NOTE: The cover page of this standard has been changed for administrative reasons.

There are no other changes to this document.

NOT MEASUREMENT SENSITIVE

MIL-STD-1808(USAF) 10 OCTOBER 1990 SUPERSEDING See 6.2

DEPARTMENT OF DEFENSE

INTERFACE STANDARD

SYSTEM/SUBSYSTEM/SUBJECT/NUMBER (S/S/S/N) NUMBERING SYSTEM



FOREWORD

- 1. This standard is approved for use by Department of the Air Force and is available for use by all Departments and Agencies of the Department of Defense.
- 2. Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: HQ AFLC/MMDB, Wright-Patterson AFB, OH 45433-5000, by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.
- 3. This standard is intended to be used in conjunction with MIL-M-83495 and replace Air Force use of Appendix A of DOD-STD-863.

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1. SCOPE.

- 1.1 Scope. This standard sets forth the requirements for the system/subsystem/subject numbering for engineering drawings and technical manuals for aircraft, missiles and space systems, engines, ground communication-electronic equipment and support equipment (only that support equipment unique to the equipment covered), and may be used for logistic support analysis, configuration management and work unit codes.
- 1.2 <u>Acquisition applicability</u>. This standard shall be used by all Air Force acquiring activities and their respective contractors during the development and acquisition of weapon systems and equipment.

1

2. REFERENCE DOCUMENTS.

2.1 Government documents.

2.1.1 Specifications, standards, and handbooks. The following specifications, standards and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, cited in the solicitation (see 6.2).

SPECIFICATIONS

Military

MIL-M-83495

Manuals, Technical: On Equipment Set, Organizational Manuals; Detailed Requirements for Preparation of

STANDARDS

Military

DOD-STD-863

Wiring Data and System Schematic Diagrams

Preparation of

MIL-STD-33739

Aircraft Markings, Servicing and Precautioning (ASG)

(Unless otherwise indicated, copies of federal and military specifications, standards and handbooks are available from the Standardization Documents Order Desk, Building 4D, 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

2.1.2 Other Government documents, drawings and publications. The following other Government documents, drawings, and publications form a part of this specification to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation.

TECHNICAL MANUALS

TO 1-1-4

Exterior Finishes, Insignia, and Marks Applicable to United States Air Force Aircraft

(Copies of this manual required by manufacturers in connection with specific acquisition functions should be obtained from the acquiring activity or as directed by the contracting officer.)

2.2 Order of precedence. In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. **DEFINITIONS.**

3.1 <u>Definitions</u>. Definitions shall be in accordance with the documents listed in Section 2.

4. GENERAL REQUIREMENTS.

- 4.1 System/Subsystem/Subject Number (S/S/SN) numbering system. The numbering system is a conventional dash number breakdown which provides a means for dividing material into System, Subsystem and Subject. The following instructions provide general procedures for constructing the S/S/SN using the numbers assigned herein. The S/S/SN is used as a reference key to locate needed data. Broad rules for applying the S/S/SN and specific instructions applying to individual manuals are outlined in this document. The S/S/SN shall be used in conjunction with the requirements of DOD-STD-863, MIL-M-83495 or, for electronic data, task oriented view packages.
- 4.1.1 <u>Number composition</u>. The S/S/SN is composed of three elements which consist of two designators each; a fourth element, Function number, is used when typical maintenance functions are performed. The sub-subsystem number and subject number are assigned by the manufacturer dependent upon the complexity of the equipment. The following is an example:

FIRST ELEMENT		SECOND ELEMENT		THIRD ELEMENT	FOURTH ELEMENT	
SYSTEM NUMBER		SUBSYSTEM NUMBER		SUBJECT NUMBER	FUNCTION NUMBER	COVERAGE
34 (SYST Navig	- TEM) gatio:	00 n	-	00		Information which is applicable to the system in general. These designators are specified herein.
34	-	50 (SUBS) Depend Determ	dent	Position		Information which is applicable to the subsystem as a whole. The first designator of the pair is specified herein.
34	-	5 <u>2</u> (SUB-	- SUBSY	00 Stem)		Information which is applicable to the subsubsystem as a whole. This second designator of the pair is assigned by the manufacturer.

34	-	52	-	O3 GENE			Information which is applicable to a general item of the sub-
				(01-	_		subsystem. These designators are assigned by the manufacturer unless specified herein.
34	-	52	-			T CATION	Information which is applicable to a component of the subsubsystem. These designators are assigned by the manufacturer.
34	-	52	-	10	-	001 FUNCTION (001-999)	A procedure, part, etc., which is applicable to a subsystem, sub-subsystem or subject.

NOTE: In covering material which is applicable to a system as a whole, the three element number shall be used. These shall be the system number followed by '-00-00.'

Examples:

21-00-00 would be used for description and operation, troubleshooting and maintenance practices for the complete air conditioning system.

34-50-00-001 would be used for the Operational Checkout of the total Dependent Position Determining subsystem. 34-51-22-003 would be the removal of a (subject) part of the Dependent Position Determining subsystem.

4.1.1.1 Expanded numbering. When required for program needs such as logistic support analysis, configuration management, work unit codes, etc., additional elements may be used.

5. DETAILED REQUIREMENTS.

- 5.1 <u>Use of S/S/SN</u>. When used in conjunction with MIL-M-83495, the S/S/SN shall be used as described in the following paragraphs. When used for electronic data, the S/S/SN shall be used in task oriented view packages.
- 5.1.1 <u>Use of "System" number</u>. The system number is used to denote a chapter in General Equipment (GE), Fault Reporting (FR) and Fault Isolation (FI) manuals. In General System (GS) manuals, the system number is used to denote a manual (if separate manuals) or a chapter (if combined manuals). For Job Guide (JG) manuals, the system number designates the manual(s) for that system. The contents of the manual or chapter, and the broad system, subsystem separations are assigned by this standard. Sub-subsystem breakouts and the subject and function number elements are assigned by the manufacturer. Systems which are reserved or not used shall not be included in the manuals. For electronic data, the system number shall be used in the S/S/SN as specified in 5.1.
- 5.1.1.1 Chapter/manual numbering system. Chapter/manual numbers and titles are listed in Section 5.
- 5.1.2 <u>Use of 'Subsystem' number</u>. The subsystem number is used to denote a section in the GE, FR and FI manuals. In GS manuals, the subsystem number is used as a reference only. For Job Guide (JG) manuals, the subsystem number designates a chapter within the manual(s) for that system. The contents of the chapter or section, and the subsystem separations, are assigned by this document. Sub-subsystem breakouts and the subject and function number elements are assigned by the manufacturer. For electronic data, the subsystem number shall be used in the S/S/SN as specified in 5.1.
- 5.1.3 Sub-subsystem numbering. Certain systems which contain very complex subsystems may require further breakout into sub-subsystems. This will be indicated by the fourth designator, such as 34-51-00. In this case, -51 would be a sub-subsystem of the Dependent Position Determining subsystem of the Navigation System. When complexity of the subsystem dictates the need to use the sub-subsystem breakout, the application of the subsystem designator as shown herein must be confined to discussion of the total subsystem; i.e., material contained in 34-50 would necessarily be confined to general discussion of the total Dependent Position Determining subsystem, and requires the addition of zeros in the third element (34-50-00). A subsubsystem shall not be identified in the second element unless a

fourth designator, different from zero (0), is assigned. For electronic data, the sub-subsystem number shall be used in the S/S/SN as specified in 5.1.

- 5.1.4 <u>Subject number numbering</u>. The subject number is assigned by the manufacturer. This number will be assigned in consecutive order which relates to the manual/view package in which it is used. For example, the fifth subject in a Job Guide (JG) would be XX-XX-05.
- 5.1.4.1 Subject number development for JG, FR and FI manuals. In JG manuals, the subject number is assigned in accordance with the sequence of the JG manuals.
- a. The significance of the subject number assignments is in the referencing of the S/S/SN in the terminal steps of the fault tree contained in the FR and FI manuals. This allows revision of the JG manual with minimal impact on the references of the fault tree.
- b. The S/S/SN reflected in the lower outer corner of the FR and FI manuals shall reflect the three element (6 designator) number to the lowest element or designator possible, as allowed by the composition of the segment of the fault tree displayed on that page. For example: If an FR or FI page contains only fault tree segments applicable to a specific item of a sub-subsystem of the Dependent Position Determining subsystem, the page would reflect 34-51-01; if a page contains segments of the fault tree applicable to more than one subject (general) breakdown of the Dependent Position Determining subsystem, the page would reflect 34-51-00; if the page contains segments of the fault tree applicable to multiple sub-subsystems within the Dependent Position Determining subsystem, the page would reflect 34-50-00.
- 5.1.4.1.1 Subject number development for other than JG, FR and FI manuals. When used in view packages/other manuals, the subject number is assigned in subject sequence of the system. Subject number development for manuals other than the JG, FR and FI manuals, are similar to identifications above.
- 5.1.5 <u>Function number</u>. The function number shall be assigned as prescribed by MIL-M-83495 and 5.1.5.1 except when used with view packages. When used in conjunction with view packages, the function number shall designate a task, maintenance procedure, part, etc.
- 5.1.5.1 Function number requirements for Job Guide manuals. The assignment of the function number shall be keyed to the function

subject of the JG manual and shall be numbered as provided in MIL-M-83495. For example: All operational checkouts of systems, subsystems, sub-subsystems or a subject number identified item would be identified as "-001".

5.1.5.2 Typical functions. The following typical functions may be used as guide for development of the function numbers and may be expanded/changed to suit equipment requirements:

001 - Operational Che	ckout 011 -	Calibrate
002 - Access	012 -	Operate
003 - Remove	013 -	Troubleshoot
004 - Repair	014 -	Disassemble
005 - Install	015 -	Assemble
006 - Inspect	016 -	Test
007 - Clean	017 -	Non Destructive Inspection
008 - Lubricate	018 -	Corrosion Prevention
009 - Service	019 -	Follow-On Maintenance
010 - Align and Adjus	t 020 -	Shipping/Handling/Packaging

- 5.1.6 Text development. The definitions of the system numbering shall be used as a basis for sequencing/developing the text of the manuals/view packages.
- Definition of aircraft groups, systems and subsystems.

GROUP

DEFINITION

AIRCRAFT

wattana ration and construction

The complete operational unit, Includes dimensions and areas, lifting and shoring, leveling, and weighing, towing and taxing, parking and shoring, required placards, servicing.

5.3 System number index. The following index is a compilation of the Systems that will be found on the subsequent pages of this document and has been added for quick reference purposes.

SYSTEM	TITLE
00	AIRCRAFT - GENERAL
01 THRU 04	RESERVED
05	TIME LIMITS/MAINTENANCE CHECKS
06	DIMENSIONS AND AREAS

07	LIFTING, SHORING, RECOVERING AND TRANSPORTING
08	LEVELING AND WEIGHING
09	TOWING AND TAXIING
10	PARKING AND MOORING
11	PLACARDS AND MARKINGS
12	SERVICING
13	EQUIPMENT STORAGE
14	AIRCRAFT LOADING AND OFF-LOADING
15	SUPPORT EQUIPMENT
16	SITING INSTALLATION
17	PREPARATION FOR USE AND SHIPMENT
18	WEAPONS INSTRUMENTATION
19	RESERVED
20	STANDARD PRACTICES - AIRFRAME SYSTEMS
21	AIR CONDITIONING
22	AUTO FLIGHT
23	COMMUNICATIONS
24	ELECTRICAL POWER
25	EQUIPMENT/FURNISHINGS
26	FIRE PROTECTION
27	FLIGHT CONTROLS
28	FUEL
29	HYDRAULIC POWER
30	ICE AND RAIN PROTECTION

31	INDICATING/RECORDING SYSTEMS
32	LANDING GEAR
33	LIGHTS
34	NAVIGATION
35	OXYGEN
36	PNEUMATIC
37	VACUUM
38	WATER/WASTE
39	ELECTRICAL/ELECTRONIC COMPONENTS AND MULTIFUNCTION UNITS
40	STANDARD PRACTICES - INTEGRATED AVIONICS
41	WATER BALLAST
42	INTEGRATED AVIONICS ARCHITECTURE
43	COMMUNICATIONS - STAFF
44	IN-FLIGHT REFUELING - TANKER
45	CENTRAL MAINTENANCE SYSTEM (CMS)
46	SYSTEM INTEGRATION AND DISPLAY
47	LIQUID/GASEOUS NITROGEN
48	RESERVED
49	AIRBORNE AUXILIARY POWER
50	RESERVED
51	STANDARD PRACTICES - STRUCTURES
52	DOORS
53	FUSELAGE
54	NACELLES/PYLONS

55			STABILIZERS
56			WINDOWS AND CANOPIES
57			WINGS
58	AND	59	RESERVED
60			STANDARD PRACTICES - PROPELLER
61			PROPELLERS/PROPULSORS
62			ROTOR(S)
63			ROTOR DRIVE(S)
64			TAIL ROTOR
65			TAIL ROTOR DRIVE
66			FOLDING BLADES/PYLON
67			ROTORS FLIGHT CONTROLS
68	AND	69	RESERVED
70			STANDARD PRACTICES - ENGINE
71			POWER PLANT
72 72	(1) (2)	-	POWER PLANT ENGINE ENGINE - TURBINE/TURBOPROP ENGINE - RECIPROCATING
72 72	(1)		ENGINE ENGINE - TURBINE/TURBOPROP
72 72 72	(1)		ENGINE ENGINE - TURBINE/TURBOPROP ENGINE - RECIPROCATING
72 72 72 73	(1)		ENGINE ENGINE - TURBINE/TURBOPROP ENGINE - RECIPROCATING ENGINE FUEL AND CONTROL
72 72 72 73	(1)		ENGINE - TURBINE/TURBOPROP ENGINE - RECIPROCATING ENGINE FUEL AND CONTROL ENGINE IGNITION
72 72 72 73 74 75	(1)		ENGINE - TURBINE/TURBOPROP ENGINE - RECIPROCATING ENGINE FUEL AND CONTROL ENGINE IGNITION ENGINE AIR
72 72 72 73 74 75 76	(1)		ENGINE ENGINE - TURBINE/TURBOPROP ENGINE - RECIPROCATING ENGINE FUEL AND CONTROL ENGINE IGNITION ENGINE AIR ENGINE CONTROLS

80	ENGINE STARTING
81	TURBINES
82	WATER INJECTION
83	ACCESSORY GEARBOXES
84	PROPULSION AUGMENTATION
85 THRU 90	RESERVED
91	CHARTS/DIAGRAMS
92	ELECTRICAL POWER MULTIPLEXING
93	ELECTRONIC WARFARE
94	WEAPON SYSTEM
95	CREW ESCAPE AND SAFETY
96	MISSILES, DRONES AND TELEMETRY
97	IMAGE RECORDING
98	METEOROLOGICAL AND ATMOSPHERIC RESEARCH
99	SURVEILLANCE

<u>SYSTEM</u>	SUB- SYSTEM	M TITLE	DEFINITION
00		AIRCRAFT GENERAL	General information for the complete aircraft, procedures for aircraft safety and general aircraft maintenance, use of aircraft safety and protective devices, and fatigue life calculations.
	00	AIRCRAFT DESCRIPTION	General description of the aircraft and it's systems, including type of aircraft, it's roles, accommodations, salient construction features, power unit installation, systems and operational equipment.
	10	AIRCRAFT GENERAL MAINTENANCE	Those instructions necessary for aircraft maintenance condition, cockpit entry, electrical (static) grounding, external power and cooling removal and installation, proximity switch control hookup and removal, ground communications connecting and disconnecting, utility power connection, radome opening and closing, landing gear door opening and closing, solo flight configuration, engine oil analysis, electrical bonding and sealing, and stress frame installation and removal.
	20	AIRCRAFT SAFETY	Those specific or vehicle peculiar instructions necessary to make safe and prepare the aircraft for maintenance action. Includes instructions for returning the aircraft to it's serviceable state.
	30	SAFETY AND PROTECTIVE DEVICES	Those instructions necessary for use or operation of devices, such as; ejection control safety lever, safety pins, safety locks, safety pin flag assemblies, safety strut extensions and other required safety devices. Includes

	SYSTEM	SUB- SYSTEM	M TITLE	DEFINITION
0	00	30 - 0	Continued	instructions necessary for removal and installation of ground protective covers, bungs, blanks, etc.
		40	FATIGUE INDEX CALCULATIONS	Procedures and formulae for calculating fatigue index/fatigue lives of the aircraft structure from fatigue meter readings.
		50	OPERATING SPECTRUM(S)	Assumed operating spectrum(s) for the aircraft from which the safe fatigue lives are calculated.

SYSTEM SYSTEM TITLE

DEFINITION

01 THRU 04 RESERVED

#MINI

SYSTEM	SUB- SYSTEM	1 TITLE	<u>DEFINITION</u>
05		TIME LIMITS/ MAINTENANCE CHECKS	Time limits for inspections and maintenance checks (both scheduled and unscheduled). This system shall be used for reference only. Actual inspections and time limits shall be included in the equipment -6 manual and workcards.
	00	GENERAL	
	10	TIME LIMITS	Those time limits for inspections, maintenance and overhaul of the aircraft, it's systems and units, and life of parts.
			For engines, this shall include the flight cycle lives of major rotating components and other items designated critical.
	20	SCHEDULED MAINTENANCE CHECKS	Those maintenance checks and inspections of the aircraft, it's systems and units dictated by the time limits in -10 above. This section shall list in detail the items which are required and shall cross reference the detailed procedures included in the individual maintenance practices. Includes preflight, basic postflight, hourly postflight, periodic/phased, etc., inspections.
	30 and 40	AVAILABLE	Available for use in those cases where the number of breakouts provided by the fourth designator of the -20 breakout is not sufficient to cover all of the maintenance checks dictated by subsystem -10 above.
	50	UNSCHEDULED MAINTENANCE CHECKS	Those maintenance checks and inspections on the aircraft, it's systems and units which are dictated by special or unusual

SYSTEM	SUB- SYSTEM TITLE	DEFINITION
05	5 50 - Continued	conditions which are not related to the time limits specified in -10 above. Includes inspections and checks such as hard landing, over weight landing, bird strike, turbulent air, lightning strike, slush ingestion, radioactive contamination, maintenance checks prior to engine out ferry, etc.
	60 ACCEPTANCE AND FUNCTIONAL CHECK FLIGHT	Those in-flight functional checks necessary to fulfill inspection requirements to prove the safety/airworthiness of all components and systems following maintenance activities. Includes only that information which adds to or enhances the information contained in the flight manual.

SYSTEM	SUB- SYSTEM	M TITLE	DEFINITION
06		DIMENSIONS AND AREAS	Those charts, diagrams and text which show the area, dimensions, stations, access doors/zoning, reference lines and physical locations of the major structural members of the aircraft. Includes an explanation of the system of zoning and measurement used. When applicable, illustrations shall be provided identifying, by station number, equipment stations (fuselage, wing stations, etc.). Stations shall be identified to the number by use of connecting lines. Other applicable illustrations shall be prepared showing the internal/external access doors openings, inspection openings and walkways. Openings shall be identified by numbers, letters, or a combination of both, and use of connecting lines.
	00	GENERAL	
	10	PRINCIPAL DIMENSIONS	Includes a conventional three view illustration of the aircraft with principal dimensions.
	20	REFERENCE LINES	Includes a system for locating units/components in relation to aircraft reference lines (stations, water lines and buttock lines).
	30	ZONES AND AREAS	Includes aircraft subdivision by zone(s)/area(s) to identify the zone/area in which the maintenance task is done.
	40	ACCESS PROVISIONS	Includes all access doors and panels, ports and drainage holes.

	SUB-		
SYSTEM	SYSTEM	TITLE	<u>DEFINITION</u>
07		LIFTING,	That material necessary to describe
		SHORING, RECOVERING	the lifting, shoring recovering and
		AND	transporting of the aircraft in any of the conditions to which it may
		TRANSPORTING	be subjected. Includes procedures covering maintenance, overhaul and repair. Charts showing lifting, jacking and shoring points shall be provided. Also includes information on recovering the aircraft from any condition to which it may be subjected (including emergency recovery), and
			how to transport by air/road/rail/etc.
	10	JACKING	Information on jacking points, adapter, tail supports, balance weights, jacking procedures and the
			jacks used to lift the aircraft during maintenance, repair and recovery.
	20	SHORING	Information on shoring points, shoring procedures and equipment used during aircraft maintenance, repair and recovery.
	30	SLINGING	Information on slinging points, slinging procedures and the slings used to lift the aircraft during maintenance, repair and recovery.
	40	RECOVERING	Information on recovery procedures and the tools and equipment required to recover the aircraft from any condition to which it may be subjected, including emergency recovering.
	50	TRANSPORTING	Information on how to dismantle the aircraft to a standard of breakdown consistent with the vehicle in which it may have to be transported. Information for the

SYSTEM	SUB- SYSTEM TITLE	DEFINITION
07	50 - Continued	manufacture of transportation sledges or pallets. For removal procedures and maintenance information, refer to appropriate system/subsystem.

SYSTEM	SUB- SYSTEM	1 TITLE	DEFINITION
08		LEVELING AND WEIGHING	That material necessary to properly level the aircraft for any of the various maintenance, overhaul or major repairs which might become necessary during the life of the aircraft. Includes those units or components which are specifically dedicated to record, store or compute weight and balance data. Also includes those maintenance practices necessary to prepare the aircraft for weighing and the procedures to weigh the aircraft. Includes weight and Center Of Gravity (CG) data.
	00	GENERAL	
	10	WEIGHT AND BALANCE	Those units or components on the aircraft dedicated to the specific function of recording, storing or computing weight and balance data.
	20	LEVELING	Those instructions necessary to prepare the aircraft for leveling and the leveling procedure. Includes information on the leveling equipment used.
	30	WEIGHING	Those instructions necessary to prepare the aircraft for weighing and the weighing procedure. Includes information on the weighing equipment used. Also includes limits of variation allowed between physical recorded weight and calculated weight based on specific aircraft record.
	40	WEIGHT AND CG DATA	Weight and moment or index information characteristic of the aircraft, limitations, datum points and lines, CG range, weight and balance management of the fuel and other expendable loads,

SYSTEM SYSTEM TITLE DEFINITION

08 40 - Continued

residual fuel, ballast and the effects of change-of-role. Expression of CG as a percentage of Mean Aerodynamic Chord (MAC).

Diagram of CG envelope and equipment location charts if necessary.

Effect on the CG position of dropping or picking up stores (with an example).

Relevant equipment included in the basic weight, plus variable equipment, i.e. aircraft 'role' or 'fit-list' equipment, tabulated and showing weight, load arm and moment or index of each item.

Relationship between the aircraft and Engine Control Unit (ECU) datum lines including the jet pipe and/or propeller datum lines and the effect of an ECU change (with a worked example).

50 STATIC STABILITY

Information required to determine the minimum nose wheel reaction necessary to ensure that the aircraft is stable about its main wheels while being moved and while static during servicing operations and to ensure aircraft remains stable during jacking operations.

Includes tabular and graphical data for the calculation of nose wheel reaction in relation to aircraft mass and residual moment (and wing sweep angles, if appropriate) for both a fully equipped aircraft and for situations where items of equipment/stores have been removed

	SUB-		
SYSTEM	SYSTEM	TITLE	DEFINITION

08 50 - Continued

or the fuel state is outside the normal sequence.

Examples shall be provided.

Safety precautions and limitations shall cover defueling sequences, maximum movement speeds and movement on gradients or over rough ground.

....

SYSTEM	SUB- SYSTEM	M TITLE	DEFINITION
09		TOWING AND TAXIING	Those instructions necessary to tow and taxi the aircraft in any of the conditions to which it may be subjected. Illustrations showing location of attachment points, turning radius, etc., shall be included. Includes those maintenance practices necessary to prepare the aircraft for towing and taxiing.
	00	GENERAL	
	10	TOWING	Those instructions necessary to tow, winch, handle or push the aircraft in normal or abnormal conditions, such as towing in soft ground, with engines removed, aircraft damaged, etc. Includes equipment and materials required, such as towing vehicles, tow bars, towing cables, etc.; procedures to be used, such as ground turning techniques, use of interphone and brakes, connection of electrical power, etc.; safety precautions and limitations, such as use of landing gear and control surface locks, minimum turning radius, maximum towing and pushing loads on the landing gear, etc.
	20	TAXIING	Those instructions necessary to taxi the aircraft in normal or abnormal conditions, such as adverse weather conditions, etc. Includes procedures to be used, such as use of engines, interphone and brakes, ground turning techniques, etc.; safety precautions and limitations, such as jet intake and exhaust danger areas, minimum turning radius, friction coefficients for various ground conditions, etc.

SYSTEM	SUB- SYSTER	M TITLE	DEFINITION
10		PARKING AND MOORING	Those specific instructions necessary to park and moor the aircraft in any of the conditions to which it may be subjected. Charts showing location of landing gear and control surface locks, blanking plugs and covers, mooring points, etc., shall be included. Includes those maintenance practices necessary to prepare the aircraft for parking and mooring.
	00	GENERAL	
	10	PARKING	Those instructions necessary to park and store the aircraft in normal and abnormal conditions, such as with removed engines, damaged aircraft, etc. For short or long terms in extremes of weather conditions. Includes equipment and materials required, such as landing gear and control surface locks, wheel chocks, blanking plugs and covers, cocooning materials, etc. Procedures, such as periodic engine running, control or drainage of fluid systems, static grounding, etc., shall be included. Precautions and limitations, such as landing gear strut pressures and wheel rotation, control of lifted equipment, etc., shall be included.
	20	MOORING	Those instructions necessary to moor or picket the aircraft in normal or abnormal conditions, such as with removed engines, damaged aircraft, etc. For short or long terms in extremes of weather conditions. Includes equipment and materials required, such as wheel chocks, mooring blocks, mooring

SYSTEM	SUB- SYSTEM TITLE	DEFINITION
10	20 - Continued	cables, etc. Procedures such as ballasting, etc., shall be included. Precautions and limitations, such as control in high wind conditions, etc., shall be included.

SYSTEM	SUB- SYSTE	M TITLE	DEFINITION
11		PLACARDS AND MARKINGS	All placards, labels, markings, etc., shall be illustrated, showing the part number, legend and location of each placard, label, marking, etc. required for safety or maintenance significant information or by government regulations. Those required by government regulation shall be so identified. The requirements of MIL-STD-33739 and TO 1-1-4 concerning Aircraft Markings shall be covered. Sufficient information for local manufacture and replacement shall be included. In addition, like information shall also be included for markings other than those specified above. The maintenance manual shall contain requirements for a particular aircraft.
	00	GENERAL	
	10	EXTERIOR COLOR SCHEMES AND MARKINGS	The specifications and requirements covering aircraft and exterior color and related markings.
	20	EXTERIOR PLACARDS AND MARKINGS	Those placards, labels and markings required for ground servicing instructions, inspections, cautions, warnings, etc.
	30	INTERIOR PLACARDS AND MARKINGS	Those placards, labels and markings required for interior general and emergency information, instructions, cautions, warnings, etc.

SYSTEM SYSTEM TITLE

DEFINITION

12 SERVICING

Those instructions for the replenishment and depletion of fluids, scheduled and unscheduled servicing applicable to the whole airplane. The information shall be concise and preferably in tabular or chart form. Precautions to be observed in servicing a particular tank, reservoir, converter, etc., such as grounding and prevention of fire hazards, shall be clearly stated. Instructions regarding access to any out of the way or unusual places requiring service shall be given. A diagram showing location of regular and emergency servicing points shall be included. "NO STEP" areas or walkways leading to any tank in a wing or hull, with necessary precautions, shall be indicated.

00 GENERAL

10 REPLENISHING
AND
DEPLETING

Those instructions necessary for the replenishment or depletion of fluids such as fuel, oil, hydraulic fluid, water, etc. Tank and reservoir capacities in U.S., imperial or metric measure shall be included. ANA or other standard specification number and grade (if applicable) of fuel, oil, fluid and other material used, shall be given. Specifications and grades should be grouped to facilitate revision. For fuel, expansion volume, total fuel capacity, sump capacity, net fuel capacity (as applicable) for each tank shall be included. For oil, allowance for expansion shall be included.

20 SCHEDULED SERVICING

Those instructions necessary to carry out servicing that may be

SYSTEM	SUB- SYSTEM	TITLE	DEFIN	ITION
12	20 - Continued		such as tho lubrication radioactivi aircraft ex cleaning, e lubrication for the acc	Includes instructions see for periodic of components, ty decontamination, ternal and internal etc. Shall not include procedures required complishment of practices.
	30	UNSCHEDULED SERVICING	carry out s normally un instruction	ructions necessary to servicing that is ascheduled. Includes as such as those for ice emoval from parked

SYSTEM	SUB- SYSTEI	M TITLE	DEFINITION
13		EQUIPMENT STORAGE	Shall contain those procedures and illustrations required for temporary and extended storage, inspections and treatments during storage, removal from storage, etc.
	00	GENERAL	
	10	TEMPORARY STORAGE	Those instructions necessary to prepare the equipment for temporary storage (under ninety days). Includes special servicing, location of protective covers, tie-down points, drains, etc.
	20	EXTENDED STORAGE	Those instructions necessary to prepare the equipment for extended storage (over ninety days). Includes special servicing, sealing, venting, protection from sun, preservatives or protection required, protective covers, tie-down points, drains, etc.
	30	STORAGE INSPECTIONS AND TREATMENTS	Those instructions necessary to perform the required inspections and apply the required treatments during storage.
	40	REMOVAL FROM STORAGE	Those instructions necessary to remove the equipment from storage and prepare it for use.
	50	MOVING/FLYING TO OVERHAUL/ MAINTENANCE FACILITY	Those instructions necessary to prepare the equipment to be moved or flown to an overhaul/maintenance facility

SYSTEM	SUB- SYSTEM	M TITLE	DEFINITION
14		AIRCRAFT LOADING AND OFF-LOADING	Shall contain those procedures and illustrations necessary to load and off-load internal and external stores, munitions and cargo. Includes information on the equipment and special tools required. Cross references shall be made to the applicable systems for information on the aircraft attachment points, pylons and carriers.
	00	GENERAL	
	10	SUPPORT EQUIPMENT	A list of all support equipment and special tools, information and illustrations, as necessary, on those items not covered in other manuals shall be included.
	20	CARGO	Examples of loading and off-loading techniques, interior layout, floor loadings, location and strength of lashing points, methods of stowing and securing, capacities and dimensions of compartments and doors shall be included.
	30	INTERNAL AND EXTERNAL STORES	A list of stores such as external fuel tanks, reconnaissance pods, chaff dispensers, air/sea rescue equipment, etc. carried. Includes the carrier/adapter on which they are fitted. Data on the throttles of the ejector release units shall be included. Loading and
			off-loading procedures and illustrations shall be included.
	40	NON-NUCLEAR MUNITIONS	A list of non-nuclear munitions such as rockets, missiles, bombs, ammunition, etc., and the carrier/adapter on which they are mounted shall be included. Data on the throttles of the ejector release

SYSTEM	SUB- SYSTEM TITLE	DEFINITION
14	40 - Continued	units shall be included. Loading and off-loading procedures and illustrations shall be included.
	50 NUCLEAR MUNITIONS	A list of nuclear munitions such as rockets, missiles, bombs, etc., and the carrier/adapter on which they are mounted shall be included. Data on the throttles of the ejector release units shall be included. Loading and off-loading procedures and illustrations shall be included.

SYSTEM	SUB- SYSTE	M TITLE	DEFINITION
15		SUPPORT EQUIPMENT	Shall contain that specialized support equipment (SE) required to maintain or test equipment/aircraft systems or engines. Does not include common and standard SE, only that SE unique to the equipment.
	00	GENERAL	
	10 thru 90		Subsystems 10 thru 90 shall be used to describe SE. The manufacturer may assign the subsystem numbers to suit the required types of support equipment.

SYSTEM	SUB- SYSTEM	M TITLE	DEFINITION
16		SITING INSTALLATION (GROUND EQUIPMENT ONLY)	Shall contain those procedures and illustrations required for the installation of ground equipment such as communication-electronic, radar, tracking systems, etc.
	00	GENERAL	
	10	INSTALLATION LOGISTICS	Those procedures and illustrations required to unload, unpack, house and store equipment prior to, and during, installation.
	20	INSTALLATION	Those procedures and illustrations required for installation of the equipment. Includes manpower and manhour requirements, installation sequence, etc.

SYSTEM	SUB- SYSTER	M TITLE	DEFINITION
17		PREPARATION FOR USE AND SHIPMENT (GROUND EQUIPMENT ONLY)	Those procedures and illustrations required to properly prepare equipment for use or shipment.
	00	GENERAL	
	10	PREPARATION FOR USE	Those procedures and illustrations required to prepare the equipment for use. Includes tune-up, testing, adjustment, alignment, etc.
	20	PREPARATION FOR SHIPMENT	Those procedures and illustrations required to prepare the equipment for shipment. Includes methods and conditions of shipment, removal of parts (if removal is required for shipping), instructions for use of special containers, etc.

SYSTEM	SUB- SYSTE	M TITLE	DEFINITION
18		WEAPONS INSTRUMENTATION	That information necessary to explain and describe the instrumentation used for test, data acquisition and flight termination of airborne weapons. Includes instrumentation for testing weapons payload, telemetry, etc.
	00	GENERAL	
	10 thru 90		Subsystems 10 thru 90 shall be used to describe weapons instrumentation. The manufacturer may assign the subsystem numbers to suit the required types of instrumentation.

SYSTEM SYSTEM TITLE

DEFINITION

19

RESERVED

	<u>sub-</u>		
SYSTEM	SYSTEM	<u>TITLE</u>	<u>DEFINITION</u>
20		STANDARD PRACTICES - AIRFRAME SYSTEMS	This system shall contain those standard mechanical, electrical, electronic and engineering practices applicable to more than one airframe system which are not covered in Systems 40, 50, 60 or 70, or the applicable system. Shall exclude those practices which are covered in other manuals or systems. Practices for a particular application shall be included in the appropriate airframe system as part of the procedure.
	00	GENERAL	Standard practices applicable to all airframe systems.
	10 thru 90		Subsystems 10 thru 90 shall be used to describe standard practices. The manufacturer may assign the subsystem numbers to suit generic standard practices related to more than one airframe system.

SYSTEM	SUB- SYSTEM	TITLE	DEFINITION
21		AIR CONDITIONING	Those units and components which furnish a means of pressurizing, heating, cooling, moisture controlling, filtering and treating the air used to ventilate the areas of the fuselage within the pressure seals. Includes cabin supercharger charger, equipment cooling, heater, fuel system heater, expansion turbine, valves, scoops, ducts, etc.
	00	GENERAL	
	10	COMPRESSION	That portion of the system and its controls which supplies compressed air to the cabin. Includes items such as controls and indicating systems related to the compressors, wiring, etc. Shall not include the pressure control and indicating system for the cabin pressurization.
	20	DISTRIBUTION	That portion of the system used to induct and distribute air. Includes equipment rack cooling systems and items such as blowers, scoops, ducting, inlets, check valves, wiring, etc. Shall not include valves which are part of pressurization and temperature control.
	30	PRESSURIZATION CONTROL	That portion of the system used to control the pressure within the fuselage. Includes items such as control valves, relief valves, indicators, switches, amplifiers, wiring, etc.
	40	HEATING	That portion of the system and it's controls which supply heated air to the cabin. Includes items such as heater units, fuel system and

SYSTEM	SUB- SYSTEM	M TITLE	DEFINITION
21	40 - 0	Continued	control, ignition, indicating systems related to heater operation, wiring, etc. Shall not include the temperature control and indicating systems.
	50	COOLING	That portion of the system and it's controls which supply cooled air to the cabin. Includes items such as the cooling unit, indicating systems related to the cooler operation, wiring, etc. Shall not include temperature control and indicating systems.
	60	TEMPERATURE CONTROL	That portion of the system used to control the temperature of the air within the cabin. Includes items such as control valves, thermal sensing devices, switches, indicators, amplifiers, wiring, etc.
	70	MOISTURE/AIR CONTAMINANT CONTROL	That portion of the system used to control moisture in the air, to control ozone concentrations, to filter radioactive debris from conditioned air and to treat the air with deodorizers, insecticides, etc.
	80	EQUIPMENT COOLING	That portion of the system and it's controls which supply cooled air to the equipment. Includes items such as the cooling unit, indicating systems related to the cooler operation, wiring, etc. Shall not include temperature control and indicating systems.
	90	LIQUID COOLING	That portion of the system and it's controls which supply cooling liquid to the equipment. Includes items such as the compressor,

SYSTEM	SUB- SYSTEM TITLE	DEFINITION
21	90 - Continued	coolant pump, indicating systems related to the operation, wiring, etc. Shall not include temperature control and indicating systems.

3

SYSTEM	SUB- SYSTE	M TITLE	DEFINITION
22		AUTO FLIGHT	Those units and components which furnish a means of automatically controlling the flight of the aircraft. Includes those units and components which control direction, heading, attitude, altitude and speed.
	00	GENERAL	
	10	AUTOPILOT	That system or portion of the system that uses radio/radar beam, directional and vertical references, air data (pitot/static) and manually induced inputs to automatically control the flight path of the airplane through adjustment of yaw, pitch, roll or wing lift characteristics and provide visual cues for flight path guidance. Includes power source devices, interlocking devices and amplifying, computing, integrating, controlling, actuating, indicating and warning devices such as computers, servos, control panels, indicators, warning lights, etc.
	20	SPEED - ATTITUDE CORRECTION	That system or portion of the system which automatically maintains safe flight conditions by correcting for effects of speed and out-of-trim conditions by such means as automatic trim, Mach trim or speed stability and Mach feel. Includes sensing, computing, actuating, indicating, internal monitoring and warning devices such as computers, servos, actuators, warning lights, etc.
	30	AUTO THROTTLE	That system or portion of the system that automatically controls the position of the throttles to properly manage engine power during

SYSTEM	SUB- SYSTE	M TITLE	DEFINITION
22	30 -	Continued	all phases of flight/attitude. This includes engaging, sensing, computing, amplifying, controlling, actuating and warning devices such as amplifiers, computers, servos, limit switches, clutches, gearboxes, warning lights, etc.
	40	SYSTEM MONITOR	That system or portion of the system which provides external monitoring/remote readout (for maintenance or other purposes) not directly related to the internal system monitoring (for system integrity/flight crew warning). Includes sensing, computing, indicating and warning devices, control panels, etc.
	50	AERODYNAMIC LOAD ALLEVIATING	That system or portion of the system that automatically corrects/provides for gust loading/upset, aerodynamic augmentation/alleviation/suppression, ride control, etc. This includes sensing, computing, actuating, internal monitoring, indicating, warning devices, etc.

SYSTEM	SUB- SYSTEM	TITLE	DEFINITION
23		COMMUNICATIONS	Those units and components which furnish a means of communicating within the aircraft, between the aircraft and other aircraft, and between the aircraft and ground stations. Includes voice, data continuous wave communicating components, passenger address systems, intercom and tape recorder-record player.
	00	GENERAL	
	10	LOW/VERY LOW FREQUENCY (LF/VLF)	That portion of the system which is used for air to air and air to ground communications utilizing LF/VLF carriers. Includes items such as transmitters, receivers, power supply, control panel, antenna, antenna coupler, etc.
	20	HIGH/VERY HIGH FREQUENCY (HF/VHF)	That portion of the system which is used for air to air and air to ground communications utilizing HF/VHF carriers. Includes items such as transmitters, receivers, power supply, control panel, antenna, antenna coupler, etc.
	30	ULTRA/SUPER/ EXTREMELY HIGH FREQUENCY (UHF/SHF/EHF)	That portion of the system which is used for air to air and air to ground communication utilizing UHF/SHF/EHF carriers. Includes items such as transmitters, receivers, control panel, selcal decoder, antenna, etc.
	40	PASSENGER ADDRESS/ INTERPHONE	That portion of the system used to address and entertain the passengers and for communication by flight and ground personnel between areas of the aircraft. Includes items such as amplifiers, handsets, etc. Shall not include the flight crew interphone system which is

<u>system</u>	SUB- SYSTE	M TITLE	DEFINITION
23	40 -	Continued	part of the audio integrating system.
	50	AUDIO INTEGRATING	That portion of the system which controls the output of the communications and navigation receivers into the flight crew headphones and speakers, and the output of the flight crew microphones into the communications transmitters. Includes items such as audio selector control panel, microphones, headphones, cockpit loudspeakers, etc.
	60	STATIC DISCHARGING	That portion of the system which is used to dissipate static electricity. Excludes static dischargers and suppressors which are mounted on the airframe, wing or stabilizers and included in the structures systems.
	70	AUDIO AND VIDEO MONITORING	Those installations that record or monitor flight crew or passenger conversation or movement, for security or safety purposes. Includes voice recorders, televisions, monitors, etc.
	80	INTEGRATED AUTOMATIC TUNING	That portion of the system which maintains integrated control of the operating frequencies of communication and navigation transmitter/receivers after either a manually inserted command or a preprogrammed integrated flight system command. Includes items such as integrated frequency selector panels, digital frequency control computers, integrated frequency display panels, etc.

SYSTEM	SUB- SYSTEM	M TITLE	DEFINITION
24		ELECTRICAL POWER	Those electrical units and components which generate, control and supply Alternating Current (AC) and/or Direct Current (DC) electrical power for other systems, including generators and relays, inverters, batteries, etc., through the secondary busses. Also includes those units and components which provide for multiplexing of electrical power and common electrical items such as wiring, switches, connectors, etc.
	00	GENERAL	
	10	CONSTANT SPEED DRIVE	Mechanical devices that drive the generators at a desired, constant Revolutions Per Minute (RPM). Includes items such as oil system, connecting devices, indicating and warning systems for the drive, ram turbine etc.
	20	AC GENERATION	That portion of the system used to generate, regulate, control and indicate AC electrical power. Includes items such as inverters, AC generators/alternators, control and regulating components, indicating systems, etc., and all wiring to, but not including, main busses.
	30	DC GENERATION	That portion of the system used to generate, regulate, control and indicate DC electrical power. Includes items such as DC generators/alternators, transformers, rectifiers, batteries, control and regulating components, indicating systems, etc., and all wiring to, but not including, main busses.

SYSTEM	<u>SUB-</u> SYSTEI	M TITLE	DEFINITION
24	40	EXTERNAL POWER	That portion of the system within the aircraft which connects external electrical power to the aircraft's electrical system. Includes items such as receptacles, relays, switches, wiring, warning lights, etc.
	50	AC ELECTRICAL LOAD DISTRIBUTION	That portion of the system which provides for connection of AC power to the using systems. Includes items such as AC main and secondary busses, main system circuit breakers, power system devices, etc.
	60	DC ELECTRICAL LOAD DISTRIBUTION	That portion of the system which provides for connection of DC power to the using systems. Includes items such as DC main and secondary busses, main system circuit breakers, power system devices, etc.
	70	ELECTRICAL MONITORING AND PROTECTION	That portion of the system used to supply aircraft or ground power for use of the ground power switching system, avionics low cooling protection system, essential 28 vdc bus monitoring system and system monitoring. Includes aircraft grounding receptacles.
	80	EMERGENCY GENERATION	That portion of the system which provides simultaneous generation of emergency electrical power in the event of failure of the main electrical system generator or loss of engine power.

SYSTEM	SUB- SYSTEM	A TITLE	DEFINITION
25		EQUIPMENT/ FURNISHINGS	Those removable items of equipment and furnishings externally mounted on the aircraft or contained in the flight, passenger, cargo and accessory compartments. Includes emergency, buffet and lavatory equipment. Does not include structures or equipment assigned specifically to other systems.
	00	GENERAL	
	10	FLIGHT COMPARTMENT	The compartment above the floor and between the forward passenger partition and the forward pressure dome. Includes items such as flight crew seats, tables, pilot check lists and food containers, curtains, manuals, electronic equipment racks, spare bulbs, fuses, etc. Shall not include cargo compartments.
	20	PASSENGER COMPARTMENT	The areas in which the passengers are seated. Includes lounges but not dressing rooms. Includes items such as seats, berths, hat racks, curtains, wall coverings, carpets, magazine racks, movable partitions, wall type thermometers, spare bulbs, fuses, etc.
	30	BUFFET/GALLEY	The areas in which food and beverages are stored and prepared. Includes items such as removable and fixed cabinets, ovens, refrigerators, garbage containers, dish racks, coffee maker and dispensers, containers, electrical outlets, wiring, etc.
	40	LAVATORIES	The toilet and dressing room areas containing wash basins, dressing tables and water closet. Includes items such as mirrors, seats,

SYSTEM	SUB- SYSTE	M TITLE	DEFINITION
25	40 - (Continued	cabinets, dispensing equipment, electrical outlets, wiring, etc. Shall not include wash basins and water closets which are covered in System 38, WATER/WASTE.
	50	CARGO COMPARTMENTS	Those compartments for storage of cargo and those components which are or can be mounted on the aircraft and used to load/unload, restrain, guide or service cargo. Includes drive systems, rollers, latches, restraint nets, etc.
	60	EMERGENCY	Those items of equipment carried for use in emergency procedures. Includes items such as evacuation equipment, life rafts, jackets, emergency locator beacons, underwater locator devices, first aid kits, incubators, oxygen tents, medical stretchers, landing and signal flares, drag parachutes, evacuation signaling systems, etc. Shall not include fire extinguishers, oxygen equipment or masks.
	70	ACCESSORY COMPARTMENTS	Those compartments used for the housing of various components or accessories. Includes wheel wells, tail compartments, hydraulic/electrical/electronic equipment rack compartment, main battery structure, etc.
	80	INSULATION AND LINING	Those blankets which are used for heat and sound insulation and those coverings which are used, either with or without integral insulation, to form the internal lining of flight compartments, passenger compartments, cargo and accessory compartments, etc.

SYSTEM	SUB- SYSTEM	TITLE	DEFINITION
25		AERIAL DELIVERY	Those items required for air drop of cargo or personnel. Includes Container Delivery System (CDS) and Air Drop System (ADS) platforms, parachutes and drogue chutes, load release mechanisms and load transfer devices, anchor cables, static lines, retrieval winches, jump lights, etc.

SYSTEM	SUB- SYSTE	M TITLE	<u>DEFINITION</u>
26		FIRE PROTECTION	Those fixed and portable units and components which detect and indicate fire or smoke, and store and distribute fire extinguishing agents to all protected areas of the aircraft. Includes bottles, valves, tubing, etc.
	00	GENERAL	
	10	DETECTION	That portion of the system which is used to sense and indicate the presence of overheat, smoke or fire.
	20	EXTINGUISHING	That portion of those fixed or portable systems which are used to extinguish fire.
,	30	EXPLOSION SUPPRESSION	That portion of the system which is used to sense, indicate and extinguish a flame propagating into the fuel vent or scoop to prevent an explosion in the fuel system.

SYSTEM	SUB- SYSTEM	<u>TITLE</u>	DEFINITION
27		FLIGHT CONTROLS	Those units and components which furnish a means of controlling the flight attitude characteristics of the aircraft. Includes items such as hydraulic boost system, rudder pedals, control column linkages, control cables, tab controls, etc. Also includes the functioning and maintenance aspects of the flaps, spoilers and other control surfaces, but does not include the structure, which is covered in the Structures systems. Shall not include rotorcraft rotor controls which are covered in the Rotor systems.
	00	GENERAL	
	10	ROLL CONTROL	That portion of the system which controls the position and movement of the ailerons and tabs. Includes items such as the control wheels, cables, booster, linkages, control surfaces, indicators, etc.
	20	YAW CONTROL	That portion of the system which controls the position and movement of the rudder and tabs. Includes items such as the rudder pedals, tab control wheel, cables, boosters, linkages, control surfaces, position indicators, etc.
	30	PITCH CONTROL	That portion of the system which controls the position and movement of the elevator/elevon and tabs. Includes items such as the control column, stickshaker units, automatic stall recovery devices, tab control wheels, cables, boosters, linkages, control surfaces, position indicators, stall warning systems, etc.

<u>SYSTEM</u>	SUB- SYSTEM	A TITLE	DEFINITION
27	40	HORIZONTAL STABILIZERS	That portion of the system which controls the position and movement of the horizontal stabilizer/canard. Includes items such as control handle, cables, jackscrews, motors, warning systems, linkages, control surfaces, position indicators, etc.
	50	FLAPS	That portion of the system which controls the position and movement of the trailing edge flaps. Includes items such as control handles, cables, actuators, warning systems, linkages, control surfaces, position indicators, etc.
	60	SPOILERS, DRAG DEVICES AND VARIABLE AERODYNAMIC FAIRINGS	That portion of the system which controls the position and movement of the spoilers, drag devices and variable aerodynamic fairings. Includes items such as control handles, cables, warning systems, linkages, spoilers, drag devices, position indicators, etc.
	70	GUST LOCK AND DAMPER	That portion of the system which protects the control surfaces from movement by wind while the aircraft is on the ground. Does not include locking the control by means of flight control boost system.
	80	LIFT AUGMENTING	That portion of the system which controls the position and movement of variable opening wings slots, leading edge wing flaps and other similar auxiliary devices used for increasing aerodynamic lift. Includes items such as control handles, cables, actuators, linkages, warning systems, control

SYSTEM	SUB- SYSTEM TITLE	DEFINITION
27	80 - Continued	surfaces, position indicators, etc. Shall not include trailing edge flaps.

SYSTEM	SUB- SYSTE	M TITLE	DEFINITION
28		FUEL	Those units and components which store and deliver fuel to the engine. Includes engine driven fuel pumps (for reciprocating engines), tanks (bladder), valves, boost pumps, etc., and those components which furnish a means of dumping fuel overboard. Includes integral and tip fuel tank leak detection and sealing. Does not include the structure of integral or tip fuel tanks and the fuel cell backing boards which are covered in the Structures systems. Shall not include fuel flow rate sensing, transmitting and/or indicating which are covered in System 73, ENGINE FUEL AND CONTROL.
	00	GENERAL	
	10	STORAGE	That portion of the system which stores fuel, including external tanks. Includes tank sealing, bladder type cells, ventilating system, cell and tank interconnectors, over wing filler necks and caps, etc. Also includes reservoir feed pumping systems and reservoirs within the tanks which are not a part of the distribution system.
	20	DISTRIBUTION	That portion of the system which is used to distribute fuel from the filler connector to the storage system and from the storage system to and including the power plant fuel quick disconnect. Includes items such as plumbing, pumps, valves, controls, etc.
	30	DU M P	That portion of the system which is used to dump fuel overboard

SYSTEM	SUB- SYSTE	A TITLE	DEFINITION
28	30 - 0	Continued	during flight. Includes items such as plumbing, valves, chutes, controls, etc.
	40	INDICATING	That portion of the system which is used to indicate the quantity, temperature and pressure of the fuel. Includes pressure warning systems for pumping systems within the tank, etc. Does not include engine fuel flow or pressure.
	50	IN-FLIGHT REFUELING - RECEIVER	That portion of the system which provides the means of accepting in-flight refueling. Includes access door controls/actuators, fuel receptor, distribution system to fuel storage or interface with standard fuel distribution system, flow controls and indicators, and audio interconnections with the tanker aircraft. Includes manual transfer and refueling controls but excludes automatic systems based on fuel quantity and Center of Gravity (CG) constraints which are covered in System 28-60, FUEL/CG MANAGEMENT on aircraft so equipped.
	60	FUEL/CG MANAGEMENT	That portion of the system which controls fuel distribution during aerial and ground refueling to maintain a safe CG configuration. Utilizes fuel quantity and stores data to compute aircraft CG. Includes fuel quantity and CG indication for in-flight and ground refueling operations.

SYSTEM	SUB- SYSTEM	M TITLE	DEFINITION
29		HYDRAULIC POWER	Those units and components which furnish hydraulic fluid under pressure to a common point (manifold) for redistribution to other defined systems. Includes items such as pumps, regulators, lines, valves, etc.
	00	GENERAL	
	10	MAIN	That portion of the system which is used to store and deliver hydraulic fluid to using systems. Includes items such as tanks, accumulators, valves, pumps, levers, switches, cables, plumbing, wiring, external connectors, etc. Shall not include the supply valves to the using systems.
	20	AUXILIARY	That portion of the system which is classified as auxiliary, emergency or standby, and which is used to supplement or take the place of the main hydraulic system. Includes items such as tanks and accumulators which are separate from the main system, hand pumps, auxiliary pumps, ram air turbine, valves, plumbing, wiring, etc.
	30	INDICATING	That portion of the system which is used to indicate the quantity, temperature and pressure of the hydraulic fluid. Includes items such as transmitters, indicators, wiring, warning systems, etc.

SYSTEM	SUB- SYSTEM	TITLE	DEFINITION
30		ICE AND RAIN PROTECTION	Those units and components which provide a means of preventing or disposing of formation of ice and rain on various parts of the aircraft. Includes alcohol pump, valves, tanks, propeller/rotor anti-icing system, wing heaters, water line heaters, pitot heaters, scoop heaters, windshield wipers, and the electrical and heated air portion of windshield ice control. Shall not include the basic windshield panel. For turbine type power plants using air as the anti-icing medium, engine anti-icing is contained in System 75, AIR.
	00	GENERAL	
	10	AIRFOIL	That portion of the system which is used to eliminate or prevent the formation of ice on all airfoil surfaces. Includes wings, airfoil sections of the empennage, and pylons.
	20	AIR INTAKES	That portion of the system which is used to eliminate or prevent the formation of ice in or around air intakes. Includes power plant cowling anti-icing.
	30	PITOT AND STATIC	That portion of the system which is used to eliminate or prevent the formation of ice on the pitot and static systems.
	40	WINDOWS, WINDSHIELDS CANOPIES AND DOORS	That portion of the system which is used to eliminate or prevent the formation and accumulation of ice, frost or rain on the windows and windshields.

SYSTEM	SUB- SYSTE	M TITLE	DEFINITION
30	50	ANTENNAS AND RADOMES	That portion of the system which is used to eliminate or prevent the formation of ice on antennas and radomes.
	60	PROPELLERS/ ROTORS	That portion of the system which is used to eliminate or prevent the formation of ice on propellers or rotors. Includes all components up to but not including rotating assembly.
	7-0	WATER LINES	That portion of the system which is used to prevent the formation of ice in water supply and drain lines.
	80	DETECTION	That portion of the system which is used to detect and indicate the formation of ice.

<u>SYSTEM</u>	SUB- SYSTEM	M TITLE	DEFINITION
31		INDICATING/ RECORDING SYSTEMS	Those systems which give visual or aural warning of conditions in unrelated systems. Includes units which record, store or compute data from unrelated systems.
	00	GENERAL	
	10	INSTRUMENT AND CONTROL PANELS	Coverage of all panels, fixed or movable, with their replaceable components such as instruments, switches, circuit breakers, fuses, etc. Also includes general coverage of instrument panel vibrators and other panel accessories.
	20	INDEPENDENT INSTRUMENTS	Those instruments, units and components which are not related to specific systems. Includes items such as inclinometers, clocks, etc.
	30	RECORDERS	Those units and components used for recording data not related to specific systems. Includes items such as flight recorders, performance or maintenance recorders, etc.
	40	CENTRAL COMPUTERS	Those units and components used for computing data from a number of different sources without a preponderance of functions in any one system. Includes items such as stored checklists, emergency procedures, etc. for presentation on a display, integrated instrument systems such as engines, airplane power and central warning indicators when combined into a central display.

SYSTEM	SUB- SYSTEM	TITLE	DEFINITION
31	50	CENTRAL WARNING SYSTEMS	Those units and components which give audible or visual warning of conditions in unrelated systems. Includes items such as master warning or flight warning systems, central instrument warning systems, tone generators, annuciators, etc.
	60	CENTRAL DISPLAY SYSTEMS	Those units and components which give visual display of conditions in unrelated systems.
-	70	AUTOMATIC DATA REPORTING SYSTEMS (ADRS)	Those units and components used for collating and computing data from unrelated systems and transmitting same automatically. Includes ADRS systems and components.
	80	UNASSIGNED	
	90	VOICE COMMAND SYSTEMS	Those units and components which provide voice command for flight crew members. Does not include the units and components of the associated system.

12.3

<u>system</u>	SUB- SYSTEM	<u>TITLE</u>	DEFINITION
32	-	LANDING GEAR	Those units and components which furnish a means of supporting and steering the aircraft on the ground or water, and make it possible to retract and store the landing gear in flight. Includes tail skid assembly, arresting hooks, drag chutes, brakes, wheels, floats, skids, skis, doors, shock struts, tires, linkages, position indicating and warning systems. Also includes the functioning and maintenance aspects of the landing gear doors but does not include the structure which is covered in System 52, DOORS.
	00	GENERAL	
	10	MAIN GEAR AND DOORS	That portion of the system which provides the major support for the aircraft while on the ground. Includes items such as shock struts, bogie axles, drag struts, doors, linkages, attach bolts, etc.
	20	NOSE GEAR AND DOORS	That portion of the system which supports the nose of the aircraft while the aircraft is on the ground. Includes items such as shock struts, drag struts, doors, linkages, attach bolts, etc.
	30	EXTENSION AND RETRACTION	That portion of the system which is used to extend and retract the landing gear, and open and close the landing gear doors. Includes items such as actuating mechanisms, bogie trim, bungees, up and down latches, operating controls, valves, motors, cables, wiring, plumbing, etc.

SYSTEM	SUB- System	A TITLE	DEFINITION
32	40	WHEELS AND BRAKES	That portion of the system which provides for rolling and stopping the aircraft while on the ground and stopping wheel rotation after retraction. Includes items such as bearings, tires, valves, deboosters, swivel glands, anti-skid devices, pressure indicators, plumbing, etc.
	50	STEERING	That portion of the system which is used to control the direction of movement of the aircraft on the ground. Includes items such as actuating cylinders, controls, bogie swivel unlock, etc.
	60	POSITION AND WARNING	That portion of the system which is used to indicate and warn of the position of the landing gear/doors. Includes items such as switches, relays, lights, indicators, horns, wiring, etc.
	70	SUPPLEMENTARY GEAR	Devices used to stabilize the aircraft while on the ground and prevent damage by ground contact. Includes items such as shock strut, skid block, wheels, etc.
	80	DRAG CHUTE	That portion of the system used to aid in slowing the speed of the aircraft when landing. Includes items such as switches, relays, lights, indicators, wiring, etc.
	90	ARRESTING HOOK	That portion of the system that is extended in the event of an aborted takeoff or emergency landing to engage an arresting pendant (cable) to stop the aircraft in a short distance. Includes items such as switches, relays, lights, indicators, wiring, actuating cylinders, explosive bolts, etc.

	SUB-		
SYSTEM	SYSTEM	TITLE	DEFINITION
33	-	LIGHTS	Those units and components which provide for external and internal illumination, such as landing lights, taxi lights, position lights, rotating lights, ice lights, master warning lights, passenger reading and cabin dome lights, etc. Includes light fixtures, switches and wiring. Shall not include warning lights for individual systems. Shall not include lamps/bulbs which are covered in System 39, ELECTRICAL/ELECTRONIC COMPONENTS AND MULTIFUNCTION UNITS.
	00	GENERAL	
		FLIGHT COMPARTMENT	That portion of the system in the compartment above the floor and between the forward passenger partition and the forward pressure dome. Does not include cargo compartment. Includes direct and indirect illumination of work areas, panels and instruments. Includes the master warning light system and the warning light dimming systems where not integrated with a central audio or

lavatories, lounges and coat rooms. Includes items such as direct and indirect illumination, passenger call system, lighted signs, etc.

visual system under System 31-50.

NOTE: For those aircraft which do not contain passenger compartments, and the flight compartment(s) can be reasonably divided, subsystem 20 may be used to aid in defining such division.

SYSTEM	SUB- SYSTE	M TITLE	DEFINITION
33	30	CARGO AND SERVICE COMPARTMENTS	That portion of the system in the compartments for stowage of cargo and the housing of various components or accessories.
	40	EXTERIOR	That portion of the system used to provide illumination outside of the aircraft. Includes lights such as landing, navigation, position indicating, wing illumination, rotating, courtesy, taxi, etc.
	50	EMERGENCY LIGHTING	That portion of the system used to provide illumination in case of primary electrical power failure. Includes items such as inertia flashlights, lanterns, etc.

SYSTEM	SUB- SYSTEM	I TITLE	DEFINITION
34		NAVIGATION	Those units and components which provide aircraft navigational information. Includes Very High Frequency Omnidirectional and Radio Range (VOR), pitot, static, Instrument Landing System (ILS), flight director, compasses, indicators, etc.
	00	GENERAL	
	10	FLIGHT ENVIRONMENT DATA	That portion of the system which senses environmental conditions and uses the data to influence navigation. Includes items such as central air data computer, pitot/static, air temperature, rate-of-climb, airspeed, high speed warning, altitude, altitude reporting, altimeter correction system, air disturbance detection system, etc.
	20	ATTITUDE AND DIRECTION	That portion of the system which uses magnetic, gyroscopic and inertia forces to sense and display the direction or attitude of the aircraft. Includes items such as gyro horizons, directional gyros, magnetic compasses and magnetic heading systems, turn and bank, amplifiers, servos, flight director, etc. Includes flight director when not integral with the autopilot computation.
	30	LANDING AND TAXIING AIDS	That portion of the system which provides guidance during approach, landing and taxiing. Includes items such as localizer, glide slope, ILS, markers, paravisual director ground guidance systems, etc.

SYSTEM	SUB- SYSTEM	<u>TITLE</u>	<u>DEFINITION</u>
34		INDEPENDENT POSITION DETERMINING	That portion of the system which provides information to determine position and is mainly independent of ground installations or earth satellite systems. Includes items such as inertial guidance systems, weather radar, doppler, proximity warning, collision avoidance, star tracker, sextant/ octant, etc.
	50	DEPENDENT POSITION DETERMINING	That portion of the system which provides information to determine position and is mainly dependent on ground installations or earth satellite systems. Includes items such as distance measurement equipment, transponders, radio compass, Long Range Navigation (LORAN), VOR, Automatic Direction Finder (ADF), Tactical Air Navigation (TACAN), etc.
	60	FLIGHT MANAGEMENT COMPUTING	That portion of the system which combines navigational information to compute or manage the aircraft's geographical location or theoretical flight path. Includes items such as course computers, flight management computers, performance data computers and associated control/display units, warning annunciators, etc.

SYSTEM	SUB- System	M TITLE	DEFINITION
35		OXYGEN	Those units and components which store, generate, regulate and deliver oxygen to the passengers and flight crew. Includes bottles, relief valves, shutoff valves, outlets, regulators, masks, walk-around bottles, etc.
	00	GENERAL	
	10	CREW	That portion of the system which furnishes oxygen to the flight crew.
	20	PASSENGER	That portion of the system which furnishes oxygen to the passengers.
	30	PORTABLE	That portion of the system which has an independent oxygen supply and which can be transported about the airplane.
	40	ON BOARD OXYGEN GENER- ATING SYSTEM	That portion of the system which generates oxygen for distribution in the other subsystems.

	SUB-		
SYSTEM	SYSTEM	M TITLE	<u>DEFINITION</u>
36		PNEUMATIC	Those units and components (ducts and valves) which deliver large volumes of compressed air from a power source to connecting points for other systems, such as air conditioning, pressurization, deicing, etc.
	00	GENERAL	
	10	DISTRIBUTION	That portion of the system which is used to distribute high or low pressure air to using systems. Includes items such as ducts, valves, actuators, heat exchangers, controls, etc. Does not include the supply valves to the using systems.
	20	INDICATING	That portion of the system which is used to indicate temperature and pressure of the pneumatic system. Includes temperature and pressure warning system.
	30	ANTI-G	That portion of the system which is used to provide compressed air for operation of anti-G suits worn by the flight crew. Does not include the anti-G suit.

SYSTEM	SUB- SYSTEM	M TITLE	DEFINITION
37		VACUUM	Those units and components used to generate, deliver and regulate negative air pressure, including vacuum pumps, regulators, lines, etc., through, and including, the manifold.
	00	GENERAL	
	10	DISTRIBUTION	That portion of the system which is used to distribute negative pressure air to using systems.
,	20	INDICATING	That portion of the system which is used to indicate pressure. Includes pressure warning system.

SYSTEM	SUB- SYSTER	M TITLE	DEFINITION
38		WATER/ WASTE	Those fixed units and components which store and deliver for use, fresh water, and those fixed components which store and furnish a means of removal of water and waste. Includes wash basins, toilet assemblies, tanks, valves, etc.
	00	GENERAL	
	10	POTABLE	That portion of the system which is used to store and deliver fresh drinking water. Includes wash water system if the potable water is also used for washing.
	20	WASH	That portion of the system which is used to store and deliver wash water which is not potable.
	30	WASTE DISPOSAL	That portion of the system which is used for disposal of water and waste. Includes items such as wash basins, water closets, flushing systems, etc.
	40	AIR SUPPLY	That portion of the system common to more than one subsystem which is used for pressurizing supply tanks to insure fluid flow.

SYSTEM	SUB- SYSTEM	1 TITLE	DEFINITION
39		ELECTRICAL/ ELECTRONIC COMPONENTS AND MULTIFUNCTION UNITS	Pictorial coverage of all electrical/electronic indicating and control panels, racks, junction boxes, etc. Full coverage of all multifunction units exclusive of engine, auxiliary power unit and utilized maintenance items such as galleys, lavatories, etc.
	00	GENERAL	
	10	INSTRUMENT AND CONTROL PANELS	Pictorial coverage of all panels, fixed or movable, with their replaceable components, such as instruments (exclusive of independent instruments), switches, circuit breakers, fuses, etc. Also includes general coverage of instrument panel vibrators and other panel accessories.
	20	ELECTRICAL AND ELECTRONIC EQUIPMENTS RACKS	Pictorial coverage of all electrical and electronic equipment racks.
	30	ELECTRICAL AND ELECTRONIC JUNCTION BOXES	Pictorial coverage of junction boxes.
	40	MULTIFUNCTION UNITS	Pictorial coverage of units which have multiple functions but are normally maintained as a unit, i.e. passenger service units, accessory modules, etc.
	50	INTEGRATED CIRCUITS	Contains general coverage of those devices having integrated components, in monolithic

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SYSTEM	SUB- SYSTEM TITLE	<u>DEFINITION</u>
39	50 - Continued	structure, which perform complete circuit functions. Includes integrated logic devices.
	60 PRINTED CIRCUIT CARD ASSEMBLIES	Contains general coverage of plug- in assemblies or subassemblies which perform a complete circuit function and are used on more than one specific system. Includes power supply cards, isolation amplifiers, servo control modules.

SYSTEM	SUB- SYSTEM	A TITLE	DEFINITION
40		STANDARD PRACTICES - INTEGRATED AVIONICS	This system shall contain those standard mechanical, electrical, electronic and engineering practices applicable to an integrated avionics package. Shall exclude those practices which are covered in other manuals or systems. Practices for a particular application shall be included in the appropriate system as part of the procedure.
	00	GENERAL	Standard practices applicable to the integrated avionics package.
	10 thru 90		Subsystems 10 thru 90 shall be used to describe standard practices. The manufacturer may assign the subsystem numbers to suit generic standard practices related to the integrated avionics package.

SYSTEM	SUB- SYSTEM	M TITLE	DEFINITION
41		WATER BALLAST	Those units and components provided for the storage, balancing, controlling, filling, discharge and dumping of water ballast. Does not include units or components covered in System 38, WATER/WASTE.
	00	GENERAL	
	10	STORAGE	That portion of the system which stores water solely for the purpose of providing airship ballast. Includes removable tanks (bladder cells), interconnecting balance pipes, filler valves, etc.
	20	DUMP	That portion of the system used to dump water ballast during flight. Includes valves (remote/direct), manual/automatic controls, etc.
	30	INDICATION	That portion of the system used to indicate quantity, condition and relative distribution of the water ballast.

SYSTEM	SUB- SYSTEM	A TITLE	DEFINITION
42		INTEGRATED AVIONICS ARCHITECTURE	Shall contain information on the architecture of integrated avionics packages. Integrated avionics packages are those systems which provide the functions of multiple systems but are contained in one system.
	00	GENERAL	
	10	SOFTWARE	Shall contain the structure and utilization of the software in the integrated avionics package.
	20	COMMON PROCESSING	That portion of the system which provides processing for the integrated avionics package or multiple functions within the integrated avionics package.
	30	DISPLAYS AND INDICATORS	Those portion of the system which provides visual or aural cues concerning the operation, mode, function, etc., of the integrated avionics package. Items included are not related to specific systems. Includes multifunction displays, controls, indicators, remote displays, etc.

SYSTEM	SUB- SYSTEM	TITLE	DEFINITION
43		COMMUNICATIONS - STAFF	Those units and components which furnish the staff a means of communicating within the aircraft, between the aircraft and other aircraft, and between the aircraft and ground stations. Includes voice and Continuous Wave (CW) communicating components, passenger address system, intercom and tape recorder-record player.
	00	GENERAL	
	10	ULTRA/SUPER/ EXTREMELY HIGH FREQUENCY (UHF/SHF/EHF)	That portion of the system which is used for communications utilizing UHF/SHF/EHF carriers. Includes items such as transmitters, receivers, control panel, encryption devices, selcal decoder, antenna, etc.
	20	VERY HIGH FREQUENCY (VHF)	That portion of the system which is used for communications utilizing VHF carriers. Includes items such as transmitters, receivers, control panel, encryption devices, selcal decoder, antenna, etc.
	30	HIGH FREQUENCY (HF)	That portion of the system which is used for communications utilizing HF carriers. Includes items such as transmitters, receivers, power supply, encryption devices, control panel, antenna, antenna coupler, etc.
	40	LOW/VERY LOW FREQUENCY (LF/VLF)	That portion of the system which is used for communications utilizing LF/VLF carriers. Includes items such as transmitters, receivers, power supply, control panel, encryption devices, antenna, antenna coupler, etc.

<u>system</u>	SUB- SYSTEM	TITLE	DEFINITION
43	50	AUDIO INTEGRATING	That portion of the system which controls the output of the communications and navigation receivers into the Staff's headphones and speakers, and the output of the Staff's microphones into the communications transmitters. Includes items such as audio selector control panel, microphones, headphones, loudspeakers, etc.
	60 ۽	DIGITAL	That portion of the system which is used for aircraft to aircraft or aircraft to ground stations utilizing CW. Includes items such as teletypewriters, modems, keyers, encryption devices, etc.
	70	MULTIPLEX AND AUDIO SWITCHING	That portion of the system which is used for telephone communications between aircraft or ground stations. Includes items such as telephones and multiplexing equipment.
	80	PASSENGER ADDRESS/ INTERPHONE	That portion of the system used to address the Staff and which is used by the Staff to communicate between areas of the aircraft. Includes items such as amplifiers, speakers, handsets, control panels, audio, video and film equipment. Does not include the interphone system within the flight compartment which is part of the integrating system.
	90	SATELLITE COMMUNICATIONS	That portion of the system which is used for aircraft to satellite communications. Includes items such as receivers, transmitters, encryption devices, modems, amplifiers, etc.

SYSTEM	SUB- SYSTEM	TITLE	DEFINITION
44		IN-FLIGHT REFUELING - TANKER	Those units and components which store and deliver fuel to a receiver vehicle while in flight. Includes fuel storage units, distribution system, controls, sensors, etc., specifically used for in-flight refueling supply. Includes interfaces with other systems but does not include any dual purpose item that is identified with another system.
-	90	GENERAL	
	10	STORAGE	That portion of the system which stores fuel specifically for the purpose of in-flight refueling. Includes tank sealing, bladder type cells, ventilating system, cell and tank interconnects, over wing filler necks and caps, etc. Also includes reservoir feed pumping systems and reservoirs within the tanks which are not part of the distribution system.
	20	DISTRIBUTION	That portion of the system which is used to distribute fuel from the filler connector to the storage system and from the storage system to, and including, the interface with the vehicle to vehicle transfer system. Includes items such as plumbing, pumps, valves, controls, etc.
	30	DELIVERY	That portion of the system that accepts the fuel from the distribution portion and conducts it to the receiving vehicle. Includes refueling boom and nozzle or hose and drogue, boom control surfaces, actuators, and hoist and stowage system. Does not include operator controls.

SYSTEM	SUB- SYSTE	M TITLE	DEFINITION
44	40	CONTROLS	That portion of the system which is used to control the transfer of fuel from tanker to receiver vehicle. Includes operator controls, indicators, intervehicle communications, etc.
	50	INDICATING	That portion of the system which is used to indicate fuel quantity, temperature and pressure. Includes pressure warning systems for pumping within the storage and distribution areas.
	60	DUMP	That portion of the system which is used to dump fuel overboard during flight. When the tanker vehicle dump system (28-30) is used, the interface with it shall be identified in this system. Includes items such as plumbing, controls, indicators, chutes, etc.

NOTE: When systems and components serve both the operation and refueling system, they shall be identified with System 28, FUEL.

SYSTEM	SUB- SYSTEM	1 TITLE	DEFINITION
45		CENTRAL MAINTENANCE SYSTEM (CMS)	Those units, components and associated systems which interface with multiple aircraft systems and provides checkout and/or fault isolation for those systems. Includes checkout and fault isolation procedures using a central computer complex and/or standard fault isolation procedures to locate a single system or component malfunction.
	00=	GENERAL	
	10	CMS/AIRCRAFT GENERAL	CMS interfaces with General Aircraft systems and identification of maintenance functions related to Aircraft General.
	20	CMS/AIRFRAME SYSTEMS	CMS interfaces with Airframe systems and identification of maintenance functions related to Airframe systems.
	30	UNASSIGNED	
	40	CMS/INTEGRATED AVIONICS SYSTEMS	CMS interfaces with Integrated Avionics systems and identification of maintenance functions related to Integrated Avionics systems.
	50	CMS/STRUCTURES	CMS interfaces with Structures systems and identification of maintenance functions related to Structures systems.
	60	CMS/PROPELLERS	CMS interfaces with Propeller systems and identification of maintenance functions related to Propeller systems.
	70	CMS/POWER PLANT	CMS interfaces with Power Plant systems and identification of maintenance functions related to Power Plant systems.

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SYSTEM SYSTEM TITLE

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DEFINITION

NOTE: Subsystem Code is selected to match applicable system interface. For example, 44-21-XX would identify all Air Conditioning system monitoring and testing provided by the CMS and would provide directions for using the CMS to execute those maintenance functions. Detailed testing not capable of coverage in System 44 would be appropriately cross referenced and would be provided in System 21. Similarly, 44-32-XX would identify landing gear monitoring and testing provided by the CMS. 44-44-XX would identify the CMS itself.

<u>SYSTEM</u>	SUB- SYSTEM	<u>TITLE</u>	<u>DEFINITION</u>
46		SYSTEM INTEGRATION AND DISPLAY	The primary aircraft system used to provide central acquisition, processing and display of data from multiple sources, such as flight controls, navigation computation, air data computation, warnings, engine parameters, etc.
	00	GENERAL	
	10 F	ACQUISITION	Those units and components used to acquire data for integration and processing. Excludes components which are covered by the applicable system.
	20	PROCESSING AND INTEGRATION	Those units and components used to integrate and process data acquired from a variety of sources and output signals to displays or warning devices. Includes items such as interfaces, central processing units, data bus controls, etc.
	30	DISPLAY	Those units which display data or provide warnings. Items included are not related to specific systems. Includes multifunction displays, integrated control and warning units, remote displays, etc.
	40 thru 70	SYSTEMS INTEGRATION SOFTWARE PACKAGES	These subsystems shall be used to provide information about those software packages which are applicable to more than one system of the aircraft and can be classified as multisystem applicable software. This includes software for computers which, in the event of failure of the computer(s) in another system, assume management of that system.

SYSTEM	SUB- SYSTEM	TITLE	<u>DEFINITION</u>
47		LIQUID/GASEOUS NITROGEN	Those units and components used to generate, store, deliver and regulate liquid/gaseous nitrogen to two or more using systems. Includes regulators, lines, manifolds, etc. Does not include liquid nitrogen handling components of the using system.
	00	GENERAL	
	10	GENERATION/ STORAGE	That portion of the system which generates and/or stores nitrogen. Includes tanks, cells, reservoirs, accumulators, etc. Shall not include plumbing, pumps, valves, controls, etc.
	20	DISTRIBUTION	That portion of the system which is used to distribute nitrogen to the using systems. Includes plumbing, pumps, valves, regulators, etc.
	30	CONTROLLING	The nitrogen controls which meter the nitrogen to the distribution components and into the using systems. Includes items such as levers, switches, cables, etc.
	40	INDICATING	That portion of the system which is used to indicate the flow rate, temperature and pressure of the nitrogen. Includes items such as transmitters, indicators, etc.

SYSTEM SYSTEM TITLE

DEFINITION

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RESERVED

SYSTEM	SUB- SYSTEM	TITLE		DEFIN	ITI	<u>on</u>	
49		AIRBORNE AUXILIARY POWER	(eng the gene type elec othe driv cont tors the gene pump syst power	ines) waircraf rating or com tric, h r power e secti rol sys , plumb power u rators, s, etc.	t f and bin ydr on, tem inst al och	h ar p sup atio auli Incl fues, watern the supp	ver plants te installed on turpose of turpos
	00	GENERAL					
	10	POWER PLANT	See	System	71	for	definition.
	20	ENGINE	See	System	72	for	definition.
	30	ENGINE FUEL AND CONTROL	See	System	73	for	definition.
	40	IGNITION/ STARTING		System nition.		and	80 for
	50	AIR	See	System	75	for	definition.
	60	ENGINE CONTROLS	See	System	76	for	definition.
	70	INDICATING	See	System	77	for	definition.
	80	EXHAUST	See	System	78	for	definition.
	90	OIL	See	System	79	for	definition.

SYSTEM SYSTEM TITLE

DEFINITION

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RESERVED

<u>system</u>	SUB- SYSTEM	TITLE	DEFINITION
51		STANDARD PRACTICES - STRUCTURES	This system shall contain those standard practices applicable to the entire structure of the aircraft. Shall exclude those practices which are covered in other manuals or systems. Practices for a particular application shall be included in the appropriate structure system as part of the procedure.
	00	GENERAL	Includes: Airplane major structural breakdown diagram; Primary and secondary structure diagram; Principal area and dimensional data; Restricted area diagram; Zoning diagram; Access door and panel identification; Glossary.
	10	INVESTIGATION, CLEANUP AND AERODYNAMIC SMOOTHNESS	Includes: Definition of damage classifications; Cleanup of dents, cracks, scratches, corrosion, etc.; aerodynamic smoothness requirements for the airplane, permissible contour variations, gaps and mismatch data.
	20	PROCESSES	Includes special processes for use in the repair of the airplane. Does not include general engineering practices unless specific deviations are required. Unique processes, such as welding specifications, etc., relative to a single repair, shall be incorporated in the repair and only referenced here.
	30	MATERIALS	Includes description of materials (metallic and nonmetallic) including extrusions, formed sections, sheet, sealants, adhesives and special materials

SYSTEM	SUB- SYSTE	M TITLE	DEFINITION
51	30 - 0	Continued	used in airplane repair. Permissible substitutes and sources of supply shall be given.
	40	FASTENERS	Includes: description of fastener types, materials and sizes; Procedures for fastener installation and removal including hole preparation; Fastener strength values and substitution data.
	50	SUPPORT OF AIRPLANE FOR REPAIR AND ALIGNMENT CHECK PROCEDURES	Procedures for supporting the airplane to relieve loads during repairs. Includes locations for supports and contour dimensions required ground equipment. Complete procedures and diagrams shall be provided to check the principal alignment or symmetry dimensions and permissible variations.
	60	CONTROL SURFACE BALANCING	Procedures for adjusting the mass balance of control surfaces after repair. Where applicable, individual repairs shall contain their own balancing instructions.
	70	REPAIRS	Typical repairs suitable for general use, not limited to one system.

SYSTEM	SUB- System	A TITLE	DEFINITION
52		DOORS	Those removable units used for entrance or exit, and for enclosing other structure contained within the fuselage. Includes passenger and flight crew doors, cargo doors, emergency exits, etc. Electrical and hydraulic systems associated with door control are included as appropriate.
	00	GENERAL	
	10	PASSENGER/ CREW	The doors used for entrance and exit of the passengers and flight crew to and from the aircraft. Includes items such as structure, latching mechanisms, handles, insulation, lining, controls, integral steps, ramps, handrails, attach/attached fittings, etc.
	20	EMERGENCY EXIT	The exit doors used to facilitate evacuation that are not normally used for exit. Includes items such as structure, latching mechanisms, handles, insulation, lining, controls, attach/attached fittings, etc.
	30	CARGO/WEAPONS BAYS	The exterior doors used primarily to gain access to cargo compartments/weapons bays. Includes items such as structure, latching mechanisms, handles, insulation, lining, controls, integral steps, ramps, handrails, attach/attached fittings, etc.
	40	SERVICE	The exterior doors used primarily to gain access for servicing aircraft systems and equipment. Includes items such as structure, latching mechanisms, handles, insulation, lining, controls,

SYSTEM	SUB- SYSTE	M TITLE	<u>DEFINITION</u>
52	40 -	Continued	integral steps, handrails, attach/attached fittings, etc.
	50	FIXED INTERIOR	The doors inside the fuselage installed in fixed partitions. Includes items such as structure, latching mechanisms, handles, lining, attach/attached fittings, etc. Does not include doors installed in movable partitions which are covered in System 25, EQUIPMENT/FURNISHINGS.
	60	ENTRANCE STAIRS	The stairs which operate in conjunction with but are not an integral part of entrance doors. Stairs whose primary structure is a door shall be covered under the appropriate topic. Includes items such as structure, actuating mechanisms and controls, handrails, attach/attached fittings, etc.
	70	DOOR WARNING	That portion of the system which is used to indicate whether the doors are closed and properly latched. Includes items such as switches, lights, bells, horns, etc. Does not include landing gear or weapons bay door warnings which are covered in System 32, LANDING GEAR and System 94, WEAPON SYSTEM, respectively.
	80	LANDING GEAR	The structure of the doors used to enclose the landing gear compartments. Includes items such as structure, latching mechanisms, handles, insulation, lining, controls, attach/attached fittings, etc.

SYSTEM	SUB- SYSTEM	M TITLE	DEFINITION
53		FUSELAGE	The structural units and associated components/members which make up the compartments for equipment, passengers, flight crew and cargo, including the envelope and gondola of airships. Includes skin, belt frames, stringers, floor beams, floor, pressure dome, scuppers, tail cone, fuselage to wing and empennage fillets, attach/attached fittings, load curtain, cables, ballonets, etc. Also includes structural and removable pylons used for the carriage of external stores other than weapons. Pylons used for the carriage of weapons are covered in System 94, WEAPON SYSTEM.
	00	GENERAL	
	10	MAIN FRAME	The primary skeleton of the fuselage. Includes frames, bulkheads, formers, longerons, stringers, keel, frames around openings, etc.
	20	AUXILIARY STRUCTURE	The secondary structure of the fuselage. Includes floors, internal stairs and fixed partitions. Does not include movable partitions which are covered in System 25, EQUIPMENT/FURNISHING.
	30	PLATES/ SKIN	The exterior covering of the fuselage including doublers and access covers which are not covered in System 52, DOORS.
	40	ATTACH FITTINGS	The fittings on the fuselage used for the attachment of doors, wings, stabilizers, landing gear, engine and rotor pylons, and for the support of equipment within

SYSTEM	SUB- SYSTEM TITLE	DEFINITION
53	40 - Continued	the fuselage. Includes items such as seat tracks, cargo basket rails, instrument brackets, etc.
	50 AERODYNAMIC FAIRINGS	The structure of fixed or variable aerodynamic fairings such as those on the nose and tail, and between the fuselage and the wing and the stabilizers. Includes items such as wing/fuselage fillets, nose and tail cones, radome, visor and droop nose, etc. Does not include the functioning and maintenance aspects of variable aerodynamic fairings which are covered in System 27, FLIGHT CONTROL.

SYSTEM	SUB- System	A TITLE	DEFINITION
54		NACELLES/ PYLONS	Those structural units and associated components/members which furnish a means of housing and mounting the power plant or rotor assembly. Includes skin, longerons, belt frames, stringers, clamshells, scuppers, doors, nacelle fillets, attach/attached fitting, etc. Also includes the structure of power plant cowling inclusive of the structural portion of the inlet whether or not integral with the aircraft. Structural portions of the exhaust system are excluded where they are not integral with the airframe.
	00	GENERAL	
	10	NACELLE MAIN FRAME	The primary skeleton of the nacelle. Includes items such as frames, bulkheads, firewalls, stringers, keel, frames around openings, etc.
	20	NACELLE AUXILIARY STRUCTURE	The secondary structure in the nacelle. Includes leading and trailing edge structure, etc. Does not include plates/skin.
	30	NACELLE PLATES/SKIN	The exterior covering of the nacelle. Includes access covers, cowling and doublers.
	40	NACELLE ATTACH FITTINGS	The fittings on the nacelles used for attachment to it's connecting structure, power plant or thrust reverser and for the support of equipment within the nacelle.
	50	PYLON MAIN FRAME	The primary skeleton of the pylon. Includes items such as frames, bulkheads, firewalls, stringers, keel, frames around openings, etc.

SYSTEM	SUB- SYSTE	M TITLE	DEFINITION
54	60	PYLON AUXILIARY STRUCTURE	The secondary structure in the pylons. Includes leading and trailing edge structure, etc. Does not include plates/skin.
	70	PYLON PLATES/ SKINS	The exterior covering of the pylons. Includes access covers, cowling and doublers.
	80	PYLON ATTACH FITTINGS	The fittings on the pylons used for attachment to its connecting structure, power plant or thrust reverser and for the support of equipment within the pylon.
	90	FILLETS/ FAIRINGS	The aerodynamic fairings between the nacelle or pylon and it's connecting structure.

SYSTEM	SUB- SYSTE	M TITLE	DEFINITION
55		STABILIZERS	The horizontal and vertical stabilizers include the structure of the elevator and rudder.
	00	GENERAL	
	10	HORIZONTAL STABILIZER OR CANARD	The horizontal airfoil of the tail or nose section to which the elevator/canard is attached. Includes items such as spars, ribs, stringers, plates/skin, access covers, tips, attach/attached fittings, etc.
	20	ELEVATOR	The removable airfoil which is used for pitch control. Includes items such as spars, ribs, stringers, plates/skin, access covers, tabs, balance devices, attach/attached fittings, etc.
	30	VERTICAL STABILIZER	The vertical airfoil to which the rudder is attached. Includes items such as spars, ribs, stringers, plates/skin, access covers, tips, attach/attached fittings, etc.
	40	RUDDER	The removable airfoil which is attached to the vertical stabilizer and is used for yaw control. Includes items such as spars, ribs, stringers, plates/skin, access covers, tabs, balance devices, attach/attached fittings, etc.

SYSTEM	SUB- SYSTEM	I TITLE	DEFINITION
56		WINDOWS AND CANOPIES	The fuselage and flight crew compartment windows and canopies inclusive of windshield; also those windows installed in doors. Includes associated electrical/hydraulic/pneumatic actuation systems.
	00	GENERAL	
		FLIGHT COMPARTMENT WINDOWS/ CANOPIES	The compartment from which the flight crew flies the aircraft. Includes items such as the transparent material and it's frame of sliding and fixed windows, windshields and canopies, handles, latching mechanisms, and associated electrical/hydraulic/pneumatic actuation systems, etc. Does not include door or inspection/observation windows.
	20	FUSELAGE COMPARTMENT WINDOWS/ CANOPIES	The compartment used for passenger/tactical crew/cargo, etc. Includes lounges, lavatories, buffets/galleys and coat room. Includes items such as transparent material, it's frame, frost shield, etc.
	30	DOOR WINDOWS	The doors in the flight and fuselage compartments. Includes items such as transparent material, it's frame, etc. Does not include emergency exit windows.
	40	INSPECTION AND OBSERVATION WINDOWS/ CANOPIES	The windows used for examining compartments and equipment in and about the airplane, astrodomes used for celestial navigation and in-flight refueling operator's windows. Includes items such as transparent material, it's frame, etc.

SYSTEM	SUB- SYSTEM	<u>TITLE</u>	DEFINITION
57		WINGS	The center wing and outer wing structural units and associated components/members which enable the atmosphere to lift the aircraft. Includes integral fuel tank structure and components that make up these units, such as spars, skin, ribs, stringers, clamshells, scuppers, etc. Includes the structure of the flaps, ailerons and spoilers, including tabs.
	00	GENERAL	
	10	CENTER WING	The skin, primary structure, fillets and fairings of the center wing including attach/attached fittings.
	20	OUTER WING	The skin, primary structure, fillets and fairings of the outer wing including attach/attached fittings.
	30	WING TIP	The skin and structure of the wing tip including attach/attached fittings.
	40	LEADING EDGE AND LEADING EDGE DEVICES	The skin and structure of the wing leading edge and removable leading edge airfoils such as flaps, slats, attach/attached fittings, etc.
	50	TRAILING EDGE AND TRAILING EDGE DEVICES	The skin and structure of the wing trailing edge removable trailing edge airfoils such as flaps, attach/attached fittings, etc.
	60	AILERONS AND ELEVONS	The skin and structure of ailerons/ elevons and tabs including balancing devices, attach/attached fittings, etc.

SYSTEM	SUB- SYSTE	M TITLE	<u>DEFINITION</u>
57	70	SPOILERS	The skin and structure of wing mounted spoilers, airbrakes, lift dampers, attach/attached fittings, etc.

SYSTEM SYSTEM TITLE

DEFINITION

58 AND 59

RESERVED

	SUB-		
SYSTEM	SYSTE	M TITLE	<u>DEFINITION</u>
60		STANDARD PRACTICES - PROPELLER	This system shall contain those standard mechanical and electrical/electronic engineering practices applicable to more than one propeller/rotor system and are not covered in Systems 61 thru 69. Shall exclude those practices which are covered in other manuals or systems. Practices for a particular application shall be included in the appropriate propeller/rotor system as part of the procedure. Excludes rotor anti-ice system which is covered in System 30, ICE AND RAIN PROTECTION.
	00	GENERAL	Standard Practices applicable to all Propeller/Rotor systems.
	10 thru 90		Subsystems 10 thru 90 shall be used to describe standard practices. The manufacturer may assign the subsystem numbers to suit generic standard practices related to more than one propeller or rotor system.

SYSTEM	SUB- System	M TITLE	DEFINITION
61		PROPELLERS/ PROPULSORS	The complete mechanical or electrical propeller, pumps, motors, governor, alternators and those units and components external to or integral with the engine used to control the propeller blade angle. Includes propeller spinner, synchronizers, propulsor duct assemblies, including aerodynamic fairing of mechanical components, stators, vectoring systems, etc.
	00	GENERAL	
	10	PROPELLER ASSEMBLY	That portion of the system which rotates except the engine propeller shaft. Includes items such as blades, dome, hub, spinner, slip ring, deicer boot, distributor valve, etc.
	20	CONTROLLING	That portion of the system which controls the pitch of the propeller blades. Includes items such as governors, synchronizers, switches, wiring, cables, levers, etc. Does not include any parts which rotate with the propeller assembly. Also includes those units and components provided for the propulsor vector drive system. Includes flight deck control, drive motors, gearboxes, drive shafts, synchronizing shaft, etc.
	30	BRAKING	That portion of the system which is used to decrease run-down time or stop propeller rotation during engine power off conditions. Includes brake mechanisms, levers, pulleys, cables, switches, wiring, plumbing, etc.
61	40	INDICATING	That portion of the system used to

SYSTEM	SUB- SYSTEM TITLE	DEFINITION
61	40 - Continued	indicate operation or activation of propeller/propulsor systems. Includes items such as lights, switches, wiring, etc.
	50 PROPULSOR DUCT	The complete duct assembly including vector drive attachment, fairings, stators, gearbox covers, etc.

SYSTEM	SUB- SYSTEI	M TITLE	DEFINITION
62		ROTOR(S)	Rotor head assembly(ies) and rotor blades, including the swashplate assembly(ies) and the rotor shaft unit(s) if not an integral part of the gearbox(es). Does not include the rotor anti-icing system which is included in System 30, ICE AND RAIN PROTECTION.
	00	GENERAL .	
	10	ROTOR BLADES	Rotor blade assemblies, including the heating mat (electrical resistors) for anti-icing.
	20	ROTOR HEAD(S)	Complete rotor head(s), including blade folding system(s). Includes sleeves, spindles, dampers, rotor head fairing(s) as well as rotor shaft(s) and swashplate(s) if the rotor head and shaft constitute a non-dissociable assembly.
	30	ROTOR SHAFT(S)/ SWASHPLATE ASSEMBLY(IES)	If not included in Subsystem 20.
	40	INDICATING	That portion of the system which indicates operation or activation of rotor systems. Includes items such as lights, gauges, switches, wiring, etc.

SYSTEM	SUB- SYSTEM	TITLE	DEFINITION
63		ROTOR DRIVE(S)	Includes all components transmitting power to the rotor(s). Includes engine coupling components, drive shaft(s), clutch and free wheel units, gear box(es), components, systems and securing elements.
	00	GENERAL	
	10	ENGINE/ GEARBOX COUPLINGS	Drive shaft(s) between engine(s) and main gear box(es) and, if applicable, clutch and free wheel unit(s).
	20	GEARBOX(ES)	That portion of the system driving the rotor(s). Includes the mechanical power takeoff(s) and accessory drives but does not include the accessories themselves (alternators, hydraulic pumps, etc.). Includes the gearbox lubricating system(s) and the rotor brake(s) if the latter forms part of the gearbox.
	30	MOUNTS, ATTACHMENTS	Includes suspension bars, vibration damping systems, etc., providing attachment of the gearbox(es) to the airframe.
	40	INDICATING	That portion of the system which indicates operation or activation of rotor systems. Includes items such as lights, gauges, switches, wiring, etc.

SYSTEM	SUB- SYSTEM	M TITLE	DEFINITION
64		TAIL ROTOR	Assembly that rotates in a plane nearly parallel to the symmetry plane and delivers a thrust opposing the main rotor torque, thus ensuring yaw control. Includes the rotor blades and rotor head. Does not include the rotor anti-icing system which is covered in System 30, ICE AND RAIN PROTECTION.
	00	GENERAL	
	10	ROTOR BLADES	Blade assemblies, including the heating mats (electrical resistors) for anti-icing.
	20	ROTOR HEAD	Tail rotor head.
	30	UNASSIGNED	
	40	INDICATING	That portion of the system which indicates operation or activation of rotor systems. Includes items such as lights, gauges, switches, wiring, etc.

NOTE: For an integral unit, only one subsystem (10 or 20) shall be used.

SYSTEM	SUB- SYSTEM	M TITLE	DEFINITION
65		TAIL ROTOR DRIVE	The components transmitting power to the tail rotor. Includes drive Also includes rotor braking, blade angle and attitude control system but does not include the rotor anti-icing system which is covered in System 30, ICE AND RAIN PROTECTION.
	00	GENERAL	
	10	SHAFTS	Includes drive shafts, bearing, flexible couplings, etc.
	20	GEARBOXES	Includes intermediate and tail gearboxes.
	30	UNASSIGNED	
	40	INDICATING	That portion of the system used to indicate operation or activation of rotor systems. Includes items such as lights, gauges, switches, wiring, etc.

SYSTEM	SUB- SYSTER	<u>r</u>	TITLE	DEFINITION
66			DING ADES/ ON	The complete system ensuring automatic or manual folding and spreading of the rotor blades and/or tail pylon.
			rigging also systems.	affects the components describ-
	00	GEN	IERAL	
	10	ROT BLA	OR ADES	That portion of the system ensuring rotor blade folding and spreading. Includes the mechanical, hydraulic and electrical means permanently fitted on the aircraft.
	20	TAI PYL	-	That portion of the system ensuring tail pylon folding and spreading. Includes mechanical, hydraulic and electrical means permanently fitted on the aircraft.
	30	AND	TROLS OICATING	That portion of the system intended to control the folding/spreading sequences and for indicating system operation. Includes the control units, caption lights, indicators, wiring, etc.

SYSTEM	SUB- SYSTEM TITLE	DEFINITION
67	ROTORS FLIGHT CONTROLS	The system which provides means of manually controlling the flight attitude of the helicopter. Includes items such as control linkage and control cables for collective pitch, cyclic pitch, directional control, servo controls and corresponding system. Includes the trim, indicating and monitoring system.

NOTE: This system includes the complete rigging of rotor control including the associated items not described under this system, such as autopilot, servo control unit, automatic trim (System 22), blade pitch change rod (System 63), and swashplate.

00	GENERAL	
10	ROTOR CONTROL	That portion of the system which controls the attitude of the angle of attack of the rotor blades. Includes items such as collective pitch lever, cyclic pitch stick and corresponding linkage and cable controls, coupling and mixing units, and artificial feel unit system. Also includes the control position indicating system.
20	ANTI-TORQUE ROTOR CONTROL (YAW CONTROL)	That portion of the controls which control the direction of the helicopter (yaw control). Includes items such as tail rotor control pedals, relevant linkage and cable controls, bellcranks constituting the yaw control channel, and the control position indicating system.
30	SERVO CONTROL SYSTEM	That portion of the system which ensures distribution from a power source to the rotor servo control system. Includes items such as pressure relief valves, electronic valves, check valves, accumulators

SYSTEM	SUB- SYSTEM TITLE	DEFINITION
67	30 - Continued	and equipment needed for the operation of the servo control system; the servo controls; the systems used for monitoring and indicating the operation of the servo control system.

SYSTEM SYSTEM TITLE

DEFINITION

68 AND 69

RESERVED

<u>SYSTEM</u>	SUB- SYSTEM	M TITLE	DEFINITION
70		STANDARD PRACTICES - ENGINE	This system shall contain those standard mechanical, electrical, electronic and engineering practices which are applicable to more than one engine system which are not covered in Systems 71 thru 84. Shall not include those items covered in other manuals. Practices for a particular application shall be included in the appropriate engine system as part of the procedure.
	00 10 thru 90	GENERAL	Standard practices applicable to all engine associated systems. Subsystems 10 thru 90 shall be used to describe standard practices. The manufacturer may assign the subsystem numbers to suit generic standard practices related to more than one engine or associated systems.

SYSTEM	SUB- SYSTEM	M TITLE	DEFINITION
71		POWER PLANT	The overall power package. Include engine air intake, mount, cowling, scoops, cowl flaps, etc.
	00	GENERAL	Includes general information, limits and procedures. In the maintenance manual, this subsystem shall cover subjects such as engine changes, run-up, externally mounted spare power plants, etc. In the overhaul manual, this subsystem shall cover subjects such as power plant buildup, teardown, etc.
	10	COWLING	Those removable coverings which extend over and around the power plant assembly. Includes the functioning and maintenance aspects of items such as accessory section cowls, cowl flaps, cowling supports, attach and locking mechanisms, etc. Does not include the structure integral with the airframe which shall be covered in the applicable Structures System.
	20	MOUNTS	The framework, either of buildup construction or forgings, which support the engine and attach it to the nacelle or pylon. Includes items such as engine mounts, vibration dampeners, support links, mounting bolts, etc.
	30	FIRESEALS	Those fire resistant partitions and seals mounted on or about the power package for the purpose of isolating areas subject to fire. Does not include those firewalls which are included in System 54, NACELLES/PYLONS.
	40	ATTACH FITTINGS	Those fittings and brackets which are used for the support of

SYSTEM	SUB- SYSTE	M TITLE	DEFINITION
71	40 - 6	Continued	equipment in and about the power package.
	50	ELECTRICAL HARNESS	Those electrical cables, conduits, plugs, sockets, etc., which serve several power plant systems, but which are banded together to facilitate removal and installation of the power plant. Does not include the wiring which is specifically covered under another system.
	60	AIR INTAKES	That portion of the power plant system which directs and may or may not vary the mass air flow to the engine. Includes items such as nose ring cowls, scoops, compressor fan cowls, buried engine ducts, vortex generators, actuators, control handles, cables, wiring, plumbing, linkages, doors, warning systems, position indicators, etc. Does not include integral structure with the airframe, which shall be included in the applicable Structures System.
	70	ENGINE DRAINS	Those components and manifold assemblies which are used to drain off excess fluids from the power plant and its accessories. Includes drain lines, manifolds, tanks, flame arrestors, vents and their supporting brackets, etc. Also includes components that are an integral part of, or fitted to, the power plant cowling.

SYSTEM SYSTEM TITLE

DEFINITION

72 ENGINE

The power producing portion of the power plant exclusive of engine air intake, mount, cowling, scoops, cowl flaps, etc. Includes those units and components which are:

Used to induce and convert fuel-air mixture into power. Includes, for the turbine engine, air inlet, compressor, diffuser, combustion chambers, turbine, exhaust, etc, and, for the reciprocating engine, blower and clutch, clutch control valve, cylinders, cylinder baffles, intake pipes, crankshaft assembly, etc.

Used to transmit power to the propeller shaft, if any, and accessory drives. Includes reduction gearing, gear trains, extension shaft and torque-meter.

Within the profile of the basic engine, used to supplement the functioning of other defined systems external to the engine. Includes items such as accessory drives, mechanical portion of the spark advance mechanism, oil transfer tubes from the propeller governor pad to the propeller shaft, etc.

Used to control and direct the flow of lubrication through the engine from the inlet fitting to the outlet fitting. Includes engine pumps (pressure and scavenger), pressure relief valves, screens, oil lines (internal and external), etc.

SYSTEM	SUB- SYSTEM	M TITLE	DEFINITION
72 (1)		ENGINE - TURBINE/ TURBOPROP	
	00	GENERAL	This subsystem is intended to cover general information, limits and procedures. In the engine overhaul manual, this subsystem would include such subjects as teardown, cleaning, inspection, assembly, testing, etc.
	10	REDUCTION GEAR AND SHAFT SECTION (TURBOPROP)	The section of the engine which contains the propeller shafts and reduction gears. Includes items such as drives for nose mounted accessories, etc.
	20	AIR INLET SECTION	The section of the engine through which the air enters the compressor section. Includes items such as guide vanes, shrouds, cases, etc.
	30	COMPRESSOR SECTION	The section of the engine in which the air is compressed. Includes items such as cases, vanes, shrouds, rotors, diffusers, etc. Also includes the maintenance and overhaul of stator blades, but not the operation of variable stator blades which is covered under System 75, AIR. Does not include compressor bleed system.
	40	COMBUSTION SECTION	The section of the engine in which the air and fuel are combined and burned. Includes items such as burner cans, cases, etc.
	50	TURBINE SECTION	The section of the engine containing the turbines. Includes items such as turbine nozzles, turbine rotors, cases, etc.

SYSTEM	SUB- System	<u>TITLE</u>	DEFINITION
72 (1)		ACCESSORY DRIVES	The mechanical power takeoffs to drive accessories. Includes items such as engine mounted gearboxes, gears, seals, pumps, etc. Does not include remotely installed gearboxes which are covered in System 83, ACCESSORY GEARBOXES.
		BYPASS SECTION	The section of the engine which bypasses a portion of the normal engine airflow (either ram or compressed air) for the prime purpose of adding to engine thrust or reducing specific fuel consumption.

SYSTEM	SUB- SYSTEM	A TITLE	DEFINITION
72 (2)		ENGINE - RECIPROCATING	
	00	GENERAL	This subsystem is intended to cover general information, limits and procedures. In the engine overhaul manual, this subsystem would include subjects such as teardown, cleaning, inspection, assembly, testing, etc.
	10	FRONT SECTION	The section of the engine which contains the propeller shafts and reduction gears. Includes items such as drives for nose mounted accessories, etc.
	20	POWER SECTION	The section of the engine which contains the crankshaft, master and link rod assemblies, cams, cam drive gears, tappet guides, rollers, carriers, etc.
	30	CYLINDER SECTION	The section of the engine which contains the cylinders, valves, pistons, push rods, intake pipes, baffles, etc. Also includes rocker arm assembly, valve springs, etc.
	40	SUPERCHARGER/ TURBOCHARGER SECTION	The section of the engine which contains cases, shroud plates, PRT coupling and gearing, impeller and drives, accessory drives, bushings, etc.
	50	LUBRICATION	Those units and components which are used to distribute oil throughout the engine. Includes front and rear pressure and scavenger pumps, sumps, strainers, valves, etc. Also includes those oil lines not included in System

SYSTEM	SUB- SYSTEM TITLE			<u>DE</u> 1	FINITION		
70 (A)	E0 G-		70	0.7.7	D	2	

72 (2) 50 - Continued 79, OIL. Does not include those items which form integral passages within the engine.

SYSTEM SYSTEM TITLE

DEFINITION

73

ENGINE FUEL AND CONTROL For turbine engines, those units, components and associated mechanical systems or electrical circuits which furnish or control fuel to the engine beyond the main fuel quick disconnect and thrust augmentor, fuel flow rate sensing, transmitting and/or indicating units whether the units are before or beyond the quick disconnect. Includes coordinator or equivalent, engine driven fuel pump and filter assembly, main and thrust augmentor fuel controls, electronic temperature datum control, temperature datum valve, fuel manifold, fuel nozzles, fuel enrichment system, speed sensitive switch, relay box assembly, solenoid drip valve, burner drain valve, etc.

For reciprocating engines, those units and components which deliver metered fuel and air to the engine. The fuel portion includes the carburetor/master control from the inlet side to the discharge nozzle(s), injection pumps, carburetor, injection nozzles and fuel primer. The air portion includes units from the scoop inlet to the vapor vent return, and the impeller chamber. Does not include engine driven fuel pumps which are covered in System 28, FUEL.

00 GENERAL

10 DISTRIBUTION

That portion of the system, from the main quick disconnect to the engine, which distributes fuel to the engine burner section and the thrust augmentor. Includes items

SYSTEM	SUB- SYSTEM TITLE	DEFINITION
73	10 - Continued	such as plumbing, pumps, temperature regulators, valves, filters, manifold, nozzles, etc. Does not include the main or thrust augmentor fuel control.
	20 CONTROLLING	The main fuel control which meters fuel to the engine and the thrust augmentor. Includes items such as hydromechanical or electronic fuel control, levers, cables, pulleys, linkages, sensors, valves, etc., which are components of the fuel control units.
	30 INDICATING	That portion of the system which is used to indicate the flow rate, temperature and pressure of the fuel. Includes items such as transmitters, indicators, wiring, etc. Does not include indication if accomplished as part of an integrated engine instrument system covered by System 77, ENGINE INDICATING.

SYSTEM	SUB- System	1 TITLE	DEFINITION
74		ENGINE IGNITION	Those units and components which generate, control, furnish or distribute an electrical current to ignite the fuel-air mixture in the cylinders of reciprocating engines, or in the combustion chambers or thrust augmentors of turbine engines. Includes induction vibrators, magnetos, switches, lead filters, distributors, harnesses, spark plugs, ignition relays, exciters and the electrical portion of the spark advance mechanism.
	00	GENERAL	
	10	ELECTRICAL POWER SUPPLY	That portion of the system which generates electrical current for the purpose of igniting the fuelair mixture. Includes items such as magnetos, distributors, booster coils, exciters, transformers, storage capacitors and compositors, etc.
	20	DISTRIBUTION	That portion of the system which conducts high or low voltage electricity from the electrical power supply to the spark plugs or igniters. Includes wiring between magneto and distributor in those systems where they are separate units. Includes items such as ignition harness, high tension leads, coils as used in 'low tension' systems, spark plugs, igniters, etc.
	30	SWITCHING	That portion of the system which provides a means of rendering the electrical power supply inoperative. Includes items such as ignition switches, wiring, connectors, etc.

<u>SYSTEM</u>	SUB- SYSTEM	M TITLE	<u>DEFINITION</u>
75		ENGINE AIR	For turbine engines, those external units and components and integral basic engine parts which go together to conduct air to various portions of the engine and to the extension shaft and torque-meter, assembly, if any. Includes compressor bleed systems used to control flow of air through the engine, cooling air systems and heated air systems for engine anti-icing. Does not include aircraft anti-icing, engine starting systems or exhaust supplementary air systems.
	00	GENERAL	
	10	ENGINE ANTI-ICING	That portion of the system which is used to eliminate and prevent the formation of ice, by the use of bleed air, in all parts of the engine, excluding power plant cowling which is covered in System 30, ICE AND RAIN PROTECTION. Includes items such as valves, plumbing, wiring, regulators, etc. Electrical anti-icing is covered in System 30, ICE AND RAIN PROTECTION.
	20	COOLING	That portion of the system which is used to ventilate the engine and accessories. Includes items such as valves, plumbing, wiring, jet pumps, vortex spoilers, etc.
	30	COMPRESSOR CONTROL	That portion of the system which is used to control the flow of air through the engine. Includes items such as governors, valves, actuators, linkages, etc. Also includes the operation of variable stator blades, but not the

SYSTEM	SUB- SYSTEM TITLE	DEFINITION
75	30 - Continued	maintenance and overhaul, which shall be covered in System 72, ENGINE.
	40 INDICATING	That portion of the system which is used to indicate temperature, pressure, control positions, etc., of the air systems. Includes items such as transmitters, indicators, wiring, etc.

SYSTEM	SUB- SYSTEM	M TITLE	DEFINITION
76		ENGINE CONTROLS	Those controls which govern operation of the engine. Includes units and components which are interconnected for emergency shutdown. For turboprop engines, includes linkages and controls to the coordinator or equivalent, the propeller governor, fuel control unit or other units being controlled. For reciprocating engines, includes controls for blowers. Does not include units or components which are specifically included in other systems.
	00	GENERAL	
	10	POWER CONTROL	That portion of the system which furnishes a means of controlling the main fuel control or coordinator. Includes controls to the propeller regulator on turboprop engines. Includes items such as linkages, cables, levers, pulleys, switches, wiring, etc. Does not include the units themselves.
	20	EMERGENCY SHUTDOWN	That portion of the system which furnishes a means of controlling the flow of fluids to and from the engine during emergency procedures. Includes items such as levers, cables, pulleys, linkages, switches, wiring, etc. Does not include the units themselves.

<u>system</u>	SUB- SYSTEM	1 TITLE	DEFINITION
77		ENGINE INDICATING	Those units, components and associated systems which indicate engine operation. Includes indicators, transmitters, analyzers, etc. For turboprop engines, includes phase detectors. Does not include systems or items which are specifically included in other systems except when indication is accomplished as a part of an integrated engine instrument system, Subsystem 40.
	00	GENERAL	
	10	POWER	That portion of the system which directly or indirectly indicates power or thrust. Includes items such as Brake Mean Effective Pressure (BMEP), pressure ratio, Revolutions Per Minute (RPM), etc.
	20	TEMPERATURE	That portion of the system which indicates temperatures in the engine. Includes items such as cylinder head, exhaust (turbine inlet), etc.
	30	ANALYZERS	That portion of the system which is used to analyze engine performance or condition by means of instruments or devices, such as oscilloscopes, etc. Includes items such as generators, wiring, amplifiers, oscilloscopes, etc.
	40	INTEGRATED ENGINE INSTRUMENT SYSTEMS	That portion of the system which, in an integrated concept, receives several/all engine operating parameters and transmits this to a central processor for presentation to the flight crew. Includes items such as display units, transmitters, receivers, computers, etc.

SYSTEM	SUB- SYSTE	M TITLE	DEFINITION
77	50	ENGINE MONITORING SYSTEM	That portion of the system which monitors engine operation, issues warnings to the flight crew on predetermined malfunctions, and stores engine information for later use by maintenance personnel.

SYSTEM	SUB- SYSTEM	1 TITLE	DEFINITION
78		ENGINE EXHAUST	Those units and components which direct the engine exhaust gases overboard.
			For turbine engines, includes units external to the basic engine, such as thrust reverser and noise suppressor.
			For reciprocating engines, includes augmentors, stacks, clamps, etc. Excludes exhaust driven turbines.
	00	GENERAL	
	10	COLLECTOR/ NOZZLE	That portion of the system which collects the exhaust gases from the cylinders or turbines and conducts them overboard. Includes items such as collector rings, exhaust and thrust augmentor ducts (unless included in Subsytem 50), variable nozzles, actuators, plumbing, linkages, wiring, position indicators, warning systems, etc. Does not include power recovery turbines, turbo/superchargers, etc., nor noise suppressors or thrust reversers where they are not an integral part of the nozzle system.
	20	NOISE SUPPRESSOR	That portion of the system which reduces the noise generated by the exhaust gases. Includes items such as pipes, baffles, shields, actuators, plumbing, linkages, wiring, position indicators, warning systems, etc. Use Subsystem 10 when an integral
			part of the nozzle system.

SYSTEM	SUB- SYSTE	M TITLE	<u>DEFINITION</u>
78	30	THRUST REVERSER	That portion of the system which is used to change the direction of the exhaust gases for reverse thrust. Includes items such as clamshells, linkages, levers, actuators, plumbing, wiring, position indicators, warning systems, etc. Use Subsystem 10 when an integral
			part of nozzle system.
	40	SUPPLEMENTARY AIR	That portion of the system which varies and controls supplementary air flow to the exhaust system. Includes items such as tertiary air doors, actuators, linkages, springs, plumbing, wiring, position indicators, warning systems, etc.
	50	AUGMENTOR	That portion of the system which provides additional thrust for takeoff and infight at the command of the pilot. Includes items such as liners, rings, ducts, actuators, linkages, wiring, indicators, warning systems, etc. Does not include augmentation external to the power plant which shall be covered in System 84, PROPULSION AUGMENTATION.

<u>SYSTEM</u>	SUB- Systei	M TITLE	<u>DEFINITION</u>
79		ENGINE OIL	Those units and components external to the engine concerned with storing and delivering lubricating oil to and from the engine. Covers all units and components from the lubricating oil engine outlet to the inlet, including the inlet and outlet fittings, tank, radiator, bypass valve, etc., including auxiliary oil systems.
	00	GENERAL	
	10	STORAGE	That portion of the system used for storage of oil. Includes items such as tanks, filling systems, internal hoppers, baffles, tank sump and drain, etc. Does not include tanks which are an integral portion of the engine.
	20	DISTRIBUTION	That portion of the system which is used to conduct oil from and to the engine. Includes items such as plumbing, valves, temperature regulator, control systems, etc.
	30	INDICATING	That portion of the system which is used to indicate the quantity, temperature and pressure of the oil. Includes items such as transmitters, indicators, wiring, warning systems, etc. Does not include indication if accomplished as part of an integrated engine instrument system covered by System 77, ENGINE INDICATING.

SYSTEM	SUB- SYSTEM	M TITLE	<u>DEFINITION</u>
80		ENGINE STARTING	Those units, components and associated systems used for starting the engine. Includes electrical, inertia air or other starter systems. Does not include ignition systems which are covered in System 74, IGNITION.
	00	GENERAL	
	10	CRANKING	That portion of the system which is used to perform the cranking portion of the starting operation. Includes items such as plumbing, valves, wiring, starter, switches, relays, etc.

SYSTEM	SUB- SYSTEI	M TITLE	DEFINITION
81		TURBINES	For reciprocating engines only. Includes power recovery turbine assembly and turbo/supercharger unit when external to the engine.
	00	GENERAL	
	10	POWER RECOVERY	The turbines which extract energy from the exhaust gases and are coupled to the crankshaft.
	20	TURBO/ SUPERCHARGER	The turbines which extract energy from the exhaust gases and drive an air compressor.

SYSTEM	SUB- SYSTEM	M TITLE	DEFINITION
82		WATER INJECTION	Those units and components which furnish, meter and inject water or water mixtures into the induction system. Includes tanks, pumps, regulators, etc.
	00	GENERAL	
	10	STORAGE	That portion of the system which is used for the storage of water or water mixtures. Includes tank sealing, attachment of bladder type cells, ventilating system, cell and tank interconnectors, filling systems, etc.
	20	DISTRIBUTION	That portion of the system which is used to conduct water or water mixtures from the tanks or cells to the engine. Includes items such as plumbing, crossfeed system, pumps, valves, controls, etc.
	30	DUMPING AND PURGING	That portion of the system which is used to dump injection water and to purge the system. Includes items such as plumbing, valves, controls, etc.
	40	INDICATING	That portion of the system which is used to indicate the quantity, temperature and pressure of the water or water mixtures. Includes items such as transmitters, indicators, wiring, etc.

SYSTEM	SUB- SYSTEM	M TITLE	DEFINITION
83		ACCESSORY GEARBOXES	Those units and components which are remotely installed and connected to the engine by a drive shaft and which drive multiple types of accessories. Does not include those accessory drives which are bolted to and are immediately adjacent to the engine, which are covered in System 72, ENGINE.
	00	GENERAL	
	10	DRIVE SHAFT SECTION	That portion of the system which is used to conduct power from the engine to the gearbox. Includes items such as drive shaft, adapters, seals, etc.
	20	GEARBOX SECTION	The case which contains the gear trains and shafts. Includes items such as gears, shafts, seals, oil pumps, coolers, etc.

SYSTEM	SUB- SYSTE	M TITLE	DEFINITION
84		PROPULSION AUGMENTATION	Those units and components which, independent of the primary propulsion system, furnish additional thrust for short duration. Includes solid or liquid propellants, controls, indicators, etc.
	00	GENERAL	
	10	JET ASSISTED TAKEOFF (JATO)	That portion of the system containing controls, mounting provisions, indicators and JATO units.

SYSTEM SYSTEM TITLE

DEFINITION

85 THRU 90

RESERVED

SYSTEM	SUB- SYSTEM TITLE	<u>DEFINITION</u>
91	CHARTS/ DIAGRAMS	Miscellaneous charts, diagrams and lists not applicable to a particular system or applicable to several systems or to system interfaces, such as wire harness locations, spare wires, junction boxes, disconnect plugs, conduit and wire routing, rigid tube, flexible hoses, control cables, etc.

<u>system</u>	SUB- SYSTEM	M TITLE	<u>DEFINITION</u>
92		ELECTRICAL POWER MULTIPLEXING	Those units and components which provide for multiplexing of electrical power. Includes computers, remote terminals and related interfaces to transmit and receive electrical power control signals.
	00	GENERAL	
	10	DATA BUS	That portion of the system which is used to transmit multiplexed data between control boxes and remote terminals. Includes data link terminals and related wiring.
	20	TERMINALS	That portion of the system which is used to receive signals from, and transmit signals to, using systems and to process the system data to generate commands. Includes the remote terminals, control boxes and any general purpose programmable logic. Does not include the programmable logic associated with solution of commands for the using systems which is included in the controls for the using system.
	30	SYSTEM INTEGRATION INTERFACE	That portion of the system which interfaces the electrical power multiplexing control boxes and data link with System 40, SYSTEM INTEGRATION. Includes the interfacing electronics, but not the connection to the System Integration data bus, which is covered in System 40, SYSTEM INTEGRATION.
		ADDRESSING AND INITIALIZATION INTERFACES	That portion of the system which is used to configure the system for proper communication and initialization. Includes power controller, latch reset function

SYSTEM	SUB- SYSTEM TITLE	DEFINITION
92	40 - Continued	and control switch, terminal address jumpers and connector verification jumpers.
	50 POWER CONTROLLER ASSEMBLY INTERFACES	That portion of the system which is used to interface between the remote terminals and the power controller assembly Serial Digital Multiplex Assemblies (SDMA) to receive and transmit power controller commands and statuses. Includes the wiring and data transmission between the remote terminals and the SDMAs.
	60 CAUTION AND WARNING INTERFACES	That portion of the system which is used to interface between the remote terminals and the main caution panel. Includes the wiring and data transmission between the remote terminal and the main caution panel, but does not include the main caution panel and serial digital receivers which are covered in System 33, LIGHTS.

SYSTEM	SUB- System	M TITLE	DEFINITION
93		ELECTRONIC WARFARE	Those units and components which furnish a means of detecting, jamming or nullifying the effectiveness of defensive detection devices.
	00	GENERAL	
	10	ACTIVE	That portion of the system consisting of receivers, transmitters, repeaters, blanking and modulating devices, etc.
	20	PASSIVE	That portion of the system that contains no active elements. For example: chaff.
	30	ELINT (Electronic Intelligence)	That portion of the system consisting of electronic intelligence systems, such as receivers, monitors, recorders and analysis devices.

<u>SYSTEM</u>	SUB- System	M TITLE	DEFINITION
94		WEAPON SYSTEM	Those units and components which furnish a means of acquiring a target, performing release calculations based on ballistics, winds, air and ground speed, altitude, attitude, etc., and releasing stores either automatically or manually.
	00	GENERAL	
	10	WEAPONS RELEASE	The weapon release system consists of all equipment required to release, fire and/or jettison stores. Includes computers, displays, controls, stores management, etc.
	20	UNASSIGNED	
	30	WEAPONS SUSPENSION	The weapons suspension system provides interconnecting equipment to transport and release/fire weapons. Includes multipurpose pylons if used for any weapon mounting role, special pylons, ejection racks, launchers, etc.
	40	UNASSIGNED	
	50	GUNNERY	The gunnery system consists of all guns and equipment necessary to fire stores.
	60	UNASSIGNED	
	70	WEAPONS CONTROL	Those units and components which furnish a means of designating and acquiring a target, includes radar, computers, displays, etc., necessary to provide weapons release decision (aiming cues).

SYSTEM	SUB- SYSTE	M TITLE	DEFINITION
95		CREW ESCAPE AND SAFETY	Those units and components which furnish a means of ejecting or jettisoning personnel, capsules or equipment from the airframe.
	00	GENERAL	
	10	EJECTION SEATS	That portion of the system which is used to eject flight crew or passenger seats individually from the airframe.
	20	ESCAPE HATCHES/ CANOPIES	That portion of the system involving hatches and canopies including miniature detonating cord. Does not include the canopy and it's actuating mechanisms which are covered in System 56, WINDOWS AND CANOPIES.
	30	CAPSULE EJECTION	That portion of the system which provides a protective environment for the flight crew after separation from the airframe.
	40	UNASSIGNED	
	50	GLOBAL SURVIVAL KITS	That portion of the system that insures flight crew survivability after unplanned separation and/or landing.
	60	IMPACT PROTECTION AND FLOTATION	That portion of the system providing protection and/or flotation for personnel/equipment after impact.
	70	CAPSULE FLIGHT	That portion of the system used to control attitude and direction of the capsule or container after ejecting or jettisoning from the airframe.

SYSTEM	SUB- SYSTEI	M TITLE	DEFINITION
96		MISSILES, DRONES AND TELEMETRY	Those units and components which furnish a means of launching and controlling drones and ground launched missiles.
	00	GENERAL	
	10	SURFACE TO SURFACE MISSILES	That portion of the system which is used for launching and controlling surface to surface missiles.
	20	SURFACE TO AIR MISSILES	That portion of the system which is used for launching and controlling surface to air missiles.
	30	DRONES	That portion of the system which is used for launching and controlling drones.
	40	TELEMETRY	That portion of the system which is used for telemetry for applications other than missile, drone or decoy usage.

SYSTEM	SUB- SYSTEM	M TITLE	DEFINITION
97		I MAGE RECORD I NG	Those units and components which furnish a means of recording on film, video, disc, tape, etc. Does not include recording systems which are part of any other system.
	00	GENERAL	
	10	STRIKE	That portion of the system which is used for recording the results of an air strike.
	20	OFFENSIVE WEAPONS SYSTEM	That portion of the system which is used for recording instruments and the dropping of bombs.
	30	FIRE CONTROL SYSTEM	That portion of the system which is used for recording rockets and gunfire.
	40	INSTRUMENT- ATION SYSTEM	That portion of the system which is used for recording meters, dials, displays, etc.
	50	RANGE SYSTEM	That portion of the system which is used for range recording. Includes installations such as forward and oblique recording systems.

SYSTEM	SUB- System	M TITLE	<u>DEFINITION</u>
98		METEOROLOGICAL AND ATMOSPHERIC RESEARCH	Those units and components which furnish a means of providing and recording measurement of natural or man-made atmospheric phenomena, gravitation and magnetic.
	00	GENERAL	
	10	WEATHER	That portion of the system which is used to measure and record moisture, temperature, cloudiness, wind, etc.
	20	CLEAR AIR TURBULENCE	That portion of the system which is used to detect, measure and record clear air turbulence.
	30	POLLUTANTS	That portion of the system which is used to detect, measure and record contaminated particles.
	40	MAGNETIC/ GRAVITATIONAL	That portion of the system which is used to detect, measure and record the earth's magnetic and gravitational force.

SYSTEM	SUB- SYSTE	M TITLE	DEFINITION
99		SURVEILLANCE	Those units and components which furnish a means of sensing the surrounding environment and process, display and record the resulting information.
	00	GENERAL	
	10	DATA PROCESSING	That portion of the system that provides computation, switching and storage of signals acquired.
	20	DATA DISPLAY	That portion of the system that provides the data display of information acquired by sensors.
	30	RECORDING	That portion of the system that provides the recording of information acquired by sensors.
	40	IDENTIFICATION	That portion of the system that provides identification of information acquired by sensors.
	50	INFRARED SENSORS	That portion of the system that uses heat sensing devices, such as infrared scanners, infrared image and detection to acquire information.
	60	LASER SENSORS	That portion of the system that uses laser devices to acquire information for distance measuring, identification, etc
	70	SURVEILLANCE RADAR	That portion of the system that uses radar for surveillance or mapping purposes. Includes devices such as antennas, receivers, transmitters, indicators, etc.
	80	MAGNETIC SENSORS	That portion of the system that senses magnetic anomalies. Includes devices such as

<u>system</u>	SUB- SYSTEM TITLE	DEFINITION
99	80 - Continued	magnetometers, amplifiers, computers, indicators, etc.
	90 SONAR SENSORS	That portion of the system that senses objects underwater. This includes devices such as modulators, computers, transducers, indicators, etc.

6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

- 6.1 <u>Intended use</u>. This standard is to be used for system/subsystem/subject numbering for engineering drawings and technical manuals for aircraft, missiles and space systems, engines, ground communication-electronic equipment and support equipment (only that support equipment unique to the equipment covered), and may be used for logistics support analysis, configuration management and work unit codes.
- 6.2 <u>Issue of DODISS</u>. When this standard is used in acquisition, the applicable issue of the DODISS must be cited in the solicitation (see 2.1.1).
- 6.3 <u>Supersession data</u>. This standard supersedes Air Force use of Appendix A of DOD-STD-863.

Custodian

Preparing Activity

Air Force - 16

Air Force - 16

Reviewing Activity

Project Number

Air Force - 10, 11, 13, 14, 15, 19, 85, 91, 99

TMSS - F541

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