.

NOTE: When revision symbols applicable to specific configuration identifications are maintained and provided as required through ADPS or EAM systems, the use of Column 14 is optional.



COLUMN 15, SHEET NUMBER (Mandatory) Column. Book-form and multi-sheet drawings recording revision status on sheet one (1) need only record total number of sheets in this column. Drawings recording revisions on sheets affected shall have each sheet listed. However, specifications and standards shall not have total number of inclusive sheets listed.

COLUMN 16, DOCUMENT NOMENCLATURE (Optional) Column. As a minimum, enter the assigned noun or noun phrase of each document whose number appears in Column 13.

COLUMN 17, NOTES (Optional) Column. For referencing notes elsewhere to clarify the line entry.

COLUMN 18, REVISION LETTER (Mandatory) Column. Data Lists shall include a Revision History Block at the bottom of the applicable list per FIGURE 10-16. Entries for revision letter, description, date and approval would be made in accordance with SECTION 23 of this DRM. A description of every change, addition or deletion processed shall be recorded either on a sheet of the affected list or on a separate revision notice referred to as a Document Change Notice (DCN). When the list is initially released, enter a dash (-) and release date on each sheet of the list. Each time a sheet of the list is revised, enter the appropriate revision letter and revision date on the revised sheet. When a revised list is reissued in its entirety, a new revision letter shall be entered on all sheets, including those that have not been revised. When an optional cover sheet is used, the release data need be entered on that sheet only. Separate Data Lists are changed independently from the applicable drawings. There is no requirement that the drawing and a separate DL maintain the same revision letter.

COLUMN 19, DESCRIPTION/AUTHENTICATION (Mandatory) Column. A brief description of the change or reference to the identity of the revision authorization document describing the change. (DCN or NOR).

COLUMN 20, DATE (Mandatory) Column. Date entered at time Approval Column 21 is entered. Date shall be entered as YR-MO-DAY. E.g. 94-06-21

COLUMN 21, APPROVED (Mandatory) Column. Certification of revision shall be entered in the Approval Column and date entered in the Date Column 20.









10.13 GENERAL REQUIREMENTS FOR MANUALLY PREPARED "INDEX LISTS" (IL) SEPARATE FROM THE DRAWING. (ALSO APPLIES TO LISTS PREPARED USING CAD APPLICATIONS THAT APPEAR ON A DRAWING FORMAT)

10.13.1 Separate Index List Use Requirements. An Index List is a tabulation of Data Lists and subordinate index lists pertaining to the item to which the index list applies.

10.13.2 Format.

10.13.2.1 Company Forms Used For Manually Prepared Separate Index Lists. Company Forms are used when preparing a manual Index List (IL) separate from drawings (See FIGURE 10-17), except when using Automatic Data Processing System (ADPS) techniques.

10.13.2.2 Title (Top) Sheet For Manually Prepared Separate Index Lists (IL). A Title sheet may be used as Page one (1) of all index lists (IL). (See FIGURE 10-15 and 10-15M) and substitute "PL" with "IL" in the Drawing Number Block. The cover sheet may contain signatures; revision record of reissue of multiple sheets in their entirety, notes, etc. are to be entered on this sheet.

10.13.3 Index List (IL) Entries.

10.13.3.1 Order Of Precedence. Items are entered in separate Index Lists (IL) starting at the top of the list and proceeding downward. The items shall be grouped under the following headings:

- a. Data lists.
- b. Index lists.

10.13.3.2 SEQUENCE OF DOCUMENTS. Under each heading, arrangement shall be as follows: The list numbers of those items whose CAGE Code appears in block 2 shall be arranged alpha-numerically in Column 12; their CAGE Code need not be repeated in Column 9. The CAGE Codes of all documents shall then be arranged numerically in Column 11 with each corresponding list number placed side by side in Column 12. List numbers of those documents having identical CAGE Codes shall be arranged alpha-numerically in Column 12. This sequence need not be maintained after list revision.

10.13.3.3 Entries. Entries are made by either hand lettering or typing. Blank spaces may

be left in the index list (IL) between the groupings to allow for later additions. Horizontal separating lines between item entries are not mandatory. When separating lines are used, the spacing will be suitable for the height of the entry; no standard increment is required. Entries are made in the blocks and columns of the Index List (IL) (FIGURE 10-17) and listed as follows:

BLOCK 1, DESIGN ACTIVITY (Optional)) Block. The original design activity of a Government procurement activity or the name and address of the Contractor (or design activity) whose Commercial and Government Entity (CAGE) Code appears in block 2 shall be entered.

BLOCK 1(a), CONTRACT NUMBER (Optional) Block. Enter contract number under which the list is initially prepared Subsequent contract numbers to which the list may apply may be omitted from this block.

BLOCK 2, CAGE CODE (Optional) Block. Enter the Commercial and Government Entity Code designating the original design activity whose CAGE Code (if applicable) assigned to the associated drawing appears on all sheets.

BLOCK 3, ORIGINAL DATE (Mandatory) Block. Enter the date the Parts List was originally released. Express the date by YR-MO-DAY, e.g., 94-06-21

BLOCK 4, INDEX LIST (IL) NUMBER (Mandatory) Block. Enter the identifying number of the assembly drawing prefixed with the letters PL to which the list applies on each sheet of the list.

BLOCK 5, REVISION. (Mandatory) See SECTION 23 herein.



BLOCK 6, LIST TITLE (Optional) Block. On sheet 1 enter the basic noun or noun phrase from the title of the drawing to which the list applies. When more than a single sheet is required to prepare or revise a list, the list title may be shown on each sheet; however, it is required only on the first sheet.

BLOCK 7, END ITEM or SYSTEM DESIGNATOR. (Mandatory) Enter the end item or system designator to which the list applies. When no designator has been assigned, the top assembly part number of the end item shall be entered.

BLOCK 8, APPROVAL SIGNATURE (Optional) Block). An approval signature, hand written or lettered, is entered in this block or cover sheet if used, at initial release of manually prepared lists. Signatures are not required on subsequent sheets or when entered on an optional cover sheet. Signatures are not required for machine (ADPS) prepared lists or may be mechanically printed.

BLOCK 9, REVISION AUTHORIZATION NUMBER Block. (Mandatory) The number of the revision authorization document, Drawing Change Notice (DCN), shall be entered when a revision description or revision record is not provided.

BLOCK 10, SHEET NUMBER (Mandatory) Block. Enter the appropriate sheet number on each sheet. The total number of sheets in the list shall be specified on the first sheet only. On Automatic Data Processing Systems (ADPSs) prepared sheets, the first or last sheet shall indicate the total number of sheets. Sheets 2, 3, etc., shall bear a sheet number only in this block.

e.g. SHEET 1 OF 6 – First Sheet SHEET 3 – Third Sheet

COLUMN 11, CAGE CODE (Optional) Column. Except for CAGE Code identical to that entered in block 2, enter the appropriate CAGE Code assigned to the design activity whose list number appears in Column 12.

COLUMN 12, LIST NUMBER (Mandatory) Column. Enter the list number of each list and subordinate list applicable to the item to which the list applies. Items may be grouped under the following headings as applicable:

DATA LIST INDEX LIST INDENTURED LIST

When new entries are required as the result of revision action, the new entries may be added to the end of the existing list following the same sequence.

ALPHA-NUMERIC ARRANGEMENT. A group of mixed number-letter designations arranged so that the character farthest to the left in each designation is aligned. All the characters in this first portion are arranged alphabetically where possible. Below the alphabetized characters, those with numbers in the first position are arranged consecutively (0-9). Alphabetic O's should be considered as numeric zeros. Further organization of those characters in the second and succeeding positions is achieved by placing the designations composed only of single characters first; those with a dash (-) second; those with a slash (/) third; the alphabetized group, fourth and finally, the numerically arranged group.

COLUMN 13, REVISION STATUS (Mandatory) Column. Enter the latest revision letter applicable to the Index List (IL) Number whose letter appears in Column 13.

COLUMN 14, LIST TITLE (Mandatory) Column. Enter the noun or noun phrase of each list whose letter appears in Column 12.

COLUMN 15, NOTES (Optional) Column. For referencing notes elsewhere to clarify the line entry.

COLUMN 16, REVISION LETTER (Mandatory) Column. Index Lists shall include a Revision History Block at the bottom of the applicable list per FIGURE 10-17. Entries for revision letter, description, date and approval would be made in accordance with SECTION 23 of this DRM. A description of every change, addition or deletion processed shall be recorded either on a sheet of the effected list or on a separate revision notice referred to as a Document Change Notice (DCN). When the list is initially released, enter a dash (-) and release date on each sheet of the list. Each time a sheet of the list is revised, enter the appropriate revision letter and revision date on the revised sheet. When a revision sheet is reissued in its entirety, a new revision letter shall be entered on all sheets, including those that have not been revised. When an optional cover sheet is used, the release date need be entered on that sheet only. Separate Index Lists are changed independently from the applicable drawings. There is no requirement that the drawing and a separate IL maintain the same revision letter.

COLUMN 17, DESCRIPTION/AUTHENTICATION (Mandatory) Column. A brief description of the change or reference to the identity of the revision authorization document describing the change (DCN or NOR).

COLUMN 18, DATE (Mandatory) Column. Date entered at time Approval COLUMN 19 is entered. Date shall be entered as YR-MO-DAY. E.g. 94-06-21

COLUMN 19, APPROVED (Mandatory) Column. Certification of revision shall be entered in the Approval Column and date entered in the Date Column 18.







10.14 GENERAL REQUIREMENTS FOR MANUALLY PREPARED INDENTURED DATA LIST (ID) SEPARATE FROM THE DRAWING. (ALSO APPLIES TO LISTS PREPARED USING CAD APPLICATIONS THAT APPEAR ON A DRAWING FORMAT)

10.14.1 Indentured Data List (ID) Requirements. A tabulation of all engineering drawings, associated lists, specifications, standards and subordinate data lists pertaining to the item to which the data list applies and essential in-house documents necessary to meet the technical design disclosure requirements except for those in-house documents referenced parenthetically. The documents are listed in a top-down breakdown (generation tree) order.

10.14.2 Format.

10.14.2.1 Company Forms For Manually Prepared Separate Indentured Data List (ID). A company form is used when preparing a manual Indentured Data List (ID) separate from the drawing. See FIGURE 10-21 except when using Automatic Data Processing System (ADPS) techniques. The indentured data list shall consist of a header followed by a two (2) part listing of all engineering documents comprising a technical data package, including all standardization documents. See FIGURE 10-21.

- a. **PART I Listing.** All documents for the complete system shall be listed in top-down breakdown (generation tree) order in accordance with FIGURE 10-19. List shall include:
 - (1) All documents except standardization documents required to define an item, assembly or system required to make up the technical data package.
 - (2) All subcontractor, vendor or supplier documents that are required to make up the technical data package applicable to the item or services.
- b. PART II Listing. Part II listing shall identify all Government and non-Government standardization documents that are cited or referenced in the documents listed in Part I. Part II entries shall be entered in the same manner as Part 1 and in accordance with FIGURE 10-19. Document listing shall be sequenced as follows: (Ref MIL-STD-961)

Federal Specifications	Alpha-Numerically Listed
Military Specifications Federal Standards Federal Information Processing Standards Military Standards Military Handbooks	. — Numerically Listed
Other Govt Documents (DOE, DOT, etc.)	Alpha- Numerically Listed
Non-Govt Documents (ANSI, IEEE, etc.)	

10.14.2.2 Title (Top) Sheet For Manually Prepared Indentured Data List (ID). A Title sheet when used as Page one (1) of all Indentured Data List (ID). (See FIGURE 10-15 and 10-15M) and substitute "PL" with "ID" in the Drawing Number block. The Title Sheet may contain signatures, revision record of reissue of multiple sheets in their entirety and Notes.

10.14.3 Entries. Entries are made by either hand lettering or typing. Blank spaces may be left in the Indentured Data List (ID) between the indentured groupings to allow for later additions. Horizontal separating lines between indentured items are not mandatory. When separating lines are used, the spacing will be suitable for the height of the entry; no standard increment is required. New or superseding items may be either added chronologically in the list or added at the end of the list. Initial sequence need not be maintained after list revision. Entries are made in the blocks and columns of the Indentured Data List (ID) (FIGURE 10-21) and listed as follows:



BLOCK 1, DESIGN ACTIVITY (Optional)) Block. The original design activity of a Government procurement activity or the name and address of the Contractor (or design activity) whose Commercial and Government Entity (CAGE) Code appears in block 2 shall be entered.

BLOCK 1(a), CONTRACT NUMBER (Optional) Block. Enter contract number under which the list is initially prepared Subsequent contract numbers to which the list may apply may be omitted from this block.

BLOCK 2, CAGE CODE (Optional) Block. Enter the Commercial and Government Entity Code designating the original design activity whose CAGE Code (if applicable) assigned to the associated drawing appears on all sheets.

BLOCK 3, ORIGINAL DATE (Mandatory) Block. Enter the date the Parts List was originally released. Express the date by YR-MO-DAY, e.g. 94-06-21

BLOCK 4, INDENTURED DATA LIST (ID) NUMBER (Mandatory) Block. Enter the identifying number of the assembly drawing prefixed with the letters IDL to which the list applies on each sheet of the list.

BLOCK 5, REVISION. (Mandatory) See SECTION 23 herein.

BLOCK 6, LIST TITLE (Optional) Block. On sheet 1 enter the basic noun or noun phrase from the title of the drawing to which the list applies. When more than a single sheet is required to prepare or revise a list, the list title may be shown on each sheet; however, it is required only on the first sheet.

BLOCK 7, END ITEM or SYSTEM DESIGNATOR. (Mandatory) Enter the end item or system designator to which the list applies. When no designator has been assigned, the top assembly part number of the end item shall be entered.

BLOCK 8, APPROVAL SIGNATURE (Optional) Block). An approval signature, hand written or lettered, is entered in this block or cover sheet if used, at initial release of manually prepared lists. Signatures are not required on subsequent sheets or when entered on an optional cover sheet. Signatures are not required for machine (ADPS) prepared lists or may be mechanically printed.

BLOCK 9, REVISION AUTHORIZATION NUMBER Block. (Mandatory) The number of the revision authorization document, Drawing Change Notice (DCN), shall be entered when a revision description or revision record is not provided.

BLOCK 10, SHEET NUMBER (Mandatory) Block. Enter the appropriate sheet number on each sheet. The total number of sheets in the list shall be specified on the first sheet only. On Automatic Data Processing Systems (ADPSs) prepared sheets, the first or last sheet shall indicate the total number of sheets. Sheets 2, 3, etc., shall bear a sheet number only in this block.

e.g. SHEET 1 OF 6 – First Sheet SHEET 3 – Third Sheet

BLOCK 11, PART I LISTING (Mandatory) Block. A list that identifies all documents to define an item, assembly or system. All documents listed for the complete system or end item shall be listed in a top-down breakdown (generation tree) order See Paragraph 10.14.2.1a.



COLUMN 12, TYPE OF DOCUMENT CODE (DOC TYPE) (Optional) Column. As required by the procuring activity, enter a document type code to, identify the type of each document listed in Column 14. Document type codes are listed in FIGURE 10-18 per MIL-STD-804 which is INACTIVE FOR NEW DESIGN AFTER 6/01/95. The procuring activity will need to provide the codes or approve the codes used by the design activity by providing them as part of the Technical Data Package (TDP).

Document (Prefix) Code	Explanation	Document (Prefix) Code	Explanation
AL AW CB CC CP S DL D7 EL FL D IL KD MI MP NO PD PL QA	Application/Auxiliary List Art Work Circuit Board Classification Characteristics Company Specification Company Standard Document/Drawing List Undimensioned Drawing Equipment List Functional List Gauge List Indentured Data List Index List Kit Drawings Logic Diagram Master index List Material List Master Pattern Numerical Control Data Nuclear Ordnance Data Program Bulletin Program Document Parts List Quality Assurance Data	QL RD SD SD SB TD TP TR SD WB WH WT 1L 2L 2L 4L	Qualified Product List Redistribution List Running List Schematic Diagram Specification List System Schematic Test Bulletin Tool Drawing or List Tabulating List Test Procedures Test requirement Test Specifications Usage List Wiring Board or Wire Print Board Wiring Diagram Wiring Harness Wiring List Wire Table Acquisition Data Only Maintenance Data Only Acquisition & Maintenance Data Acquisition Data Packing List

TYPE OF DOCUMENT CODES. FIGURE 10-18
COLUMN 13, INDENTURED LEVEL (ID LVL) (Mandatory) Column. Enter a numerical code to indicate the relationship of the document listed in Column 14 to the end item or system, and its subordinate assemblies and subassemblies. A two digit number shall be used beginning with "01" to indicate the top drawing indenture. Codes shall follow the pattern shown in FIGURE 10-19.

	TA	LIST	DESIGN ACTIVITY IDENTURED DATA LIST FORMAT (See FIGURE 10-20 for interpretation.)
	^{13.} IND LVL	^{14.} DOCUME NUMBE	
PL CS CS PL CS SD WL PL CS	$\begin{array}{c} 01\\ 01\\ 02\\ 02\\ 02\\ 02\\ 03\\ 03\\ 03\\ 03\\ 03\\ 04\\ 04\\ 04\\ 05\\ 05\\ 06\\ 03\\ 02\\ 02\\ \end{array}$	123456 PL12345 S3245 MK137 FIN3589 678900 PL67890 S3245 MK137 SCHM99 WL993 135790 PL13579 975310 102030 192850 582910 112233 864200 S3245 2DPK66 765432 PL76543	 (company standard listed in drawing 123456 notes) (company part marking standard listed in the notes on drawing 123456) (company paint standard listed on drawing 123456) (assembly drawing listed on drawing 123456) (parts list for drawing 6789100) (company standard listed in drawing 6789100) (company part marking standard listed in the notes on the drawing 6789100) (company part marking standard listed in the notes on the drawing 6789100) (schematic diagram listed on drawing 6789100) (wire list called out on drawing 6789100) (mire list called out on drawing 6789100) (detail part drawing listed on drawing 6789100) (detail part drawing 135790) (detail part drawing 135790Enter "@" in column 22, Figure 21. See NOTE 1.) (substitute part for 192850. Enter an "S" in column 22, Figure 21 See NOTE 1.) (detail part drawing listed on drawing 192850) (company standard listed in drawing 123456) (detail part drawing listed on drawing 123450) (detail part drawing listed on drawing 123850) (company standard listed in drawing 864200 notes) (detail part drawing listed on drawing 123456) NOTE: These entries were

NOTES:

- 1. Substitute documents shall immediately follow primary documents at the same indenture level.
- 2. Drawing preparation documents, technical manuals, etc. shall not be included in the indentured data list.

INDENTURED DATA LIST (ID) ENTRIES. FIGURE 10-19



COLUMN 14, DOCUMENT NUMBER (Mandatory) Column. Enter the complete identification number for the document being listed. A complete document identification number includes prefixes such as PL, DL, IL, IDL, AL, and WL for associated lists.

- a. Substitute/Alternative documents shall immediately follow primary documents at the same indenture level.
- b. Items listed in parentheses "()" on the drawing and parts list are for reference only and shall not be recorded on the list.
- c. Drawing preparation documents, technical manuals, etc. shall not be included in the Indentured Data List (ID).

COLUMN 15, NUMBER OF SHEETS (No. of SHTS) (Optional) Column. Enter the total number of sheets comprising the document listed in Column 14 when all sheets of the document are maintained at the same revision level, or when the document itself contains a listing of the revision status of sheets. If the total number of sheets exceeds 999, then "999" shall be the entry. If the sheets of the document listed in Column 14 are revised independently and the document does not contain revision status of its sheet listing, each sheet of the document shall be listed separately by its sheet number.



COLUMN 16, CAGE CODE (Optional) Column. Enter. The Commercial and Entity Code (CAGE) assigned to the document listed in column 14.

COLUMN 17, REVISION LETTER (REV LTR) Mandatory) Column. The latest revision letter applicable to the document listed In Column 14. If each sheet of the document is listed separately in Column 14, the entry is the revision letter applicable to each sheet. For documents such as ANSI or ASME where no revisions are indicated, the entry shall be the last two digits of the date indicating the year of issue or reaffirmation date.

COLUMN 18, OUTSTANDING CHANGES (OUT CHGS) (Optional) Column. Enter the identification number of each change, e.g. Document Changes Notice (DCN)), against a document that has not yet been incorporated into a new revision.

COLUMN 19, SOURCE CODE (SRC) (Optional) Column. When items are source coded, the source code assigned to the part identified in Column 14 shall be entered as follows:

- A Non-procurable assembly which can be built up from details at any maintenance of the item or system.
- A1 Same as A, but depot level only.
- **M** Field Manufacture, procurement not justified.
- M1 Same as M, but depot level manufacture only.
- P6 Parts procurable by open competition.
- **P7** Parts procurable only from selected sources.
- **P8** Parts which must be procured from a sole source.
- **U** Documents and parts which are not significant to the maintenance of the item or system.

COLUMN 20, RIGHTS INFORMATION (RTS INFO) (Mandatory) Column. For documents to which the Government has an unlimited right to use, enter "U". For documents to which the Government has only a limited right to use, enter "L".

COLUMN 21, SPECIAL CONDITIONS (SPEC COND) (Mandatory) Column. Enter the identification of special conditions noted on the listed documentation. These conditions are identified with the following codes. Additional codes may be added when appropriate but must be defined at the end of the list and submitted with the Technical Data Package (TDP).

- CSI Critical Safety Item
- **CSP** Critical Safety Process
- ENI Environmental Impact Items
- **ESD** Electro Static Discharge sensitive devices
- ESS Environmental Stress Screening
- HAZ HAZardous conditions, processes, or materials
- HCI Hardness Critical Item
- HCP Hardness Critical Process
- INT INTerface control
- I/R Interchangeability / Replaceability
- OCI Observable Critical Item
- **OCP** Observable Critical Process
- **ODS** Ozone Depleting Substances



COLUMN 22, SUBSTITUTE PART INDICATOR (SUB IND) (Optional) Column. When substitute parts have been selected for the primary part listed, enter the appropriate notation. The notation for identifying substitutes are: "@" if the primary number has one or more substitutes , and "S" if the item listed is a Substitute.

COLUMN 23, NEXT HIGHER ASSEMBLY (Mandatory When Cover Sheet Not Used) Column. Enter the next higher assembly drawing number applicable to the document number contained in Column 14. For indentured level "01", this Column shall be left blank.

COLUMN 24, REMARKS (RMKS FLAG) (Optional) Column. Enter any appropriate explanatory remarks or notation that may be useful or informative regarding the entries in any of the preceding elements. A flag symbol may be used to locate the information where space is more appropriate.

BLOCK 25, PART II LISTING Mandatory) Block. A list that identifies all Government and non-government standardization documents that are cited or referenced in the documents listed in Part I of Block 9.

COLUMN 26, DOCUMENT IDENTIFIER AND REVISION (Mandatory) Column. Enter the document identifier with applicable revision level indicator. Entries shall be sequenced per MIL-STD-961. See PARAGRAPH 10.14.2.1b. Initial sequence need not be maintained after list revision.

COLUMN 27, DOCUMENT TITLE (Mandatory) Column. Enter the document title or, if the document has no title, a short descriptive phrase.

COLUMN 28, REVISION LETTER (LTR) (Mandatory) Column. Parts List shall include a Revision Block at the bottom of the applicable list per FIGURE 10-21. Entries for revision letter, description, date and approval would be made in accordance with SECTION 23 of this DRM. A description of every change, addition or deletion processed shall be recorded either on a sheet of the affected list or on a separate revision noticed referred to as a Document Change Notice (DCN). When the list is initially released, enter a dash (-) and release date on each sheet of the list. Each time a sheet of the list is revised, enter the appropriate Revision Letter and revision date on the revised sheet. When the revised list is reissued in its entirety, a new revision letter shall be entered on all sheets, including those that have not been revised. When an optional cover sheet is used, the release date need be entered on that sheet only. Separate parts lists are changed independently from the applicable drawings. There is no requirement that the drawing and a separate "IDL" maintain the same revision letter.

COLUMN 29, DESCRIPTION / AUTHENTICATION (Mandatory) Column. A brief description of the change or reference to the identity of the revision authorization document describing the change referred to as a Document Change Notice (DCN or NOR).

COLUMN 30, DATE (Mandatory) Column. Date entered at time approval Column 31 is entered. Date shall be entered as YR-MO-DAY. e.g., 94-06-21

COLUMN 31, APPROVED (Mandatory) Column. Certification of revision shall be entered in the Approval Column and date entered in the Date Column 30.





10.15 GENERAL REQUIREMENTS FOR MANUALLY PREPARED "WIRE LIST" (WL) SEPARATE FROM THE DRAWING. THE SAME TYPE COLUMNAR ARRANGEMENT MAY BE USED FOR AN INTEGRAL "WIRE LIST" (WL) ON THE DRAWINGS. (ALSO APPLIES TO LISTS PREPARED USING CAD APPLICATIONS THAT APPEAR ON A DRAWING FORMAT) (See SECTION 4)

10.15.1 Separate Wire List Use Authorization. A separate Wire List shall be made when contractually required. In doing so, the following requirements and procedures are to be followed:

10.15.2 Format

10.15.2.1 Company Forms Used For Manual Prepared Separate Wire List (WL). Company forms are used when preparing a manual wire list separate from drawings (See FIGURE 10-21.1), except when using automatic data processing techniques.

10.15.2.2 Title (Top) Sheet For Manual Prepared Separate Wire List (WL). A title sheet, when used, will be Page 1 of all Wire Lists (WL) (see FIGURES 10-15 and 10-15M). The title sheet may contain signatures, revision record of reissue of multiple sheets in their entirety and "Notes". "Next Assembly" and "Used On", columns are left blank and are entered beginning on sheet 2.

10.15.2.3 Wire List Purpose. A Wire List provides the information necessary for making wire connections for one or more sources to a terminating connection(s). A Wire List includes as applicable;

- a. location identification and termination methods for each end of wire terminating on associated drawing;
- b. a description of each wire (type, size and color);
- c. connection of items with wire leads;
- d. material (wire, sleeving, other required material) and process requirements for connections when they are not specified on the associated drawing;
- e. reference to the associated drawing, connection diagram interconnection diagram or wire harness drawing.

10.15.3 Limitations For Separate Wire List (WL).

10.15.3.1 End Product Assembly. Assemblies listed on Wire lists separate from the drawing should be limited to end product assemblies.

10.15.3.2 Single Drawing Separate Wire List (WL). Multi-assemblies are not recommended on a single drawing when a Separate Wire List is required.

10.15.3.3 Wire List Requirement For Each Level Of Assembly. When Wire Lists are required, a Wire List shall be prepared for each assembly regardless of the level on which the assembly is used within the equipment or system.

10.15.4 Identification. Wire lists separate from drawings are identified by a document number including the basic drawing number preceded by the prefix "WL." Assemblies requiring separate identification should have different "WL" identifications including "shown" and "opposite" assemblies, e.g., WL1234567-1, WL1234567-2.

10.15.5 Cross Reference to a Separate Wire List (WL). When the wire list is separate from the drawing, a reference to the wire list document is made with a note in the parts list area. See FIGURE 10-1.

Example: SEE SEPARATE WIRE LIST.

10.15.6 Wire List (WL) Entries.

10.15.6.1 Order Of Precedence. Items are entered in separate wire lists starting at the top of the list and proceeding downward. The items should be listed in the order prescribed by PARAGRAPH 10.3.1.



10.15.6.2 Entries. Entries are made by either hand lettering or typing. Blank spaces may be left in the wire list between the category groupings to allow for later additions. The item's Find Number on the associated Parts Lists is placed in the "USE FIND NO." column. Horizontal separating lines between item entries are not mandatory. When separating lines are used, the spacing will be suitable for the height of the entry; no standard increment is required. New or superseding items may be either added chronologically in the list or added at the end of the list. Initial sequence need not be maintained after list revision. Entries are made in the blocks and columns of the Wire List (FIGURE 10-21.1) and listed as follows:

BLOCK 1, DESIGN ACTIVITY (Optional)) Block. The original design activity of a Government procurement activity or the name and address of the Contractor (or design activity) whose Commercial and Government Entity (CAGE) Code appears in block 2 shall be entered.

BLOCK 1(a), CONTRACT NUMBER (Optional) Block. Enter contract number under which the list is initially prepared Subsequent contract numbers to which the list may apply may be omitted from this block.

BLOCK 2, CAGE CODE (Optional) Block. Enter the Commercial and Government Entity Code designating the original design activity whose CAGE Code (if applicable) assigned to the associated drawing appears on all sheets.

BLOCK 3, ORIGINAL DATE (Mandatory) Block. Enter the date the Parts List was originally released. Express the date by YR-MO-DAY, e.g., 94-06-21

BLOCK 4, WIRE LIST (WL) NUMBER (Mandatory) Block. Enter the identifying number of the assembly drawing prefixed with the letters WL to which the list applies on each sheet of the list.

BLOCK 5, REVISION (Mandatory) See SECTION 23 herein.

BLOCK 6, LIST TITLE (Optional) Block. On sheet 1 enter the basic noun or noun phrase from the title of the drawing to which the list applies. When more than a single sheet is required to prepare or revise a list, the list title may be shown on each sheet; however, it is required only on the first sheet.

BLOCK 7, END ITEM or SYSTEM DESIGNATOR. (Mandatory) Enter the end item or system designator to which the list applies. When no designator has been assigned, the top assembly part number of the end item shall be entered.

BLOCK 8, APPROVAL SIGNATURE (Optional) Block). An approval signature, hand written or lettered, is entered in this block or cover sheet if used, at initial release of manually prepared lists. Signatures are not required on subsequent sheets or when entered on an optional cover sheet. Signatures are not required for machine (ADPS) prepared lists or may be mechanically printed.

BLOCK 9 REVISION AUTHORIZATION NUMBER Block. (Mandatory) The number of the revision authorization document, Drawing Change Notice (DCN), shall be entered when a revision description or revision record is not provided.

BLOCK 10, SHEET NUMBER (Mandatory) Block. Enter the appropriate sheet number on each sheet. The total number of sheets in the list shall be specified on the first sheet only. On Automatic Data Processing Systems (ADPSs) prepared sheets, the first or last sheet shall indicate the total number of sheets. Sheets 2, 3, etc., shall bear a sheet number only in this block.

e.g. SHEET 1 OF 6 - First Sheet

SHEET 3 – Third Sheet



COLUMN 11, WIRE RUNS (Mandatory). FROM-TO wire runs between terminals and informational columns for providing additional information or view identification.

COLUMN 12, WIRE NUMBER (Mandatory) Column. Enter the wire numbers in consecutive order or in order dictated by the terminal component. Single wires are listed by number only. Multiple wires are listed by a number and may also have consecutive alpha characters assigned. If wire is deleted, that wire number shall not be used for another purpose.

COLUMN 13, WIRE COLOR (Mandatory) Column). Enter the color of each wire, using abbreviations. If wires are multi-color, separate the colors with a / (slash).

COLUMN 14, WIRE SIZE AWG or METRIC (Mandatory) Column. Enter the gauge of each wire.

COLUMN 15, FROM (Mandatory) Column. Identification of the wire originating point (e.g., reference designator, terminal component, etc.), or the wiring harness stitch location of the wire cable.

COLUMN 16, NOTE OR VIEW (Optional) Column. Any information or view identification on the assembly drawing for connecting the wire.

COLUMN 17, TO (Mandatory Except for Installation Drawings Installing a Harness Assembly) Column. Identification of the wire terminating point, or the wiring harness stitch location of the wire or cable.

COLUMN 18, NOTE OR VIEW (Optional) Column. Any information or view identification on the associated drawing for connecting the wire.

COLUMN 19, FUNCTION, ROUTING, REMARKS (Optional) Column. The function or designation of the wire from the associated schematic or wiring diagram. Any specific routing requirements or remarks.

COLUMN 20, APPROX LENGTH (Optional) Column. The approximate length of the wire.

COLUMN 21, FIND NO. (Mandatory) Column. The item's find number on the associated Parts List. NOTE: When the item Find Number system is not used, PIN shall be used as the column header and the item's part number shall be entered in the column.

COLUMN 22, **REVISION LETTER (Mandatory) Column.** Parts List shall include a Revision History Block at the bottom of the applicable list per FIGURE 10-21.1. Entries for revision letter, description, date and approval would be made in accordance with SECTION 23 of this DRM. A description of every change, addition or deletion processed shall be recorded either on a sheet of the affected list or on a separate revision notice referred to as a Document Change Notice (DCN). When the list is initially released, enter a dash (-) and release date on each sheet of the list. Each time a sheet of the list is revised, enter the appropriate Revision Letter and revision date on the revised sheet. When the revised list is reissued in its entirety, a new revision letter shall be entered on all sheets, including those that have not been revised. When an optional cover sheet is used, the release date need be entered on that sheet only. Separate wire lists are changed independently from the applicable drawings. There is no requirement that the drawing and a separate WL maintain the same revision letter.

COLUMN 23, DESCRIPTION/AUTHENTICATION (Mandatory) Column. A brief description of the change or a reference to the identity of the revision authorization document describing the change. (DCN or NOR).

COLUMN 24, DATE (Mandatory) Column. Date entered at time approval column 25 is entered. Date shall be entered as YR-MO-DAY. e.g., 94-06-21.

COLUMN 25, APPROVED (Mandatory) Column. Certification of revision shall be entered in the Approval Column and date entered in the Date Column 24.



COLUMN 26, Suffix (DASH) NUMBER (Mandatory When Application List (AL) is Used) Column. Enter the suffix identifier (dash) for each item detailed or assembled on the engineering drawing which is a component of an assembly detailed on another drawing. When the item is identified on the engineering drawing by an identifier suffix (dash) system, only that suffix need be entered.

COLUMN 27, NEXT ASSEMBLY (Mandatory When Application List (AL) is applied)) Column. Enter the part number of the engineering drawing detailing the next assembly of which the item is a component. When the drawing depicts the final deliverable item, enter the word "FINAL". When a Title (Top) Sheet is used, the "Next Assembly" column may be used in lieu of column 27 of the Wire List (WL).

COLUMN 28, USED ON (Mandatory When Application List (AL) is Applied) Column. Enter the model number or other designation of the assembled unit(s) or end item assigned to the program of which the item is a component. When a Title (Top) Sheet is used, the "Used On" Column may be used in lieu of Column 28 of the Wire List (WL).

-	WAS .38 OR .62	5. REV	10. SF OF		L 20. APPROX 21. LENGTH FIND			28	28	28	28	288	28		28	28	21	1.00	INCH * METF (8.5 X 11) (210 X 2 .19 5 .25 6 .31 8 .38 10 .50 13 .62 16 .69 18 .75 19 .88 222 1.00 24 1.12 28 1.19 30	297)	1.38	2	 ■ ²⁸. USED ON 	MAS 38
	>	3. ORG DATE 4. YR-MO-DA WL	9. REV AUTH NO.		NOTE ROUTING	╞	F/F PH TX-	GND	F/F PH CV+	F/F PH CV-	GND	R/F PH TX+	GND GND	R/F PH CV+	R/F PH CV-	GND	D GND	- 1.25	1.25 32 1.38 35 1.75 44 2.00 50 2.12 54 2.38 60 2.75 70 3.50 89 8.50 210 11.00 297 * METRIC DIMENSI		.38		²⁶ sur ^{[27.} NEXTASSEMBLY	
		1a.CONTRACT NO. 2. CAGE CODE 3. O * ORIGINAL ORIGINAL	8. APPROVAL		WIRE RUNS	J1-3	J1-4	J1-3/J1-4	J1-1	J1-2	J1-1/J1-2	J1-8	J 1-9 11-8/11-9	J1-6	L1-7	J1-6/J1-7	FL20/21 SHIELD	1.25	ARE IN WHOLE M METERS AND ARE INCH TO MILLIME CONVERSIONS.	01.1 01.1		NUTH 24. DATE 25. YR-MO-DA APVD		200
		1a. CON	-	2.38	16. NOTE	╞	3-2	FL22-3	0-2	1-2	FL21-2	6-2	FI 27-2	4-2	5-2	-25-7	.22/23 SHIELD D	5	RIBUTION STATEMENT" Y NOTATIONS", EXTEND	COLUMN LINES FOR CONTINUATION SHEETS.		22. 23. DESCRIPTION/AUTH		
		1. DESIGN ACTIVITY	7. END ITEM		^{14.} SIZE ^{11.} .19 AWG ^{15.} A FROM	22 FL22-2		FL22-2/FL22-3	22 FL20-2		FLS		FI 26-2/FI 27-2	22 FL24-2	22 FL25-2	FL24/FL25-7	22 FL22/23 S	► ► .75 ► ► ► 1.25	D FOR "DISTRIBU	CONTINUATION	▲ 69. ▼	H 24. DATE 25.VD YR-MO-DA APVD		
	- WAS .25	WIRE LIST	6. LIST TITLE *	2.75	WIRE COLOR NO.	1A WHT		1C SHIELD	2A WHT				36 BLUE 3C SHIFLD		4B BLUE	4C SHIELD	5 GRN	1.00 1.00	THIS AREA RESERVED FOR "DIST AND WHEN REOUIRED. "SECURIT	UMN LINES FOR	.31 2.00	23. DESCRIPTION/AUTH		

SECTION 10 ELEVENTH EDITION 2008 PARTS LIST PREPARATION



10.16 GENERAL REQUIREMENTS FOR "AUTOMATIC DATA PROCESSING SYSTEM" (ADPS) PARTS LIST (PL), DATA LIST (DL), INDEX LIST (IL) AND INDENTURED DATA LIST (ID) PREPARED BY UTILIZATION OF AUTOMATIC DATA PROCESSING TECHNIQUES.

10.16.1 Preprinted Format Not Required. Preprinted formats need not be utilized if normal machine operations can duplicate format headings and listings commensurate to preprinted forms used for manually prepared Parts, Data, Index and Indentured Lists.

10.16.2 Dimension Size Of Paper Stock. Size of Automatic Data Processing System (ADPS) listings shall be commensurate with machine capability and normal size, marginally punched, continuous blank paper stock. See FIGURES 10-22 and 10-23.

	CLASSIFICATION							
PA RTS LIST DOCUMENT / PART N WIRING HARNESS, E CHANGE CONTROL	BRANCHED	133	FRANKFORD ARSENAL CONTRACT NO. PHILADELPHIA, PA CURRENT CAGE CODE 19200 NAL ORIGINAL CAGE CODE	REV. DATE 991112 REVISION LETTER B SHEET 1 OF 1 ORIG. DATE 740131				
FND QTY UNIT CAGE NO. REQ MEAS CODE	PART OR IDENTIFYING NO.	DRAWING/DOCUMENT SIZE NUMBER	NOMENCLATURE OR DOCUMENT TITLE	SUP LST				
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	11738017-2 11738913 11738920 11741514 REFERENCE DWG 11743316 1174330-1 1174330-1 11743698-3 11743698-3 11745698-3 11745698-3 11745401 11745403 11745403 11745477 MIL-W-16878-CSO MIL-W-16878-CSO MIL-W-16878-CSO MIL-W-16878-S36 MMM-A-134 MS3723-12H1832N RG316/U TE-20-195-C-B TE-20-195-C-B TE-20-195-C-BR 16878/4E22-19B 16878/4E22-19S 16878/4E22-19W	F 11743316 C 11743330 D 11743330 C 11743698 C 11743698 C 11743698 A 11745409 A 11745401 A 11745403 A 11745403 A 11745403 A 11745477 MIL-W-16878 MIL-W-16878 MIL-W-16879 MIL-W-16879 MIL-W-16879 I MIL-C-83723/12 MIL-C-83723/12 MIL-C-17/113 MIL-W-16878/4 MIL-W-16878/4 MIL-W-16878/4 MIL-W-16878/4 MIL-W-16878/4 MIL-W-16878/4	CONNECTOR, RECEPTACLE, ELECTRICAL CONNECTOR, ELECTRICAL CONTACT, PLUG RECEPTACLE CONNECTOR, RECEPTACLE ELECTRICAL - 23 PIN ELECTRONICS UNIT, SCHEMATIC DIAGRAM BOARD ASSY, INTERCONNECTING STRAP, CABLE IDENTIFICATION TERMINAL BOARD ASSY CONNECTOR, RECEPTACLE, ELECTRICAL, HERMETIC CONNECTOR, RECEPTACLE, ELECTRICAL, HERMETIC CONNECTOR, RECEPTACLE, ELECTRICAL, HERMETIC CONNECTOR, RECEPTACLE, ELECTRICAL, HERMETIC WIRE HARNESS, FABRICATION & ROUTING, PROCESS TERMINATING SHIELDING WIRES, PROCESS FOR CABLE & HARDNESS CONNECTORS, ASSY, PROCEDUF IDENT OF ELEC WIRES, CA SLVG, AND PTS BY PRINTII JACKET, FLUOROCARBON, COLOR OPTIONAL JACKET, FLUOROCARBON, COLOR WHITE BRAID, SHIELD, SIZE 30, SILVER PLATED, COPPER BRAID, SHIELD, SIZE 30, SILVER PLATED, COPPER BAID, SHIELD, SIZE 30, SILVER PLATED, COPPER ADHESIVE, EPOXY RESIN, METAL TO METAL STRUCTU CONNECTOR, ELECT, RECEPTACLE, SINGLE HOLE MOI CABLE, RADIO FREQUENCY, COAXIAL WIRE, TEFLON INSULATED, TYPE E-20, 19 STRANDS, C WIRE, TEFLON, INSULATED, TYPE E-20, 19 STRANDS, C WIRE, TEFLON, INSULATED, TYPE E-20, 19 STRANDS, C WIRE, INSUL, 22 AWG, 19 STRANDS, COLOR BLACK WIRE, TEFLON, INSULATED, TWISTED PR TYPE E22, 19 WIRE, INSULATED, 22 AWG, 19 STRANDS, COLOR WHIT IBUTION STATEMENT	RE FOR NG PRCS RAL BONDING UNT, CLASS H OLOR BLACK OLOR WITE OLOR BROWN				
└ └	CLASSIFICATION							

"SUGGESTED" <u>AUTOMATIC DATA PROCESSING SYSTEM (ADPS</u> <u>FROM DIGITAL DATA PARTS LIST (PL).</u> FIGURE 10-22 NOTE: ADPS may be a continuous runout. See PARAGRAPH 10.12.1.1.

This sample is informational only and complete to the degree necessary to illustrate a type of ADPS list. Actual format and list shall conform to the textual requirements set forth in this section and normal automatic machine operations utilized.

SEGME		DL-826774 MBER B 826774 JMBER		FRANKFORD ARSENAL CONTRACT N PHILADELPHIA, PA CURRENT CAGE CODE 19200 ORIGINAL CAGE CODE	NO. REV. DATE REVISION LETTER SHEET 1 OF 4 ORIG DATE 740131
			PRODUCT D	RAWINGS AND LISTS	
CODE ID.	PRE- DWG FIX SIZE CODE	DOCUMENT NUMBER	NUMBER OF SHEETS	NOMENCLATURE OR DOCUMEN	TTITLE
21450 96906	PS A PS A PS A PS A PS B PL B PS C PS C PS B PS B	7586885 7586888 7586888 7586888 7586889 7586899 7586890 8267742 8267742 8267742 8267743 8267743 8267743 8267786 8267786 8267786 8267786 8267786	1 PKG 1 RET 1 PKG 2 SQA 1 WAS 1 PKG 1 SEP 1 PKG 1 SEG PAR 1 PKG 3 SQA 1 STO 1 STO 1 PKG 1 STO 1 SEG 1 PKG 1 SEA	DATA SHT - WASHER ARATOR DATA SHT MENT ASSEMBLY TS LIST - SEGMENT ASSEMBLY DATA SHT - SEGMENT ASSEMBLY R SECTOR DATA SHT - GEAR SECTOR P - GEAR SECTOR	
	SEGMENT	T / PART NUMBER ASSEMBLY ONTROL NUMBEI	R AUTHENTIO	FRANKFORD ARSENAL CO PHILADELPHIA, PA CURRENT CAGE CODE 192 CATIONAL ORIGINAL CAGE CODE PACKAGE DRAWINGS AND ASSOCIATED I	REVISION LETTER 200 SHEET 2 ORIG DATE 740131
	1	QPL	DOCUMENT NUMBER	NOMENCLATURE OR DOCUMEN	
		Q	PPP-B-636 PPP-C-1797 PPP-P-291 PPP-T-76 FED-STD-595 MIL-P-116 MIL-B-117 MIL-B-121 MIL-P-130	BOX, FIBERBOARD CUSHIONING MATERIAL, RESILIENT, LOW DEN PAPERBOARD, WRAPPING, CUSHIONING TAPE, PRESSURE - SENSITIVE ADHESIVE PAPI COLORS PRESERVATION, METHODS OF BAG, SLEEVE AND TUBING - INTERIOR PACKA BARRIER MATERIAL, GREASEPROOFED, WATE PAPER, WRAPPING, LAMINATED AND CREPED	NSITY, UNICELLULAR ER, WATER RESISTANT AGING ERPROOFED, FLEXIBLE
		A	UTOMATIC DATA FROM DIGIT	"SUGGESTED" <u>A PROCESSING SYSTEM (A</u> TAL DATA; DATA LIST (DL). SURE 10-23 (1 of 2)	<u>.DPS)</u>

NOTE: ADPS may be a continuous runout. See PARAGRAPH 10.12.1.1.

This sample is informational only and complete to the degree necessary to illustrate a type of ADPS list. Actual format and list shall conform to the textual requirements set forth in this section and normal automatic machine operations utilized.



SEGME	ENT / NT AS	PART NUMBEF SEMBLY ITROL NUMBE	DL-8267742 R B 8267742 R A	UTHENTICATIONAL	FRANKFORD PHILADELPH CURRENT C. ORIGINAL C/	IIA, PA AGE CODE	CONTRACT NO. 19200	REV. DATE REVISION LE SHEET 3 ORIG. DATE		
				INSPECTION EQU	IPMENT DRAWI	NGS AND L	ISTS			
CODE ID.	PRE- FIX CODE	SIZE	DOCUMENT NUMBER	NUMBER OF SHEETS	N	OMENCLATUF	RE OR DOCUMENT TITLE	Ē		
		B B B F F	7290675 7292349 7292390 7292391 7659410 8576041	1 GO 1 1 NOT 1 NOT 27 ACC	THREAD RING GAO THREAD SETTING GO THREAD RING GO SETTING PLU URACY TEST FIXT PTER FOR GEAR S	PLUG GAGE GAGE G GAGE URE FOR GEA				
		SEGMENT AS	PART NUMBER SSEMBLY NTROL NUMBEI		TICATIONAL	PHILADE	DRD ARSENAL CON LPHIA, PA T CAGE CODE 1920 L CAGE CODE		REV. DATE REVISION LE SHEET 4 ORIG. DATE	
					SPECIFICATIO	NS AND STA	NDARDS			
			QPL	DOCUMENT NUMBER		NOMENCLA	ATURE OR DOCUMENT 1	TITLE		
			Q Q Q Q Q Q Q Q Q Q	C-F-206 U-T-634 FF-B-171 FF-S-92 QQ-B-626 QQ-I-652 QQ-S-763 QQ-S-764 QQ-T-570 TT-C-490 TT-E-529 TT-P-636 TT-P-636 TT-P-664 UU-T-106 VV-L-800 GGG-G-61 MIL-S-13048 MIL-F-14232 MIL-F-45133 MIL-F-45208 MIL-STD-105 MIL-STD-105 MIL-STD-104 MIL-STD-1194 MIL-STD-1242 100-46	BEARINGS, SCREW, MA BRASS, LEA IRON CAST STEEL BAR: STEEL BAR: TOOL STEEI CLEANING I ENAMEL, AI PRIMER, CC PRIMER, CC PRIMER, CC TAPE, PRES LUBRICATII GAGE, PLUI LUBRICATII STEEL FOR PART, EQUI FIRE CONTI INSPECTIOI SAMPLING SYSTEM FC MACHINING FELT, HAR	CHINE, SLOTT DED AND NO' ING, GRAY S, SHAPES AN S, CORROSIOI , ALLOY METHODS ANIL KYO, SEMI-GI JATING, ALKYO SURE-SENSII GOIL, GENEI GOIL, GENEI GING, / FOR G PMENT AND T ROL COMPON N SYSTEM REI PROCEDURES R PAINTING A S TANDARD F DR WOOL MILI	AR / GENERAL PURPOSE TED OR CROSS-RECESS V-LEADED ROD, SHAPE: D FORGINGS -CORROS N RESISTING, FREE MAY D PRETREATMENT OF FI LOSS D, WOOD AND FERROUS HETTIC, RUST INHIBITING TWE ADHESIVE, MASKIN TAL PURPOSE PRESER? PLAIN AND THREADED EVATIVE, MEDIUM EENERAL PURPOSE APP OOLS FOR ARMY MATEI ENTS AND ASSEMBLIES QUIREMENTS S AND TABLES FOR INSF ND FINISHING F C MATE OUR FIRE CONTROL MAT DUE RESISTANT AND MA	SED S, FORGINGS, ETC ION RESISTING CHINING ERROUS SURFACI G PAPER VATIVE PLICATIONS / RIAL PKG OF S PBY ATTRIBUTES ERIAL OSITURE RES,		
				51-70-1	SYSTEM FC		FINISHING FIRE CONTR	ROL MATERIAL		

"SUGGESTED" <u>AUTOMATIC DATA PROCESSING SYSTEM (ADPS)</u> <u>FROM DIGITAL DATA; DATA LIST (DL).</u> FIGURE 10-23 (2 of 2)

This sample is informational only and complete to the degree necessary to illustrate a type of ADPS list. Actual format and list shall conform to the textual requirements set forth in this section and normal automatic machine operations utilized.



10.16.3 Content And Information Of Machine Prepared PL, DL IL and ID. The same content and information provided by manually prepared lists on preprinted formats are also required in automatic prepared lists with certain exceptions as indicated by Parts List (PL) Entries PARAGRAPH 10.11.6, Data List (DL) Entries PARAGRAPH 10.12.4, Index List (IL) Entries PARAGRAPH 10.13.3, Indentured Data List (ID) Entries PARAGRAPH 10.14.3 and as shown in TABLE 10-1.

REQUIREMENT	PL	TYI OI LIS DL	= ;T		MANUALLY PREPARED	DDEDADEN
PREPRINTED FORMATS	\checkmark	\checkmark	\checkmark	\checkmark	YES	NO
FIRST SHEET SHALL INDICATE THE TOTAL NUMBER OF SHEETS	\checkmark	\checkmark	\checkmark	\checkmark	YES	FIRST OR LAST SHEET
AUTHENTICATION SIGNATURE AT INITIAL RELEASE	\checkmark	\checkmark			YES	NO
SEPERATE PAGE REQUIRED FOR EACH OF FOUR SECTIONS		\checkmark			YES	NO (CONTINOUS COMPUTER RUNOUT OK)
USE OF REVISION COLUMN			<u></u>	· /	YES	NO IF NOT MAINTAINED
	v	v			0	OPTIONAL WHEN MAINTAINED

WHERE:

PL = PARTS LIST DL = DATA LIST IL = INDEX LIST ID = INDENTURED LIST

OPPOSITELY OPPOSED REQUIREMENTS FOR MANUAL OR AUTOMATED (ADPS) PREPARED ASSOCIATED DRAWING LISTS. TABLE 10-1

10.17 PARTS LIST (PL) CALLOUT CROSS-REFERENCE TO GENERAL NOTES.

10.17.1 Use Of General Notes In Conjunction With Parts Lists. A general note is used to establish application requirements that are not otherwise covered by an existing specification, or other acceptable document, or when space will not permit entry of all necessary information.

10.17.2 General Notes To Be Short And Concise. When requirements are established by a general note, the note is limited to concise statements.

10.17.3 General Notes Too Complex Will Become Company Specifications. If lengthy or complex data is required to provide adequate information that is not covered by an existing document, the responsible designer initiates action for preparation of an appropriate company specification.



10.17.4 General Notes Created By Parts List (PL) Reference. The following notes illustrate the type of general note coverage intended to be included on the engineering drawing. They may be varied to suit individual requirements. See SECTION 9.

10.17.4.1 Abbreviations Not Listed in ASME Y14.38. Abbreviations not listed in ASME Y14.38 shall be listed and identified as a General Note or on the field of the drawing.



ABBREVIATIONS APPLICABLE AND USED ON THIS DRAWING.

BI	BULK ITEM
PP	PURCHASED PART
SOCD	SOURCE CONTROL DRAWING
VICD	VENDOR ITEM CONTROL DRAWING

10.17.4.2 Permissible To Use. Alternate part number and CAGE Code when required in place of parts list number.

10.17.4.3 Customer Furnished And Controlled Item. Company name and location. List division if applicable.



NOTES: