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	CONTRACT NO. F33657-75-0310	LOCKHEED	
		FORT WORTH COMPANY	FORT WORTH, TEXAS
UNLESS NOTED DIMENSIONS IN INCHES	APPROVED	B. BROWN	INTERPRETATION OF ENGINEERING FORMATS
LINEAR TOL .XX +/- .03; .XXX +/- .010	CHECK	J. O'NEAL	
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1.0 SCOPE

THIS DOCUMENT, WHEN ANNOTATED ON ENGINEERING FORMATS, DEFINES THE APPLICABLE INTERPRETATION FOR THE FORMAT COLUMN AND BLOCK DATA ENTRIES. THE DOCUMENT ALSO INTERPRETS ENGINEERING DRAWING INFORMATION TO THE EXTENT NOTED.

1.1 PURPOSE

THE INTENT OF THIS DOCUMENT IS TO ELIMINATE CONFLICTS OF INTERPRETATION, ESTABLISH INTENDED USE AND PURPOSE OF ENGINEERING FORMAT DATA FIELDS, AND TO ESTABLISH GENERAL REQUIREMENTS APPLICABLE TO THE DRAWING.

1.2 APPLICATION

THIS DOCUMENT, WHEN REFERENCED, GOVERNS ALL LOCKHEED MARTIN AERONAUTICS COMPANY DATA FORMATS DEFINED HEREIN. ITS INTERPRETATIONS SHALL APPLY UNLESS OTHERWISE SPECIFIED ON THE AFFECTED ENGINEERING DOCUMENT. ALL USERS OF LOCKHEED MARTIN AERONAUTICS COMPANY ENGINEERING DATA SPECIFYING INTERPRETATION PER THIS DOCUMENT SHALL CONFORM TO THE INTERPRETATIONS SUPPLIED HEREIN.

1.3 PRECEDENCE

IN CASE OF CONFLICT. THE FOLLOWING ORDER OF PRECEDENCE SHALL APPLY.

A) FEATURES CALLED OUT OR SPECIFIED IN THE FIELD OF A DRAWING SHALL TAKE PRECEDENCE OVER FEATURES CALLED OUT OR SPECIFIED IN A GENERAL NOTE.

B) FEATURES CALLED OUT OR SPECIFIED IN A GENERAL NOTE SHALL TAKE PRECEDENCE OVER PREPRINTED FORMAT FEATURES OR CALLOUTS.

C) THE DRAWING SHALL TAKE PRECEDENCE OVER ANY DOCUMENT SPECIFIED THEREON.

2.0 GENERAL DRAWING REQUIREMENTS AND INTERPRETATIONS

THE FOLLOWING GENERAL REQUIREMENTS AND INTERPRETATIONS SHALL APPLY TO ALL LOCKHEED MARTIN AERONAUTICS COMPANY ENGINEERING DRAWINGS, ‘CAD’ ONLY DATASETS, ‘CAD/CAM DATASETS’, DATASETS WITH A SPECIFIC ‘DATASET RATING’ AND DATASETS WHICH REFERENCE THIS DOCUMENT FOR INTERPRETATION.

2.1 DIMENSIONS AND TOLERANCES

A) UNLESS OTHERWISE SPECIFIED ON THE DRAWING, DIMENSIONS AND TOLERANCES ARE IN ACCORDANCE WITH ANSI Y14.5-1973 "DIMENSIONING AND TOLERANCING".

B) UNLESS OTHERWISE SPECIFIED ON THE DRAWING, DIMENSIONAL LIMITS APPLY AFTER THE APPLICATION OF INORGANIC FINISHES (PLATING, ANODIZING, COATING, ETC.) AND PRIOR TO THE APPLICATION OF ORGANIC FINISHES (PRIMER, PAINT. ETC.).

C) TOLERANCES SHOWN WITHOUT PLUS (+) OR MINUS (-) INDICATIONS SHALL BE INTERPRETED AS TOTAL INDICATOR READING (TIR).

D) STRAIGHTNESS TOLERANCES SPECIFIED IN NOTES OF ROUGH CASTING, ROUGH FORGING, WELDMENTS, ETC., ARE TO BE INTERPRETED AS TOTAL INDICATOR READING (TIR). STRAIGHTNESS TOLERANCES ARE APPLIED TO CONTINUOUS FLAT AND/OR CONTOURED SURFACES AND ARE SEPARATE AND INDEPENDENT OF ALL OTHER TOLERANCES. FLAT SURFACES ARE CHECKED AGAINST A STRAIGHT EDGE OR SURFACE PLATE. CONTOURED SURFACES ARE CHECKED AGAINST A CONTOUR TEMPLATE.

E) TOOLING CHECK POINTS SHALL BE CONSIDERED BASIC DIMENSIONS IN THE DIRECTION THAT THE PART IS LOCATED.

F) FLATNESS TOLERANCE, UNLESS OTHERWISE SPECIFIED ON THE DRAWING SHALL BE .005 INCH PER INCH WARPAGE IN THE WEB. NOT TO EXCEED .02 TOTAL.

G) UNLESS OTHERWISE STATED ON THE DRAWING, WHEN DATUM TARGETS ARE USED TO ESTABLISH A DATUM REFERENCE FRAME, THE DATUM PLANES SHALL BE ESTABLISHED IN TRUE AIRCRAFT COORDINATES (FS, WL, BL). THIS MAY RESULT IN OFFSET (STEP) DATUM TARGETS. THE BASIC DIMENSIONS DISPLAYED ON THE RELATED VIEWS OR DISPLAYED IN TABLE FORMAT ON A DRAWING, DEFINE THE OFFSET (STEP) BETWEEN THE TARGETS. THE ESTABLISHED DATUM REFERENCE FRAME SHALL BE COINCIDENT WITH THE FIRST DATUM TARGET OF EACH DATUM PLANE (I.E. A1, B1, C1).

2.2 MANUFACTURING REQUIREMENTS

A) ALL BURRS RESULTING FROM MANUFACTURING OPERATIONS SHALL BE REMOVED AND ALL EDGES DULLED TO THE EXTENT THAT BURRS ARE NOT VISIBLE AND CANNOT BE FELT. BURRS ARE DEFINED AS ATTACHED OR ADHERENT SLIVERS, FEATHERS, WHISKERS, OR PARTICLES OF THE ORIGINAL MATERIAL OF THE PART.

B) MANY DATASETS HAVE BEEN RATED FOR THE ACCURACY OF THE DATA IN THE ELECTRONIC FILE. 'CAD' ONLY DATASETS, 'CAD/CAM DATASETS', AND DATASETS WITH A 'DATASET RATING' MAY CONTAIN 2 DIMENSIONAL (2D) AND/OR 3 DIMENSIONAL (3D) GEOMETRY. NO DESIGNATION INDICATES AN UN-RATED DATASET.

3D GEOMETRY CONTAINED IN UN-RATED DATASETS AND 'CAD' ONLY DATASETS ARE PROVIDED FOR REFERENCE ONLY AND THE 3D DATA SHALL NOT BE UTILIZED FOR FABRICATION, INSPECTION OR INSTALLATION.

3D GEOMETRY CONTAINED IN A DATASET IDENTIFIED AS 'CAD/CAM DATASET' MAY BE UTILIZED IN CONJUNCTION WITH THE DRAWING TO FABRICATE, INSPECT OR INSTALL DEFINED PARTS. GEOMETRY IDENTIFIED AS 'REFERENCE GEOMETRY' SHALL NOT TO BE USED FOR THESE PURPOSES.

DATASETS THAT UTILIZE A DATASET RATING SYSTEM SPECIFY THE EXTENT TO WHICH THE DRAWING AND 3D GEOMETRY MAY BE UTILIZED FOR FABRICATION, INSPECTION OR INSTALLATION OF DEFINED PARTS. REFER TO PARAGRAPHS 2.3 N) THROUGH 2.3 T).

2.3 DEFINITION OF TERMS

A) "REF MATING PART (NUMBER OF PART)", "TO MATCH (NUMBER OF PART)", OR "LOCATE FROM (NUMBER OF PART)". WHEN USED ON THE DRAWING IN CONJUNCTION WITH A HOLE PATTERN SHALL BE INTERPRETED TO MEAN THAT ONE OR BOTH OF THE MATING PARTS MUST BE DRILLED TOGETHER ON ASSY OR INSTL OR COORDINATED TOOLING IS REQUIRED TO ASSURE MATING WITH THE HOLE PATTERN OF THE REFERENCED PART.

B) THE USE OF TERMS SIMILAR TO "ENGINEERING APPROVAL","FWD APPROVAL" ETC., IN DRAWING NOTES OR REFERENCED DOCUMENTS SHALL BE CONSIDERED APPLICABLE ONLY TO LOCKHEED MARTIN AERONAUTICS COMPANY MANUFACTURE OR PROCUREMENT. WHEN MANUFACTURING OR PROCUREMENT ACTION IS INITIATED BY A GOVERNMENT PROCURING AGENCY, ALL SUCH APPROVAL RIGHTS ARE TRANSFERRED TO THE GOVERNMENT PROCURING AGENCY.

C) DRAWING REQUIREMENTS SUCH AS "MOCKUP PROOFING OF PARTS" OR "SAMPLE PART APPROVAL" SHALL NOT BE APPLICABLE TO GOVERNMENT PROCUREMENT OF SPARE PARTS.

D) FASTENER TORQUE SPECIFICATION CALLOUTS:

AK

FOR DRAWINGS CREATED FROM JULY 1983 TO PRESENT, WHERE IT IS AN ENGINEERING REQUIREMENT THE ENGINEERING DRAWING WILL SPECIFY THE TORQUE VALUE ON THE FACE OF THE DRAWING AS PART OF THE FASTENER CALLOUT OR IN A GENERAL NOTE.

FOR DRAWINGS CREATED PRIOR TO JULY 1983, M016 SPECIFIED ON A DRAWING FASTENER CALLOUT REFERS TO AN ENGINEERING DOCUMENT SPECIFYING FASTENER TORQUE AND SEALANT/LUBRICATION APPLICATION, AS APPLICABLE.

DRAWINGS CREATED PRIOR TO JULY 1983 SPECIFYING M016 WILL REMAIN UNCHANGED EXCEPT WHEN A NEW FASTENER IS USED IN A NEW APPLICATION ON THE DRAWING. A M016 CALLOUT IS INVALID FOR DRAWING CALLOUTS AFTER AUGUST 1983.

E) "DOMESTIC", AS USED IN CONNECTION WITH DASH NUMBERS, INDICATES AN ITEM COMPLETELY DEFINED ON THE DRAWING WITH WHICH THE DOCUMENT IS ASSOCIATED. DOMESTIC PARTS ARE CALLED OUT IN THE PART NUMBER AND NEXT ASSY COLUMN BY DASH NUMBER ONLY. FOR COMPLETE PART NUMBER PREFIX WITH THE DOMESTIC DRAWING NUMBER.

F) FILLET RADII - A CONCAVE RADIUS FORMED AT INTERSECTING PLANES.

G) CORNER RADII - A CONVEX RADIUS FORMED AT INTERSECTING PLANES.

H) SERVICE DATA NOTES INCLUDED WITHIN THE DRAWING GENERAL NOTES (DRAWING OR PARTS LIST) ARE APPLICABLE FOR CUSTOMER IN-SERVICE REPLACEMENT ONLY. SUCH NOTES DO NOT AUTHORIZE IN-HOUSE SUBSTITUTIONS. I.E. SUBSTITUTIONS PRIOR TO DD250 DELIVERY.

I) FOR GOVERNMENT PROCUREMENTS, WHEN SPECIFICATION AND SOURCE CONTROL DRAWINGS REFLECT NOTES THAT REQUIRE INSPECTION TO VENDOR DRAWINGS, THESE NOTES SHALL BE INTERPRETED AS "INSPECT AND ACCEPT TO THE CONTROL DRAWING".

J) IF AN ENGINEERING DRAWING DOES NOT SPECIFY A THREAD PROTRUSION FOR A PARTICULAR THREADED FASTENER, THEN IT IS TO BE CONTROLLED BY NORMAL SHOP PRACTICE AS DEFINED BY STANDARD M131.

K) A SPOTFACE IS CALLED OUT ON THE FACE OF DRAWING BY A FLAT DIAMETER AND CUTTER RADIUS. THE DEPTH OF THE SPOTFACE IS WHAT IS REQUIRED TO GET THE ENTIRE FLAT DIAMETER AND SHOULD NOT EXCEED A MAX DEPTH OF .010 AT THINNEST DEPTH OF SPOTFACE.

L) 'CAD' ONLY - A 'CAD' ONLY DATASET IS A DATASET WHOSE 3D GEOMETRY CANNOT BE UTILIZED TO FABRICATE OR INSPECT THE PART OR INSTALLATION. ONLY THE DRAWING CAN BE USED.

M) 'CAD/CAM DATASET' - A 'CAD/CAM DATASET' IS A DATASET WHOSE DRAWING AND 3D GEOMETRY MAY BE USED TO FABRICATE AND INSPECT THE PART OR INSTALLATION, IF THE 3D DATA IS VERIFIED TO BE CONSISTENT WITH THE DRAWING. NOTE, ONLY THE DIMENSIONED GEOMETRY CAN BE USED TO FABRICATE AND INSPECT THE PART OR INSTALLATION–REFERENCE GEOMETRY SHALL NOT BE USED.

N) DATASET RATINGS - DATASETS CREATED AT LM AERONAUTICS COMPANY ARE EITHER UN-RATED (OLDER CAD DATASETS MAY BE IDENTIFIED AS 'CAD' ONLY OR 'CAD/CAM DATASET') OR ASSIGNED A RATING FROM 1 TO 5.

O) UN-RATED DATASETS - THE DEGREE TO WHICH THE DATASET COMPLIES WITH DATASET STANDARDS IS UNKNOWN AND CANNOT BE USED TO FABRICATE, ASSEMBLE, OR INSTALL PARTS WITHOUT PRIOR VERIFICATION THAT THE 3D MODEL IS FULLY COMPLIANT WITH THE DRAWING DEFINITION.

P) DATASET RATING 1 - DATASET RATING FIELD CONTAINS A 1 AND THE DATASET RATING 1 NOTATION APPEARS ON THE FACE OF THE DRAWING. THE DATASET MAY OR MAY NOT CONTAIN 3D DATA, BUT ANY 3D DATA IS INTENDED AS A VISUAL AID TO THE CONTROL DATA, DOCUMENT, OR FORM.

Q) DATASET RATING 2 - DATASET RATING FIELD CONTAINS A 2 AND THE DATASET RATING 2 NOTATION APPEARS ON THE FACE OF THE DRAWING. THE DATASET IS PRIMARILY A DRAWING WITH SOME CAD/CAM DATA. THE DRAWING PORTION OF THE DATASET IS THE SOLE AUTHORITY FOR THE BASIC FORM, LOCATION, ORIENTATION, AND DIMENSIONAL CHARACTERISTICS OF ALL PART FEATURES EXCEPT AS NOTED ON THE FACE OF THE DRAWING. LITTLE OR NO EFFORT HAS BEEN MADE TO ENSURE OR CHECK THAT THE 3D DATA IS CONSISTENT WITH THE FACE OF THE DRAWING DIMENSIONS AND REQUIREMENTS. THEREFORE, THE 3D DATA PORTION OF THE DATASET IS NOT DIRECTLY USABLE FOR MANUFACTURING, UNLESS OTHERWISE NOTED ON THE FACE OF THE DRAWING.

R) DATASET RATING 3 - DATASET RATING FIELD CONTAINS A 3 AND THE DATASET RATING 3 NOTATION APPEARS ON THE FACE OF THE DRAWING. ALL DRAWING AND 3D DATA IN THE DATASET MAY BE USED TO FABRICATE, ASSEMBLE, OR INSTALL PARTS OR TOOLS. HOWEVER, SOME FEATURES MAY NOT BE DEFINED BY 3D DATA (E.G., CUTTER MISMATCH AND FLOOR FILLETS) AND THE FABRICATOR MUST REFER TO THE DRAWING FOR THIS INFORMATION.

EVERY ATTEMPT HAS BEEN MADE TO ENSURE THAT THE 3D DATA IS CONSISTENT WITH THE FACE OF THE DRAWING DIMENSIONS AND REQUIREMENTS. SURFACES HAVE BEEN CHECKED. IF A CONFLICT IS DISCOVERED BETWEEN THE DRAWING AND THE 3D DATA, A REQUEST FOR ENGINEERING ACTION IS SUBMITTED TO CORRECT THE DISCREPANCY. DEFER TO THE DRAWING REQUIREMENTS UNDER THESE CIRCUMSTANCES UNLESS OTHERWISE DIRECTED.

S) DATASET RATING 4 - DATASET RATING FIELD CONTAINS A 4 AND THE DATASET RATING 4 NOTATION APPEARS ON THE FACE OF THE DRAWING. REDUCED DIMENSION DATASETS ARE DESIGNATED LEVEL 4 DATASETS. THE CAD EXACT SOLID IS THE SOLE AUTHORITY FOR THE BASIC FORM, LOCATION, ORIENTATION, AND DIMENSIONAL CHARACTERISTICS OF ALL PART FEATURES. TOLERANCES ARE DEFINED ON THE FACE OF THE DRAWING AND NOT LINKED TO THE 3D MODEL.

EVERY ATTEMPT HAS BEEN MADE TO ENSURE THAT THE 3D DATA IS CONSISTENT WITH THE FACE OF THE DRAWING DIMENSIONS AND REQUIREMENTS. IF A CONFLICT BETWEEN THE 3D DATA AND DRAWING DATA IS DISCOVERED, A REQUEST FOR ENGINEERING ACTION IS SUBMITTED TO CORRECT THE DISCREPANCY. DEFER TO THE 3D EXACT SOLID MODEL UNDER THESE CIRCUMSTANCES UNLESS OTHERWISE DIRECTED.

T) DATASET RATING 5 - DATASET RATING FIELD CONTAINS A 5 AND THE DATASET RATING 5 NOTATION APPEARS ON THE FACE OF THE DRAWING. DATASETS THAT HAVE ALL DRAWING DATA, INCLUDING TOLERANCES, DIRECTLY LINKED TO THE MASTER 3D SOLID ARE DESIGNATED LEVEL 5 DATASETS. THE CAD EXACT SOLID IS THE SOLE AUTHORITY FOR THE BASIC FORM, LOCATION, ORIENTATION, AND DIMENSIONAL CHARACTERISTICS OF ALL PART FEATURES. ALL DIMENSIONS AND TOLERANCES SHOWN ON THE DRAWING ARE LINKED TO THE MASTER 3D SOLID AND THE LINKS ARE CHECKED. THEREFORE, CONFLICTS BETWEEN THE 3D DATA AND DRAWING DATA ARE NOT POSSIBLE.

2.4 TYPE-VERSION CODES:

TYPE-VERSION CODES ARE USED IN CONJUNCTION WITH PRODUCTION LINE SEQUENCE NUMBERS TO ESTABLISH THE APPLICABLE ENGINEERING EFFECTIVITY.

FOR APPLICABLE TYPE-VERSION CODE ASSIGNMENT AND INTERPRETATION SEE SEPARATE PARTS LIST, PL 16Z001.

2.5 USAGE FLAGS - GENERAL

GENERALLY, THE TYPE/VERSION AND EFFECTIVITY OF DRAWING ENTITIES (DETAILS, ASSEMBLIES, FASTENERS, FEATURES, ETC) CAN BE DETERMINED THROUGH THE USE OF THE APPLICABLE DASH NUMBER AND THE TYPE/VERSION AND EFFECTIVITY COLUMNS IN THE APPLICATION LIST/PART LIST. HOWEVER, THERE ARE MANY CASES WHEN THIS IS NOT TRUE. FOR INSTANCE, WHEN THE EFFECTIVITY OF AN ENTITY IS DIFFERENT FROM THE USING DASH NUMBER. IN THIS EVENT, SYMBOL FLAGS ARE EMPLOYED TO SPECIFY THE TYPE/VERSION AND EFFECTIVITY OF THE ITEM.

2.6 USAGE DENOTED BY DASH NUMBER

SYMBOL FLAGS ARE GENERALLY NOT USED FOR ITEMS THAT HAVE THE TYPE/VERSION AND EFFECTIVITY DETERMINED BY THE USE OF A DASH NUMBER E.G. .250 HOLE (FOR -15) IS SPECIFIED WHEN THE HOLE IS USED FOR THE ENTIRE TYPE/VERSION AND EFFECTIVITY OF THE -15. DASH NUMBERS ARE ALWAYS READ AS "FOR" (APPLICABLE TO) A SPECIFIED TYPE/VERSION AND EFFECTIVITY.

2.7 USAGE DENOTED BY SYMBOL FLAGS

TO DETERMINE THE TYPE/VERSION AND EFFECTIVITY OF A SYMBOL FLAG LETTER, FIND THE APPLICABLE IDENTIFICATION LETTER IN THE APPLICATION LIST. THE TYPE/VERSIONS, EFFECTIVITIES AND ECPS, THAT ARE APPLICABLE TO THAT SYMBOL FLAG LETTER ARE LISTED FOLLOWING THE IDENTIFICATION LETTER. THERE ARE TWO DIFFERENT TYPES OF SYMBOL FLAGS (OPEN AND CLOSED). SEE FIGURE 1.

2.7.1 "FOR" SYMBOL FLAGS

OPEN TIP SYMBOL FLAGS ARE USED TO IDENTIFY THE ITEMS WHICH ARE "FOR" (APPLICABLE TO) A SPECIFIED TYPE/VERSION AND EFFECTIVITY.

2.7.2 "TO" SYMBOL FLAGS

CLOSED TIP SYMBOL FLAGS ARE USED TO IDENTIFY THE ITEMS WHICH ARE "TO" (NOT APPLICABLE TO) A SPECIFIED TYPE/VERSION AND EFFECTIVITY.

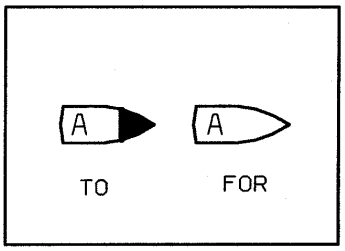


FIGURE 1

	SIZE A	CAGE CODE 81755	16Z001
CONTRACT NO. F33657-75-C-0310	SCALE	REVISION AK	SHEET 12

2.8 SYMBOL FLAG INTERPRETATION

IT MAY BE NECESSARY TO ANALYZE DASH NUMBERS AND SYMBOL FLAGS TOGETHER TO DETERMINE THE EFFECTIVITY OF THE ITEM. THE HIERARCHY OF SYMBOL FLAGS MUST BE CONSIDERED FOR PROPER INTERPRETATION OF THE ITEMS TYPE/VERSION AND EFFECTIVITY. THE FOLLOWING PARAGRAPHS CONFORM TO THE HIERARCHY DEPICTED IN FIGURE 2.

FIGURE 2

	SIZE	CAGE CODE	
	A	81755	16Z001
CONTRACT NO. F33657-75-C-0310	SCALE	REVISION AK	SHEET 14

SYMBOL FLAGS ON AN ENTITY TAKE PRECEDENCE OVER SYMBOL FLAGS ON AUXILIARY VIEWS/SECTIONS, MAIN ASSEMBLY/DETAIL VIEWS AND OVER THE TYPE/VERSION LISTED IN THE APPLICATION LIST/PART LIST FOR THE DASH NUMBER. ALTHOUGH SYMBOL FLAGS ON AN ENTITY TAKE PRECEDENCE, THEY CANNOT BE INTERPRETED FOR ADDITIONAL TYPE/VERSION AND EFFECTIVITY THAN THE VIEWS AND DASH NUMBERS ESTABLISH FOR THE ENTITY.

FOR EXAMPLE:

A TYPE/VERSION AND EFFECTIVITY OF "61:3 & ON" SYMBOL FLAG ON AN ENTITY APPEARING IN A DRAWING VIEW WITH A TYPE/VERSION AND EFFECTIVITY OF "61:1 - 6" WOULD INDICATE A NET TYPE/VERSION AND EFFECTIVITY OF "61: 3 - 6" FOR THE ITEM.

SYMBOL FLAGS ON AUXILIARY VIEWS/SECTIONS TAKE PRECEDENCE OVER SYMBOL FLAGS ON THE MAIN ASSEMBLY/DETAIL VIEWS AND OVER THE TYPE/VERSION LISTED IN THE APPLICATION LIST/PART LIST FOR THE DASH NUMBER WHICH CONTAINS THE ITEM. ALTHOUGH SYMBOL FLAGS ON VIEW/SECTION TAKE PRECEDENCE, THEY CANNOT BE INTERPRETED FOR ANY ADDITIONAL TYPE/VERSION AND EFFECTIVITY THAN THE MAIN VIEW OR ITEMS FOR WHICH THEY ARE APPLICABLE.

SYMBOL FLAGS ON MAIN ASSEMBLY/DETAIL VIEWS TAKE PRECEDENCE OVER THE TYPE/VERSION LISTED IN THE APPLICATION LIST/PART LIST OF THE ITEMS DESCRIBED THEREIN. ALTHOUGH SYMBOL FLAGS ON MAIN ASSEMBLY/DETAILS TAKE PRECEDENCE, THEY CANNOT BE INTERPRETED FOR ANY ADDITIONAL TYPE/VERSION AND EFFECTIVITY THAN THE APPLICATION LIST/PART LIST TYPE/VERSION AND EFFECTIVITY FOR WHICH THEY ARE APPLICABLE.

THE APPLICATION LIST/PART LIST TYPE/VERSION AND EFFECTIVITY OF AN ITEM IS SUBORDINATE TO ALL SYMBOL FLAGS APPLICABLE TO THE ITEM. HOWEVER THE SYMBOL FLAGS CANNOT BE INTERPRETED FOR ANY ADDITIONAL TYPE/VERSION AND EFFECTIVITY THAN IS INDICATED IN THE APPLICATION LIST/PART LIST.

WHEN AN ITEM CONTAINS TWO OR MORE SYMBOL FLAGS THE FOLLOWING APPLIES.

IF THE ITEM CONTAINS ALL OPEN SYMBOL FLAGS, THE ITEM APPLIES FOR THE TYPE/VERSION AND EFFECTIVITY INCLUDED IN ALL OF THE OPEN SYMBOL FLAGS.

IF THE ITEM CONTAINS ALL CLOSED SYMBOL FLAGS, THE ITEM DOES NOT APPLY FOR THE TYPE/VERSION AND EFFECTIVITY INCLUDED IN ALL OF THE CLOSED SYMBOL FLAGS.

IF THE ITEM CONTAINS A COMBINATION OF OPENED AND CLOSED SYMBOL FLAGS, THE EFFECTIVITY OF THE ITEM IS DETERMINED BY SUBTRACTING THE CLOSED SYMBOL FLAG'S TYPE/VERSION AND EFFECTIVITY FROM THE OPEN SYMBOL FLAG'S TYPE/VERSION AND EFFECTIVITY. SEE FIGURE 3 & 4 FOR EXAMPLES.

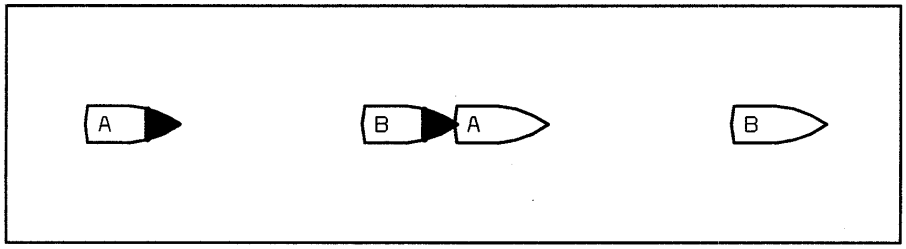


FIGURE 3

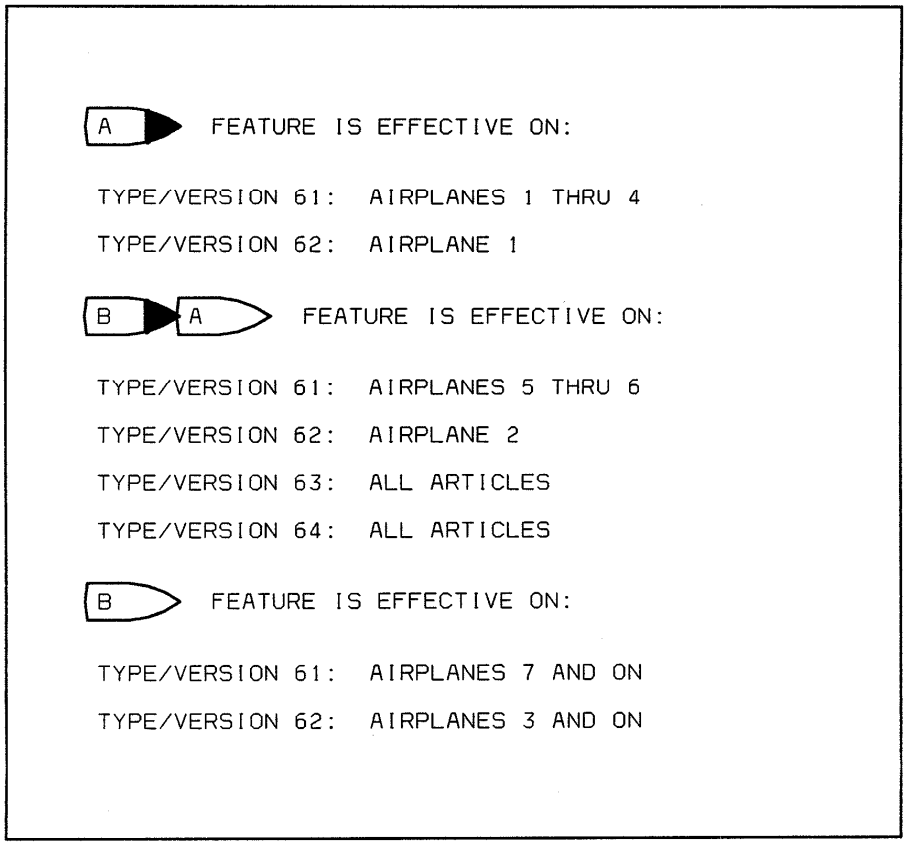


FIGURE 4

2.9 APPLICABLE DOCUMENT

THE FOLLOWING DOCUMENTS FORM A PART OF THIS DOCUMENT WITHIN THE LIMITS OF APPLICATION SPECIFIED FOR EACH.

2.9.1 STANDARD PARTS SUBSTITUTIONS (F16 PROGRAM)

16PR009 "AUTHORIZED STANDARD PARTS SUBSTITUTIONS FOR USE ON F-16 AIRCRAFT", ESTABLISHES THE ACCEPTABLE STANDARD PARTS THAT ARE AUTHORIZED TO BE USED IN LIEU OF THE STANDARD PARTS THAT ARE SPECIFIED ON THE DRAWING AND/OR PARTS LIST.

2.9.2 MATERIALS SUBSTITUTION

16PR092 "AUTHORIZED MATERIAL SUBSTITUTIONS FOR USE ON F-16 AIRCRAFT, ESTABLISHED THE ACCEPTABLE MATERIALS THAT ARE AUTHORIZED TO BE USED IN LIEU OF THE MATERIALS THAT ARE SPECIFIED IN THE PARTS LIST.

2.9.3 STANDARD PARTS SUBSTITUTIONS (TRAINER FLIGHT SIMULATOR/LINK)

652PR029 "AUTHORIZED STANDARD PARTS SUBSTITUTIONS FOR USE ON F-16 TRAINER FLIGHT SIMULATOR". ESTABLISHES THE ACCEPTABLE STANDARD PARTS THAT ARE AUTHORIZED TO BE USED IN LIEU OF THE STANDARD PARTS THAT ARE SPECIFIED ON THE DRAWING AND/OR PARTS LIST.

2.10 MOCKED-UP TUBING

MOCKED-UP TUBING IS DEFINED AND SUBMITTED TO THE CUSTOMER ON TUBE BEND DATA FORMATS MEETING THE REQUIREMENTS OF MIL-D-9898. TO ESTABLISH IN-HOUSE MANUFACTURING AND MATERIAL REQUIREMENTS, EACH TUBE IS RELEASED AS A PARTS LIST (PL) ONLY DRAWING IDENTIFIED WITH THE TUBE PART NUMBER (DRAWING AND DASH NO.) IN THE PL DRAWING NUMBER BLOCK. THE SAME DASH NUMBER IDENTIFIED IN THE PL DRAWING NUMBER BLOCK OR A UNIQUE DASH NUMBER MAY BE USED IN THE PL TO IDENTIFY THE TUBING RAW MATERIAL. THE PL DASH NUMBER IDENTIFYING THE RAW MATERIAL MAY BE USED AS A SUFFIX TO THE COMPLETE PART NUMBER SHOWN IN THE PL DRAWING NUMBER BLOCK FOR LOGISTICS PURPOSES (FOR EXAMPLE. 16H2602-26-26 OR 16H2602-28-27). SUCH "MAKE-FROM" TUBES DO NOT REQUIRE PART NUMBER MARKING.

2.11 SYMBOLS

A) LOWER CASE LETTERS ON WIRING AND SCHEMATIC DIAGRAMS ARE SYMBOLIZED BY EITHER AN UPPER CASE LETTER FOLLOWED

BY AN ASTERISK OR BY AN UPPER CASE LETTER THAT IS UNDERLINED.

B) ALL SURFACE SMOOTHNESS SYMBOLS SHALL BE INTERPRETED PER ASA B46.1-1962.

C) WELDING SYMBOLS ARE PER AMERICAN WELDING SOCIETY STANDARD AWS A2.0-68.

2.12 EFFECTIVITY FLAG INTERPRETATION

ITEMS CHANGED WITHOUT A PART NUMBER CHANGE IN ACCORDANCE WITH MIL-STD-100A WILL NORMALLY HAVE EFFECTIVITY FLAGS ON FEATURES CHANGED FOR LESS THAN THE FULL EFFECTIVITY OF THE PART OR ASSEMBLY. FOR REPLACEMENT ORDERS OF THESE ITEMS, THE LATEST (AND ON) EFFECTIVITY CONFIGURATION SHOULD BE USED; HOWEVER, SUPERSEDED CONFIGURATIONS MAY BE USED, SINCE ALL CONFIGURATIONS OF THE SAME PART NUMBER ARE CONSIDERED INTERCHANGEABLE.

2.13 MODIFICATION (MOD) DRAWING - GENERAL

MOD DRAWINGS ARE PREPARED TO DOCUMENT RETROFIT CHANGES TO DELIVERED ITEMS DEPICTED ON PRODUCTION DRAWINGS OR OTHER PREVIOUSLY RELEASED MOD DRAWINGS. THIS INCLUDES, BUT IS NOT LIMITED TO, MODIFICATIONS TO AIRCRAFT PRIMARY STRUCTURE, EQUIPMENT RACKS AND INSTALLATIONS.

A MOD DRAWING MAY BE RECOGNIZED BY THE NOTATION "MODIFICATION DRAWING" ABOVE OR ADJACENT TO THE TITLE BLOCK OF EACH SHEET OF THE DRAWING.

THE MOD DRAWING TITLE IS THE SAME AS THE TITLE OF THE DRAWING BEING MODIFIED EXCEPT THAT THE PHRASE "MOD OF", PRECEDED BY A COMMA IS THE LAST MODIFIER.

2.14 MOD DRAWING CONTENTS

MOD DRAWINGS INCLUDE DRAWING SHEETS, AS REQUIRED, TO DEPICT COMPLETE MODIFICATION INSTRUCTIONS, A PARTS LIST TABULATING PARTS AND MATERIALS ADDED, DELETED, OR ALTERED BY THE MODIFICATION AND AN APPLICATION LIST TO SHOW USAGE AND HEADER INFORMATION. WHEN A PICTORIAL DELINEATION IS REQUIRED THE USE OF ADD, REMOVE AND RELOCATE ARE INCLUDED ON THE FIELD OF THE DRAWING AS NECESSARY TO COMPLETELY DEFINE THE MODIFICATION TO DOWNSTREAM USERS. SEE FIGURE 5 FOR EXAMPLES. IF PICTORIAL DELINEATION IS NOT NECESSARY, THE MOD DRAWING CONSIST OF AN APPLICATION/PARTS LIST ONLY.

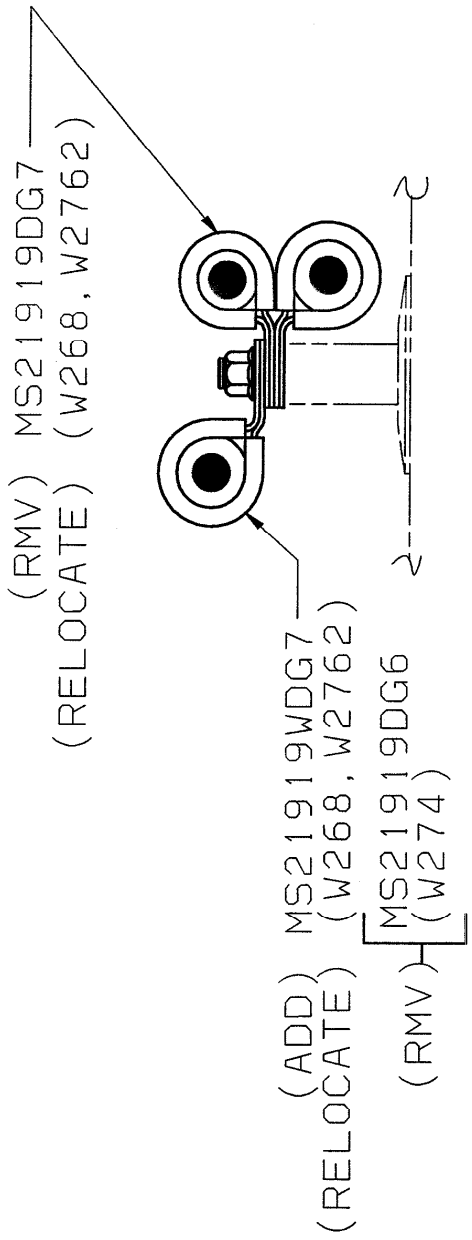


FIGURE 5

	SIZE	CAGE CODE	
	A	81755	16Z001
CONTRACT NO. F33657-75-C-0310	SCALE	REVISION AK	SHEET 20

2.15 MOD DRAWING NUMBERING

THE MOD DRAWING NUMBER CONSISTS OF THE BASIC DRAWING NUMBER SUFFIXED WITH THE LETTER "M' AND A NUMERIC DIGIT FROM 1-99.

2.15.1 SUFFIX DESCRIPTION

THE NUMERIC DIGIT IN THE SUFFIX INDICATES THE NUMBER OF MODIFICATIONS PREPARED AGAINST THE RELATED BASIC DRAWING NUMBER. THE NUMERIC DIGIT IS ASSIGNED SEQUENTIALLY STARTING WITH THE NUMBER ONE (1).

THE NUMERIC SUFFIX WITHIN THE MOD DRAWING NUMBERS DO NOT NECESSARILY, AND ARE NOT INTENDED TO ESTABLISH THE ORDER IN WHICH A SPECIFIC ECP IS ACCOMPLISHED ON THE AIRCRAFT.

2.16 MOD DRAWING PARTS LIST

WHETHER PARTS ARE ADDED, DELETED OR MODIFIED MAY BE DETERMINED FROM THE LETTER IN THE "APPL" COLUMN OF THE PARTS LIST. ADDED PARTS ARE IDENTIFIED WITH AN "APPL" CODE "A", DELETED PARTS WITH A "D" AND REWORKED (MODIFIED) PARTS WITH AN "R". SEE FIGURE 6 FOR AN EXAMPLE.

16B443M1

PARTS LIST NOTES

A. REWORK 16B443-825 INTO -1
B. REWORK 16B443-755 INTO -3
C. THIS DRAWING MODIFIES DRAWING 16B109

FORMAL PARTS LIST

QTY REQ/ASY	PART NUMBER	NOMENCLATURE	APL	EFFECTIVE ON FROM	EFFECTIVE ON THRU	TYPE	STOCK SIZE	ALT PN CD	CAGEC	ITEM NO	MATERIAL SPECIFICATION	FNISH	NOTE	DWG ZONE
48	NAS1791A3-2	NUT	A											C3
AR	MS20426AD5	RIVET	A											C7
AR	MS20426AD3	RIVET	A					1						C3
ALT	C9605-3-2	RIVET						1						
1	16B1220-661	BHD ASSY OF	A				I							B5
1	16B1220-621	BHD ASSY OF	D				A							
MOD	16B443-825	EQUIP ASSY	R				D						A	
MOD	16B443-755	EQUIP ASSY	R										B	
AR	-9	PLATE	A				.063X2X3				QQ-A-250/4-T8	A616	3	D6
AR	-7	SEALANT	A				AS REQUIRED				FMS-1044-TYV	0000	3	C7
3	1		A											
			P											
			L											

*M DENOTES 1200 PLUS QTY SHOWN IN PL PARTS LIST/ROUTING LIST (READ UP) *N DENOTES 1300 PLUS QTY SHOWN IN PL

FIGURE 6

CONTRACT NO. F33657-75-C-0310	SIZE A	CAGE CODE 81755	16Z001
	SCALE	REVISION AK	SHEET 22

2.17 ITEMS PROCURED USING SPECIFICATION CONTROL DRAWINGS (SCD's)

ITEMS PROCURED USING LOCKHEED MARTIN AERONAUTICS COMPANY SCDs MUST BE PROCURED FROM THE SOURCES SPECIFIED ON THE APPLICABLE RELEASED SCD UNLESS PRIOR APPROVAL IN WRITING HAS BEEN GRANTED BY LOCKHEED MARTIN ENGINEERS. THIS POLICY APPLIES TO ALL LOCKHEED MARTIN ENTITIES, SUBCONTRACTORS, MANUFACTURERS, AND CO-PRODUCERS. THIS POLICY DOES NOT APPLY TO LOCKHEED MARTIN CUSTOMERS WHO MAY PROCURE ITEMS FROM OTHER SOURCES THAT THEY DEEM APPROPRIATE.

3.0 APPLICABILITY OF GENERAL NOTES

A) WHEN A REQUIREMENT IS SPECIFIED BY GENERAL NOTE (PARTS LIST OR DRAWING) WITHOUT SPECIFIC REFERENCE TO A SPECIFIC PART OR FEATURE, IT APPLIES TO ALL PARTS OR FEATURES APPLICABLE TO THE REQUIREMENT SPECIFIED BY THE NOTE.

B) WHEN A REQUIREMENT IS SPECIFIED BY GENERAL NOTE (PARTS LIST OR DRAWING) AND SPECIFIC PARTS OR FEATURES ARE REFERENCED TO THAT NOTE BY ENTRY OF THE NOTE IDENTIFICATION NUMBER OR LETTER AT A PARTS LIST OR DRAWING CALLOUT OF THE PART OR FEATURE, IT APPLIES ONLY TO THE PARTS OR FEATURES SO NOTED.

3.1 LOCATION OF WASHERS

UNLESS OTHERWISE SPECIFIED, WASHERS, WHEN SPECIFIED ON THE DRAWING, SHALL BE INSTALLED BETWEEN THE NUT AND THE SURFACE OF THE MATERIAL BEING FASTENED. IN THE CASES WHERE A FLAT WASHER AND A LOCKWASHER ARE INSTALLED ON THE SAME FASTENER THE FLAT WASHER SHALL BE INSTALLED ADJACENT TO THE MATERIAL SURFACE AND THE LOCKWASHER SHALL BE INSTALLED BETWEEN THE FLAT WASHER AND THE NUT.

3.2 FORMAT INTERPRETATION

NUMERICAL SYMBOLS (XX), WITHIN FIGURES, ARE USED TO IDENTIFY INTERPRETATION NOTES APPLICABLE TO THE INDICATED AREA OR FIELD.

3.3 DRAWING FORMATS

3.3.1 TITLE BLOCK

ENTRIES APPLY TO THE DRAWING IN GENERAL, ARE REQUIRED ONLY WHEN INDICATED DATA IS APPLICABLE, AND SHALL BE ENTERED ON SHEET ONE ONLY UNLESS OTHERWISE NOTED.

REFER TO FIGURE 7.

(1) DRAWING TITLE: DRAWING TITLES ARE COMPRISED OF TWO PARTS SEPARATED BY A HYPHEN (-). THE FIRST PART IS THE NAME BY WHICH THE PART IS KNOWN. THE SECOND PART OF THE TITLE CONSISTS OF THOSE ADDITIONAL MODIFIERS NECESSARY TO COMPLETE THE ITEM IDENTIFICATION. CATALOGING HANDBOOK H6-1, "ALPHABETIC INDEX OF NAMES". IS THE NORMAL SOURCE OF SELECTION FOR COMPRISING DRAWING TITLES. THE TITLE IS INDICATED ON ALL SHEETS OF THE DRAWING.

(2) DRAWING NUMBER: INDICATES THE NONSIGNIFICANT NUMBER ASSIGNED TO THE DRAWING FOR IDENTIFICATION PURPOSES. WHEN SUFFIXED WITH A DASH AND A DASH NUMBER, THE DRAWING NUMBER BECOMES A PART NUMBER. ALL SHEETS OF THE DRAWING SHALL INDICATE THE DRAWING NUMBER.

(3) SHEET: INDICATES THE DRAWING SHEET NUMBER. TOTAL NUMBER OF DRAWING SHEETS ARE INDICATED ON SHEET NUMBER ONE ONLY. SUBSEQUENT SHEETS INDICATE SHEET NUMBER ONLY.

(4) SCALE: INDICATES THE PREDOMINANT SCALE OF THE DRAWING. "NONE" IS USED FOR TABLES, DIAGRAMS, SCHEMATICS, ETC., FOR WHICH NO SPECIFIC SCALE IS APPLICABLE.

(5) SIGNATURES: SIGNATURE AND DATE OF PERSON PERFORMING THE INDICATED FUNCTIONAL APPROVAL. SIGNATURES OTHER THAN DRAFT ARE REQUIRED ON SHEET ONE ONLY AND INDICATE APPROVAL OF ALL SHEETS. SIGNATURES WITHIN THE "DRAFT" BLOCK ON EACH SHEET INDICATE THE ORIGINATOR OF EACH SHEET.

(6) CONTRACT NO: INDICATES THE CONTRACT NUMBER FOR WHICH THE DRAWING WAS ORIGINALLY PREPARED. ALL SHEETS OF THE DRAWING SHALL REFLECT THE CONTRACT NUMBER THAT ORIGINATED THE INITIAL DRAWING.

(7) INSTALL RIVETS PER: INDICATES THE SPECIFICATION OR STANDARD WHICH GOVERNS THE INSTALLATION OF RIVETS SPECIFIED ON THE DRAWING.

(8) MARK PARTS PER: INDICATES THE SPECIFICATION OR STANDARD WHICH GOVERNS IDENTIFICATION OF PARTS AND ASSEMBLIES DEPICTED ON THE DRAWING, OR A REFERENCE TO AN APPLICABLE NOTE.

(9) NEXT SECT LETTER: INDICATES THE NEXT LETTER AVAILABLE FOR IDENTIFICATION OF SECTIONS, VIEWS OR DETAILS.

(10) UNLESS OTHERWISE SPECIFIED: INDICATES THAT THE FOLLOWING GENERAL REQUIREMENTS APPLY TO THE DRAWING UNLESS OTHERWISE STATED ON THE DRAWING.

A) DIMENSIONS IN INCHES: INDICATES THAT THE UNIT OF MEASUREMENT USED ON THE DRAWING IS THE INCH.

B) LINEAR TOL: DEFINES APPLICABLE TOLERANCE TO BE APPLIED TO UNTOLERANCED LINEAR DIMENSIONS.

C) ANGULAR TOL: DEFINES APPLICABLE TOLERANCE TO BE APPLIED TO UNTOLERANCED ANGULAR (STATED OR IMPLIED) DIMENSIONS.

D) MACH SURF: INDICATES THE PREDOMINATE SURFACE ROUGHNESS APPLICABLE TO PARTS DEFINED ON THE DRAWING.

(11) RIVET CODE PER NAS523: DEFINITION OF CODED FASTENER CALLOUTS APPEARING ON THE DRAWING.

(12) RESERVED SPACE: USED ONLY WHEN SPECIFICALLY DIRECTED BY SPECIAL INSTRUCTION DEFINING THE ENTRY AND APPLICATION.

(13) FOR ASSOCIATED LIST SEE DOCUMENT SAME NO. PREFIXED AS INDICATED: IDENTIFIES THE ASSOCIATED LIST PREFIX ON WHICH THE INDICATED DATA APPEARS.

PL = PARTS LIST
AL = APPLICATION LIST

3.3.2 REVISION BLOCK

THE REVISIONS BLOCK IS A HISTORICAL RECORD OF ALL CHANGES INCORPORATED INTO THE DRAWING SUBSEQUENT TO ITS ORIGINAL RELEASE.

REFER TO FIGURE 8 FOR LOCATION OF FORMAT DATA FIELDS.

A BRIEF DESCRIPTION OF THE COLUMNS LOCATED IN FIGURE 8:

(1) ZONE: AN ENTRY SIGNIFYING THE DRAWING ZONE WHERE APPLICABLE.

(2) REV: AN ENTRY IN THIS COLUMN SIGNIFIES THE DRAWING REVISION LETTER ASSIGNED TO THE ECN. SEE BELOW FOR REVISION STATUS SEQUENCE. LETTERS I, O, Q, X, AND NUMBER ZERO ARE PROHIBITED FROM USE.

A, B, C,.....Z THRU
AA, AB, AC,.....AZ THRU
BA, BB, BC,.....BZ THRU
ZA, ZB, ZC,.....ZZ THRU
A1, A2, A3, A4, A5, A6, A7, A8, A9 THRU
B1, B2, B3,.....B9 THRU
Z1, Z2, Z3, Z4, Z5, Z6, Z7, Z8, Z9 THRU
1A, 1B, 1C,.....1Z THRU
2A, 2B, 2C,.....2Z THRU
9A, 9B, 9C,.....9Z

(3) DESCRIPTION: A NOTATION INDICATING THAT THE REVISION WAS A REDRAW WITHOUT CHANGES, A REDRAW WITH CHANGES, AN INCORPORATION OF AN ENGINEERING CHANGE NOTICE, OR A DIRECT DRAWING CHANGE. “INC ECN”INDICATES THE INCORPORATION OF AN OUTSTANDING ENGINEERING CHANGE NOTICE. “DESIGN CHG ECN” INDICATES A DIRECT DRAWING CHANGE NOT PREVIOUSLY DESCRIBED BY AN ENGINEERING CHANGE NOTICE.

(4) DATE: THE DATE OF EACH SIGNATURE ENTERED IN THE APPROVED COLUMN.

(5) APPROVED: APPROVAL SIGNATURE AS APPLICABLE.

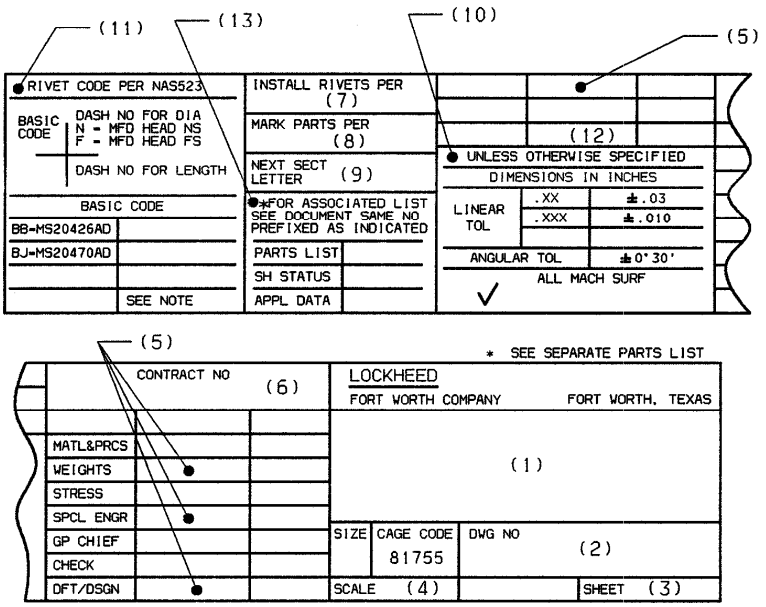


FIGURE 7

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
(1)	(2)	(3)	(4)	(5)

FIGURE 8

	SIZE A	CAGE CODE 81755	16Z001
CONTRACT NO. F33657-75-C-0310	SCALE	REVISION AK	SHEET 28

3.4 ASSOCIATED LIST AND CHANGE DOCUMENTS

3.4.1 APPLICATION LIST (AL)

THE APPLICATION LIST IS A TABULATION OF NEXT ASSEMBLY USAGE DATA APPLICABLE TO THOSE ITEMS DEFINED BY THE ASSOCIATED DRAWING. IN ADDITION, THE APPLICATION LIST RECORDS DRAWING SHEET STATUS AND OUTSTANDING DRAWING REVISIONS DATA APPLICABLE TO THE ASSOCIATED DRAWING.

REFER TO FIGURE 9 FOR LOCATION OF FORMAT DATA FIELDS.

APPLICATION LIST DATA FOR SPECIAL DRAWING TYPES (WIRING DATA, SCDS, ETC.) IS THE SAME AS DEFINED HEREIN EXCEPT DATA FIELDS NOT INCLUDED ARE NOT APPLICABLE.

(1) BLOCKS AND COLUMNS AS INDICATED: LOCKHEED MARTIN AERONAUTICS COMPANY INTERNAL INFORMATION. NOT NECESSARY FOR INTERPRETATION OF DOCUMENTS.

(2) CONTRACT NO: GOVERNMENT CONTRACT NUMBER FOR WHICH THE DOCUMENT WAS INITIALLY PREPARED.

(3) DRAWING NUMBER: IDENTIFICATION NUMBER OF THE APPLICATION LIST. THIS NUMBER LESS THE AL PREFIX IS THE SAME AS THE NUMBER OF THE ASSOCIATED DRAWING.

(4) DWG TITLE: TITLE OF THE ASSOCIATED DRAWING.

(5) SHEET OF : SHEET NUMBER AND THE TOTAL NUMBER OF SHEETS OF THE DOCUMENT.

(6) RELEASE DATE: THE DATE OF THE INITIAL RELEASE OF THE DOCUMENT.

(7) AL/PL ISSUE DATE: DATE OF THE ISSUE.

(8) AL ISSUE NO: A NUMBER ASSIGNED IN NUMERICAL SEQUENCE FOR EACH ISSUE OF THE APPLICATION LIST. REVISION LETTERS ARE ALSO ASSIGNED WHEN REQUIRED BY MIL-STD-100, MILITARY STANDARD ENGINEERING DRAWING PRACTICES. SEE ITEM (9).

(9) AL/PL REV LTR: THE REVISION LETTER OF THE CURRENT ISSUE.

(10) DWG SHEET STATUS: INDICATES THE NUMBER OF SHEETS OF THE ASSOCIATED DRAWING, THE DRAWING LETTER SIZE

OF EACH SHEET, AND THE CURRENT REVISION LETTER APPLICABLE TO EACH SHEET.

(11) OUTSTANDING DRAWING REVISIONS: THE LATEST DRAWING REVISION LETTER RELEASED AGAINST, BUT NOT INCORPORATED ON THE ASSOCIATED DRAWING. ENTRY MAY BE COMPARED TO REVISION LETTER INDICATED FOR SHEET NUMBER 1. ITEM (9), TO DETERMINE NUMBERS OF UNINCORPORATED CHANGES OUTSTANDING AGAINST THE DRAWING.

(12) PL ISSUE NO: IDENTIFIES THE ISSUE NO. OF THE CURRENT ASSOCIATED PARTS LIST.

(13) COLUMNS AS INDICATED: ENTRIES AS REQUIRED PER MIL-STD-100, MILITARY STANDARD ENGINEERING DRAWING PRACTICES.

(14) APP: THIS COLUMN IS USED IN CONJUNCTION WITH RETROFIT ACCOMPLISHMENT. A CODE LETTER ENTERED IN THIS COLUMN DEFINES THE APPLICABLE RETROFIT USAGE FOR THE LINE ENTRY. CODE LETTERS ARE DEFINED AS FOLLOWS:

A = ADDED (AN ITEM TO BE "ADDED" BY RETROFIT)
D = DELETE (AN ITEM TO BE "DELETED" BY RETROFIT)
R = REWORK (AN ITEM TO BE "REWORKED" BY RETROFIT)

15) EFFECTIVE ON - FROM/THRU: NUMBER APPEARING IN "FROM" COLUMN INDICATES STARTING (FIRST) ARTICLE ON WHICH THE PART IS TO BE INSTALLED. NUMBER APPEARING IN "THRU" COLUMN INDICATES ENDING (LAST) ARTICLE ON WHICH THE PART IS TO BE INSTALLED. "ON" IN THE "THRU" COLUMN INDICATES ALL SUBSEQUENT ARTICLES.

(16) TYPE/VERSION: INDICATES USING ARTICLE FOR ITEM LISTED IN THE "PART NUMBER" COLUMN. CHARACTERS RECORDED IN "TYPE" COLUMN DESIGNATE MODEL. CHARACTERS RECORDED IN "VERSION" COLUMN DESIGNATE A PARTICULAR VERSION OF THE APPLICABLE MODEL (TYPE). REFER TO PARA. 2.4 FOR TYPE VERSION CODE INTERPRETATION.

(17) CONFIGURATION ITEM: INDICATES AN AGGREGATION OF HARDWARE AND/OR SOFTWARE (OR ANY DISCRETE PORTION THEREOF) WHICH SATISFY AN END-USE FUNCTION AND ARE DESIGNATED FOR CONFIGURATION MANAGEMENT.

(18) ATTRIBUTE/MISCELLANEOUS: THIS COLUMN IS USED TO SPECIFY VARIOUS TYPES OF PART DATA NOT INCLUDED IN OTHER COLUMNS.

(19) IAD: THE APPLICABLE INSTALLATION, ASSEMBLY, DETAIL, OR "MAKE FROM" CODE. CODES ARE SHOWN FOR DOMESTIC PARTS ONLY. CODES ARE DEFINED AS FOLLOWS:

1 = INSTALLATION	3 = DETAIL
2 = ASSEMBLY	6 = A "MAKE FROM" ITEM

(20) INTERPRETATION PER: REFERENCE TO THIS FORMAT INTERPRETATION DOCUMENT.

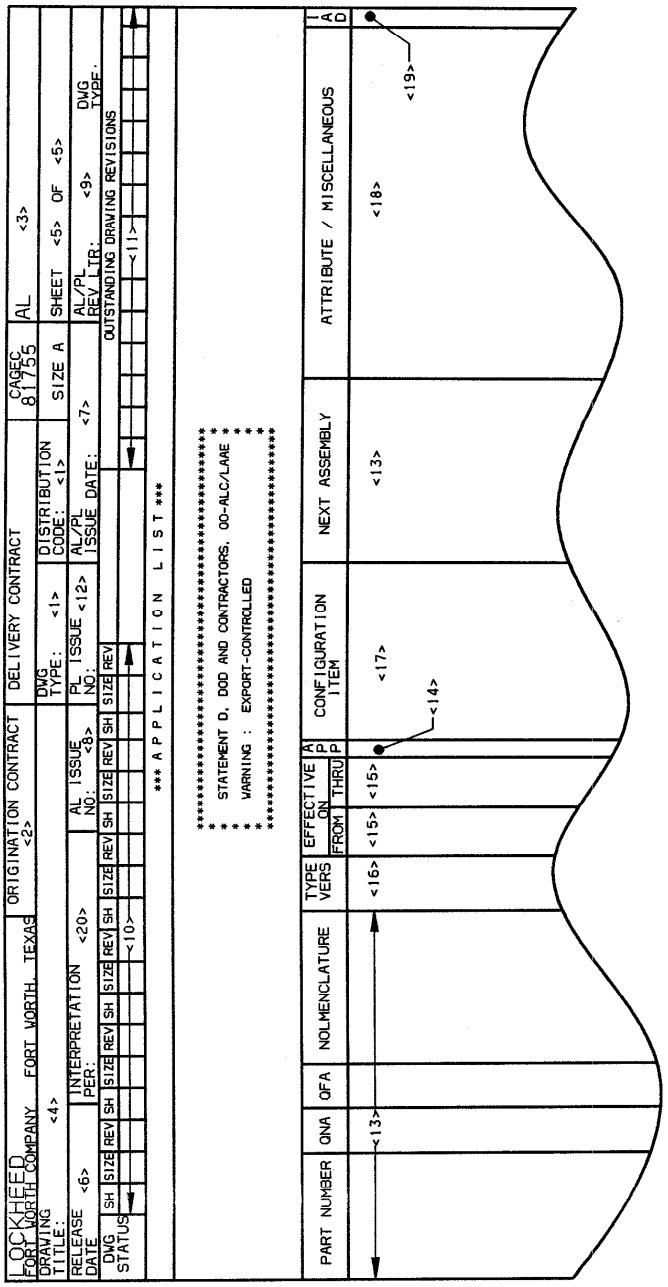


FIGURE 9

	SIZE	CAGE CODE	
	A	81755	16Z001
CONTRACT NO. F33657-75-C-0310	SCALE	REVISION AK	SHEET 32

3.4.2 PARTS LIST (PL)

THE PARTS LIST IS A TABULATED LIST OF PARTS, ETC., (STANDARD, FOREIGN AND DOMESTIC) REQUIRED TO ASSEMBLE OR INSTALL THE APPLICABLE ITEMS.

REFER TO FIGURE 10 FOR LOCATION OF FORMAT DATA FIELDS.

(1) BLOCKS AND COLUMNS AS INDICATED: ARE FOR INHOUSE INFORMATION. NOT NECESSARY FOR INTERPRETATION OF DOCUMENTS

(2) BLOCKS AS INDICATED: NOT APPLICABLE TO PARTS LIST.

(3) CONTRACT NO: GOVERNMENT CONTRACT NUMBER FOR WHICH THE DOCUMENT WAS INITIALLY PREPARED.

(4) DRAWING NUMBER: IDENTIFICATION NUMBER OF THE PARTS LIST. THIS NUMBER LESS THE PL PREFIX IS THE SAME AS THE NUMBER OF THE ASSOCIATED DRAWING.

(5) DWG TITLE: TITLE OF THE ASSOCIATED DRAWING.

(6) SHEET OF : SHEET NUMBER AND THE TOTAL NUMBER OF SHEETS OF THE DOCUMENT.

(7) RELEASE DATE: THE DATE OF THE INITIAL RELEASE OF THE DOCUMENT.

(8) AL/PL ISSUE DATE: DATE OF THE ISSUE.

(9) PL ISSUE NO: A NUMBER ASSIGNED IN NUMERICAL SEQUENCE FOR EACH ISSUE OF THE PARTS LIST. REVISION LETTERS ARE ALSO ASSIGNED WHEN REQUIRED BY MIL-STD-100, MILITARY STANDARD ENGINEERING DRAWING PRACTICES. SEE ITEM (10).

(10) REV LTR: THE REVISION LETTER OF THE CURRENT ISSUE.

(11) AL ISSUE NO: A NUMBER ASSIGNED IN NUMERICAL SEQUENCE FOR EACH ISSUE OF THE APPLICATION LIST. REVISION LETTERS ARE ALSO ASSIGNED WHEN REQUIRED BY MIL-STD-100, MILITARY STANDARD ENGINEERING DRAWING PRACTICES.

(12) COLUMNS AS INDICATED: ENTRIES AS REQUIRED PER MIL-STD-100, MILITARY STANDARD ENGINEERING DRAWING PRACTICES.

(13) APP: THIS COLUMN IS USED IN CONJUNCTION WITH RETROFIT ACCOMPLISHMENT. A CODE LETTER ENTERED IN THIS COLUMN DEFINES THE APPLICABLE RETROFIT USAGE FOR THE LINE ENTRY. CODE LETTERS ARE DEFINED AS FOLLOWS:

D = DELETE (AN ITEM TO BE "DELETED" BY RETROFIT)
A = ADDED (AN ITEM TO BE "ADDED" BY RETROFIT)
R = REWORK (AN ITEM TO BE "REWORKED" BY RETROFIT)

(14) EFFECTIVE ON - FROM/THRU: NUMBER APPEARING IN "FROM" COLUMN INDICATES STARTING (FIRST) ARTICLE ON WHICH THE PART IS TO BE INSTALLED. NUMBER APPEARING IN "THRU" COLUMN INDICATES ENDING (LAST) ARTICLE ON WHICH THE PART IS TO BE INSTALLED. EFFECTIVITIES SHALL BE INTERPRETED AS FOLLOWS:

A) IF THE EFFECTIVITY AND TYPE/VERSION ARE BOTH BLANK, THE PART EFFECTIVITY IS THE SAME AS ITS NEXT ASSEMBLY.

B) IF THE EFFECTIVITY IS BLANK AND THE TYPE/VESION HAS AN ENTRY, THE PART EFFECTIVITY IS THE SAME AS ITS NEXT ASSEMBLY EFFECTIVITY FOR THE NOTED TYPE/VERSION.

C) IF THE EFFECTIVITY AND TYPE/VERSION BOTH HAVE ENTRIES, THE PART EFFECTIVITY IS AS STATED.

(15) TYPE/VERSION: INDICATES USING ARTICLE FOR ITEM LISTED IN THE "PART NUMBER" COLUMN. CHARACTERS RECORDED IN "TYPE" COLUMN DESIGNATE MODEL. CHARACTERS RECORDED IN "VERSION" COLUMN DESIGNATE A PARTICULAR VERSION OF THE APPLICABLE MODEL (TYPE). REFER TO PARA. 2.4 FOR TYPE VERSION CODE INTERPRETATION.

(16) ATTRIBUTE/MISCELLANEOUS: THIS COLUMN IS USED TO SPECIFY VARIOUS TYPES OF PART DATA NOT INCLUDED IN OTHER COLUMNS.

(17) ITEM NO: THE IDENTIFICATION, OR REFERENCE DESIGNATION, NUMBER BY WHICH THE ITEM ENTERED IN THE "PART NUMBER" COLUMN IS IDENTIFIED ON THE ASSOCIATED DRAWING.

(18) IAD: THE APPLICABLE INSTALLATION, ASSEMBLY. DETAIL. OR "MAKE FROM" CODE. CODES ARE SHOWN FOR

DOMESTIC PARTS ONLY. CODES ARE DEFINED AS FOLLOWS:

1 = INSTALLATION 3 = DETAIL
2 = ASSEMBLY 6 = A "MAKE FROM" ITEM

(19) DWG ZONE: DRAWING ZONE DESIGNATION DENOTING ONE LOCATION ON A ZONED DRAWING IN WHICH THE ITEM IS CALLED OUT. DRAWINGS (E AND J SIZE) ARE ZONED FROM BOTTOM TO TOP BY LETTERS "A", "B", "C", AND "D" AND FROM RIGHT TO LEFT NUMERICALLY. DRAWING ZONE DESIGNATIONS ARE SIGNIFICANT AS TO THE DRAWING SHEET. ZONES ON SHEET 1 OF A (J SIZE) DRAWING ARE NUMERICALLY DESIGNATED FROM 1 TO 8, WHILE THOSE ON SHEET 2 ARE DESIGNATED 21 TO 28; SHEET 3, 31 TO 38, ETC. FOR DRAWINGS EXCEEDING 9 SHEETS, ZONE LETTER DESIGNATIONS ON SHEETS 10 THRU 19 ARE REPLACED BY "E", "F", "G" AND "H". SHEET 10 (OF A “J” SIZE DRAWING) IS ZONED NUMERICALLY FROM 1 THRU 8. SHEET 11 IS ZONED 11 THRU 18, SHEET 12. 21 THRU 28, ETC. ZONES FOR SUBSEQUENT SHEETS (SHEETS 20 AND ON) ARE SIMILARLY DESIGNATED. “E” SIZE DRAWINGS ARE ZONED IN THE SAME MANNER WITH THE EXCEPTION OF ONLY FOUR HORIZONTAL ZONES, ALSO NUMERICALLY DESIGNATED RIGHT TO LEFT.

(20) QTY REQD PER ASSY: THE QUANTITY OF THE ITEM LISTED IN THE PART NUMBER COLUMN REQUIRED TO FABRICATE ONE ITEM. QUANTITY ENTRIES ARE INTERPRETED AS FOLLOWS: NUMBER REQUIRED FOR PARTS, "AR" (AS REQUIRED) FOR BULK MATERIALS, "ALT" FOR ALTERNATE PARTS HAVING NO OTHER USAGE AND "DOC" FOR ASSOCIATED DOCUMENTS, AND "REF" FOR AN ITEM FURNISHED AS A PART OF ANOTHER ITEM LISTED IN THE PARTS LIST (I.E., CONTACTS SUPPLIED WITH A CONNECTOR).

(21) PARTS LIST NOTES: GENERAL NOTES REGARDING PROCUREMENT, ALTERNATE PARTS, ETC.

(22) REFERENCE DOCUMENT LIST: A LIST OF REQUIRED DOCUMENTS, EXCLUDING DOCUMENTS IDENTIFIED BY FORMAT BLOCK AND COLUMN HEADINGS.

(23) INTERPRETATION PER: REFERENCE TO THIS FORMAT INTERPRETATION DOCUMENT.

(24) CAGEC: THE FEDERAL SUPPLY CODE FOR MANUFACTURER'S (FSCM) NUMBER APPLICABLE TO THE ENTRY IN THE PART NUMBER COLUMN. ENTRIES AS

REQUIRED BY MIL-STD-100, MILITARY STANDARD ENGINEERING DRAWING PRACTICES.

(25) UM: UNITS OF MEASURE, ENTRIES IN THIS COLUMN ARE USED TO INDICATE BULK MATERIALS.

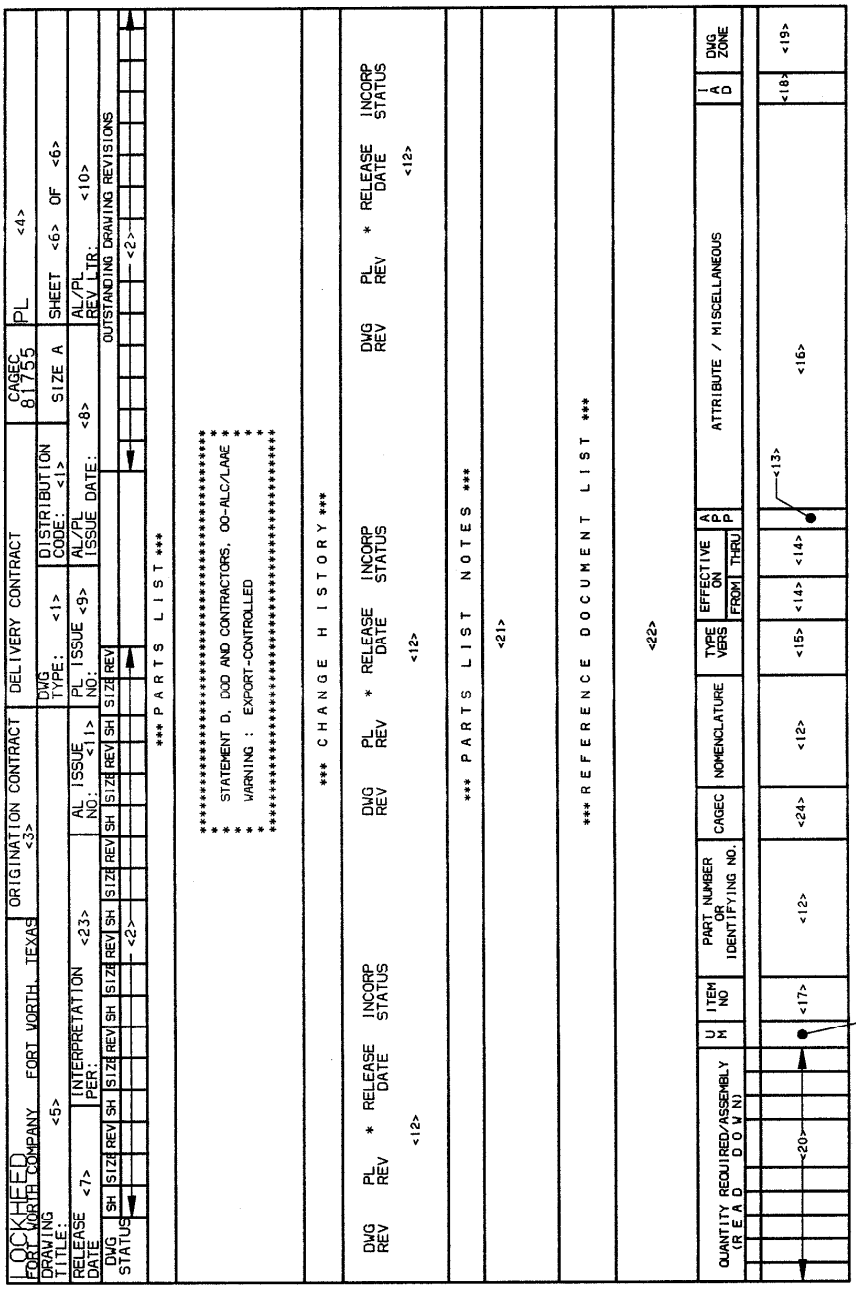


FIGURE 10

	SIZE	CAGE CODE	
	A	81755	16Z001
CONTRACT NO. F33657-75-C-0310	SCALE	REVISION AK	SHEET 37

3.4.3 LIST OF MATERIALS (LOM)

THE LIST OF MATERIAL IS A TABULATED LIST OF MATERIAL, NOTES AND DOCUMENTS THAT ARE USED WHEN FABRICATING ITEMS THAT ARE DEPICTED ON THE ASSOCIATED DRAWING.

REFER TO FIGURE 11 FOR LOCATION OF FORMAT DATA FIELDS.

(1) COLUMNS AS INDICATED: ENTRIES AS REQUIRED PER MIL-STD-100, MILITARY STANDARD ENGINEERING DRAWING PRACTICES.

(2) STOCK SIZE: MATERIAL SIZE REQUIRED TO MAKE ONE PART, EXCLUDING ALLOWANCES FOR TRIMMING, CHUCKING, ETC.

(3) MATERIAL SPECIFICATION: THE APPLICABLE MATERIAL SPECIFICATION. WHEN THE ENTRY REQUIRES THE INCLUSION OF THE WORDS, "TYPE", "TEMPER", "HARD", "GRADE", "CLASS", "CYCLE", "CONDITION", "FROM", "COMPOSITION", OR "STYLE". THEY WILL BE SEPARATED FROM THE BASIC SPECIFICATION NUMBER BY A DASH AND BE ABBREVIATED AS FOLLOWS:

TY=TYPE
T =TEMPER
H =HARD
ST=STYLE
GR=GRADE
CL=CLASS
CY=CYCLE
CN=CONDITION
FR=FORM
CP= COMPOSITION

(4) FORM CODE: MATERIAL FORM CODE AS DEFINED BY ENGINEERING MATERIALS AND PROCESSES.

LIST OF FORM CODES.

B =BAR
BE=BAR&SHAPES,EXTRUDED
BH=BAR,ROLLED,HEXOGONAL
BI=BILLET
BR=BAR,ROLLED OR DRAWN
BS=BLADE SEAL
CB=CASTING,HOLLOW BAR
CC=CASTING,CENTRIFUGAL
CH=CASTING,HIP
CI=CASTING,INVESTMENT

CO=CASTING,OPTIONAL
CP=CASTING,PERMANENT
CS=CASTING,SAND
EF=EXTRUTION,FINNED
FB=FORGING,BLOCKER DIE
FC=FORGING,CONV. DIE
FH=FORGING,HAND
SS=STRUCTURAL SHAPES
ST=STRIP
SW=SCREEN,WOVEN
T =TUBING,ROUND
TR=TUBING,RECTANGULAR
TS=TUBING,SQUARE
T1=TUBING TYPE I
T2=TUBING TYPE II
T3=TUBING TYPE III
T4=TUBING TYPE IV
W = WIRE
WR=WIRE ROPE FLEXIBLE
WS=WIRE,SQUARE
FL=FOIL
FP=FORGING,PREC. DIE
FR=FORGING,ROLLED RING
H = HEXAGONAL,STEEL ONLY
NA=NOT APPLICABLE
P = PLATE
PC=PLATE,CLAD
PM=POWDER METAL
R =ROD
RE=ROD,EXTRUDED
RR=ROD,ROLLED OR DRAWN
S =SHEET
SC=SHEET,CLAD
SE=SHAPES,EXTRUDED
SF=SHEET,SUPERPLAS,FORM
SL=SHIM STOCK,LAMINATE
SP=SHEET,PERFORATED

(5) FNSH: FINISH CODE AS DEFINED BY FINISH DOCUMENT LISTED IN PL REFERENCE DOCUMENT LIST.

(6) ATTRIBUTE/MISCELLANEOUS: THIS COLUMN IS USED TO SPECIFY VARIOUS TYPES OF PART DATA NOT INCLUDED IN OTHER COLUMNS.

(7) IAD: THE APPLICABLE INSTALLATION, ASSEMBLY, DETAIL OR “MAKE FROM” CODE. CODES ARE SHOWN FOR

DOMESTIC PARTS ONLY. CODES LETTER ARE DEFINED AS FOLLOWS:

1 = INSTALLATION
2 = ASSEMBLY
3 = DETAIL
6 = A "MAKE FROM" ITEM

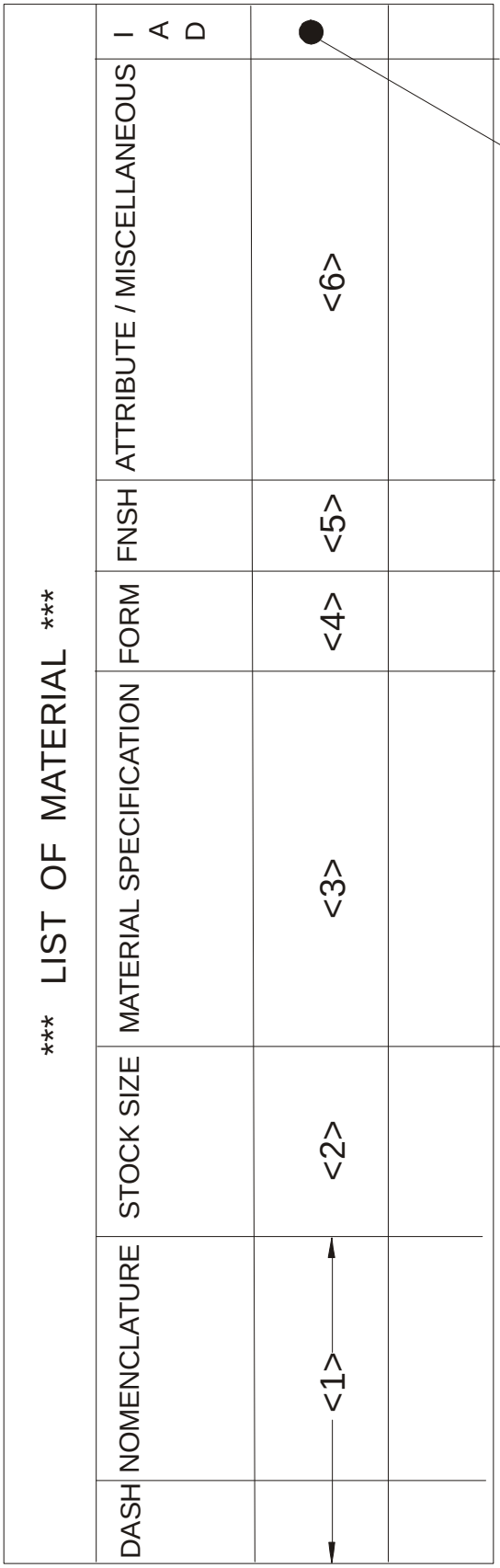


FIGURE 11

	SIZE	CAGE CODE	
	A	81755	16Z001
CONTRACT NO. F33657-75-C-0310	SCALE	REVISION AK	SHEET 41

3.4.4 ENGINEERING CHANGE NOTICE:

ENGINEERING CHANGE NOTICES ARE USED TO INITIATE CHANGES TO RELEASE DRAWINGS AND THEIR ASSOCIATED AL/PL/LOMs, AND TO RECORD DESCRIPTIONS OF CHANGES.

3.4.5 CHANGE NOTICE TYPES:

THERE ARE FIVE TYPES OF CHANGE NOTICES AVAILABLE FOR MAKING RELEASES. THE FOLLOWING IS A LISTING AND DESCRIPTION OF THE CHANGE NOTICE TYPES.

AN ENGINEERING CHANGE NOTICE (ECN) IS USED FOR CHANGES TO ENGINEERING DRAWINGS AND AL/PL/LOMs, WHICH ARE RELEASED.

A STD/DOC CHANGE NOTICE (STD/DOC CN) IS USED FOR CHANGES TO ENGINEERING DOCUMENTS AND STANDARDS DRAWINGS WHICH ARE RELEASED. DOCUMENTS SUCH AS SPECIFICATIONS, FZMs, AS WELL AS STANDARD DRAWINGS ARE CHANGED USING THIS TYPE OF CHANGE NOTICE.

A MAINTENANCE CHANGE NOTICE (MCN) IS PREPARED TO DOCUMENT THE INCORPORATION OF ECNs, TO REVISE DRAWING SHEET STATUS AND TO DOCUMENT DRAWING CHANGES NECESSARY TO ELIMINATE LEGIBILITY PROBLEMS.

A TAILORING CHANGE NOTICE (TCN) IS PREPARD TO MODIFY A COPIED AIRCRAFT DRAWING STRUCTURE INTO AN INTERIM CONFIGURATION, PRIOR TO RELEASE FOR PRODUCTION.

AN AEI CHANGE NOTICE (AEI CN) IS PREPARED TO ACCOMPLISH CHANGES TO AEIs.

REFER TO FIGURE 12 and 13 FOR LOCATION OF FORMAT DATA FIELDS.

(1) BLOCKS AND COLUMNS AS INDICATED: ARE FOR INHOUSE INFORMATION. NOT NECESSARY FOR INTERPRETATION OF DOCUMENTS.

(2) CONTRACT NO: GOVERNMENT CONTRACT NUMBER FOR WHICH THE DOCUMENT WAS PREPARED.

(3) DRAWING NUMBER: IDENTIFICATION NUMBER OF THE DRAWING AGAINST WHICH THE ECN IS WRITTEN.

(4) INTERPRETION PER: REFERENCE TO THIS FORMAT INTERPRETATION DOCUMENT.

(5) SHEET OF : SHEET NUMBER AND THE TOTAL NUMBER OF SHEETS OF THE DOCUMENT. THE TOTAL NUMBER OF SHEETS IS INDICATED ON SHEET ONE ONLY.

(6) EFFECT ON DRAWING SHEETS - INC: AN "X" INDICATES THAT THE CHANGE DESCRIBED ON THE CHANGE NOTICE HAS BEEN INCORPORATED ON THE AFFECTED DRAWING PRIOR TO RELEASE OF THE ECN.

(7) EFFECT ON DRAWING SHEETS - TO BE INC: AN "X" INDICATES THAT THE CHANGE DESCRIBED ON THE CHANGE NOTICE HAS NOT BEEN INCORPORATED ON THE AFFECTED DRAWING PRIOR TO RELEASE OF THE ECN.

(8) AFFECTS PL ONLY: AN "X" INDICATES THAT THE CHANGE DESCRIBED ON THE CHANGE NOTICE DOES NOT AFFECT THE ASSOCIATED DRAWING.

(9) REV LTR - DWG/PL: THE APPLICABLE DRAWING AND/OR PARTS LIST REVISION LETTER.

(10) DWG TITLE: ENTRY REQUIRED ONLY WHEN THE TITLE IS TO BE REVISED IN WHICH CASE THE REVISED TITLE IS ENTERED IN THIS BLOCK.

(11) REASON FOR CHG: A BRIEF STATEMENT AS TO WHY THE CHANGE WAS MADE.

(12) RCN: AN INTERNAL DOCUMENT NUMBER BY WHICH THE EFFECTIVITY OF THE CHANGE IS ESTABLISHED. THE ACTUAL EFFECTIVITY IS INDICATED ON THE APPLICATION LIST AND/OR THE AFFECTED DRAWING AND PARTS LIST. SEE PARAGRAPH 3.4.1, ITEMS (15) AND (16). "RECORD CHANGE" INDICATES THAT THE CHANGE IS NOT OF A DESIGN NATURE.

(13) EFFECTIVITY: INDICATES TYPE, VERSION AND EFFECTIVITY (SEE PARAGRAPH 3.4.1 ITEM 16) OF THE RELEASE CONTROL NUMBER, ITEM (13), WHEN A SEPARATE RELEASE CONTROL DOCUMENT IS NOT USED.

(14) DWG SH STATUS - SH/SIZE/REV/DWG LOC: INDICATES THE DRAWING SHEETS AFFECTED BY THE INCORPORATION OF THE CHANGE(S), THE REVISION LETTER APPLICABLE TO EACH AFFECTED SHEET AND THE SYSTEM USED TO MAKE THE CHANGE (I.E. CADAM, CATIA, MANUAL, ETC).

(15) TC: TRANSACTION CODE DEFINED AS FOLLOWS:

C - CREATE (NEW ITEM)

A - ADD (NEW OR ADDITIONAL REQUIREMENTS FOR AN EXISTING ITEM)
D - DECREASE (REDUCTION IN REQUIREMENT)
L - LIMIT (DELETION OF ALL REQUIREMENTS)
R - REVISE (REVISION WITHIN AN EXISTING LINE ENTRY)

(16) COLUMNS AS INDICATED: ENTRIES AS REQUIRED PER MIL-STD-100, MILITARY STANDARD ENGINEERING DRAWING PRACTICES.

(17) QNA: INDICATES THE TOTAL NUMBER OF ITEMS REQUIRED TO COMPLETE ONE NEXT ASSEMBLY.

(18) QFA: INDICATES THE TOTAL NUMBER OF ITEMS REQUIRED TO COMPLETE ONE END ARTICLE (AIRCRAFT AND SPARE).

(19) SAME AS: THE DASH NUMBER OF AN EXISTING ITEM WHEN A NEW DASH NUMBERED ITEM IS CREATED SIMILAR TO THE EXISTING ITEM.

(20) REPLACED - QTY: THE QUANTITY PER ASSEMBLY OF THE REPLACED ITEM. SEE ITEM (21).

(21) REPLACED - DASH: THE DASH NUMBER OF THE REPLACED ITEM.

(22) OLD NEXT ASSY DRAWING OR DASH NO: NEXT ASSEMBLY DRAWING NUMBER OR DOMESTIC DASH NUMBER, OF THE ITEM REPLACED.

(23) NEW NEXT ASSY DRAWING OR DASH NO: NEXT ASSEMBLY DRAWING NUMBER OR DOMESTIC DASH NUMBER OF THE ITEM LISTED IN THE "PART NUMBER" COLUMN.

(24) ATTRIBUTE / MISCELLANEOUS: THIS COLUMN IS USED TO SPECIFY VARIOUS TYPES OF PART DATA NOT INCLUDED IN OTHER COLUMNS.

(25) DWG ZONE: DRAWING ZONE DESIGNATION DENOTING ONE LOCATION ON A ZONED DRAWING IN WHICH THE ITEM IS CALLED OUT. DRAWINGS (E AND J SIZE) ARE ZONED FROM BOTTOM TO TOP BY LETTERS "A", "B", "C", AND "D" AND FROM RIGHT TO LEFT NUMERICALLY. DRAWING ZONE DESIGNATIONS ARE SIGNIFICANT AS TO THE DRAWING SHEET. ZONES ON SHEET 1 OF A (“J” SIZE) DRAWING ARE NUMERICALLY DESIGNATED FROM 1 TO 8. WHILE THOSE ON SHEET 2 ARE DESIGNATED 21 TO 28; SHEET 3, 31 TO 38, ETC. FOR DRAWINGS EXCEEDING 9 SHEETS, ZONE LETTER DESIGNATIONS ON SHEETS 10 THRU 19 ARE REPLACED BY "E", "F", "G" AND "H". SHEET

10 (OF A J SIZE DRAWING) IS ZONED NUMERICALLY FROM 1 THRU 8, SHEET 11 IS ZONED 11 THRU 18, SHEET 12, 21 THRU 28, ETC. ZONES FOR SUBSEQUENT SHEETS (SHEETS 20 AND ON) ARE SIMILARLY DESIGNATED. “E” SIZE DRAWINGS ARE ZONED IN THE SAME MANNER WITH THE EXCEPTION OF ONLY FOUR HORIZONTAL ZONES, ALSO NUMERICALLY DESIGNATED RIGHT TO LEFT.

(26) NEXT ASSY DASH: DASH NUMBER OF THE DOMESTIC ASSEMBLY WHICH IS AFFECTED BY THE CHANGE TO THE ITEM NOTED IN THE "PART NUMBER" COLUMN. NO ENTRY INDICATES THAT THE NEXT ASSEMBLY OF THE AFFECTED ITEM IS NOT DOMESTIC.

(27) ITEM NO: THE IDENTIFICATION OR REFERENCE DESIGNATION NUMBER BY WHICH THE ITEM ENTERED IN THE "PART NUMBER" COLUMN IS IDENTIFIED ON THE ASSOCIATED DRAWING.

(28) IAD: THE APPLICABLE INSTALLATION, ASSEMBLY, DETAIL, OR "MAKE FROM" CODE. CODES ARE SHOWN FOR DOMESTIC PARTS ONLY. CODES ARE DEFINED AS FOLLOWS:

1 = INSTALLATION	3 = DETAIL
2 = ASSEMBLY	6 = A "MAKE FROM" ITEM

(29) APPL: THIS COLUMN IS USED IN CONJUNCTION WITH RETROFIT ACCOMPLISHMENT. A CODE LETTER ENTERED IN THIS COLUMN DEFINES THE APPLICABLE RETROFIT USAGE FOR THE LINE ENTRY. CODE LETTERS ARE DEFINED AS FOLLOWS:

D = DELETE (AN ITEM TO BE "DELETED" BY RETROFIT)
A = ADD (AN ITEM TO BE "ADDED" BY RETROFIT)
R = REWORK (AN ITEM TO BE "REWORKED" BY RETROFIT)

(30) NFB: THIS COLUMN IS USED TO STOP FEED DOWN TO LOWER INDENTURED DRAWINGS GENERATED BY THE TC’s ‘A’, ‘D’ AND ‘L’.

(31) BLOCKS AS INDICATED: SIGNATURES OF APPROVAL, CHECK, AND PREPARATION. SIGNATURES ON SHEET 1 OF A MULTIPLE SHEET DOCUMENT INDICATE APPROVAL AND CHECK OF ALL SHEETS.

(32) RELEASE DATE: THE DATE OF INITIAL RELEASE OF THE DOCUMENT.

(33) CN SER NO: IDENTIFICATION NUMBER OF THE ENGINEERING CHANGE NOTICE.

(34) RCN: A NUMBER ENTERED IN THIS COLUMN INDICATES THE RELEASE CONTROL NUMBER APPLICABLE TO THE LINE ENTRY. A DASH (-) INDICATES ALL RELEASE CONTROL NUMBERS LISTED ARE APPLICABLE TO THE LINE ENTRY.

(35) CAGE CODE: THE FEDERAL SUPPLY CODE FOR MANUFACTURER'S (FSCM) NUMBER APPLICABLE TO THE ENTRY IN THE PART NUMBER COLUMN. ENTRIES AS REQUIRED BY MIL-STD-100, MILITARY STANDARD ENGINEERING DRAWING PRACTICES.

(36) COPY TV/SHIP OR COPY #ECP: THIS COLUMN INDICATES THE TYPE/VERSION AIRCRAFT OR ECP NUMBER THAT IS BEING USED TO DIRECT THE FEED DOWN TO LOWER INDENTURE DRAWINGS

(37) UM: UNIT OF MEASURE, ENTRIES IN THIS COLUMN ARE USED TO INDICATE BULK MATERIALS.

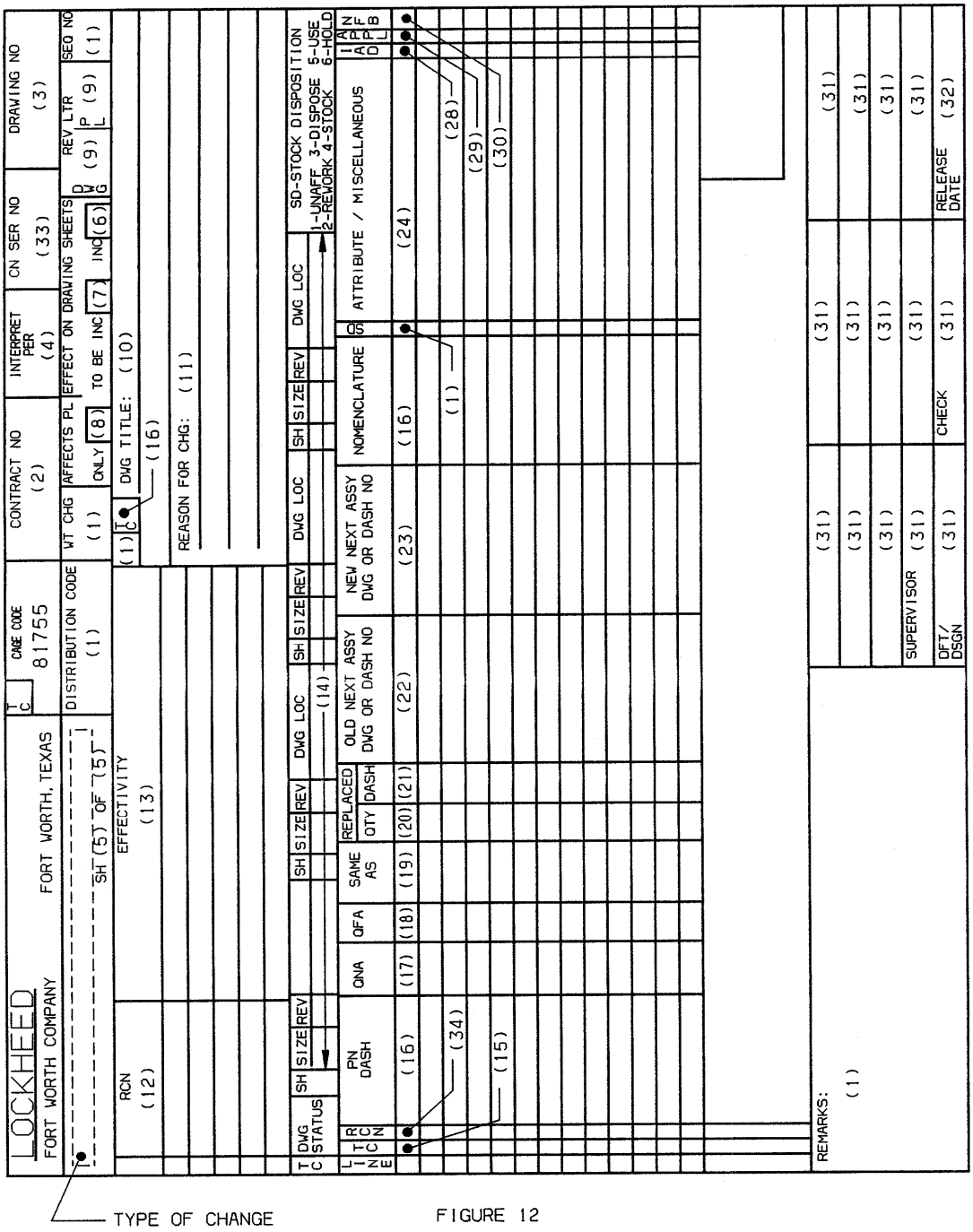


FIGURE 12

CONTRACT NO. F33657-75-C-0310	SIZE A	CAGE CODE 81755	16Z001
	SCALE	REVISION AK	SHEET 47

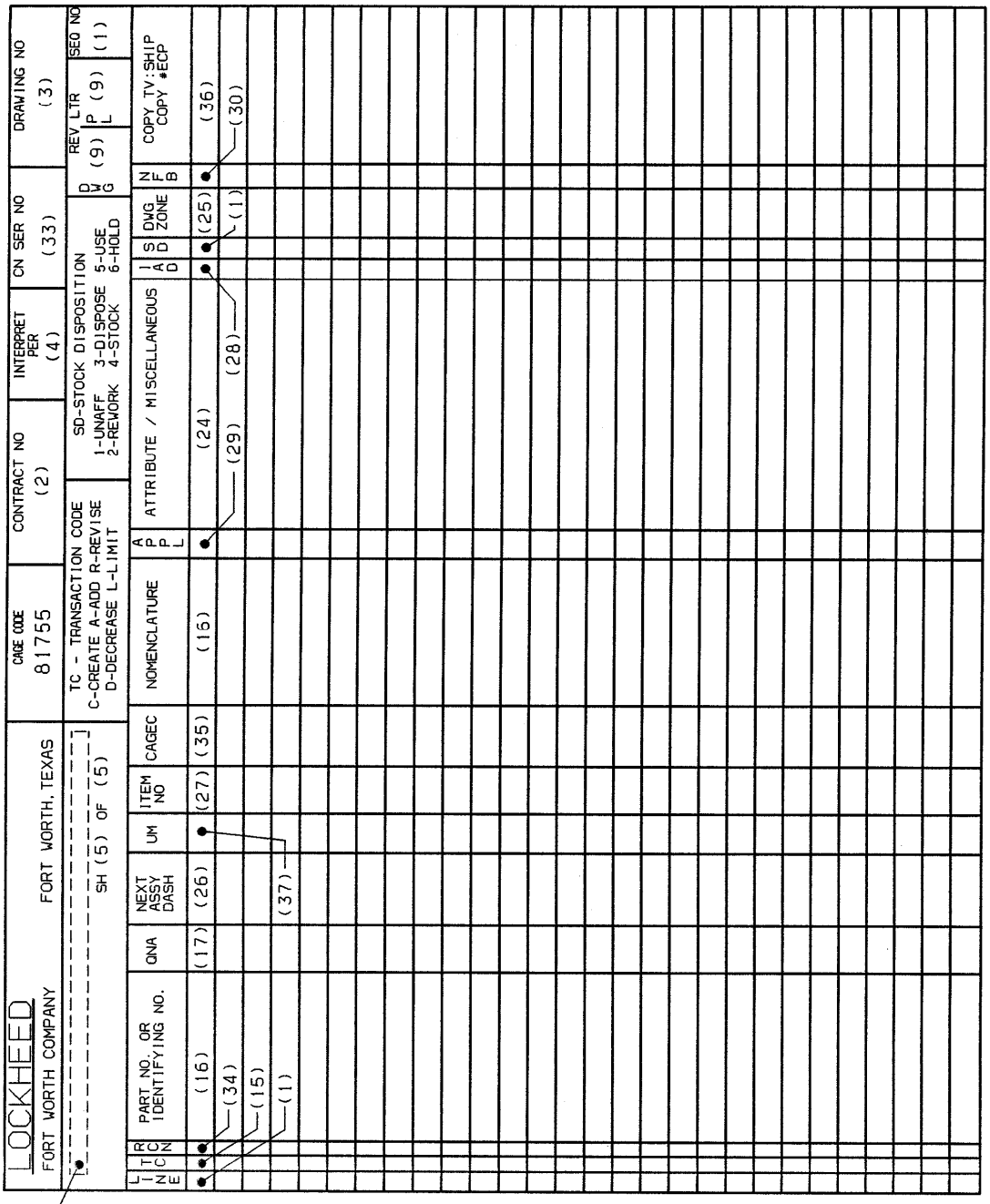


FIGURE 13

	SIZE A	CAGE CODE 81755
CONTRACT NO. F33657-75-C-0310	SCALE	REVISION AK

16Z001

SHEET 48

3.4.6 ROUTING LIST (RL) - DRAWING TYPES "E" AND "T"

THE ROUTING LIST IS COMPRISED OF TWO BASIC SECTIONS; THE "PARTS LIST" AND THE "ROUTING LIST". "PARTS LIST NOTES", A REFERENCE DOCUMENT LIST" AND THE "ROUTING LIST REVISION" HISTORY ARE ALSO INCLUDED UNDER SEPARATE HEADINGS.

THE "PARTS LIST" IS A TABULATION OF THE PARTS AND BULK MATERIALS REQUIRED TO FABRICATE THE WIRING HARNESS OR CABLE ASSEMBLY. THE "ROUTING LIST" DEFINES THE WIRE TYPE, POINT TO POINT ROUTING AND END CONNECTIONS FOR EACH INDIVIDUAL WIRE WITHIN THE HARNESS OR CABLE.

REFER TO FIGURE 14 FOR LOCATION OF FORMAT DATA FIELDS.

(1) BLOCKS AND COLUMNS AS INDICATED: ARE FOR INHOUSE INFORMATION. NOT NECESSARY FOR INTERPRETATION OR DOCUMENT.

(2) BLOCKS AS INDICATED: NOT APPLICABLE TO ROUTING LIST COVERED BY THIS INTERPRETATION DOCUMENT.

(3) CONTRACT NUMBER: GOVERNMENT CONTRACT NUMBER FOR WHICH THE DOCUMENT WAS INITIALLY PREPARED.

(4) BLOCKS AS INDICATED: DOCUMENT IDENTIFICATION NUMBER OF THE ROUTING LIST. THIS NUMBER LESS THE "RL" PREFIX IS THE IDENTIFICATION NUMBER ASSIGNED TO THE WIRING HARNESS OR CABLE ASSEMBLY DEFINED BY THE ROUTING LIST AND, WHEN APPLICABLE, THE ASSOCIATED DRAWING.

(5) DRAWING TITLE: TITLE OF THE WIRING HARNESS OR CABLE ASSEMBLY.

(6) RL ISSUE NO: A NUMBER ASSIGNED IN NUMERICAL SEQUENCE FOR EACH ISSUE OF THE ROUTING LIST. REVISION LETTERS ARE ALSO ASSIGNED WHEN REQUIRED BY MIL-STD-100. MILITARY STANDARD ENGINEERING DRAWING PRACTICES.

(7) DWG TYPE: A CODE LETTER INDICATING THE DRAWING TYPE. APPLICABLE CODE LETTERS ARE DEFINED AS FOLLOWS.

E = WIRING HARNESS
T = CABLE ASSEMBLY

(8) SHEET OF : SHEET NUMBER AND TOTAL NUMBER OF SHEETS OF THE DOCUMENT.

(9) RELEASE DATE: THE DATE OF THE INITIAL RELEASE OF THE DOCUMENT.

(10) ISSUE DATE: DATE OF THE RL ISSUE NO. SEE ITEM (6).

(11) ADDED OR REVISED THIS ISSUE: ASTERISKS ARE USED WITHIN BLOCKS AND COLUMNS DESIGNATED BY 1 WITH A CIRCLE AROUND IT TO INDICATE ENTRIES WHICH WERE AFFECTED BY THE CURRENT ISSUE. ISSUE NUMBERS ARE USED IN LIEU OF ASTERISKS TO INDICATE CHANGES MADE PRIOR TO THE CURRENT ISSUE.

(12) INTERPRETATION PER: REFERENCE TO THIS FORMAT INTERPRETATION DOCUMENT.

(13) MFG PER: AN ENGINEERING DOCUMENT TO BE USED IN CONJUNCTION WITH THE ROUTING LIST FOR FABRICATION PURPOSES WHEN APPLICABLE.

(14) REV LETTER: THE CURRENT REVISION LETTER OF THE ROUTING LIST.

(15) QTY PER ASSY: THE QUANTITY OF THE ITEM LISTED IN THE PART NUMBER COLUMN REQUIRED TO FABRICATE ONE HARNESS OR CABLE ASSEMBLY. QUANTITY ENTRIES ARE INTERPRETED AS FOLLOWS: NUMBER REQUIRED FOR PARTS; THE LENGTH IN INCHES FOR WIRE AND CABLE; "AR", (AS REQUIRED) FOR BULK MATERIALS; "REF" WHEN THE LINE ENTRY IS FOR THE PURPOSE OF ESTABLISHING A HDW CODE ONLY; "DOC" FOR REFERENCED DOCUMENTS; A DASH (-) INDICATES THE SECOND AND SUBSEQUENT CONDUCTORS OF A MULTI-CONDUCTOR OR SHIELDED CABLE (FOR WHICH A LENGTH HAS BEEN SPECIFIED BY ANOTHER LINE ENTRY) AND "PIGTAILS" SUPPLIED WITH COMPONENTS.

(16) CAGE CODE: THE FEDERAL SUPPLY CODE FOR MANUFACTURER'S (FSCM) NUMBER APPLICABLE TO THE ENTRY IN THE PART NUMBER COLUMN. ENTRIES AS REQUIRED BY MIL-STD-100, MILITARY STANDARD ENGINEERING DRAWING PRACTICES.

(17) PART NUMBER: IN THE PARTS LIST. THE PART NUMBER OF ALL REQUIRED HARDWARE ITEMS. ALSO, REFERENCED EQUIPMENT PART NUMBERS AND SPLICE AREA DESIGNATIONS WHEN REQUIRED TO ESTABLISH A HWD CODE FOR WIRE ROUTING PURPOSES. SEE ITEM (20) SEPARATE

ENTRIES FOR IDENTICAL ITEMS ARE SHOWN FOR WIRE ROUTING PURPOSES. IN THE ROUTING LIST, THE WIRE NUMBERS OR CABLE NUMBERS ASSIGNED BY THE RELATED WIRING DIAGRAM. THE SHIELD OF SHIELDED WIRE AND CABLE IS IDENTIFIED BY THE SUFFIX "-SH" ADDED TO THE BASIC WIRE NUMBER OF THE CONDUCTOR(S) WITHIN THE SHIELD. FOR TRIAXIAL CABLE, THE SUFFIX "-SHA" IDENTIFIES THE INNER SHIELD AND "-SHB" IDENTIFIES THE OUTER SHIELD. PIGTAILS OF HARDWARE ITEMS ARE IDENTIFIED BY THE PHYSICAL IDENTIFICATION OF THE PIGTAIL.

(18) NOMENCLATURE: THE NAME OF THE ITEM ENTERED IN THE PART NUMBER COLUMN. PARENTHETICAL ENTRIES, WHEN SHOWN IN CONJUNCTION WITH A WIRE OR CABLE NUMBER, IDENTIFY THE WIRING DIAGRAM DRAWING NUMBER ON WHICH THE WIRE OR CABLE IS SHOWN. FOR A SPLICE, THE NOMENCLATURE IS THE SPLICE LOCATION.

(19) HDW CODE: IN THE PARTS LIST, THE REFERENCE DESIGNATION OR HARDWARE CODE NUMBER ASSIGNED TO THE ITEM IDENTIFIED IN THE PART NUMBER COLUMN.

ENTRIES IN THIS COLUMN ARE USED TO IDENTIFY PARTS IN THE ROUTING LIST AND IN OTHER COLUMNS OF THE PARTS LIST.

IN THE ROUTING LIST, A CODE LETTER, AND NUMBER WHEN APPLICABLE, IDENTIFYING THE TYPE OF WIRE ENTERED IN THE PART NUMBER COLUMN. CODES AND DEFINITIONS ARE AS FOLLOWS:

W = PLAIN WIRE

PIGTAILS FURNISHED AS PART OF A HARDWARE ITEM ARE IDENTIFIED BY THE CODE LETTER "W" SUFFIXED WITH THE HARDWARE CODE ASSIGNED TO THE HARDWARE ITEM.

C = COAXIAL AND TRIAXIAL CABLE: THE CONDUCTORS WITHIN A CABLE ARE DESIGNATED BY A COMMON SUFFIX NUMBER.

S = SHIELDED WIRE: ALL WIRES WITHIN THE SHIELD AS WELL AS THE SHIELD REFLECT THE SAME SUFFIX NUMBER.

T = TWISTED WIRE: ALL WIRES WITHIN A GROUP OF TWISTED WIRES ARE DESIGNATED BY A COMMON SUFFIX NUMBER.

TC = THERMOCOUPLE

R = RESISTORS USED AS WIRES: A SUFFIX NUMBER IS ASSIGNED TO DISTINGUISH BETWEEN VARIOUS RESISTORS.

(20) ROUTING FROM - POINT: (APPLICABLE TO THE ROUTING LIST ONLY.) THE REFERENCE DESIGNATION OR HARDWARE CODE OF THE ITEM TO WHICH THE WIRE OR CABLE SHOWN IN THE PART NUMBER COLUMN IS ROUTED.

(21) ROUTING FROM - PIN IDENT: IN THE ROUTING LIST ONLY, THE IDENTIFICATION NUMBER OR LETTER OF THE PIN, POST, OR TERMINAL ON THE SPECIFIED ITEM OF HARDWARE, ITEM (21), TO WHICH THE WIRE OR CABLE SHOWN IN THE PART NUMBER COLUMN IS CONNECTED. IF THIS COLUMN IS BLANK, NO IDENTIFICATION NUMBER OR LETTER EXISTS. LOWER CASE LETTERS ARE INDICATED BY UPPER CASE LETTERS ENCLOSED IN PARENTHESIS. WHEN THE ITEM SPECIFIED IN THE ROUTING FROM-POINT COLUMN, ITEM (21), IS A SPLICE USED TO TERMINATE A SHIELD, THE WIRE NO. OF THE SHIELD IS SHOWN IN THIS COLUMN IN THE PARTS LIST ONLY. THE ROUTING FROM PIN IDENT AND HDW CODE COLUMNS ARE USED TO INDICATE REQUIREMENTS, BY HARDWARE CODE NUMBER, FOR SUCH ITEMS AS BOOTS, CONNECTOR ADAPTERS, TUBING, ETC., WHICH ARE REQUIRED FOR END CONNECTION AT THE POINT SPECIFIED IN THE HDW CODE COLUMN IN ADDITION TO THE REGULAR TERMINATION HARDWARE SPECIFIED IN THE ROUTING LIST.

(22) ROUTING FROM - HDW CODE: (APPLICABLE TO ROUTING LIST ONLY.) THE HARDWARE CODE IDENTIFYING THE ITEM OF HARDWARE TO BE USED TO ACCOMPLISH THE CONNECTION OF THE WIRE OR CABLE TO THE POINT AND PIN SPECIFIED IN THE POINT, ITEM (21), AND PIN IDENT, ITEM (22), COLUMNS. A NOTATION SUCH AS "PIN", "SOC", ETC., INDICATES THAT THE TERMINATING HARDWARE IS FURNISHED AS PART OF THE ASSEMBLY AT THE POINT OF TERMINATION, ITEM (21). THE WORD "STRIP" INDICATES THAT NO HARDWARE IS REQUIRED FOR THE CONNECTION. IF ADDITIONAL CONNECTIONS ARE REQUIRED BEFORE THE HARDWARE IS INSTALLED, THIS COLUMN WILL BE BLANK. THE HARDWARE CODE FOR SUCH ITEMS WILL BE SHOWN ON THE WIRE WHICH MAKES THE ADDITIONAL CONNECTION. A LETTER SUFFIX ADDED TO THE HARDWARE CODE DENOTES THAT ALL WIRES TERMINATED AT THE SAME POINT, ITEM (21). AND IDENTIFIED WITH THE SAME HARDWARE CODE AND SUFFIX LETTER ARE TO BE TERMINATED TOGETHER. IN CASES

WHERE SEVERAL WIRES TERMINATE IN A COMMON SPLICE. THE HARDWARE CODE OF BOTH THE SPLICE AND THE PIN OR NUMBER OF WIRES IN THE SPLICE SEPARATED BY A LETTER IDENTIFYING THE SPLICE WILL BE INDICATED. IN CASES WHERE MORE THAN ONE ITEM OF HARDWARE IS REQUIRED FOR THE WIRE TERMINATION, THE HARDWARE CODE OF EACH ITEM, SEPARATED BY A DASH, WILL BE INDICATED.

(23) ROUTING TO - POINT/PIN IDENT/HDW CODE: THESE COLUMNS SPECIFY THE SAME TYPE OF INFORMATION AS THE RESPECTIVE COLUMNS FOR ROUTING FROM, ITEMS (21), (22) AND (23), EXCEPT CONNECTIONS ARE FOR THE OPPOSITE END OF THE WIRE OR CABLE.

(24) SPECIFICATION/GAGE: THE PARTS LIST, THE COMPLETE REFERENCE DESIGNATION FOR THE ITEM MAY BE SHOWN, WHEN APPLICABLE (OPTIONAL ENTRY).

IN THE ROUTING LIST, THIS COLUMN DEFINES THE MATERIAL SPECIFICATION FOR THE WIRE OR CABLE SHOWN IN THE PART NUMBER COLUMN. SUFFIXES NOT DEFINED BY THE MATERIAL SPECIFICATION DESIGNATE THE FOLLOWING:

NUMERICAL = WIRE GAGE
CX = COAXIAL CABLE
TX = TRIAXIAL CABLE
SH = SHIELD

(25) NOTE: IDENTIFIES RL NOTES APPLICABLE TO THE LINE ENTRY. ADDITIONAL NOTES, WHEN APPLICABLE, ARE REFERENCED IN THE NOTE(S) INDICATED IN THIS COLUMN.

(26) RFI CODE: THE RADIO FREQUENCY INTERFERENCE CODE WHEN APPLICABLE.

(27) ROUTING LIST REVISION: PERMANENT RECORD OF ALL CHANGES TO THE ROUTING LIST.

(28) PARTS LIST NOTES: GENERAL NOTES REGARDING PROCUREMENT, FABRICATION, ALTERNATE PARTS, ETC.

(29) REFERENCE DOCUMENT LIST: A LIST OF REQUIRED DOCUMENTS, EXCLUDING DOCUMENTS IDENTIFIED BY FORMAT BLOCK AND COLUMN HEADINGS.

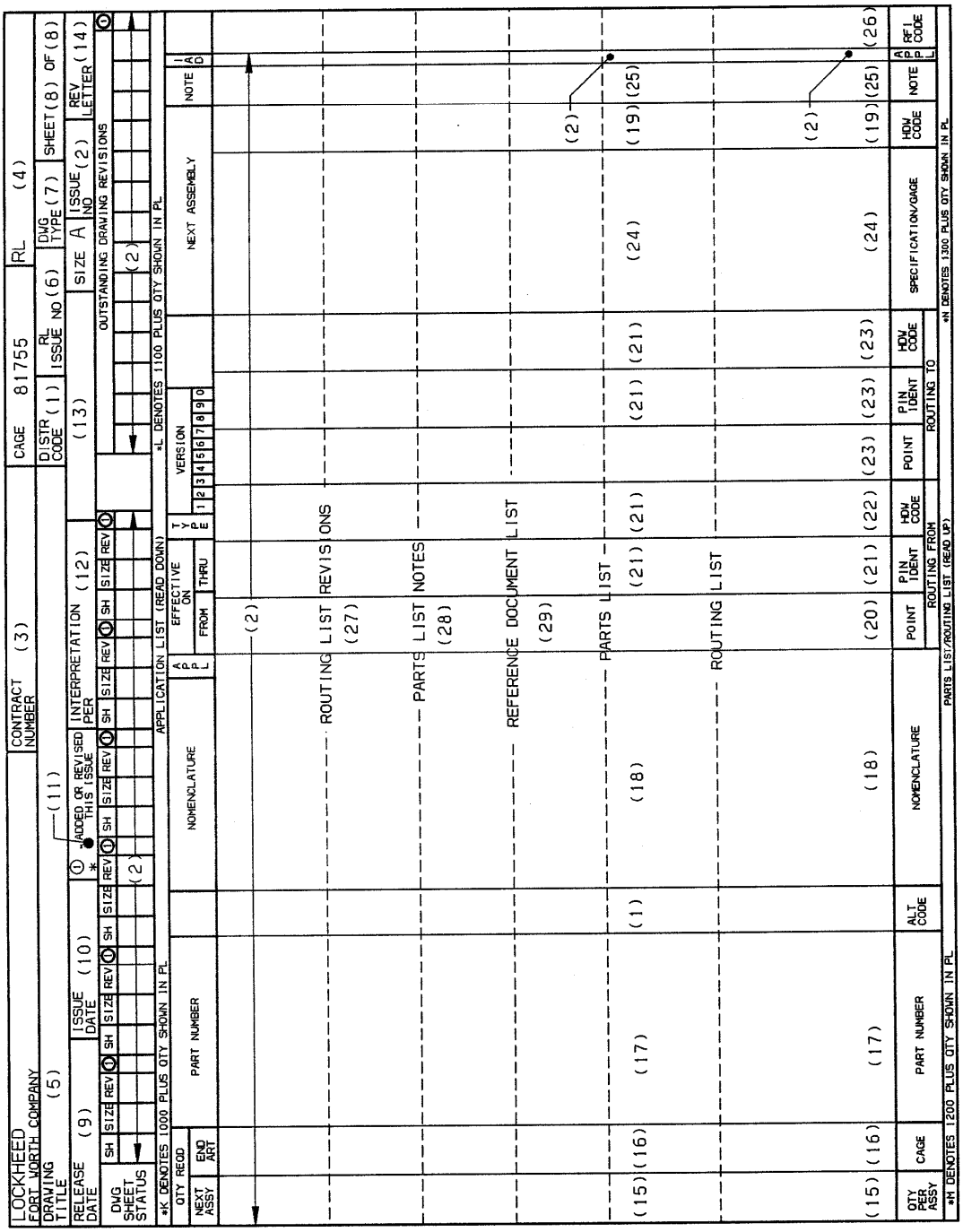


FIGURE 14

	SIZE A	CAGE CODE 81755	16Z001
CONTRACT NO. F33657-75-C-0310	SCALE	REVISION AK	SHEET 54

3.4.7 ENGINEERING CHANGE NOTICE (ECN) FOR THE ROUTING LIST (RL) - DRAWING TYPES "E" AND "T":

AN ENGINEERING CHANGE NOTICE (ECN) IS USED TO INITIATE AND RECORD CHANGES TO RELEASED ROUTING LISTS AND TO CREATE NEW ROUTING LISTS.

REFER TO FIGURE 15 FOR LOCATION OF FORMAT DATA FIELDS.

(1) BLOCKS AND COLUMNS AS INDICATED: ARE FOR INHOUSE INFORMATION. NOT NECESSARY FOR INTERPRETATION OF DOCUMENTS.

(2) CONTRACT NO: GOVERNMENT CONTRACT NUMBER FOR WHICH THE DOCUMENT WAS PREPARED.

(3) DRAWING NO: IDENTIFICATION NUMBER(S), LESS THE "RL" PREFIX, OF THE ROUTING LIST(S) AND ASSOCIATED DRAWING(S) AGAINST WHICH THE ECN IS WRITTEN.

(4) ECN SER NO: IDENTIFICATION NUMBER OF THE ENGINEERING CHANGE NOTICE.

(5) SHEET OF : SHEET NUMBER AND THE TOTAL NUMBER OF SHEETS OF THE DOCUMENT. THE TOTAL NUMBER OF SHEETS IS INDICATED ON SHEET ONE ONLY.

(6) REV LTR - DWG: THE DRAWING REVISION LETTER ASSIGNED TO THE DRAWING CHANGE DESCRIBED BY THE ECN. AN "X" INDICATES A NEW DASH NUMBERED HARNESS.

(7) REV LTR - RL: AN "X" INDICATES A NEW DASH NUMBERED HARNESS. A LETTER OTHER THAN AN "X" INDICATES THE REVISION LETTER OF THE ROUTING LIST ASSIGNED TO THE CHANGE DESCRIBED BY THE ECN.

(8) DWG TITLE: ENTRY REQUIRED ONLY WHEN THE TITLE IS TO BE REVISED IN WHICH CASE THE REVISED TITLE IS ENTERED IN THIS BLOCK.

(9) REASON FOR CHANGE: A BRIEF STATEMENT AS TO WHY THE CHANGE WAS MADE.

(10) RELEASE CONTROL NO: AN INTERNAL DOCUMENT NUMBER BY WHICH THE EFFECTIVITY OF THE CHANGE IS ESTABLISHED. THE ACTUAL EFFECTIVITY IS INDICATED ON THE APPLICATION LIST FOR THE AFFECTED HARNESS. SEE PARAGRAPH 3.4.1 ITEMS (17) AND (18). "RECORD CHANGE" INDICATES THAT THE CHANGE IS NOT OF A DESIGN NATURE.

(11) EFFECTIVITY: INDICATES TYPE VERSION (SEE PARA. 3.4.1 ITEM 18), AND EFFECTIVITY OF THE RELEASE CONTROL NUMBER, ITEM (10), WHEN A SEPARATE RELEASE CONTROL DOCUMENT IS NOT USED.

(12) DISTR: A LETTER IN THIS COLUMN INDICATES THAT A SEPARATE RELEASE CONTROL DOCUMENT IS NOT USED. A DASH IN THIS COLUMN INDICATES THAT A SEPARATE RELEASE CONTROL DOCUMENT IS USED.

(13) TC: TRANSACTION CODE DEFINED AS FOLLOWS:

C = CREATE (NEW ITEM)
A = ADD (NEW OR ADDITIONAL REQUIREMENTS FOR AN EXISTING ITEM)
D = DECREASE (REDUCTION IN REQUIREMENTS)
L = LIMIT (DELETION OF ALL REQUIREMENTS)
R = REVISE (REVISION WITHIN AN EXISTING LINE ENTRY)

(14) RCN: NUMBER ENTERED IN THIS COLUMN INDICATES THE RELEASE CONTROL NUMBER APPLICABLE TO THE LINE ENTRY. A DASH (-) INDICATES ALL RELEASE CONTROL NUMBERS LISTED ARE APPLICABLE TO THE LINE ENTRY.

(15) PART NUMBER: THE DASH NUMBER ASSIGNED TO THE BASIC ROUTING LIST NUMBER TO IDENTIFY A SPECIFIC WIRING HARNESS OR CABLE ASSEMBLY.

(16) QTY REQD - NEXT ASSY/END ART: THE QUANTITY OF THE NOTED DASH NUMBER HARNESS REQUIRED TO COMPLETE ONE NEXT ASSEMBLY, AND THE TOTAL NUMBER REQUIRED FOR ONE END ARTICLE, RESPECTIVELY.

(17) SAME AS: THE DASH NUMBER OF AN EXISTING ITEM WHEN A NEW DASH NUMBERED ITEM IS CREATED SIMILAR TO THE EXISTING ITEM.

(18) REPLACED - QTY: THE QUANTITY PER ASSEMBLY OF THE REPLACED ITEM. SEE ITEM (19).

(19) REPLACED - DASH: THE DASH NUMBER OF THE REPLACED ITEM.

(20) OLD NEXT ASSEMBLY: NEXT ASSEMBLY DRAWING NUMBER OF THE ITEM BEING REPLACED WHEN APPLICABLE.

(21) NEW NEXT ASSEMBLY:NEW NEXT ASSEMBLY: NEXT ASSEMBLY DRAWING NUMBER OF THE ITEM LISTED IN THE "PART NUMBER" COLUMN, ITEM (15).

(22) NOMENCLATURE: "WIRING HARNESS" OR "CABLE ASSEMBLY" AS APPLICABLE TO THE ITEM LISTED IN THE PART NUMBER COLUMN.

(23) COLUMNS AS INDICATED: ENTRIES CORRESPOND TO ROUTING LIST INTERPRETATIONS FOR THE IDENTICAL COLUMN. SEE PARA. 3.4.5.

(24) PART NUMBER - WIRE NUMBER: THE IDENTIFICATION NUMBER OF THE PART, WIRE OR DOCUMENT AFFECTED BY THE CHANGE. SEE PARA. 3.4.5 ITEM (16) FOR DEFINITION OF ENTRIES.

(25) QTY PER ASSY: THE INCREASE OR DECREASE IN QUANTITY PER NEXT ASSEMBLY DASH NUMBER. SEE PARA 3.4.5 ITEM (16) FOR DEFINITION OF ENTRIES.

(26) NEXT ASSY DASH: A DASH NUMBER INDICATING THE APPLICABLE NEXT ASSEMBLY FOR THE ITEM ENTERED IN THE "PART NUMBER" COLUMN, ITEM (24). A DASH (-) IN THIS COLUMN INDICATES AN APPLICABLE NEXT ASSEMBLY REQUIREMENT FOR EACH DASH NUMBER LISTED IN THE DRAWING NUMBER BLOCK. ITEM (3).

(27) RELEASE DATE: THE DATE OF INITIAL RELEASE OF THE DOCUMENT.

(28) BLOCKS AS INDICATED: SIGNATURES OF APPROVAL, CHECK, AND PREPARATION. SIGNATURES ON SHEET 1 OF A MULTIPLE SHEET DOCUMENT INDICATE APPROVAL AND CHECK OF ALL SHEETS.

(29) EFFECT ON DRAWING SHEETS - INC: AN "X" INDICATES THAT THE CHANGE DESCRIBED ON THE ENGINEERING CHANGE NOTICE HAS BEEN INCORPORATED ON THE AFFECTED DRAWING PRIOR TO RELEASE OF THE ECN.

(30) EFFECT ON DRAWING SHEETS - TO BE INC: AN "X" INDICATES THAT THE CHANGE DESCRIBED ON THE ENGINEERING CHANGE NOTICE HAS NOT BEEN

INCORPORATED ON THE AFFECTED DRAWING PRIOR TO RELEASE OF THE ECN.

(31) AFFECTS PL ONLY: AN "X" INDICATES THAT THE CHANGE DESCRIBED ON THE ENGINEERING CHANGE NOTICE DOES NOT AFFECT THE ASSOCIATED DRAWING.

(32) DWG SH STATUS - SH/SIZE/REV: INDICATES THE DRAWING SHEETS AFFECTED BY THE INCORPORATION OF THE CHANGE(S) AND THE REVISION LETTER APPLICABLE TO EACH AFFECTED SHEET.

(33) WT CHG: POUNDS INCREASED OR DECREASED AS A RESULT OF THE CHANGE. A CHECK MARK INDICATES "NONE" OR "NEGLIGIBLE".

(34) INTERPRETATION DOCUMENT: REFERENCE TO THIS FORMAT INTERPRETATION DOCUMENT.

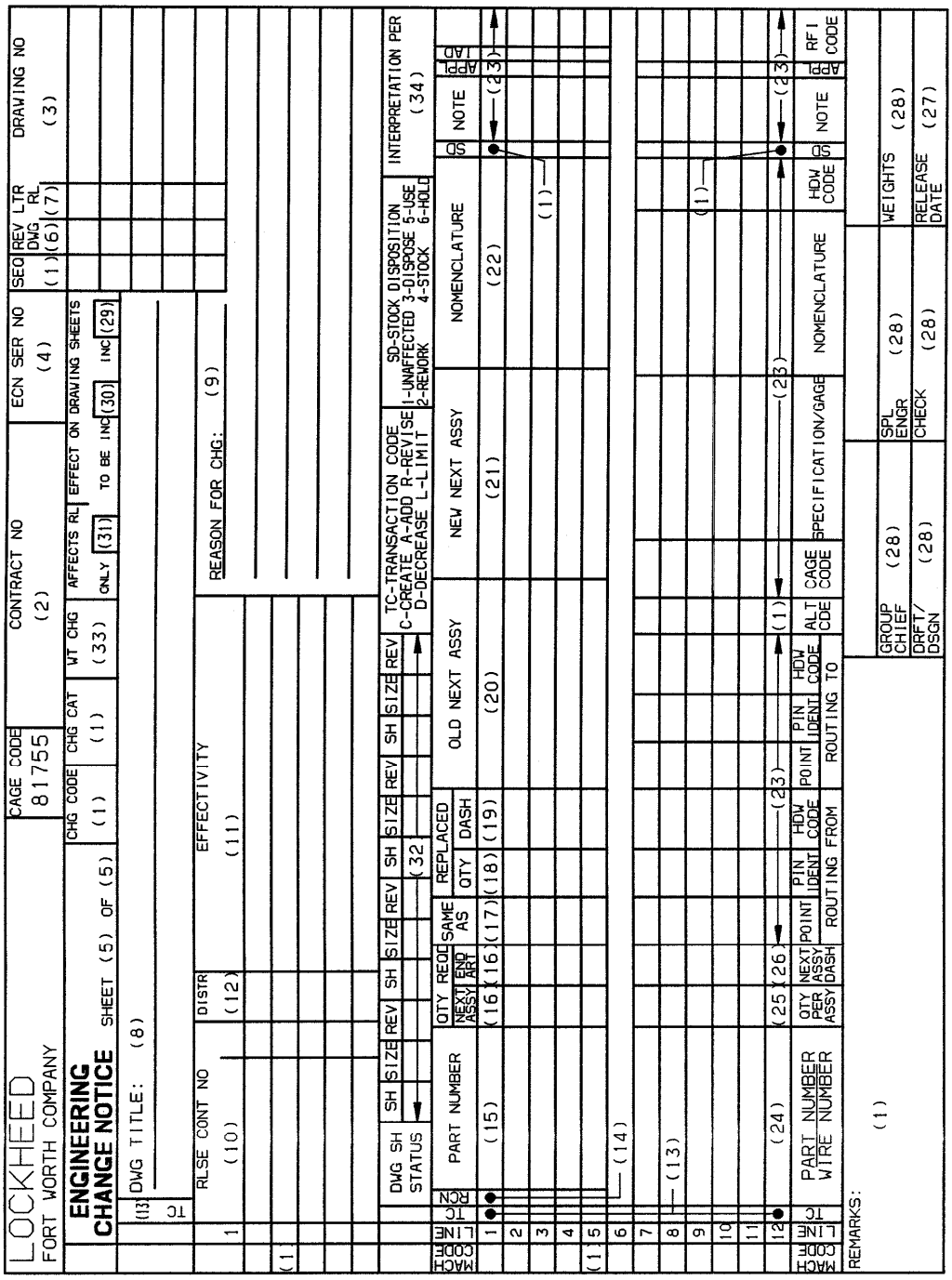


FIGURE 15

CONTRACT NO. F33657-75-C-0310	SIZE A	CAGE CODE 81755	16Z001
	SCALE	REVISION AK	SHEET 59

3.4.8 REFERENCE DESIGNATION LIST (RDL) - DRAWING TYPES "D", "G" AND "J":

THE REFERENCE DESIGNATION LIST (RDL) IS A TABULATION OF REFERENCE DESIGNATIONS ASSIGNED ON THE ASSOCIATED DIAGRAM OR DIAGRAM SCHEMATIC. THE RDL ALSO RELATES THE REFERENCE DESIGNATION TO THE PART TO WHICH IT IS ASSIGNED AND IDENTIFIES THE USING DRAWING WHICH ESTABLISHES THE ACTUAL REQUIREMENT FOR THE PART.

REFER TO FIGURE 16 FOR LOCATION OF FORMAT DATA FIELDS.

(1) BLOCKS AND COLUMNS AS INDICATED: ARE FOR INHOUSE INFORMATION. NOT NECESSARY FOR INTERPRETATION OF DOCUMENTS.

(2) BLOCKS AS INDICATED: NOT APPLICABLE TO REFERENCE DESIGNATION LIST COVERED BY THIS DOCUMENT.

(3) CONTRACT NO: GOVERNMENT CONTRACT NUMBER FOR WHICH THE DOCUMENT WAS INITIALLY PREPARED.

(4) DRAWING NO: IDENTIFICATION NUMBER OF THE REFERENCE DESIGNATION LIST. THIS NUMBER LESS THE "RDL" PREFIX IS THE SAME AS THE NUMBER OF THE ASSOCIATED DRAWING.

(5) DRAWING TITLE: TITLE OF THE ASSOCIATED DIAGRAM OR DIAGRAM SCHEMATIC.

(6) SHEET OF : SHEET NUMBER AND THE TOTAL NUMBER OF SHEETS OF THE DOCUMENT.

(7) RELEASE DATE: THE DATE OF THE INITIAL RELEASE OF THE DOCUMENT.

(8) ISSUE DATE: DATE OF THE ISSUE. SEE ITEM (10).

(9) ADDED OR REVISED THIS ISSUE: ASTERISKS ARE USED WITHIN BLOCKS AND COLUMNS DESIGNATED BY 1 WITH A CIRCLE AROUND IT TO INDICATE ENTRIES WHICH WERE AFFECTED BY THE CURRENT ISSUE. ISSUE NUMBERS ARE USED IN LIEU OF ASTERISKS TO INDICATE CHANGES MADE PRIOR TO THE CURRENT ISSUE.

(10) RDL ISSUE NO: A NUMBER ASSIGNED IN NUMERICAL SEQUENCE FOR EACH ISSUE OF THE REFERENCE DESIGNATION LIST. REVISION LETTERS ARE ALSO ASSIGNED WHEN REQUIRED BY MIL-STD-100, MILITARY

STANDARD ENGINEERING DRAWING PRACTICES. SEE ITEM (11).

(11) REV LETTER: THE REVISION LETTER OF THE CURRENT ISSUE OF THE RDL.

(12) ISSUE NO 1 WITH CIRCLE AROUND IT: SEE ITEM (9).

(13) REFERENCE DESIGNATION LIST REVISION: PERMANENT RECORD OF ALL CHANGES TO THE RDL.

(14) REFERENCE DESIGNATION: THE REFERENCE DESIGNATION ASSIGNED ON THE ASSOCIATED DIAGRAM TO THE ITEM ENTERED IN THE PART NUMBER COLUMN.

(15) QTY PER ASSY: "DOC" ENTERED IN THIS COLUMN INDICATES THAT ITEM ENTERED IN THE PART NUMBER COLUMN IS A DOCUMENT IDENTIFICATION NUMBER. COLUMN HAS NO OTHER APPLICATION ON THE REFERENCE DESIGNATION LIST.

(16) PART NUMBER: THE PART NUMBER OF THE ITEM TO WHICH THE REFERENCE DESIGNATION HAS BEEN ASSIGNED ON THE ASSOCIATED DIAGRAM SCHEMATIC.

(17) NOMENCLATURE: THE NAME OF THE ITEM ENTERED IN THE PART NUMBER COLUMN.

(18) USING DRAWING: THE NUMBER OF THE DRAWING THAT ESTABLISHES THE REQUIREMENTS FOR THE ITEM ENTERED IN THE PART NUMBER COLUMN.

(19) NOTE: LETTERS INDICATE REFERENCE TO REFERENCE DESIGNATION LIST NOTES. NUMBERS INDICATE REFERENCE TO DRAWING NOTES. ADDITIONAL NOTES, WHEN APPLICABLE, ARE REFERENCED IN THE NOTES INDICATED IN THIS COLUMN.

(20) CAGE CODE: THE FEDERAL SUPPLY CODE FOR MANUFACTURER'S (FSCM) NUMBER APPLICABLE TO THE ENTRY IN THE PART NUMBER COLUMN. ENTRIES AS REQUIRED BY MIL-STD-100. MILITARY STANDARD ENGINEERING DRAWING PRACTICES.

(21) DWG TYPE: A CODE LETTER INDICATING DRAWING TYPE. APPLICABLE CODE LETTERS ARE DEFINED AS FOLLOWS:

D - WIRING DIAGRAM
G - WIRING SCHEMATIC
J - CABLING DIAGRAM

(22) NOTES: GENERAL NOTES APPLICABLE TO THE REFERENCE DESIGNATION LIST.

(23) INTERPRETATION PER: REFERENCE TO THIS FORMAT INTERPRETATION DOCUMENT.

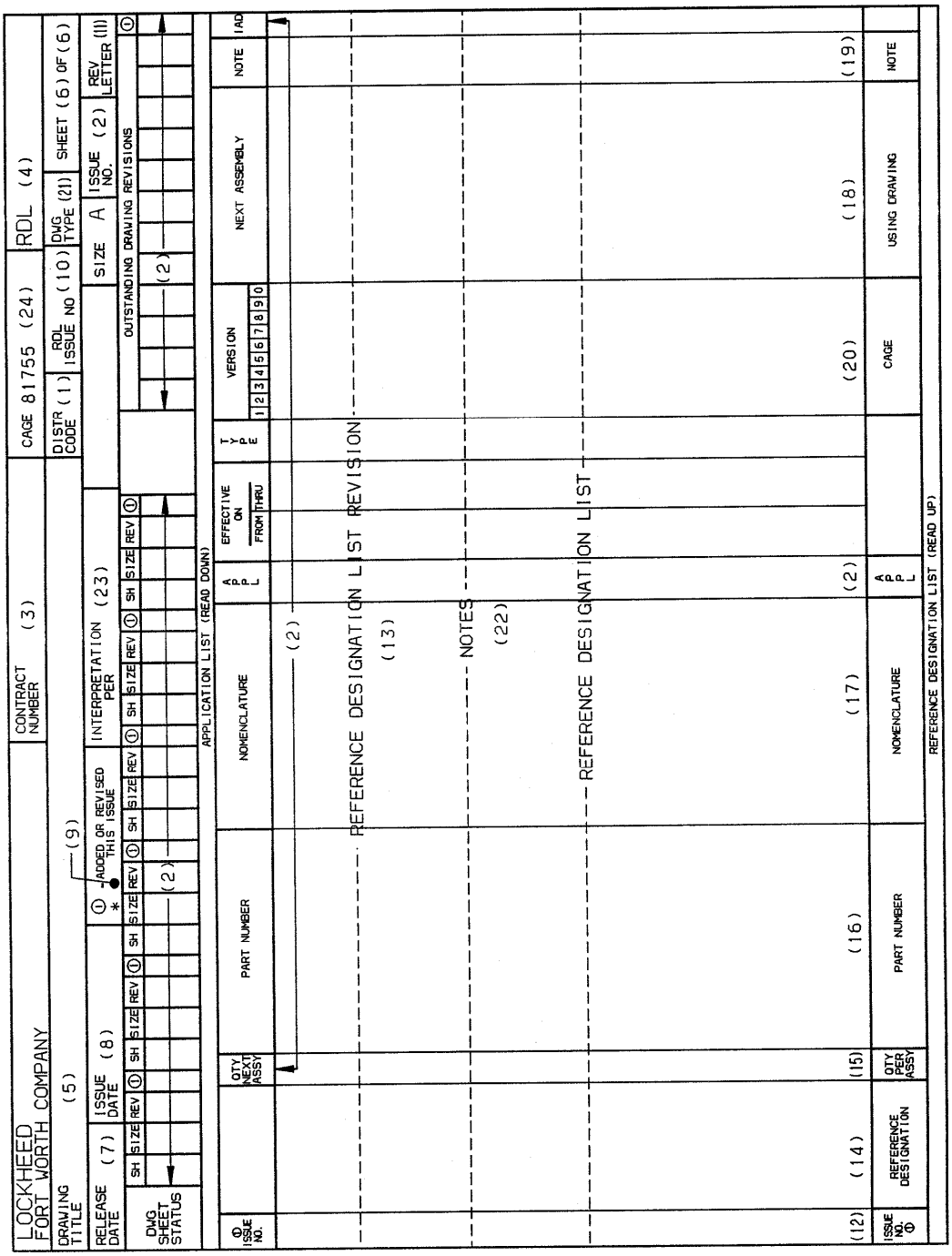


FIGURE 16

	SIZE	CAGE CODE	
	A	81755	16Z001
CONTRACT NO. F33657-75-C-0310	SCALE	REVISION AK	SHEET 63

3.4.9 ENGINEERING CHANGE NOTICE (ECN) FOR THE REFERENCE DESIGNATION LIST (RDL) - DRAWING TYPES "D", "G" AND "J":

AN ENGINEERING CHANGE NOTICE (ECN) IS USED TO INITIATE AND RECORD CHANGES TO RELEASED REFERENCE DESIGNATION LISTS AND TO CREATE NEW REFERENCE DESIGNATION LISTS.

REFER TO FIGURE 17 FOR LOCATION OF FORMAT DATA FIELDS.

(1) BLOCKS AND COLUMNS AS INDICATED: FOR INHOUSE USE ONLY. NOT NECESSARY FOR INTERPRETATION OF DOCUMENTS.

(2) CONTRACT NO:CONTRACT NO.: GOVERNMENT CONTRACT NUMBER FOR WHICH THE DOCUMENT WAS PREPARED.

(3) DRAWING NO: IDENTIFICATION NUMBER OF THE RDL AFFECTED BY THE CHANGE (LESS THE RDL PREFIX). FOR ECNS WHICH CREATE NEW RDLS, THIS NUMBER IS THE IDENTIFICATION NUMBER OF THE NEW RDL.

(4) INTERPRETATION PER: REFERENCE TO THIS FORMAT INTERPRETATION DOCUMENT.

(5) SHEET OF : SHEET NUMBER AND THE TOTAL NUMBER OF SHEETS OF THE DOCUMENT. THE TOTAL NUMBER OF SHEETS IS INDICATED ON SHEET ONE ONLY.

(6) EFFECT ON DRAWING SHEETS - INC: AN "X" INDICATES THAT THE CHANGE DESCRIBED ON THE ENGINEERING CHANGE NOTICE HAS BEEN INCORPORATED ON THE AFFECTED DIAGRAM/SCHEMATIC PRIOR TO RELEASE OF THE ECN.

(7) EFFECT ON DRAWING SHEETS - TO BE INC: AN "X" INDICATES THAT THE CHANGE DESCRIBED ON THE ENGINEERING CHANGE NOTICE HAS NOT BEEN INCORPORATED ON THE AFFECTED DIAGRAM/SCHEMATIC PRIOR TO RELEASE OF THE ECN.

(8) AFFECTS RDL ONLY: AN "X" INDICATES THAT THE CHANGE DESCRIBED ON THE ENGINEERING CHANGE NOTICE DOES NOT AFFECT THE ASSOCIATED DRAWING.

(9) REV LTR - DWG/RDL: THE APPLICABLE DIAGRAM/SCHEMATIC AND/OR REFERENCE DESIGNATION LIST REVISION LETTER.

(10) DWG TITLE: ENTRY REQUIRED ONLY WHEN THE TITLE IS TO BE REVISED, IN WHICH CASE THE REVISED TITLE IS ENTERED IN THIS BLOCK.

(11) REASON FOR CHANGE:: A BRIEF STATEMENT AS TO WHY THE CHANGE WAS MADE.

(12) REL CONT NO: AN INTERNAL DOCUMENT NUMBER BY WHICH THE EFFECTIVITY OF THE CHANGE IS ESTABLISHED. THE ACTUAL EFFECTIVITY IS INDICATED ON THE APPLICATION LIST FOR THE AFFECTED DIAGRAM/SCHEMATIC. SEE PARAGRAPH 3.4.1 ITEMS (17) AND (18). "RECORD CHANGE" INDICATES THAT THE CHANGE IS NOT OF A DESIGN NATURE.

(13) EFFECTIVITY: INDICATES TYPE, VERSION AND EFFECTIVITY (SEE PARAGRAPH 3.4.1, ITEM 18) OF THE RELEASE CONTROL NUMBER, ITEM (12), WHEN A SEPARATE RELEASE CONTROL DOCUMENT IS NOT USED.

(14) DISTR: A LETTER IN THIS COLUMN INDICATES THAT A SEPARATE RELEASE CONTROL DOCUMENT IS NOT USED. A DASH IN THIS COLUMN INDICATES THAT A SEPARATE RELEASE CONTROL DOCUMENT IS USED.

(15) DWG SH STATUS - SH/SIZE/REV: INDICATES THE DRAWING SHEETS AFFECTED BY THE INCORPORATION OF THE CHANGES(S) AND THE REVISION LETTER APPLICABLE TO EACH AFFECTED SHEET.

(16) TC: TRANSACTION CODE DEFINED AS FOLLOWS:

- C - CREATE (NEW ITEM)
- A - ADD (NEW OR ADDITIONAL REQUIREMENT FOR AN EXISTING ITEM)
- D - DECREASE (REDUCTION IN REQUIREMENTS)
- L - LIMIT (DELETION OF ALL REQUIREMENTS)
- R - REVISE (REVISION WITHIN AN EXISTING LINE ENTRY)

(17) RCN: A NUMBER ENTERED IN THIS COLUMN INDICATES THE RELEASE CONTROL NUMBER APPLICABLE TO THE LINE ENTRY. A DASH (-) INDICATES ALL RELEASE CONTROL NUMBERS LISTED ARE APPLICABLE TO THE LINE ENTRY.

(18) DIAGRAM DASH NUMBER: THE DASH NUMBER ASSIGNED TO THE BASIC DIAGRAM/SCHEMATIC NUMBER TO IDENTIFY A SPECIFIC ITEM.

(19) NEXT ASSY QTY: "REF" INDICATES THAT THE ITEM LISTED IN THE DIAGRAM DASH NUMBER COLUMN IS NOT A HARDWARE ITEM.

(20) SAME AS: THE DASH NUMBER OF AN EXISTING ITEM WHEN A NEW DASH NUMBERED ITEM IS CREATED SIMILAR TO THE EXISTING ITEM.

(21) REPLACE - QTY: "REF" INDICATES THAT THE ITEM LISTED IN THE REPLACED DASH COLUMN IS NOT A HARDWARE ITEM.

(22) REPLACED - DASH: THE DASH NUMBER OF THE REPLACED ITEM.

(23) NEXT ASSY: THE NEXT HIGHER ASSEMBLY FOR THE RDL IDENTIFIED IN THE "DIAGRAM DASH NO." COLUMN.

(24) NOMENCLATURE: "WIRING DIAGRAM", "CABLING DIAGRAM" OR "WIRING DIAGRAM SCHEMATIC", AS APPLICABLE TO THE ITEM LISTED IN THE PART NUMBER COLUMN.

(25) NOTE: LETTERS INDICATE REFERENCE TO REFERENCE DESIGNATION LIST NOTES. NUMBERS INDICATE REFERENCE TO DIAGRAM/SCHEMATIC NOTES. ADDITIONAL NOTES, WHEN APPLICABLE, ARE REFERENCED IN THE NOTES INDICATED IN THIS COLUMN.

(26) APPL: THIS COLUMN IS USED IN CONJUNCTION WITH RETROFIT ACCOMPLISHMENT. A CODE LETTER ENTERED IN THIS COLUMN DEFINES THE APPLICABLE RETROFIT USAGE FOR THE LINE ENTRY. CODE LETTERS ARE DEFINED AS FOLLOWS:

D DELETE (AN ITEM TO BE DELETED BY RETROFIT)
A ADDED (AN ITEM TO BE ADDED BY RETROFIT)

(27) PART NUMBER: THE PART NUMBER OF THE ITEM TO WHICH THE REFERENCE DESIGNATION HAS BEEN ASSIGNED ON THE ASSOCIATED DIAGRAM/SCHEMATIC.

(28) QTY: "DOC" ENTERED IN THIS COLUMN INDICATES THAT THE ITEM ENTERED IN THE PART NUMBER COLUMN IS A DOCUMENT IDENTIFICATION NUMBER. COLUMN HAS NO OTHER APPLICATION ON THE REFERENCE DESIGNATION LIST.

(29) REFERENCE DESIGNATION: THE REFERENCE DESIGNATION ASSIGNED ON THE ASSOCIATED DIAGRAM/SCHEMATIC TO THE ITEM ENTERED IN THE PART NUMBER COLUMN.

(30) USING DRAWING: THE NUMBER OF THE DRAWING THAT ESTABLISHES THE REQUIREMENTS FOR THE ITEM ENTERED IN THE PART NUMBER COLUMN.

(31) CAGE CODE: THE FEDERAL SUPPLY CODE FOR MANUFACTURER'S (FSCM) NUMBER APPLICABLE TO THE ENTRY IN THE PART NUMBER COLUMN. ENTRIES AS REQUIRED BY MIL-STD-100, MILITARY STANDARD ENGINEERING DRAWING PRACTICES.

(32) NOMENCLATURE: THE NOMENCLATURE APPLICABLE TO THE RDL IDENTIFIED IN THE "DIAGRAM DASH NO." COLUMN.

(33) BLOCKS AS INDICATED: SIGNATURES OF APPROVAL, CHECK, AND PREPARATION. SIGNATURES ON SHEET 1 OF A MULTIPLE SHEET DOCUMENT INDICATE APPROVAL AND CHECK OF ALL SHEETS.

(34) RELEASE DATE: THE DATE OF INITIAL RELEASE OF THE DOCUMENT.

(35) ECN SER NO: IDENTIFICATION NUMBER OF THE ENGINEERING CHANGE NOTICE.

(36) WT CHG: POUNDS INCREASED OR DECREASED AS A RESULT OF THE CHANGE. A CHECK MARK INDICATES "NONE" OR "NEGLIGIBLE".

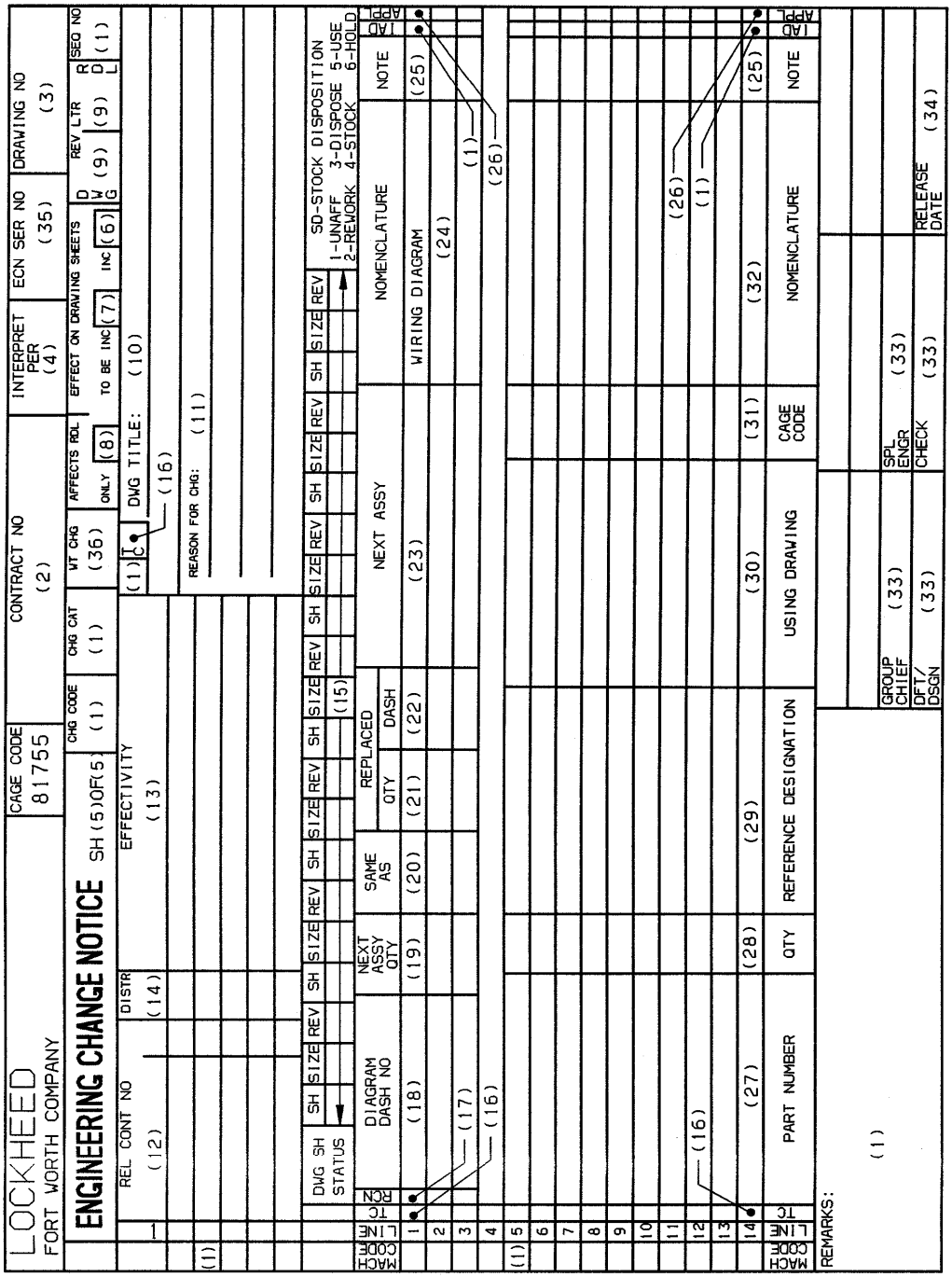


FIGURE 17

CONTRACT NO. F33657-75-C-0310	SIZE A	CAGE CODE 81755	16Z001
	SCALE	REVISION AK	SHEET 68

3.4.10 ROUTING LIST (RL) - DRAWING TYPES "K", "L" AND "W":

THE ROUTING LIST IS COMPRISED OF TWO BASIC SECTIONS; THE "PARTS LIST" AND THE "ROUTING LIST." "PARTS LIST NOTES," A "REFERENCE DOCUMENT LIST" AND THE "ROUTING LIST REVISION" HISTORY ARE ALSO INCLUDED UNDER SEPARATE HEADINGS. THE "PARTS LIST" IS A TABULATION OF THE PARTS AND BULK MATERIALS REQUIRED TO FABRICATE THE WIRING HARNESS OR CABLE ASSEMBLY. THE "ROUTING LIST" DEFINES THE WIRE TYPE, POINT TO POINT ROUTING AND END CONNECTIONS FOR EACH INDIVIDUAL WIRE WITHIN THE HARNESS OR CABLE.

REFER TO FIGURE 18 FOR LOCATION OF FORMAT DATA FIELDS.

(1) BLOCKS AND COLUMNS AS INDICATED: ARE FOR INHOUSE INFORMATION. NOT NECESSARY FOR INTERPRETATION OF DOCUMENT.

(2) BLOCKS AS INDICATED: NOT APPLICABLE TO ROUTING LIST COVERED BY THIS INTERPRETATION DOCUMENT.

(3) CONTRACT NUMBER: GOVERNMENT CONTRACT NUMBER FOR WHICH THE DOCUMENT WAS INITIALLY PREPARED.

(4) DRAWING NO: DOCUMENT IDENTIFICATION NUMBER OF THE ROUTING LIST. THIS NUMBER LESS THE "RL" PREFIX IS THE PART NUMBER IDENTIFICATION ASSIGNED TO THE WIRING HARNESS OR CABLE ASSEMBLY DEFINED BY THE ROUTING LIST AND, WHEN APPLICABLE, THE ASSOCIATED DRAWING. THIS NUMBER ALSO INCORPORATES THE REFERENCE DESIGNATION (W NUMBER) ASSIGNED TO THE HARNESS OR CABLE,

(5) DRAWING TITLE: TITLE OF THE WIRING HARNESS OR CABLE ASSEMBLY.

(6) RL ISSUE NO: A NUMBER ASSIGNED IN NUMERICAL SEQUENCE FOR EACH ISSUE OF THE ROUTING LIST. REVISION LETTERS ARE ALSO ASSIGNED WHEN REQUIRED BY MIL-STD-100, MILITARY STANDARD ENGINEERING DRAWING PRACTICES. SEE ITEM (13).

(7) DWG TYPE: A CODE LETTER INDICATING THE DRAWING TYPE. APPLICABLE CODE LETTERS ARE DEFINED AS FOLLOWS.

K = WIRING HARNESS
L = CABLE ASSEMBLY
W = HARNESS

(8) SHEET OF : SHEET NUMBER AND TOTAL NUMBER OF SHEETS OF THE DOCUMENT

(9) RELEASE DATE: THE DATE OF THE INITIAL RELEASE OF THE DOCUMENT.

(10) ISSUE DATE: DATE OF THE RL ISSUE NO. SEE ITEM(6).

(11) INTERPRETATION PER: REFERENCE TO THIS FORMAT INTERPRETATION DOCUMENT.

(12) MFG PER: AN ENGINEERING DOCUMENT TO BE USED IN CONJUNCTION WITH THE ROUTING LIST FOR FABRICATION PURPOSES WHEN APPLICABLE.

(13) REV LETTER: THE CURRENT REVISION LETTER OF THE ROUTING LIST.

(14) ROUTING LIST REVISION: PERMANENT RECORD OF ALL CHANGES TO THE ROUTING LIST.

(15) PARTS LIST NOTES: LIST NOTES: GENERAL NOTES REGARDING PROCUREMENT, FABRICATION, ALTERNATE PARTS, ETC.

(16) REFERENCE DOCUMENT LIST: A LIST OF REQUIRED DOCUMENTS, EXCLUDING DOCUMENTS IDENTIFIED BY FORMAT BLOCK AND COLUMN HEADINGS.

(17) QTY PER ASSY: THE QUANTITY OF THE ITEM LISTED IN THE "PART NUMBER/WIRE NUMBER" COLUMN REQUIRED TO FABRICATE ONE HARNESS OR CABLE ASSEMBLY. QUANTITY ENTRIES ARE INTERPRETED AS FOLLOWS: NUMBER REQUIRED FOR PARTS, "AR" (AS REQUIRED) FOR BULK MATERIALS, "REF" WHEN LINE ENTRY IS FOR THE PURPOSE OF ESTABLISHING A HDW CODE ONLY, "DOC" FOR REFERENCED DOCUMENTS, AND THE LENGTH IN INCHES FOR WIRE AND CABLE. A DASH (-) SIGNIFIES A SHIELD, THE SECOND AND SUBSEQUENT CONDUCTORS OF A MULTI-CONDUCTOR CABLE (FOR WHICH A LENGTH HAS BEEN SPECIFIED BY ANOTHER LINE ENTRY), AND "PIGTAILS" SUPPLIED WITH COMPONENTS.

(18) PART NUMBER/WIRE NUMBER: IN THE PARTS LIST, THE PART NUMBER OF ALL REQUIRED HARDWARE ITEMS AND BULK MATERIALS, EXCLUDING WIRE AND CABLE. ALSO REFERENCED EQUIPMENT PART NUMBERS WHEN REQUIRED TO ESTABLISH A HDW CODE FOR WIRE ROUTING PURPOSES. SEE ITEM (20). SEPARATE ENTRIES FOR IDENTICAL ITEMS ARE SHOWN FOR WIRE ROUTING PURPOSES.

IN THE ROUTING LIST. THE WIRE NUMBER OR CABLE NUMBER ASSIGNED ON THE RELATED WIRING DIAGRAM. THE SHIELD OF SHIELDED WIRE AND CABLE IS IDENTIFIED BY THE SUFFIX "-99SH" ADDED TO THE-BASIC WIRE NUMBER OF THE CONDUCTOR(S) WITHIN THE SHIELD. FOR TRIAXIAL CABLE, THE SUFFIX "-99SHA" IDENTIFIES THE INNER SHIELD AND "-99SHB" IDENTIFIES THE OUTER SHIELD. PIGTAILS OF HARDWARE ITEMS ARE IDENTIFIED BY THE REFERENCE DESIGNATOR OF THE HARDWARE ITEM SUFFIXED WITH A DASH AND THE PHYSICAL IDENTIFICATION (NUMBER OR LETTER) OF THE PIGTAIL.

(19) NOMENCLATURE/SUB/SUB SYSTEM: IN THE PARTS LIST, THE NAME OF THE ITEM ENTERED IN THE PART NUMBER/WIRE NUMBER COLUMN.

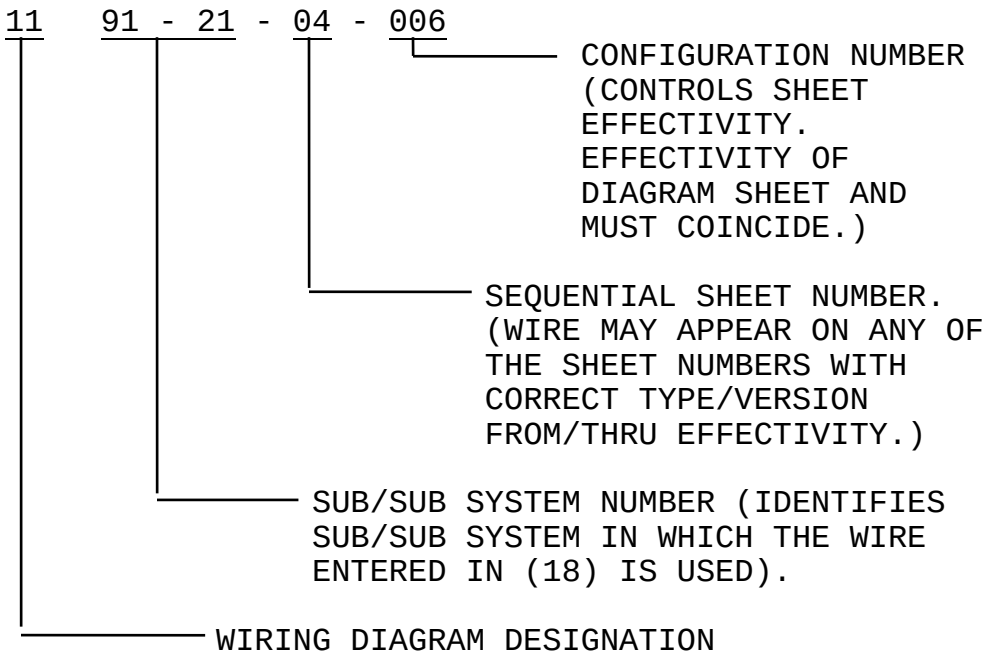
IN THE ROUTING LIST, THE SUB/SUB SYSTEM NUMBER OF THE INTER-CONNECT DIAGRAM ON WHICH THE WIRE IS CALLED OUT.

FOR EXAMPLE;

99-21 SUB/SUB SYSTEM NUMBER (SUB SYSTEM 21 OF SYSTEM 99)

TO IDENTIFY THE COMPLETE WIRING DIAGRAM SHEET NUMBER ON WHICH THE WIRE, ITEM (18), APPEARS, PREFIX THE SUB/SUB SYSTEM NUMBER WITH II- AND ADD TWO SUFFIX NUMBERS (SHEET NUMBER AND CONFIGURATION NUMBER) AS DETERMINED BY REFERENCE TO THE PARTS LIST OF THE APPLICABLE WIRING DIAGRAM INDEX. SEE 16DD1011-XX FOR F-16A AND F-16C OR 16DD2011-XX FOR F-16B AND F-16D, (XX DENOTES APPLICABLE DASH NUMBER OF INDEX). THE FIRST SUFFIX IS THE SEQUENTIAL SHEET NUMBER OF THE SUB/SUB SYSTEM NUMBER. THE SECOND SUFFIX IS THE CONFIGURATION NUMBER WHOSE EFFECTIVITY IS READ FROM THE INDEX PARTS LIST. THE EFFECTIVITY OF THE DIAGRAM SHEET AND OF THE HARNESS DASH NUMBER MUST COINCIDE FOR A GIVEN TYPE/VERSION EFFECTIVITY (FROM/THRU).

EXAMPLE OF A COMPLETE DIAGRAM SHEET NUMBER:



(20) HDW CODE/REF DES: IN THE PARTS LIST, THE REFERENCE DESIGNATION OR HARDWARE CODE NUMBER ASSIGNED TO THE PARTS SPECIFIED IN THE PART NUMBER/WIRE NUMBER COLUMN. THE "HDW CODE/REF DES" IS USED TO IDENTIFY THE PARTS IN THE ROUTING LIST AND IN OTHER COLUMNS OF THE PARTS LIST. REFERENCE DESIGNATIONS ARE THE COMPLETE REFERENCE DESIGNATION INCLUDING THE SUB/SUB SYSTEM NUMBER AS ASSIGNED BY THE RELATED WIRING DIAGRAM.

IN THE ROUTING LIST, A CODE LETTER, AND SUFFIX NUMBER WHEN APPLICABLE, DESCRIBING THE TYPE OF WIRE DEFINED BY THE RESPECTIVE LINE ENTRY. CODES AND DEFINITIONS ARE AS FOLLOWS.

C = COAXIAL AND TRIAXIAL CABLE. THE CONDUCTORS WITHIN A CABLE ARE DESIGNATED BY A COMMON SUFFIX NUMBER.

S = SHIELDED WIRE. ALL WIRES WITHIN THE SHIELD AS WELL AS THE SHIELD REFLECT THE SAME SUFFIX NUMBER.

T = TWISTED WIRE. ALL WIRES WITHIN A GROUP OF TWISTED WIRES ARE DESIGNATED BY A COMMON SUFFIX NUMBER.

TC = THERMOCOUPLE

W = PLAIN WIRE.

PIGTAILS FURNISHED AS PART OF A HARDWARE ITEM ARE IDENTIFIED BY THE CODE LETTER "W" SUFFIXED WITH THE HARDWARE CODE/REFERENCE DESIGNATOR ASSIGNED TO THE HARDWARE ITEM.

R = RESISTORS USED AS WIRES

(21) END NO. 1 - REF DES: (APPLICABLE TO THE ROUTING LIST ONLY.) THE REFERENCE DESIGNATION OR HARDWARE CODE OF THE ITEM TO WHICH THE WIRE OR CABLE SHOWN IN THE PART NUMBER/WIRE NUMBER COLUMN IS ROUTED. "NOTE" IN THIS COLUMN INDICATES THAT REQUIRED ROUTING IS ESTABLISHED BY AN RL NOTE. ENTRIES PREFIXED "GD" IDENTIFY GROUND POINTS ON THE AIRFRAME STRUCTURE.

(22) END NO. 1 - PIN/SOC/LUG: (APPLICABLE TO THE ROUTING LIST ONLY.) THE PIN, SOCKET OR TERMINAL OF THE ITEM IDENTIFIED IN THE REF DES COLUMN TO WHICH THE WIRE OR CABLE LISTED IN THE PART NUMBER/ WIRE NUMBER COLUMN IS TO BE CONNECTED. LOWER-CASE LETTERS ARE INDICATED BY AN UPPER-CASE LETTER FOLLOWED BY AN ASTERISK (*). CONNECTIONS TO A SHIELD ARE INDICATED BY THE HARDWARE CODE/ REFERENCE DESIGNATION ASSIGNED TO THE SHIELD. SEE ITEM (20). A "B" IN THIS COLUMN INDICATES THAT A WIRE IS CONNECTED FROM THE BACKSHELL (B) TO THE CONNECTOR. AN "R" IN THIS COLUMN INDICATES THAT A BONDING RING (R) IS USED TO GATHER THE SHIELDS AND THE RING IS CONNECTED TO THE CONNECTOR BY A WIRE. THE LETTER "L" PLUS A TWO DIGIT SUFFIX NUMBER (L01) INDICATES A SPECIFIC TERMINAL LUG AT THE REFERENCE DESIGNATION SHOWN IN THE "REF DES" COLUMN. ALL WIRES THAT TERMINATE IN THE SAME TERMINAL LUG ARE INDICATED BY THE SAME SUFFIX NUMBER.

(23) END NO. 1 - TERM: (APPLICABLE TO THE ROUTING LIST ONLY.) THE HDW CODE/REF DES, ITEM (20), ASSIGNED TO THE ITEM OF HARDWARE TO BE USED TO TERMINATE THE CONNECTION OF THE WIRE OR CABLE AT THE POINT AND PIN SPECIFIED IN THE REF DES AND PIN-SOC-LUG COLUMNS. "STR" (STRIP) INDICATES THAT NO HARDWARE IS REQUIRED FOR CONNECTION.

(24) END NO. 2 - REF DES/PIN-SOC-LUG/TERM:IN THE ROUTING LIST, THESE COLUMNS SPECIFY THE SAME TYPE

OF INFORMATION AS RESPECTIVE COLUMNS FOR END NO. 1, ITEMS (21), (22) AND (23). EXCEPT CONNECTIONS ARE FOR THE OPPOSITE END OF THE WIRE OR CABLE.

(25) COLUMNS AS INDICATED: IN THE PARTS LIST, ENTRIES IN THESE COLUMNS INDICATE OTHER PARTS LIST ITEMS USED IN CONJUNCTION WITH THE ITEM SHOWN IN THE PART NUMBER/WIRE NUMBER COLUMN. ENTRIES ARE BY HDW CODE/REF DES NUMBER.

(26) WIRE TYPE/SPECIFICATION: IN THE PART LIST, THE SPECIFICATION APPLICABLE TO THE ITEM LISTED IN THE PART NUMBER/WIRE NUMBER COLUMN, WHEN REQUIRED. IN THE ROUTING LIST, THE MATERIAL SPECIFICATION APPLICABLE TO THE WIRE OR CABLE BEING ROUTED BY THE LINE ENTRY.

(27) NOTE: IDENTIFIES AN RL NOTE APPLICABLE TO THE LINE ENTRY. ADDITIONAL NOTES. WHEN APPLICABLE, ARE REFERENCED IN THE NOTES INDICATED IN THIS COLUMN.

(28) EMC: ELECTROMAGNETIC COMPATIBILITY CATEGORY DESIGNATOR.

(29) ADDED OR REVISED THIS ISSUE:ADDED OR REVISED THIS ISSUE: ASTERISKS ARE USED WITHIN BLOCKS AND COLUMNS DESIGNATED BY 1 WITH A CIRCLE AROUND IT TO INDICATE ENTRIES WHICH WERE AFFECTED BY THE CURRENT ISSUE. ISSUE NUMBERS ARE USED IN LIEU OF ASTERISKS TO INDICATE CHANGES MADE PRIOR TO THE CURRENT ISSUE.

(30) CAGE CODE: THE FEDERAL SUPPLY CODE FOR MANUFACTURER'S (FSCM) NUMBER APPLICABLE TO THE ENTRY IN THE PART NUMBER COLUMN. ENTRIES AS REQUIRED BY MIL-STD-100, MILITARY STANDARD ENGINEERING DRAWING PRACTICES.

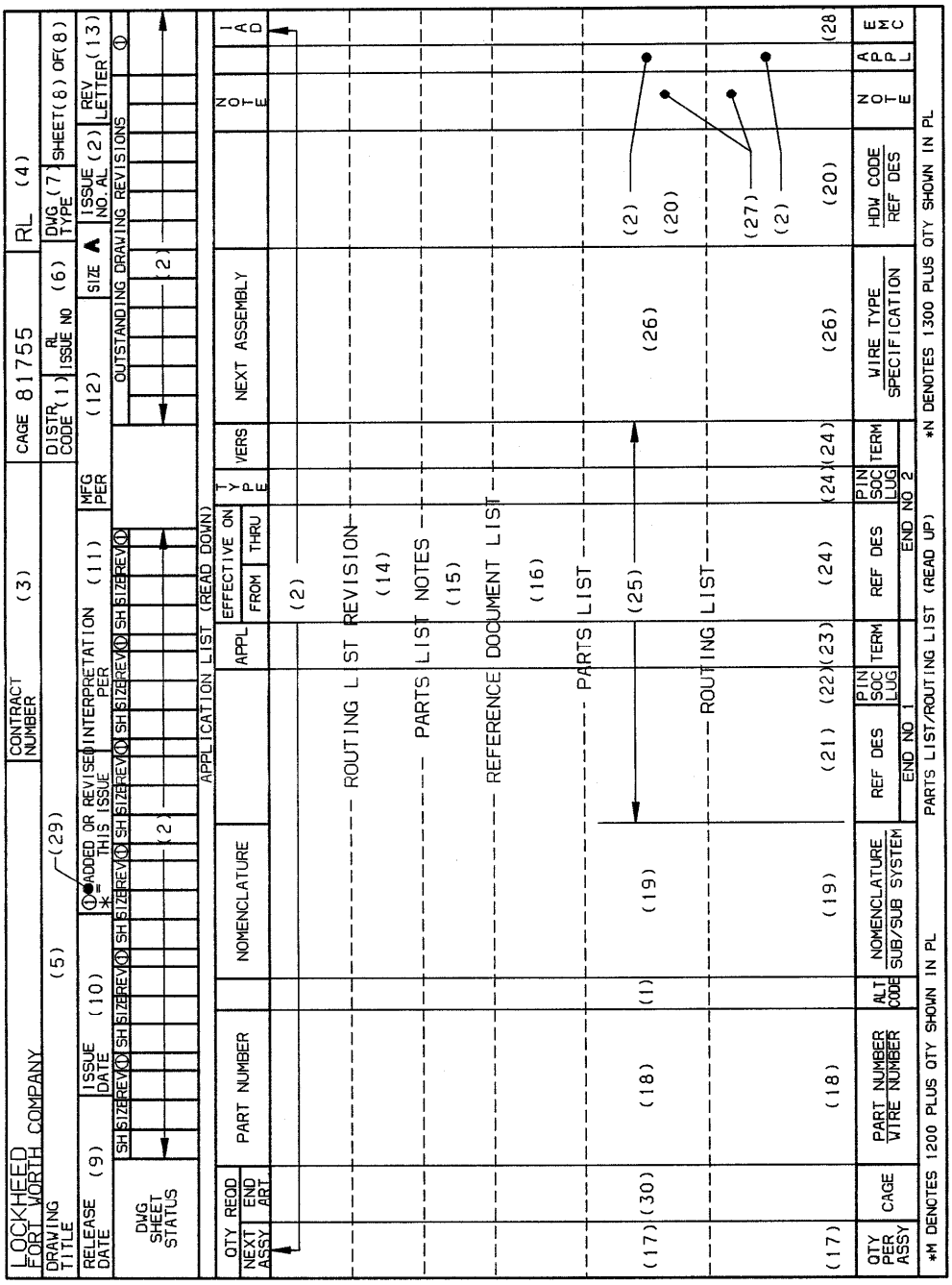


FIGURE 18

CONTRACT NO.	SIZE	CAGE CODE	
F33657-75-C-0310	A	81755	16Z001
	SCALE	REVISION AK	SHEET 75

3.4.11 ENGINEERING CHANGE NOTICE (ECN) FOR THE ROUTING LIST (RL) - DRAWING TYPES "K", "L" AND "W":

AN ENGINEERING CHANGE NOTICE (ECN) IS USED TO INITIATE AND RECORD CHANGES TO RELEASED ROUTING LISTS AND TO CREATE NEW ROUTING LISTS.

REFER TO FIGURE 19 FOR LOCATION OF FORMAT DATA FIELDS.

(1) BLOCKS AND COLUMNS AS INDICATED: ARE FOR INHOUSE INFORMATION. NOT NECESSARY FOR INTERPRETATION OF DOCUMENTS.

(2) CONTRACT NO: GOVERNMENT CONTRACT NUMBER FOR WHICH THE DOCUMENT WAS PREPARED.

(3) DRAWING NO: IDENTIFICATION NUMBER(S), LESS THE "RL" PREFIX, OF THE ROUTING LIST(S) AND ASSOCIATED DRAWINGS AGAINST WHICH THE ECN IS WRITTEN.

(4) ECN SER NO: IDENTIFICATION NUMBER OF THE ENGINEERING CHANGE NOTICE.

(5) SHEET OF : SHEET NUMBER AND THE TOTAL NUMBER OF SHEETS OF THE DOCUMENT. THE TOTAL NUMBER OF SHEETS IS INDICATED ON SHEET ONE ONLY.

(6) WT CHG: POUNDS INCREASED OR DECREASED AS A RESULT OF THE CHANGE. A "X" INDICATES "NONE" OR "NEGLIGIBLE".

(7) REV/REV LTR - RL: AN "X" INDICATES A NEW DASH NUMBERED HARNESS. A LETTER OTHER THAN AN "X" INDICATES THE REVISION LETTER OF THE ROUTING LIST ASSIGNED TO THE CHANGE DESCRIBED BY THE ECN.

(8) DWG TITLE: ENTRY REQUIRED ONLY WHEN THE TITLE IS TO BE REVISED IN WHICH CASE THE REVISED TITLE IS ENTERED IN THIS BLOCK.

(9) REASON FOR CHANGE: A BRIEF STATEMENT AS TO WHY THE CHANGE WAS MADE.

(10) REL CONT NO: AN INTERNAL DOCUMENT NUMBER BY WHICH THE EFFECTIVITY OF THE CHANGE IS ESTABLISHED. THE ACTUAL EFFECTIVITY IS INDICATED ON THE APPLICATION LIST FOR THE AFFECTED HARNESS. SEE PARAGRAPH 3.4.1 ITEMS (15) AND (16). "RECORD CHANGE" INDICATES THAT THE CHANGE IS NOT OF A DESIGN NATURE.

(11) EFFECTIVITY: INDICATES TYPE VERSION (SEE PARA. 3.4.1 ITEM 16). AND EFFECTIVITY OF THE RELEASE CONTROL NUMBER, ITEM (10), WHEN A SEPARATE RELEASE CONTROL DOCUMENT IS NOT USED.

(12) DISTR: A LETTER IN THIS COLUMN INDICATES THAT A SEPARATE RELEASE CONTROL DOCUMENT IS NOT USED. A DASH IN THIS COLUMN INDICATES THAT A SEPARATE RELEASE CONTROL DOCUMENT IS USED.

(13) TC: TRANSACTION CODE DEFINED AS FOLLOWS:

C - CREATE (NEW ITEM)
A - ADD (NEW OR ADDITIONAL REQUIREMENTS FOR AN EXISTING ITEM)
D - DECREASE (REDUCTION IN REQUIREMENTS)
L - LIMIT (DELETION OF ALL REQUIREMENTS)
R - REVISE (REVISION WITHIN AN EXISTING LINE ENTRY)

(14) RCN: A NUMBER ENTERED IN THIS COLUMN INDICATES THE RELEASE CONTROL NUMBER APPLICABLE TO THE LINE ENTRY. A DASH (-) INDICATES ALL RELEASE CONTROL NUMBERS LISTED ARE APPLICABLE TO THE LINE ENTRY,

(15) PART NUMBER: THE DASH NUMBER ASSIGNED TO THE BASIC ROUTING LIST NUMBER TO IDENTIFY A SPECIFIC WIRING HARNESS OR CABLE ASSEMBLY.

(16) QTY REQD - NEXT ASSY/END ART: THE QUANTITY OF THE NOTED DASH NUMBER HARNESS REQUIRED TO COMPLETE ONE NEXT ASSEMBLY, AND THE TOTAL NUMBER REQUIRED FOR ONE END ARTICLE. RESPECTIVELY.

(17) SAME AS: THE DASH NUMBER OF AN EXISTING ITEM WHEN A NEW DASH NUMBERED ITEM IS CREATED SIMILAR TO THE EXISTING ITEM.

(18) REPLACED - QTY: THE QUANTITY PER ASSEMBLY OF THE REPLACED ITEM. SEE ITEM (19).

(19) REPLACED - DASH: THE DASH NUMBER OF THE REPLACED ITEM.

(20) OLD NEXT ASSEMBLY: NEXT ASSEMBLY DRAWING NUMBER OF THE ITEM BEING REPLACED.

(21) NEW NEXT ASSEMBLY: NEXT ASSEMBLY DRAWING NUMBER OF THE ITEM LISTED IN THE "PART NUMBER" COLUMN, ITEM (15).

(22) NOMENCLATURE: "WIRING HARNESS" OR "CABLE ASSEMBLY" AS APPLICABLE TO THE ITEM LISTED IN THE PART NUMBER COLUMN.

(23) COLUMNS AS INDICATED: ENTRIES CORRESPOND TO ROUTING LIST INTERPRETATIONS FOR THE IDENTICAL COLUMN. SEE PARA. 3.4.9.

(24) PART NUMBER - WIRE NUMBER: THE IDENTIFICATION NUMBER OF THE PART, WIRE OR DOCUMENT AFFECTED BY THE CHANGE. SEE PARA. 3.4.9 ITEM (18) FOR EXPLANATION OF ENTRIES.

(25) QTY PER ASSY: THE INCREASE OR DECREASE IN QUANTITY PER NEXT ASSEMBLY DASH NUMBER. SEE PARA. 3.4.9, ITEM (17) FOR DEFINITION OF ENTRIES.

(26) NEXT ASSY DASH: A DASH NUMBER INDICATING THE APPLICABLE NEXT ASSEMBLY FOR THE ITEM ENTERED IN THE "PART NUMBER" COLUMN, ITEM (24). A DASH (-) IN THIS COLUMN INDICATES AN APPLICABLE NEXT ASSEMBLY REQUIREMENT FOR EACH DASH NUMBER LISTED IN THE DRAWING NUMBER BLOCK, ITEM (3).

(27) REL DATE: THE DATE OF INITIAL RELEASE OF THE DOCUMENT.

(28) BLOCKS AS INDICATED: SIGNATURES OF APPROVAL, CHECK AND PREPARATION. SIGNATURES ON SHEET I OF A MULTIPLE SHEET DOCUMENT INDICATE APPROVAL AND CHECK OF ALL SHEETS.

(29) AFFECTS RL ONLY: AN "X" INDICATES THAT THE CHANGE DESCRIBED ON THE ENGINEERING CHANGE NOTICE DOES NOT AFFECT THE ASSOCIATED DRAWING.

(30) EFFECT ON DRAWING SHEETS - INC: AN "X" INDICATES THAT THE CHANGE DESCRIBED ON THE ENGINEERING CHANGE NOTICE HAS BEEN INCORPORATED ON THE AFFECTED DRAWING PRIOR TO RELEASE OF THE ECN.

(31) EFFECT ON DRAWING SHEETS - TO BE INC: AN "X" INDICATES THAT THE CHANGE DESCRIBED ON THE ENGINEERING CHANGE NOTICE HAS NOT BEEN INCORPORATED ON THE AFFECTED DRAWING PRIOR TO RELEASE OF THE ECN.

(32) DWG SH STATUS - SH/SIZE/REV: INDICATES THE DRAWING SHEETS AFFECTED BY THE INCORPORATION OF THE

CHANGES AND THE REVISION LETTER APPLICABLE TO EACH AFFECTED SHEET.

(33) INTERPRETATION PER: REFERENCE TO THIS FORMAT INTERPRETATION DOCUMENT.

(34) REV LTR - DWG: THE DRAWING REVISION LETTER ASSIGNED TO THE DRAWING CHANGE DESCRIBED BY THE ECN. AN "X" INDICATES A NEW DASH NUMBERED HARNESS.

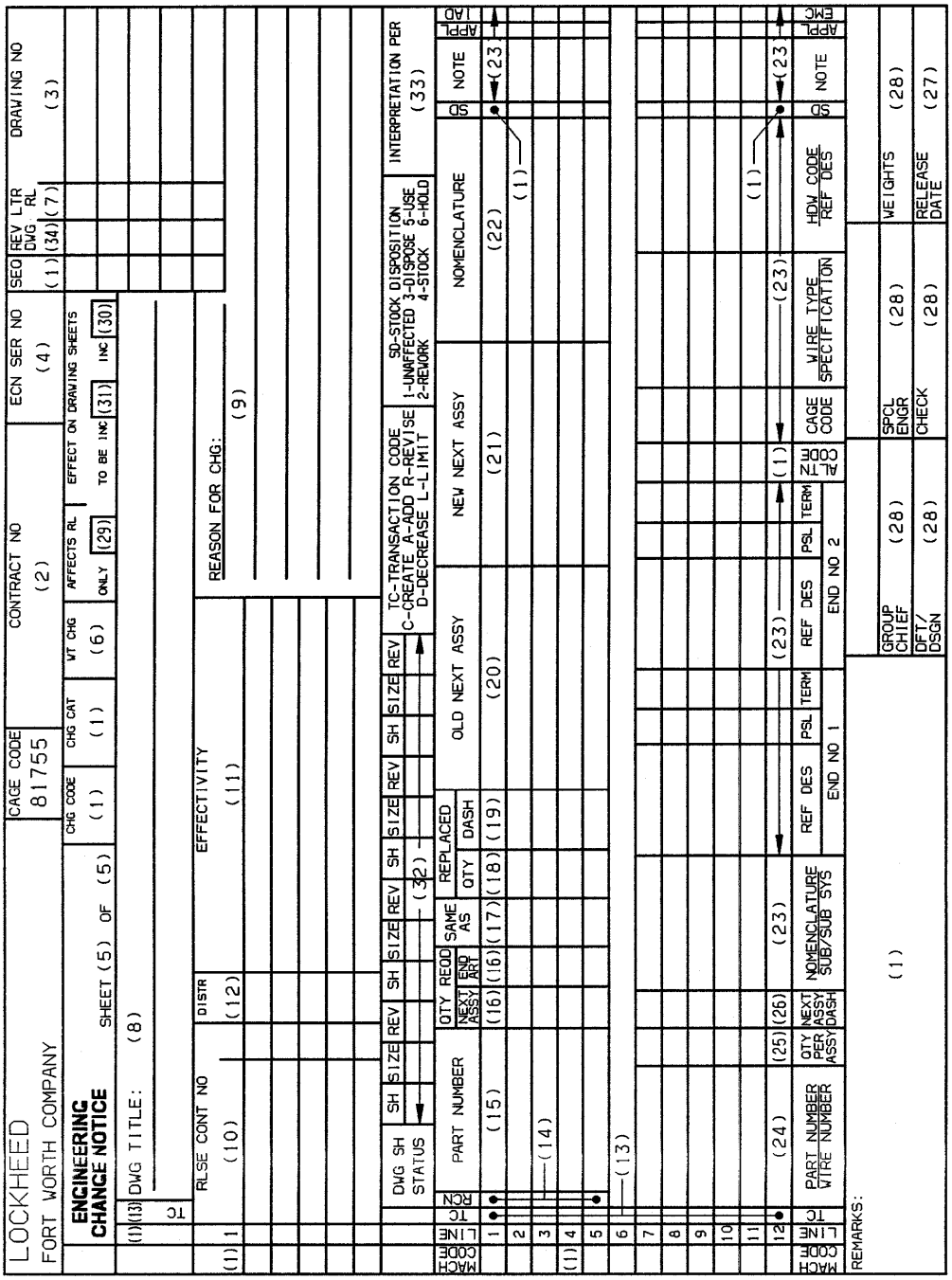


FIGURE 19

CONTRACT NO. F33657-75-C-0310	SIZE A	CAGE CODE 81755	16Z001
	SCALE	REVISION AK	SHEET 80

3.4.12 REFERENCE DESIGNATION LIST (RDL) - DRAWING TYPES "M", "N", "P" AND "Q"

THE REFERENCE DESIGNATION LIST. DRAWING TYPES M, N, P AND Q, IS A TABULATION OF ALL SECTION DIAGRAM PAGES, THEIR APPLICABLE NOMENCLATURE AND REVISION STATUS.

REFER TO FIGURE 20 FOR LOCATION OF FORMAT DATA FIELDS.

(1) BLOCKS AND COLUMNS AS INDICATED: ARE FOR INHOUSE INFORMATION. NOT NECESSARY FOR INTERPRETATION OF DOCUMENT.

(2) BLOCKS AS INDICATED: NOT APPLICABLE TO REFERENCE DESIGNATION LISTS FOR DRAWING TYPES M, N, P AND Q.

(3) CONTRACT NUMBER: GOVERNMENT CONTRACT NUMBER FOR WHICH THE DOCUMENT WAS INITIALLY PREPARED.

(4) BLOCK AS INDICATED: DOCUMENT IDENTIFICATION NUMBER OF THE REFERENCE DESIGNATION LIST. THIS NUMBER, LESS THE RDL PREFIX AND DASH NUMBER SUFFIX, IS THE SAME AS THE NUMBER OF THE ASSOCIATED DRAWING.

(5) DRAWING TITLE: TITLE APPLICABLE TO THE REFERENCE DESIGNATION LIST.

(6) RDL ISSUE NO: A NUMBER ASSIGNED IN NUMERICAL SEQUENCE FOR EACH ISSUE OF THE REFERENCE DESIGNATION LIST. REVISION LETTERS ARE ALSO ASSIGNED WHEN REQUIRED BY MIL-STD-100, MILITARY STANDARD ENGINEERING DRAWING PRACTICES. SEE ITEM (12).

(7) DWG TYPE: A CODE LETTER INDICATING THE DRAWING TYPE. APPLICABLE CODE LETTERS ARE DEFINED AS FOLLOWS:

M = INTERCONNECTION DIAGRAM
N = SCHEMATIC DIAGRAM
P = HARNESS LOCATION DIAGRAM
Q = EQUIPMENT LOCATION DIAGRAM

(8) SHEET OF : SHEET NUMBER AND TOTAL NUMBER OF SHEETS OF THE DOCUMENT.

(9) RELEASE DATE: THE DATE OF THE INITIAL RELEASE OF THE DOCUMENT.

(10) ISSUE DATE: DATE OF THE RDL ISSUE NO. SEE ITEM(6).

(11) INTERPRETATION PER: REFERENCE TO THIS FORMAT INTERPRETATION DOCUMENT.

(12) REV LETTER: THE CURRENT REVISION LETTER OF THE CURRENT ISSUE OF THE RDL.

(13) RDL REVISION: PERMANENT RECORD OF ALL CHANGES TO THE REFERENCE DESIGNATION LIST.

(14) PARTS LIST NOTES: GENERAL NOTES APPLICABLE TO THE REFERENCE DESIGNATION LIST. UPPER-CASE LETTERS ENCLOSED IN PARENTHESIS DESIGNATE LOWER-CASE LETTERS.

(15) PART NUMBER/SECTION NUMBER: A LISTING OF EACH PAGE OF THE ASSOCIATED DIAGRAM. LISTING IS BY COMPLETE DRAWING PAGE NUMBER AND PAGE CONFIGURATION NUMBER.

(16) SECT REV STATUS: THE PAGE REVISION LETTER OF THE DIAGRAM PAGE LISTED IN THE PART NUMBER/SECTION NUMBER COLUMN, WHEN APPLICABLE.

(17) NOMENCLATURE: DESCRIPTIVE NOMENCLATURE FOR THE DIAGRAM PAGE LISTED IN THE PART NUMBER/SECTION NUMBER COLUMN.

(18) EFFECTIVE ON - FROM/THRU: A NUMBER APPEARING IN THE "FROM" COLUMN INDICATES THE FIRST ARTICLE OF THE NOTED TYPE/VERSION. ITEM (19), TO WHICH THE DIAGRAM PAGE LISTED IN THE PART NUMBER/SECTION NUMBER COLUMN IS "EFFECTIVE ON" (APPLICABLE TO). A NUMBER APPEARING IN THE "THRU" COLUMN INDICATES THE LAST ARTICLE TO WHICH THE DIAGRAM PAGE IS APPLICABLE. EFFECTIVITIES SHALL BE INTERPRETED AS FOLLOWS;

(A) IF THE "EFFECTIVE ON" AND "TYPE"/"VERS" COLUMNS ARE BLANK THE DIAGRAM PAGE IS EFFECTIVE ON ALL ARTICLES COVERED BY THE RDL. SEE ASSOCIATED APPLICATION LIST.

(B) IF THE "EFFECTIVE ON" COLUMNS ARE BLANK AND THE "TYPE" AND "VERS" COLUMNS HAVE AN ENTRY, THE DIAGRAM PAGE IS EFFECTIVE FOR ALL ARTICLES OF THE NOTED TYPE VERSION TO WHICH THE RDL IS APPLICABLE.

(C) IF ENTRIES APPEAR IN THE "EFFECTIVE ON" AND "TYPE"/"VERS" COLUMNS, THE EFFECTIVITY IS AS STATED.

(19) TYPE/VERS: A CODE INDICATING THE ARTICLES TO WHICH THE LINE ENTRY IS APPLICABLE. ENTRIES IN THE "TYPE" COLUMN DESIGNATE A MODEL. ENTRIES IN THE "VERS" COLUMN DESIGNATE A PARTICULAR VERSION OF THE APPLICABLE MODEL. REFER TO PARAGRAPH 2.4 FOR TYPE/VERSION CODE INTERPRETATION.

(20) NOTE: IDENTIFIES A NOTE APPLICABLE TO THE LINE ENTRY.

(21) APPL: THIS COLUMN IS USED IN CONJUNCTION WITH RETROFIT ACCOMPLISHMENT. A CODE LETTER ENTERED IN THIS COLUMN DEFINES THE APPLICABLE RETROFIT USAGE FOR THE LINE ENTRY. CODE LETTERS ARE DEFINED AS FOLLOWS:

D = DELETE. THE LISTED DIAGRAM PAGE WILL NOT BE APPLICABLE AFTER ACCOMPLISHMENT OF THE RETROFIT CHANGE IDENTIFIED BY THE ENTRY IN THE "ECP NO." COLUMN. SEE ITEM (22).

A = ADDED. THE LISTED DIAGRAM PAGE IS APPLICABLE ONLY AFTER THE RETROFIT CHANGE IDENTIFIED IN THE "ECP NO." COLUMN IS ACCOMPLISHED.

(22) ECP NO: THIS COLUMN IS USED IN CONJUNCTION WITH RETROFIT ACCOMPLISHMENT AND IDENTIFIES THE BASIC ECP NUMBER WHICH AUTHORIZED THE RETROFIT CHANGE.

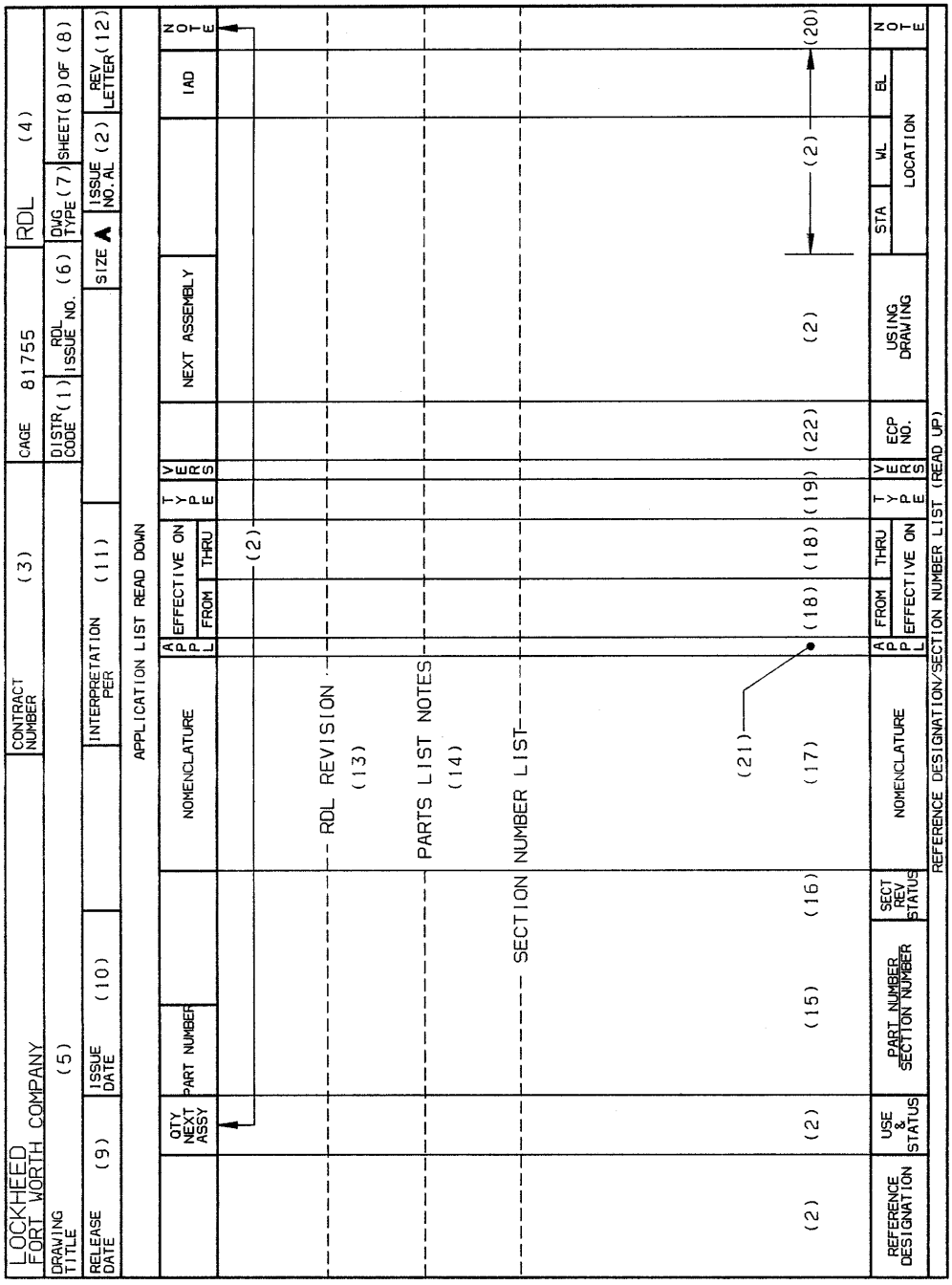


FIGURE 20

	SIZE A	CAGE CODE 81755	16Z001
CONTRACT NO. F33657-75-C-0310	SCALE	REVISION AK	SHEET 84

3.4.13 REFERENCE DESIGNATION LIST (RDL) - DRAWING TYPE "R"

THE TYPE "R" REFERENCE DESIGNATION LIST IS AN EQUIPMENT LIST. THE EQUIPMENT LIST RDL TABULATES THE REFERENCE DESIGNATIONS ASSIGNED WITHIN A SUB SYSTEM AND INCLUDES A LISTING OF THE PARTS TO WHICH THE REFERENCE DESIGNATIONS ARE ASSIGNED. THE USING DRAWING WHICH ESTABLISHES THE PART REQUIREMENT AND THE LOCATION OF THE PART IN THE AIRCRAFT IS ALSO GIVEN.

REFER TO FIGURE 21 FOR LOCATION OF FORMAT DATA FIELDS.

(1) BLOCKS AND COLUMNS AS INDICATED: ARE FOR INHOUSE INFORMATION. NOT NECESSARY FOR INTERPRETATION OF DOCUMENT.

(2) BLOCKS AS INDICATED: NOT APPLICABLE TO TYPE R REFERENCE DESIGNATION LISTS.

(3) CONTRACT NUMBER GOVERNMENT CONTRACT NUMBER FOR WHICH THE DOCUMENT WAS INITIALLY PREPARED.

(4) BLOCK AS INDICATED: DOCUMENT IDENTIFICATION NUMBER OF THE REFERENCE DESIGNATION LIST. THE BASIC DOCUMENT NUMBER IS THE SUB SYSTEM NUMBER FOR WHICH THE EQUIPMENT LIST WAS PREPARED.

(5) DRAWING TITLE: TITLE OF THE EQUIPMENT LIST DEFINED BY THE RDL.

(6) RDL ISSUE NO: A NUMBER ASSIGNED IN NUMERICAL SEQUENCE FOR EACH ISSUE OF THE REFERENCE DESIGNATION LIST. REVISION LETTERS ARE ALSO ASSIGNED WHEN REQUIRED BY MIL-STD-100, MILITARY STANDARD DRAWING PRACTICES. SEE ITEM (12).

(7) DWG TYPE: A CODE LETTER INDICATING THE DRAWING TYPE. DRAWING TYPE "R" DESIGNATES AN EQUIPMENT LIST.

(8) SHEET OF : SHEET NUMBER AND TOTAL NUMBER OF SHEETS OF THE DOCUMENT.

(9) RELEASE DATE: THE DATE OF THE INITIAL RELEASE OF THE DOCUMENT.

(10) ISSUE DATE: DATE OF THE RDL ISSUE NO. SEE ITEM(6).

(11) INTERPRETATION PER: REFERENCE TO THIS FORMAT INTERPRETATION DOCUMENT.

(12) REV LETTER: THE CURRENT REVISION LETTER OF THE REFERENCE DESIGNATION LIST.

(13) RDL REVISION: PERMANENT RECORD OF ALL CHANGES TO THE REFERENCE DESIGNATION LIST.

(14) PARTS LIST NOTES: GENERAL NOTES APPLICABLE TO THE REFERENCE DESIGNATION LIST, UPPER-CASE LETTERS ENCLOSED IN PARENTHESIS DESIGNATE LOWER-CASE LETTERS.

(15) REFERENCE DESIGNATION: THE COMPLETE REFERENCE DESIGNATION FOR THE ITEM LISTED IN THE PART NUMBER/SECTION NUMBER COLUMN.

(16) USE & STATUS: A CODE INDICATING THE SEQUENCE IN WHICH PARTS ASSIGNED THE SAME REFERENCE DESIGNATION WERE REPLACED AND THE INTERCHANGEABILITY STATUS OF REPLACING PARTS. CODES ARE ASSIGNED AS FOLLOWS.

CODES "02", "03", ETC., IDENTIFY SUBSEQUENT PART NUMBERS AND ARE ASSIGNED IN SEQUENCE FOR ITEMS HAVING THE SAME REFERENCE DESIGNATION. CODES PREFIXED WITH THE LETTER "P" (E.G. P02) DESIGNATE THAT THE PART MAY BE USED FOR ALL REPLACEMENTS OF PRIOR PARTS ASSIGNED THE SAME REFERENCE DESIGNATION. CODES PREFIXED WITH THE LETTER "A" DESIGNATE THAT THE PART MAY BE USED AS AN ALTERNATE PART.

(17) PART NUMBER/SECTION NUMBER: THE PART NUMBER OF THE SIGNED.

(18) NOMENCLATURE: THE NAME OF THE ITEM IDENTIFIED IN THE PART NUMBER/SECTION NUMBER COLUMN.

(19) EFFECTIVE ON - FROM/THRU: A NUMBER APPEARING IN THE "FROM" COLUMN INDICATES THE FIRST ARTICLE OF THE NOTED TYPE/VERSION, ITEM (20). TO WHICH THE DIAGRAM PAGE LISTED IN THE PART NUMBER/ SECTION NUMBER COLUMN IS "EFFECTIVE ON" (APPLICABLE TO). A NUMBER APPEARING IN THE "THRU" COLUMN INDICATES THE LAST ARTICLE TO WHICH THE DIAGRAM PAGE IS APPLICABLE. EFFECTIVITIES SHALL BE INTERPRETED AS FOLLOWS:

(A) IF THE "EFFECTIVE ON" AND "TYPE"/"VERS" COLUMNS ARE BLANK, THE DIAGRAM PAGE IS

EFFECTIVE ON ALL ARTICLES COVERED BY THE RDL. SEE ASSOCIATED APPLICATION LIST.

(B) IF THE "EFFECTIVE ON" COLUMNS ARE BLANK AND THE "TYPE" AND "VERS" COLUMNS HAVE AN ENTRY, THE DIAGRAM PAGE IS EFFECTIVE FOR ALL ARTICLES OF THE NOTED TYPE VERSION TO WHICH THE RDL IS APPLICABLE.

(C) IF ENTRIES APPEAR IN THE "EFFECTIVE ON" AND "TYPE"/"VERS" COLUMNS, THE EFFECTIVITY IS AS STATED.

(20) TYPE/VERS: A CODE INDICATING THE ARTICLES TO WHICH THE LINE ENTRY IS APPLICABLE. ENTRIES IN THE "TYPE" COLUMN DESIGNATE A MODEL. ENTRIES IN THE "VERS" COLUMN DESIGNATE A PARTICULAR VERSION OF THE APPLICABLE MODEL. REFER TO PARAGRAPH 2.4 FOR CODE INTERPRETATION.

(21) USING DRAWING: THE NEXT ASSEMBLY DRAWING NUMBER FOR THE ITEM ENTERED IN THE PART NUMBER/SECTION NUMBER COLUMN.

(22) LOCATION - STA, WL, BL: THE STATION LINE, WATER LINE AND BUTTOCK LINE LOCATION OF THE PART IN THE AIRCRAFT. FOR BUTTOCK LINE LOCATIONS, "L" AND "R" PREFIXES INDICATE "LEFT HAND SIDE" AND "RIGHT HAND SIDE" RESPECTIVELY.

(23) NOTE: IDENTIFIES A NOTE APPLICABLE TO THE LINE ENTRY.

(24) APPL: THIS COLUMN IS USED IN CONJUNCTION WITH RETROFIT ACCOMPLISHMENT. A CODE LETTER ENTERED IN THIS COLUMN DEFINES THE APPLICABLE RETROFIT USAGE FOR THE LINE ENTRY. CODE LETTERS ARE DEFINED AS FOLLOWS:

D = DELETE (THE LISTED PART WILL NOT BE APPLICABLE AFTER THE RETROFIT CHANGE IDENTIFIED BY THE ENTRY IN THE "ECP NO." COLUMN IS ACCOMPLISHED. SEE ITEM (25)).

A = ADDED (THE LISTED PART IS ADDED BY THE RETROFIT CHANGE IDENTIFIED IN THE "ECP NO." COLUMN).

(25) ECP NO: THIS COLUMN IS USED IN CONJUNCTION WITH RETROFIT ACCOMPLISHMENT AND IDENTIFIES THE BASIC ECP NUMBER WHICH AUTHORIZED THE CHANGE.

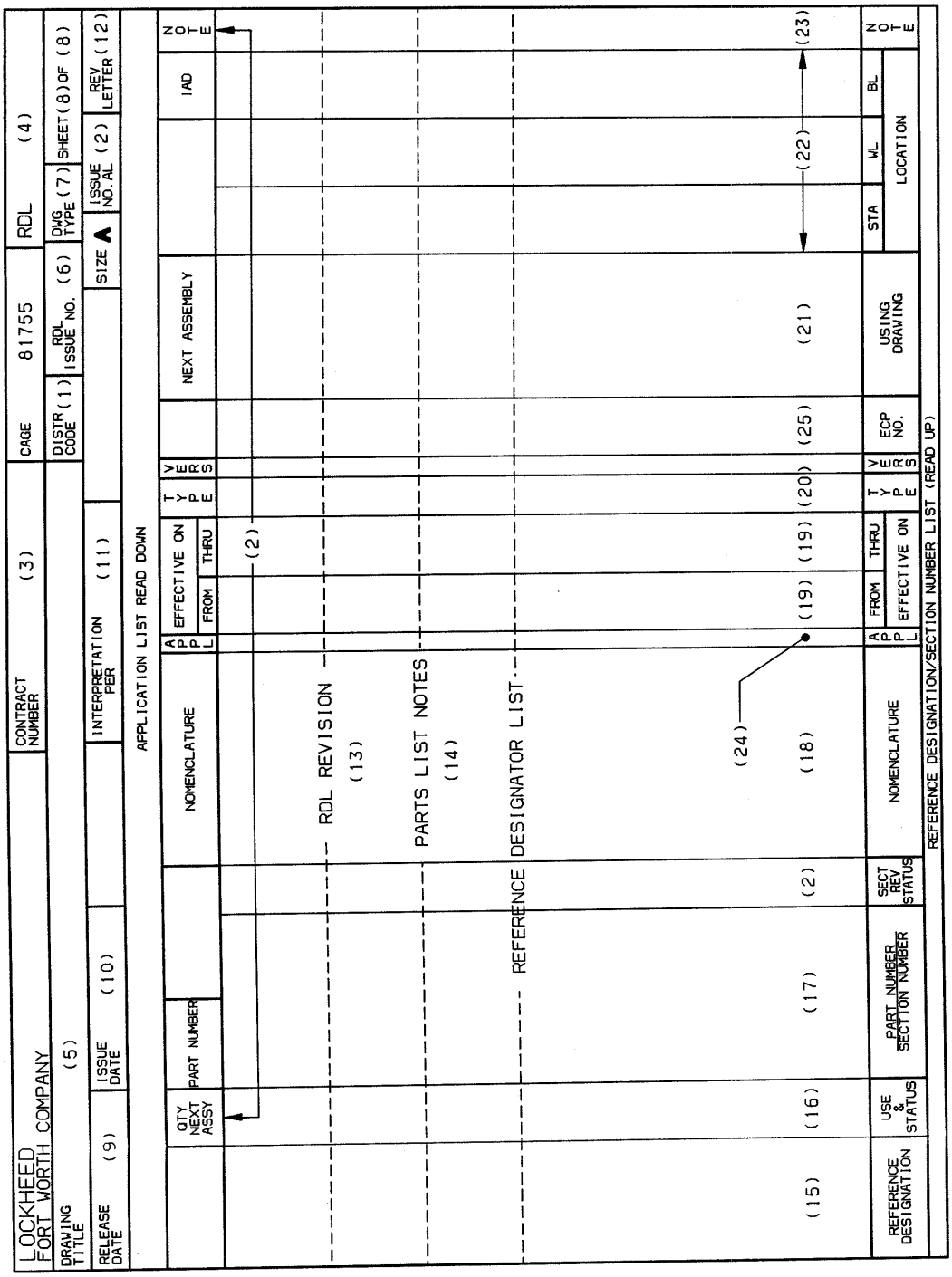


FIGURE 21

	SIZE A	CAGE CODE 81755	16Z001
CONTRACT NO. F33657-75-C-0310	SCALE	REVISION AK	SHEET 89

3.4.14 ENGINEERING CHANGE NOTICE (ECN) FOR THE REFERENCE DESIGNATION LIST (RDL) - DRAWING TYPES "M", "N", "P", "Q" AND "R"

AN ENGINEERING CHANGE NOTICE (ECN) IS USED TO INITIATE AND RECORD CHANGES TO RELEASED REFERENCE DESIGNATION LISTS AND TO CREATE NEW REFERENCE DESIGNATION LISTS.

REFER TO FIGURE 22 FOR LOCATION OF FORMAT DATA FIELDS.

(1) BLOCKS AND COLUMNS AS INDICATED: ARE FOR INHOUSE INFORMATION. NOT NECESSARY FOR INTERPRETATION OF DOCUMENTS.

(2) BLOCKS AS INDICATED: NOT APPLICABLE TO REFERENCE DESIGNATION LISTS FOR DRAWING TYPES M. N, P, Q AND R.

(3) COLUMNS AS INDICATED: ENTRIES CORRESPOND TO APPLICABLE REFERENCE DESIGNATION LIST INTERPRETATIONS FOR THE IDENTICAL COLUMNS. SEE PARAGRAPH 3.4.10 AND 3.4.11.

(4) CONTRACT NO: GOVERNMENT CONTRACT NUMBER APPLICABLE TO THE CHANGE.

(5) ECN SER NO: IDENTIFICATION NUMBER OF THE ENGINEERING CHANGE NOTICE.

(6) DRAWING NO: IDENTIFICATION NUMBER OF THE RDL AFFECTED BY THE CHANGE (LESS THE RDL PREFIX). FOR ECNS WHICH CREATE NEW RDLS, THIS NUMBER IS THE IDENTIFICATION NUMBER OF THE NEW RDL.

(7) SHEET OF : SHEET NUMBER AND TOTAL NUMBER OF SHEETS OF THE DOCUMENT. THE TOTAL NUMBER OF SHEETS IS INDICATED ON SHEET ONE ONLY.

(8) RDL REV LTR: THE REVISION LETTER OF THE REFERENCE DESIGNATION LIST ASSIGNED TO THE CHANGE DESCRIBED BY THE ECN. AN "X" IN THIS BLOCK INDICATES A NEW RDL IS BEING CREATED BY THE ECN.

(9) RCN: AN INTERNAL DOCUMENT NUMBER BY WHICH THE EFFECTIVITY OF THE CHANGE IS ESTABLISHED. THE ACTUAL EFFECTIVITY IS INDICATED ON THE APPLICATION LIST FOR THE AFFECTED DIAGRAM/SCHEMATIC. SEE PARAGRAPH 3.4.1, ITEMS (15) AND (16). "RECORD

CHANGE" INDICATES THAT THE CHANGE IS NOT OF A DESIGN NATURE.

(10) EFFECTIVITY: INDICATES TYPE, VERSION AND EFFECTIVITY (SEE PARAGRAPH 3.4.1, ITEM 18) OF THE RELEASE CONTROL NUMBER, ITEM (9). WHEN A SEPARATE RELEASE CONTROL DOCUMENT IS NOT USED.

(11) DISTR: A LETTER IN THIS COLUMN INDICATES THAT A SEPARATE RELEASE CONTROL DOCUMENT IS NOT USED. A DASH IN THIS COLUMN INDICATES THAT A SEPARATE RELEASE CONTROL DOCUMENT IS USED.

(12) DWG TITLE: ENTRY REQUIRED ONLY WHEN THE TITLE IS TO BE REVISED, IN WHICH CASE THE REVISED TITLE IS SHOWN IN THIS BLOCK.

(13) REASON FOR CHG: A BRIEF STATEMENT AS TO WHY THE CHANGE WAS MADE.

(14) TC: TRANSACTION CODE DEFINED AS FOLLOWS:

C - CREATE (NEW ITEM)
A - ADDED (ADDITIONAL REQUIREMENT FOR AN EXISTING ITEM)
L - LIMIT (DELETION OF ALL REQUIREMENTS)
D - DECREASE (REDUCTION IN REQUIREMENTS)
R - REVISE (REVISION WITHIN AN EXISTING LINE ENTRY)

(15) RCN: A NUMBER ENTERED IN THIS COLUMN INDICATES THE RELEASE CONTROL NUMBER APPLICABLE TO THE LINE ENTRY. A DASH (-) INDICATES THAT ALL RELEASE CONTROL NUMBERS LISTED ARE APPLICABLE TO THE LINE ENTRY.

(16) DIAGRAM DASH NO: THE DASH NUMBER SUFFIX OF THE AFFECTED RDL. WHEN THE ECN CREATES A NEW RDL. THE NEW RDL DASH NUMBER IS SHOWN IN THIS COLUMN.

(17) NEXT ASSY QTY: "REF" INDICATES THAT THE ITEM LISTED IN THE DIAGRAM DASH NUMBER COLUMN IS NOT A HARDWARE ITEM.

(18) SAME AS: THE DASH NUMBER OF AN EXISTING ITEM WHEN A NEW DASH NUMBERED ITEM IS CREATED SIMILAR TO THE EXISTING ITEM.

(19) REPLACED QTY: "REF" INDICATES THAT THE ITEM IS NOT A HARDWARE ITEM.

(20) REPLACED - DASH: THE DASH NUMBER OF AN EXISTING RDL REPLACED BY THE RDL IDENTIFIED IN THE "DIAGRAM DASH NO." COLUMN.

(21) NOMENCLATURE: THE NOMENCLATURE APPLICABLE TO THE RDL IDENTIFIED IN THE "DIAGRAM DASH NO." COLUMN.

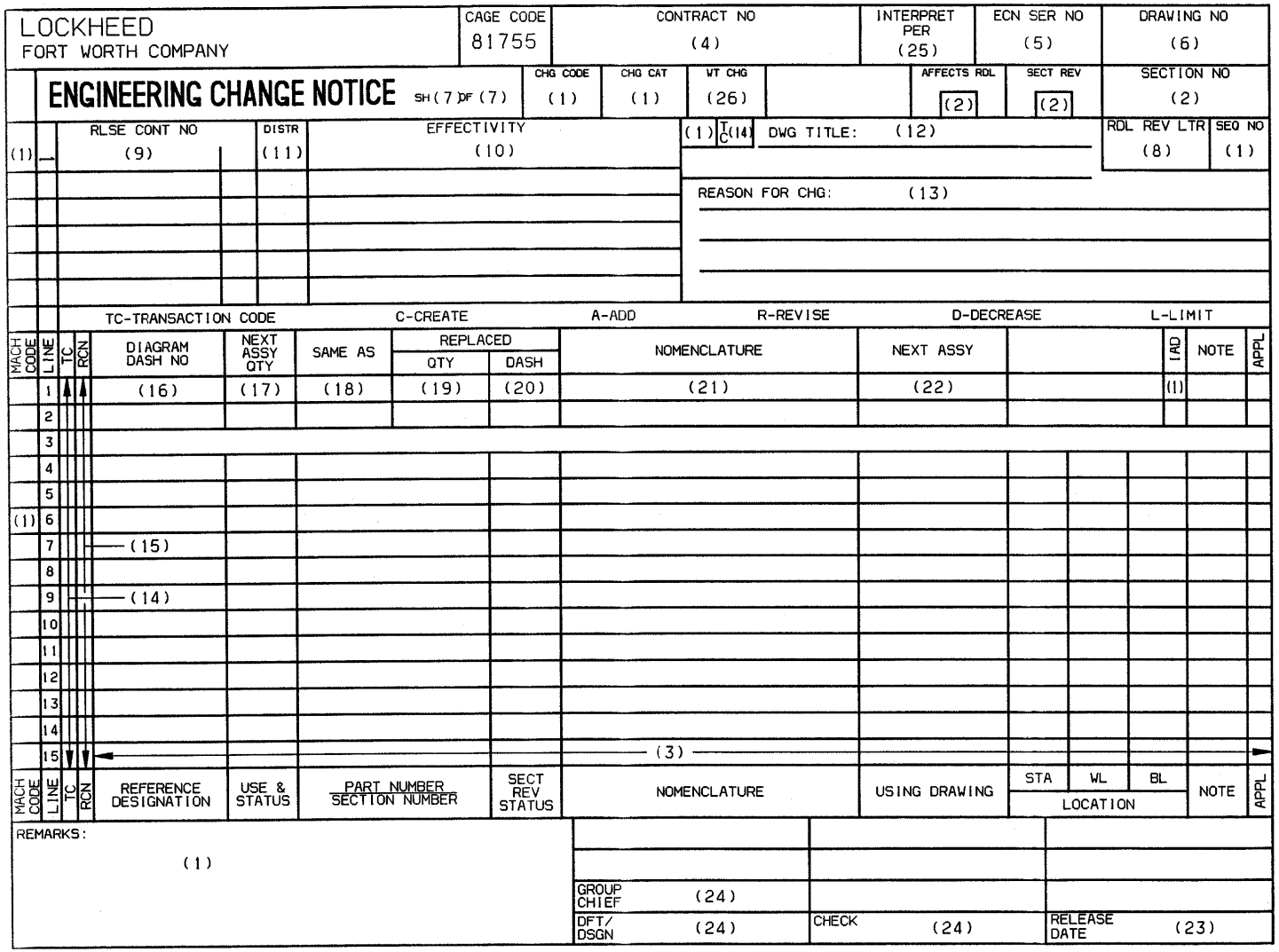
(22) NEXT ASSY: THE NEXT HIGHER ASSEMBLY FOR THE RDL IDENTIFIED IN THE "DIAGRAM DASH NO." COLUMN.

(23) REL DATE: THE DATE OF INITIAL RELEASE OF THE ECN.

(24) BLOCKS AS INDICATED: SIGNATURES OF APPROVAL, CHECK AND PREPARATION. SIGNATURES ON SH 1 OF A MULTIPLE SHEET DOCUMENT INDICATE APPROVAL OF ALL SHEETS.

(25) INTERPRETATION PER: REFERENCE TO THIS FORMAT INTERPRETATION DOCUMENT.

(26) WT CHG: POUNDS INCREASED OR DECREASED AS A RESULT OF THE CHANGE. A CHECK MARK INDICATES "NONE" OR "NEGLIGIBLE".



LOCKHEED
FORT WORTH COMPANY

CAGE CODE	CONTRACT NO	INTERPRET PER	ECN SER NO	DRAWING NO
81755	(4)	(25)	(5)	(6)

ENGINEERING CHANGE NOTICE

SH (7) OF (7)

CHG CODE	CHG CAT	WT CHG		AFFECTS RDL	SECT REV	SECTION NO
(1)	(1)	(26)		(2)	(2)	(2)

(1)	RLSE CONT NO	DISTR	EFFECTIVITY
	(9)	(11)	(10)

(1) T/C (14) DWG TITLE: (12)

RDL REV LTR (8) SEQ NO (1)

REASON FOR CHG: (13)

TC-TRANSACTION CODE C-CREATE A-ADD R-REVISE D-DECREASE L-LIMIT

MACH CODE	LINE	TC	RCN	DIAGRAM DASH NO	NEXT ASSY QTY	SAME AS	REPLACED QTY	REPLACED DASH	NOMENCLATURE	NEXT ASSY		IAD	NOTE	APPL
	1			(16)	(17)	(18)	(19)	(20)	(21)	(22)		(1)		
	2													
	3													
	4													
	5													
(1)	6													
	7			(15)										
	8													
	9			(14)										
	10													
	11													
	12													
	13													
	14													
	15								(3)					

MACH CODE	LINE	TC	RCN	REFERENCE DESIGNATION	USE & STATUS	PART NUMBER / SECTION NUMBER	SECT REV STATUS	NOMENCLATURE	USING DRAWING	STA	WL	BL	NOTE	APPL
										LOCATION				

REMARKS: (1)

GROUP CHIEF (24)		
DFT/DSGN (24)	CHECK (24)	RELEASE DATE (23)

FIGURE 22

CONTRACT NO. F33657-75-C-0310

SIZE A | CAGE CODE 81755 | 16Z001

SCALE | REVISION AK | SHEET 93