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MIL-STD-1808A(USAF)
1 December 1996
SUPERSEDING
MIL-STD-1808
10 October 1990

DEPARTMENT OF DEFENSE
INTERFACE STANDARD

SYSTEM SUBSYSTEM SUB-SUBSYSTEM NUMBERING

AMSC N/A **AREA TMSS**

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FOREWORD

1. This standard is approved for use by the Department of the Air Force and is available for use by all Departments and Agencies of the Department of Defense.

2. In order to provide standardization between publications a standardized numbering system has been developed. It is was designed with sufficient flexibility to permit expansion and application outside the technical manual system to support logistics elements that interact with or directly influence equipment maintenance and technical manual development and use.

3. To ensure maximum flexibility, gaps have been left in the system and subsystem numbering sequences. Manufacturers are encouraged to use the unassigned systems and subsystems to accommodate unique design or emerging technologies when required, as approved by the procuring activity and current acquisition policy.

4. As a minimum, this standard is intended to be used in conjunction with MIL-PRF-83495 and DoD-STD-863. Additional applications are available as defined in the documents identified in section 2.

5. Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Det 2, HQ ESC/AV-2C, 4207 Col. Glenn Hwy., Suite 300, Dayton, OH 45431-1672, by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

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1. SCOPE.

1.1 Scope. This standard sets forth requirements for the system, subsystem, and sub-subsystem numbering requirements for engineering drawings, technical manual, and other acquisition and logistics support requirements for aircraft, missile and space systems, engines, and ground communication-electronic equipment. Additionally, it may be used for supportability analysis, configuration management, maintenance data collection, or where ever a consistent maintainability related reference numbering requirement exists across a weapon system.

1.2 Acquisition applicability. 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.

2. APPLICABLE DOCUMENTS.

2.1 General. The documents listed in this section are specified in sections 3, 4, and 5 of this standard. This section does not include documents cited in other sections of this standard or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3, 4, and 5 of this standard, whether or not they are listed.

2.2 Government documents.

2.2.1 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

DEPARTMENT OF DEFENSE

MIL-PRF-9854	-	Technical Manuals: Structural Repair (Aircraft)
MIL-PRF-38807	-	Technical Manuals - Illustrated Parts Breakdown, Preparation of
MIL-PRF-83495	-	Technical Manuals - On Equipment Maintenance Manual Set
MIL-PRF-87268	-	Manuals, Interactive Electronic Technical - General Content, Style, Format, and User-interaction Requirements

STANDARDS

DEPARTMENT OF DEFENSE

DOD-STD-863	-	Wiring Data and System Schematic Diagrams Preparation of

(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.)

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

TECHNICAL MANUALS

U.S. AIR FORCE

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.)

2.3 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 Definitions. Definitions shall be in accordance with the documents listed in Section 2.

4. GENERAL REQUIREMENTS.

4.1 System subsystem sub-subsystem number (SSSN). The SSSN referencing shall be used to locate needed data for the technical information required by those documents listed in section 2. Broad rules for applying the SSSN are outlined in herein. The SSSN numbering system is a dash number breakdown that provides a means for dividing information into system, subsystem, and sub-subsystem. The following instructions provide general procedures for constructing the SSSN using the numbers assigned herein. The SSSN shall be used in conjunction with the functional requirements of MIL-PRF-9854, MIL-PRF-38807, MIL-PRF-83495, electronic data task oriented view packages developed according to MIL-PRF-87268, DoD-STD-863, and MIL-STD-33739.

4.1.1 Number composition. The basic SSSN is composed of two and three digit elements (see Table I). The first element (system) and the first digit of the second element (subsystem) are assigned as specified herein (see section 5). The second digit of the second element (sub-subsystem) and the third element (subject) are assigned by the manufacturer according to the complexity of the equipment and the numbering application. The fourth element (function) is used when typical maintenance functions are required. Depending on program needs, such as supportability analysis, configuration management, work unit codes, engineering data, etc., additional elements may be added to the right.

4.1.1.1 System number. When assigning system or subsystem numbers to information applicable to a whole system or whole subsystem zeros shall occupy the applicable elements and digits of the SSSN. For example, Information about the complete Navigation system located in an On-equipment Maintenance Manual Set (OMMS), General System (GS) manual would be assigned the SSSN 34-00-00. Information contained in this manual must be applicable to the entire Navigation system.

4.1.1.2 Subsystem number. Continuing the example in 4.1.1.1, if subsystems are so complex that the information cannot be practically covered, additional subsystem breakouts may be required. The information in these manuals would be confined to the specific subsystem, e.g., information for the Dependent Position Determining subsystem would be assigned 34-50-00.

4.1.1.3 Sub-subsystem number. Systems designed with very complex subsystems may require further breakout into sub-subsystems. The sub-subsystem element numbers and descriptions are defined by the manufacturer. Sub-subsystems shall be indicated by a number greater than zero in the second element, second digit, e.g., 34-51-00. In this case, -51 represents a sub-subsystem,

TABLE I. *Typical system subsystem sub-subsystem number composition.*

System	Subsystem	Sub-subsystem	Subject	Function	Sample breakdown of SSSN: 34-52-101-001
(First element)	(Second element)		(Third element)	(Fourth element)	Applicable to:
[1]34-	0	0-	00		the entire system in general as specified herein.
34-	[2]5	0-	00		the entire subsystem as specified herein.
34-	5	[3]1-	00		the entire sub-subsystem as assigned by the manufacturer.
34-	5	1-	[4]01 (01-99)		a general procedure of the subsystem as assigned by the manufacturer. General procedures do not use the fourth element.
34-	5	1-	[5]101 (101-999)		a specific component in the sub-subsystem as assigned by the manufacturer. Requires the use of the fourth element.
34-	5	1-	101-	[6]01	a specific function, e.g., operational checkout, as assigned by the manufacturer.

NOTES:

1. 34- ..... Navigation System.
2. 34-50-..... Dependent Position Determining Subsystem.
2. 34-51-00 ..... Sub-subsystem as assigned by manufacturer.
4. 34-51-01 ..... General item.
5. 34-51-101 ..... Specific to a component.
6. 34-51-101-01 ..... Function, e.g., operational check-out.

e.g., Global Positioning System (GPS), of the Dependent Position Determining subsystem (34-50-00) of the Navigation System (34-00-00).

4.1.1.4 Subject number. The subject number is assigned by the manufacturer and generally identifies tasks or components. This number shall be assigned in consecutive order within the manual or view package, e.g., the fifth subject in a Job Guide (JG) would be XX-XX-05.

4.1.1.5 Function number. When used, the function number shall be assigned as prescribed by MIL-PRF-83495.

5. DETAILED REQUIREMENTS.

5.1 Use of SSSN. The SSSN shall be used as described in the documents cited in section 2. System and subsystem numbers are assigned as specified herein, as required.

5.2 System numbering. The following system, subsystem numbers, and titles shall be used, as required by equipment design and as required by the documents listed in section 2.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
01 THRU 04		UNASSIGNED	

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
05		AIRCRAFT GENERAL	Those instructions necessary for general aircraft maintenance, use of aircraft safety and protective devices, engine and auxiliary power operation, and coverage of aircraft emergency procedures. Includes general description of the aircraft and systems, including type, roles, accommodations, construction features, power unit installation, systems, fatigue index data, operating spectrums and operational equipment.
	00	STANDARD PRACTICES: AIRFRAME	The subsystem information covering standard mechanical, electrical, electronic, and engineering practices applicable to more than one airframe system. Does not include those practices covered in other manuals or systems.
	10	GROUND HANDLING	The system instructions necessary to prepare the aircraft for maintenance, entry, and electrical (static) grounding; hook-up and removal of proximity switch control; application and removal of external power, ground cooling, ground communications, and utility power; opening and closing radomes and landing gear doors; solo flight configuration, engine oil analysis, electrical bonding and sealing, and stress frame installation and removal.
	20	SAFETY AND PROTECTIVE DEVICES	The system instructions for use or operation of devices such as ejection control safety lever, safety pins, safety locks, safety pin flag assemblies, safety strut extensions, protective covers, and other required safety devices.
	30	AIRCRAFT ENGINE AND ON BOARD AUXILIARY POWER OPERATION	Those instructions necessary for the engine and on board auxiliary power general maintenance regarding safety precautions, engine operating limits, engine leakage limits, and idle limits. Instructions also include maintenance functions pertaining to engine ground operation, motoring cycles, on board auxiliary operation, priming, limited duty mode operation, and run-up or test cell holdback installation and removal.
	40	AIRCRAFT EMERGENCY PROCEDURES	Emergency procedures covering cockpit access, ejections seat safety, crew removal, servicing external stores, engine shutdown, emergency shutdown, engine fire, on board auxiliary power fire, wheel, tire, or brake fires, overheat or damage to wheels and tires, and blown tires.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
05		AIRCRAFT GENERAL	Continued
	50	FATIGUE INDEX CALCULATIONS	The system procedures and formulas for calculating aircraft structural fatigue index and fatigue lives from fatigue meter readings.
	60	OPERATING SPECTRUM(S)	The system assumed operating spectrum(s) for the aircraft from which safe fatigue lives are calculated.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
06		DIMENSIONS AND AREAS	The subsystem information containing charts, diagrams, and text that shows the area, dimensions, stations, access doors, zoning, reference lines, and physical location of major structural members. Includes an explanation of the zoning and measurement used, such as station number, equipment stations (fuselage, wing, etc.), internal and external access doors and openings, inspection openings and walkways, etc.
	00	GENERAL	
	10 THRU 40		Manufacturer assigns, as required, for: Principal dimensions Reference lines Zones and areas Access provisions

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
07		LIFTING, JACKING, AND SHORING	The subsystem information covering a description of the lifting, shoring, recovering, and transporting of the aircraft in any condition. Includes procedures covering maintenance, overhaul, and repair. Charts showing lifting, jacking, and shoring points, information on recovering the aircraft from any condition (including emergency recovery), and how to transport.
	00	GENERAL	
	10	LIFTING	The system information on lifting the equipment during maintenance, repair, or recovery.
	20	JACKING	The system information on jacking points, adapter, tail supports, balance weights, jacking procedures, and the jacks used to lift the aircraft during maintenance, repair, and recovery.
	30	SHORING	The system information on shoring points, shoring procedures, and equipment used during maintenance, repair, and recovery.
	40	SLINGING	The system information on slinging points, slinging procedures, and the slings used to lift the aircraft during maintenance, repair, and recovery.
	50	RECOVERING	The system information on recovery procedures and the tools and equipment required to recover the aircraft from any condition, including emergency recovery.
	60	TRANSPORTING	The system information to dismantle the aircraft consistent with the vehicle on which it may be transported, including information for the manufacture of transportation sledges or pallets.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
08		LEVELING AND WEIGHING	The subsystem information necessary to properly level the aircraft for any maintenance, overhaul or major repair. Includes units or components specifically dedicated to record, store, or compute weight and balance data. Also includes maintenance practices necessary to prepare and weigh the aircraft. Includes weight and Center of Gravity (CG) data. This system is used for reference only. Note: See -5 series manuals for actual procedures for leveling, weighing and computing CG.
	00	GENERAL	
	10	WEIGHT AND BALANCE	The system components on the aircraft dedicated to the specific function of recording, storing, or computing weight and balance data.
	20	LEVELING	The system instructions necessary to prepare the aircraft for leveling and the leveling procedure. Includes information on the leveling equipment.
	30	WEIGHING	The system instructions necessary to prepare the aircraft for weighing and the weighing procedure. Includes information on the weighing equipment and limits of variation allowed between physical recorded weight and calculated weight based on specific aircraft records.
	40	WEIGHT AND CG DATA	The system information for weight and moment or index information characteristic of the aircraft, limitations, datum points and lines, CG range, weight and balance management of fuel and other expendable loads, residual fuel, ballast, and the effects of change-of-role. Expression of CG as a percentage of Mean Aerodynamic Chord (percent of MAC). Includes a diagram of CG envelope and equipment location charts if necessary, affect on the CG position of dropping or picking up stores (with an example), relevant equipment included in the basic weight, plus variable equipment, e.g., aircraft "role" or "fit-list" equipment, tabulated, and showing weight, load arm and moment or index of each item. Also includes the relationship between the aircraft and Engine Control Unit (ECU) datum lines including the jet pipe or propeller datum lines and the effect of an ECU change.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
08		LEVELING AND WEIGHTING	Continued
	50	STATIC STABILITY	The system information required to determine the minimum nose wheel reaction necessary to ensure that the aircraft remains stable while being moved, while static during servicing operations, and 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 or stores have been removed or the fuel state is outside the normal sequence. Includes safety precautions and limitations for defueling sequences, maximum movement speeds, and movement on gradients or over rough ground.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
09		TOWING AND TAXIING	The subsystem instructions necessary to tow and taxi in any condition. Includes instructions and illustrations showing location of attachment points, turning radius, maintenance practices necessary to prepare the aircraft for towing and taxiing, etc.
	00	GENERAL	
	10	TOWING	The system instructions 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.
	20	TAXIING	The system instructions to taxi the aircraft in normal or abnormal conditions such as adverse weather conditions. Includes procedures to be used such as use of engines, interphone, brakes, ground turning techniques; safety precautions and limitations such as jet intake and exhaust danger areas, minimum turning radius, friction coefficients for various ground conditions.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
10		PARKING AND MOORING	The subsystem instructions to park and moor the aircraft in any condition. Charts showing location of landing gear and control surface locks, blanking plugs and covers, mooring points, etc., are included. Covers maintenance practices necessary to prepare the aircraft for parking and mooring.
	00	GENERAL	
	10	PARKING	The system instructions necessary to park and store the aircraft in normal and abnormal conditions such as with removed engines, damaged aircraft, short or long term exposure in extreme weather conditions, etc. Includes equipment and materials required such as landing gear and control surface locks, wheel chocks, blanking plugs and covers, and cocooning materials; procedures such as periodic engine running, control or drainage of fluid systems, static grounding, etc.; precautions and limitations such as landing gear strut pressures, wheel rotation, and control of lifted equipment.
	20	MOORING	The system instructions necessary to moor or picket the aircraft in normal or abnormal conditions such as with removed engines, damaged aircraft, short or long terms in extreme weather conditions. Includes equipment and materials required such as wheel chocks, mooring blocks, mooring cables, etc.; ballasting and precautions, and limitations for control in high wind conditions.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
11		PLACARDS AND MARKINGS	The subsystem information covering placards, labels, markings, etc., showing the part number, legend and location of each placard, label, or marking required for safety or maintenance significant information; including those required by government regulation. The requirements of TO 1-1-4 concerning Aircraft Markings apply.
	00	GENERAL	
	10	EXTERIOR COLOR SCHEMES AND MARKINGS	The system information that provides specifications and requirements covering aircraft exterior color and related markings.
	20	EXTERIOR PLACARDS AND MARKINGS	The system information that includes placards, labels, and markings required for ground servicing instructions, inspections, cautions, warnings, etc.
	30	INTERIOR PLACARDS AND MARKINGS	The system information covering placards, labels, and markings required for general interior and emergency information, instructions, cautions, warnings, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
12		SERVICING	The subsystem instructions for the scheduled and unscheduled replenishment and depletion of aircraft fluids. Includes precautions to be observed in servicing a particular tank, reservoir, converter, etc., such as grounding and prevention of fire hazards. Includes instructions regarding access to any obscure or unusual place requiring service; the location of regular and emergency servicing points; "NO STEP" areas or walkways leading to any tank in a wing or hull, with necessary precautions.
	00	GENERAL	
	10	REPLENISHING AND DEPLETING	The system instructions necessary for the replenishment or depletion of fluids such as fuel, oil, hydraulic fluid, water, etc. Includes tank and reservoir capacities in U.S., imperial or metric measure; ANA or other standard specification number and grade (if applicable) of fuel, oil, fluid, and other material used; fuel expansion volume, total fuel capacity, sump capacity, net fuel capacity (as applicable) for each tank; allowance for oil expansion, etc.
	20	SCHEDULED SERVICING	The system instructions necessary to carry out any servicing that may be scheduled. Includes instructions for periodic lubrication of components, radioactivity decontamination, aircraft external and internal cleaning, etc. Does not include lubrication procedures required for the accomplishment of maintenance practices.
	30	UNSCHEDULED SERVICING	The system instructions necessary to carry out normally unscheduled servicing. Includes instructions for ice and snow removal from parked aircraft, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
13		TIME LIMITS, INSPECTIONS, AND MAINTENANCE CHECKS	The subsystem information covering time limits for inspections and maintenance checks (both scheduled and unscheduled). This system is used for reference only. (See equipment -6 manual and workcards for actual inspections and time limits.)
	00	GENERAL	
	10	TIME LIMITS	The system information covering time limits for inspection, maintenance, and overhaul of the aircraft, systems and units, and life of parts. For engines, this includes flight cycle lives of major rotating components and other items designated critical.
	20	SCHEDULED INSPECTIONS AND MAINTENANCE CHECKS	The system information covering maintenance checks and inspections of the aircraft, systems, and units dictated by the time limits in -10, above. This section lists in detail the items required and cross references the detailed maintenance practices. Includes preflight, basic postflight, hourly postflight, periodic, phased, etc., inspections.
	30 AND 40	ADDITIONAL INSPECTIONS AND CHECKS (AS REQUIRED)	Assigned by the manufacturer when the -20 breakout is insufficient to cover all of the maintenance checks dictated by -10, above.
	50	UNSCHEDULED MAINTENANCE INSPECTIONS AND CHECKS	The system maintenance checks and inspections on the aircraft, systems, and units dictated by special or unusual conditions; not related to the time limits specified in -10 above. Includes inspections and checks for 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	The system information covering 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 that adds to or enhances the information contained in the flight manual.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
14		CORROSION	The overall system peculiar information to determine the extent of corrosion damage. Includes instructions for treatment or removal of corrosion, corrosion repair and prevention procedures, identification of corrosion prone areas, corrosion inspections, and specific damage limits. Excludes pressurization sealing requirements. Corrosion information is presented in MIL-PRF-83495 format and is the equipment or system peculiar Corrosion Control manual for all levels of maintenance.
	00	GENERAL	The system information required for general corrosion control and prevention. Includes procedures for cleaning, washing, application, and removal of corrosion prevention compounds used for temporary protection of the equipment during washing.
	10	UNASSIGNED	
	20	CONTROL AND PREVENTION	The portion of the system information and procedures for general and system specific corrosion inspection, removal, and repair; restoration of protective finishes; etc. Includes removal of protective topcoating specific to the system or equipment.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
15		NON-DESTRUCTIVE INSPECTION	The overall system peculiar information required to accomplish non-destructive inspection (NDI) of the system or equipment and associated subsystems, sub-subsystems, and components..
	00	GENERAL	
	10	INSPECTION METHODS	The subsystem information and procedures for NDI methods, including, but not limited to, penetrant, magnetic particle, eddy current, ultrasonic, radiographic, repetitive inspection/equipment set-up procedures, etc
	20 THRU 90		Assigned by the manufacturer based on the design of the system or equipment.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
16		SITING INSTALLATION (GROUND EQUIPMENT ONLY)	The subsystem procedures and illustrations required for the installation of ground equipment such as communication-electronic, radar, tracking systems, etc.
	00	GENERAL	
	10	INSTALLATION LOGISTICS	The system procedures and illustrations required to unload, unpack, house, and store equipment before and during, installation.
	20	INSTALLATION	The system procedures and illustrations required for installation of the equipment. Includes manpower and man-hour requirements, installation sequences, etc.

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

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
18		WEAPONS INSTRUMENTA-TION	The subsystem information necessary to describe the instrumentation used for test, data acquisition, and flight termination of airborne weapons. Includes instrumentation for testing weapons payload, telemetry, etc. Does not include equipment or information directly associated with aircraft weapons maintenance (see System 94, WEAPON SYSTEM).
	00	GENERAL	
	10 THRU 90		The manufacturer assigns subsystem numbers to suit the required types of instrumentation used for the system.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
19 AND 20		UNASSIGNED	

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
21		AIR CONDITIONING	The subsystem components that furnish pressurization, heating, cooling, moisture control, filtering, and treating of the air used to ventilate the areas of the fuselage within the pressure seals. Includes cabin supercharger, equipment cooling, heating, fuel system heating, expansion turbine, valves, scoops, ducts, etc.
	00	GENERAL	
	10	COMPRESSION	The portion of the system and its controls supplying compressed air to the cabin. Includes controls and indicating systems related to the compressors, wiring, etc. Does not include the pressure control and indicating system for the cabin pressurization.
	20	DISTRIBUTION	The portion of the system used to induct and distribute air. Includes equipment rack cooling systems, blowers, scoops, ducting, inlets, check valves, wiring, etc. Does not include valves that are part of pressurization and temperature control.
	30	PRESSURIZATION CONTROL	The portion of the system used to control the pressure within the fuselage. Includes control valves, relief valves, indicators, switches, amplifiers, wiring, etc.
	40	HEATING	The portion of the system and its controls supplying heated air to the cabin. Includes heater units, fuel system and control, ignition, indicating systems related to heater operation, wiring, etc. Does not include the temperature control and indicating systems.
	50	COOLING	The portion of the system and its controls supplying cooled air to the cabin. Includes the cooling unit, indicating systems related to the cooler operation, wiring, etc. Does not include temperature control and indicating systems.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
21		AIR CONDITIONING	Continued
	60	TEMPERATURE CONTROL	The portion of the system used to control air temperature within the cabin. Includes control valves, thermal sensing devices, switches, indicators, amplifiers, wiring, etc.
	70	MOISTURE/AIR CONTAMINANT CONTROL	The 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	The portion of the system and its controls supplying cooled air to the equipment. Includes the cooling unit, indicating systems related to the cooler operation, wiring, etc. Does not include temperature control and indicating systems.
	90	LIQUID COOLING	The portion of the system and its controls supplying cooling liquid to the equipment. Includes the compressor, coolant pump, indicating systems related to the operation, wiring, etc. Does not include temperature control and indicating systems.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
22		AUTO FLIGHT	The subsystem components that furnish a means of automatically controlling the flight of the aircraft. Includes units and components that control direction, heading, attitude, altitude, and speed.
	00	GENERAL	
	10	AUTOPILOT	The 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 provides 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	The portion of the system that automatically maintains safe flight conditions by correcting for effects of speed and out-of-trim conditions by 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	The portion of the system that automatically controls the position of the throttles to properly manage engine power during all phases of flight and attitude. This includes engaging, sensing, computing, amplifying, controlling, actuating, and warning devices such as amplifiers, computers, servos, limit switches, clutches, gearboxes, warning lights, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
22		AUTO FLIGHT	Continued
	40	SYSTEM MONITOR	The portion of the system that 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	The portion of the system that automatically corrects or 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		COMMUNICA-TION	The subsystem components that 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, tape recorder-record player, etc.
	00	GENERAL	
	10	LOW/VERY LOW FREQUENCY (LF/VLF)	The portion of the system used for air-to-air and air-to-ground communications using LF/VLF carriers. Includes transmitters, receivers, power supply, control panel, antenna, antenna coupler, etc.
	20	HIGH/VERY HIGH FREQUENCY (HF/VHF)	The portion of the system used for air-to-air and air-to-ground communications using HF/VHF carriers. Includes transmitters, receivers, power supply, control panel, antenna, antenna coupler, etc.
	30	ULTRA/SUPER/ EXTREMELY HIGH FREQUENCY (UHF/SHF/EHF)	The portion of the system used for air-to-air and air-to-ground communication using UHF/SHF/EHF carriers. Includes transmitters, receivers, control panel, selcal decoder, antenna, etc.
	40	PASSENGER ADDRESS/ INTERPHONE	The portion of the system used to address and entertain passengers and for communication by flight and ground personnel between areas of the aircraft. Includes amplifiers, handsets, etc. Does not include the flight crew interphone system.
	50	AUDIO INTEGRATING	The portion of the system controlling the output of the communications and navigation receivers to the flight crew headphones and speakers, and the output of the flight crew microphones into the communications transmitters. Includes audio selector control panel, microphones, headphones, cockpit loudspeakers, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
23		COMMUNICA-TIONS	Continued
	60	STATIC DISCHARGING	The portion of the system used to dissipate static electricity. Excludes static dischargers and suppressors mounted on the airframe, wing, or stabilizers included in the structures systems.
	70	AUDIO AND VIDEO MONITORING	The portion of the system that records or monitors flight crew or passenger conversation or movement, for security or safety purposes. Includes voice recorders, televisions, monitors, etc.
	80	INTEGRATED AUTOMATIC TUNING	The portion of the system that maintains integrated control of the operating frequencies of communication and navigation transmit-ters/receivers after either a manually inserted or preprogrammed integrated flight system command. Includes integrated frequency selector panels, digital frequency control computers, integrated frequency display panels, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
24		ELECTRICAL POWER	The subsystem components used to generate, control, and supply alternating current (ac) or direct current (dc) electrical power for other systems, including generators and relays, inverters, batteries, etc., through the secondary busses. Also includes units and components that provide multiplexing of electrical power and common electrical wiring, switches, connectors, etc.
	00	GENERAL	
	10	CONSTANT SPEED DRIVE	The mechanical portion of the system that drives the generators at a desired, constant revolutions per minute (RPM). Includes oil system, connecting devices, indicating, and warning systems for the drive, ram turbine, etc.
	20	AC GENERATION	The portion of the system used to generate, regulate, control, and indicate ac electrical power. Includes inverters, ac generators and alternators, control and regulating components, indicating systems, and all wiring, except to main busses.
	30	DC GENERATION	The portion of the system used to generate, regulate, control, and indicate dc electrical power. Includes dc generators and alternators, transformers, rectifiers, batteries, control and regulating components, indicating systems, and all wiring, except to main busses.
	40	EXTERNAL POWER	The portion of the system within the aircraft that connects external electrical power to the aircraft's electrical system. Includes receptacles, relays, switches, wiring, warning lights, etc.
	50	AC ELECTRICAL LOAD DISTRIBUTION	The portion of the system that provides for connection of ac power to using systems. Includes ac main and secondary busses, main system circuit breakers, power system devices, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
24		ELECTRICAL POWER	Continued
	60	DC ELECTRICAL LOAD DISTRIBUTION	The portion of the system that provides for connection of dc power to the using systems. Includes dc main and secondary busses, main system circuit breakers, power system devices, etc.
	70	ELECTRICAL MONITORING AND PROTECTION	The 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	The portion of the system that provides generation of emergency electrical power in the event of main electrical system generator failure or loss of engine power.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
25		EQUIPMENT/ FURNISHINGS	The subsystem items of removable 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 portion of the system above the compartment floor and between the forward passenger partition and the forward pressure dome. Includes flight crew seats, tables, pilot check lists, food containers, curtains, manuals, electronic equipment racks, spare bulbs, fuses, etc. Does not include cargo compartments.
	20	PASSENGER COMPARTMENT	The portion of the system where the passengers are seated. Includes lounges (but not dressing rooms), berths, hat racks, curtains, wall coverings, carpets, magazine racks, movable partitions, wall type thermometers, spare bulbs, fuses, etc.
	30	BUFFET/GALLEY	The portion of the system where food and beverages are stored and prepared. Includes removable and fixed cabinets, ovens, refrigerators, garbage containers, dish racks, coffee makers and dispensers, containers, electrical outlets, wiring, etc.
	40	LAVATORIES	The portion of the system containing toilet and dressing room areas with wash basins, dressing tables, and water closet. Includes mirrors, seats, cabinets, dispensing equipment, electrical outlets, wiring, etc. Does not include wash basins and water closets covered in System 38, WATER/WASTE.
	50	CARGO COMPARTMENT	The portion of the system used for storage of cargo and the components that 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.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
25		EQUIPMENT/ FURNISHINGS	Continued
	60	EMERGENCY	The portion of the system equipment carried for use in emergency procedures. Includes 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. Does not include fire extinguishers, oxygen equipment, or masks.
	70	ACCESSORY COMPARTMENTS	The portion of the system used for various components or accessories. Includes wheel wells, tail compartments, hydraulic, electrical, electronic, equipment rack compartments, main battery structure, etc.
	80	INSULATION AND LINING	The portion of the system used for heat and sound insulation blankets and those coverings used, either with or without integral insulation, to form the internal lining of flight, passenger, cargo, accessory compartments, etc.
	90	AERIAL DELIVERY	The portion of the system equipment required for cargo or personnel air drop. Includes Container Delivery System (CDS) and Air Drop System (ADS) platforms, parachutes and drogue chutes, load release mechanisms, load transfer devices, anchor cables, static lines, retrieval winches, jump lights, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
26		FIRE PROTECTION	The subsystem components, fixed and portable, that 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	The portion of the system used to sense and indicate the presence of overheat, smoke, or fire.
	20	EXTINGUISHING	The portion of system, fixed or portable, used to extinguish fire.
	30	EXPLOSION SUPPRESSION	The portion of the system used to sense, indicate, and extinguish a flame propagating into a fuel vent or scoop.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
27		FLIGHT CONTROLS	The subsystem components that furnish a means of controlling the flight attitude characteristics of the aircraft. Includes 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 structure covered Structures systems. Does not include rotor controls covered in the Rotor systems.
	00	GENERAL	
	10	ROLL CONTROL	The portion of the system that controls the position and movement of the ailerons and tabs. Includes control wheels, cables, booster, linkages, control surfaces, indicators, etc.
	20	YAW CONTROL	The portion of the system that controls the position and movement of the rudder and tabs. Includes rudder pedals, tab control wheel, cables, boosters, linkages, control surfaces, position indicators, etc.
	30	PITCH CONTROL	The portion of the system that controls the position and movement of the elevator or elevon and tabs. Includes the control column, stickshaker units, automatic stall recovery devices, tab control wheels, cables, boosters, linkages, control surfaces, position indicators, stall warning systems, etc.
	40	HORIZONTAL STABILIZERS	The portion of the system that controls the position and movement of the horizontal stabilizer/canard. Includes control handle, cables, jackscrews, motors, warning systems, linkages, control surfaces, position indicators, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
27		FLIGHT CONTROLS	Continued
	50	FLAPS	The portion of the system that controls the position and movement of the trailing edge flaps. Includes control handles, cables, actuators, warning systems, linkages, control surfaces, position indicators, etc.
	60	SPOILERS, DRAG DEVICES, AND VARIABLE AERODYNAMIC FAIRINGS	The portion of the system that controls the position and movement of the spoilers, drag devices and variable aerodynamic fairings. Includes control handles, cables, warning systems, linkages, spoilers, drag devices, position indicators, etc.
	70	GUST LOCK AND DAMPENER	The portion of the system that 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	The portion of the system that 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 control handles, cables, actuators, linkages, warning systems, control surfaces, position indicators, etc. Does not include trailing edge flaps.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
28		FUEL	The subsystem components that store and deliver fuel to the engine. Includes engine driven fuel pumps (for reciprocating engines), tanks (bladder), valves, boost pumps, etc., and the components that 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 covered in the Structures systems. Does not include fuel flow rate sensing, transmitting, and indicating (see System 73, ENGINE FUEL AND CONTROL).
	00	GENERAL	
	10	STORAGE	The portion of the system that stores fuel, including external tanks. Includes tank sealing, bladder type cells, ventilating system, cell and tank inter-connectors, over wing filler necks and caps, reservoir feed pumping systems and reservoirs within the tanks (not a part of the distribution system), etc.
	20	DISTRIBUTION	The portion of the system 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 plumbing, pumps, valves, controls, etc.
	30	DUMP	The portion of the system used to dump fuel overboard during flight. Includes plumbing, valves, chutes, controls, etc.
	40	INDICATING	The portion of the system 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.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
28		FUEL	Continued
	50	IN-FLIGHT REFUELING: RECEIVER	The portion of the system that provides a 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 (see System 28-60, FUEL/CG MANAGEMENT).
	60	FUEL/CG MANAGEMENT	The portion of the system that controls fuel distribution during aerial and ground refueling to maintain a safe CG configuration. Uses fuel quantity and stores data to compute aircraft CG. Includes fuel quantity and CG indication for inflight and ground refueling operations.

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

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
30		ICE AND RAIN PROTECTION	The subsystem components that provide a means of preventing or eliminating ice and rain on various parts of the aircraft. Includes alcohol pump, valves, tanks, propeller and rotor anti-icing, wing heaters, water line heaters, pitot heaters, scoop heaters, windshield wipers, and the electrical and heated air portion of windshield ice control. Does not include the basic windshield panel or turbine type power plants using pneumatic anti-icing (see System 75, AIR).
	00	GENERAL	
	10	AIRFOIL	The portion of the system 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	The portion of the system used to eliminate or prevent the formation of ice in or around air intakes. Includes power plant cowling anti-icing.
	30	PITOT AND STATIC	The portion of the system used to eliminate or prevent the formation of ice on the pitot and static systems.
	40	WINDOWS, WINDSHIELDS, CANOPIES, AND DOORS	The portion of the system used to eliminate or prevent the formation or accumulation of ice, frost, or rain on the windows and windshields.
	50	ANTENNAS AND RADOMES	The portion of the system used to eliminate or prevent the formation of ice on antennas and radomes.
	60	PROPELLERS/ ROTORS	The portion of the system used to eliminate or prevent the formation of ice on propellers or rotors. Includes all components up to but not including rotating assembly.
	70	WATER LINES	The portion of the system used to prevent the formation of ice in water supply and drain lines.
	80	DETECTION	The portion of the system used to detect and indicate the formation of ice.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
31		INDICATING/ RECORDING SYSTEMS	The subsystem components that give visual or aural warning of conditions in unrelated systems. Includes units that record, store, or compute data from unrelated systems.
	00	GENERAL	
	10	INSTRUMENT AND CONTROL PANELS	The portion of the system covering 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	The portion of the system covering specific system instruments. Includes inclinometers, clocks, etc.
	30	RECORDERS	The portion of the system covering instruments used for recording data not related to specific systems. Includes flight recorders, performance or maintenance recorders, etc.
	40	CENTRAL COMPUTERS	The portion of the system used for computing data from a number of different sources without a preponderance of functions in any one system. Includes 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.
	50	CENTRAL WARNING SYSTEMS	The portion of the system that gives audible or visual warning of conditions in unrelated systems. Includes master warning or flight warning systems, central instrument warning systems, tone generators, annunciators, etc.
	60	CENTRAL DISPLAY SYSTEMS	The portion of the system that gives visual display of conditions in unrelated systems.
	70	AUTOMATIC DATA REPORTING SYSTEMS (ADRS)	The portion of the system used for collating and computing and transmitting data from unrelated systems. Includes ADRS systems and components.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
31		INDICATING/ RECORDING SYSTEMS	Continued
	80	UNASSIGNED	
	90	VOICE COMMAND SYSTEMS	The portion of the system that provides voice command for flight crew members. Does not include the associated system.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
32		LANDING GEAR	The subsystem components that 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. Does not include the structure (see System 52, DOORS).
	00	GENERAL	
	10	MAIN GEAR AND DOORS	The portion of the system that provides the major support for the aircraft while on the ground. Includes shock struts, bogie axles, drag struts, doors, linkages, attach bolts, etc.
	20	NOSE GEAR AND DOORS	The portion of the system that supports the nose of the aircraft while the aircraft is on the ground. Includes shock struts, drag struts, doors, linkages, attach bolts, etc.
	30	EXTENSION AND RETRACTION	The portion of the system used to extend and retract the landing gear, and open and close the landing gear doors. Includes actuating mechanisms, bogie trim, bungees, up and down latches, operating controls, valves, motors, cables, wiring, plumbing, etc.
	40	WHEELS AND BRAKES	The portion of the system that provides for rolling and stopping the aircraft while on the ground and stopping wheel rotation after retraction. Includes bearings, tires, valves, de- boosters, swivel glands, anti-skid devices, pressure indicators, plumbing, etc.
	50	STEERING	The portion of the system used to control the direction of movement of the aircraft on the ground. Includes actuating cylinders, controls, bogie swivel unlock, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
32		LANDING GEAR	Continued
	60	POSITION AND WARNING	The portion of the system used to indicate and warn of the position of the landing gear and doors. Includes switches, relays, lights, indicators, horns, wiring, etc.
	70	SUPPLEMEN-TARY GEAR	The portion of the system used to stabilize the aircraft while on the ground and prevent damage by ground contact. Includes shock strut, skid block, wheels, etc.
	80	DRAG CHUTE	The portion of the system used to aid in slowing the speed of the aircraft when landing. Includes switches, relays, lights, indicators, wiring, etc.
	90	ARRESTING HOOK	The portion of the system 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 switches, relays, lights, indicators, wiring, actuating cylinders, explosive bolts, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
33		LIGHTS	The subsystem components that 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. Does not include warning lights for individual systems or lamps and bulbs (see System 39, ELECTRICAL/ELECTRONIC COMPONENTS AND MULTIFUNCTION UNITS).
	00	GENERAL	
	10	FLIGHT COMPARTMENT/ COCKPIT	The portion of the system lighting 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 visual system under System 31-50.
	20	PASSENGER COMPARTMENTS	The portion of the system lighting areas where passengers are seated and in buffet/galley, lavatories, lounges and coat rooms. Includes direct and indirect illumination, passenger call system, lighted signs, etc.

NOTE: For those aircraft that 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.

	30	CARGO, SERVICE COMPARTMENTS AND WEAPONS BAYS	The portion of the system lighting the cargo stowage compartments and the housing of various components, accessories or weapons.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
33		LIGHTS	Continued
	40	EXTERIOR	The 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	The portion of the system used to provide illumination in case of primary electrical power failure. Includes inertia flashlights, lanterns, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
34		NAVIGATION	The subsystem components that 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	The portion of the system that senses environmental conditions and uses the data to influence navigation. Includes 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	The portion of the system that uses magnetic, gyroscopic and inertia forces to sense and display the direction or attitude of the aircraft. Includes 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 TAXING AIDS	The portion of the system that provides guidance during approach, landing, and taxiing. Includes localizer, glide slope, ILS, markers, paravisual director ground guidance systems, etc.
	40	INDEPENDENT POSITION DETERMINING	The portion of the system that provides information to determine position and is mainly independent of ground installations or earth satellite systems. Includes inertial guidance systems, weather radar, doppler, proximity warning, collision avoidance, star tracker, sextant/octant, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
34		NAVIGATION	Continued
	50	DEPENDENT POSITION DETERMINING	The portion of the system that provides information to determine position and is mainly dependent on ground installations or earth satellite systems. Includes distance measurement equipment, transponders, radio compass, Long Range Navigation (LORAN), VOR, Automatic Direction Finder (ADF), Tactical Air Navigation (TACAN), Global Positioning System (GPS), etc.
	60	FLIGHT MANAGEMENT COMPUTING	The portion of the system that combines navigational information to compute or manage the aircraft's geographical location or theoretical flight path. Includes course computers, flight management computers, performance data computers and associated control/display units, warning annunciators, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
35		OXYGEN	Those subsystem components that 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	The portion of the system that furnishes oxygen to the flight crew.
	20	PASSENGER	The portion of the system that furnishes oxygen to the passengers.
	30	PORTABLE	The portion of the system with an independent oxygen supply that can be transported about the airplane.
	40	ON BOARD OXYGEN GENERATING SYSTEM	The portion of the system that generates oxygen for distribution in the other subsystems.

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

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

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
38		WATER/WASTE	The fixed subsystem components that store and deliver fresh water, and those fixed components that store and deliver, for removal, water and waste. Includes wash basins, toilet assemblies, tanks, valves, etc.
	00	GENERAL	
	10	POTABLE	The portion of the system used to store and deliver fresh drinking water. Includes wash water if the potable water is also used for washing.
	20	WASH	The portion of the system used to store and deliver non-potable water.
	30	WASTE DISPOSAL	The portion of the system used for water and waste disposal. Includes wash basins, water closets, flushing systems, etc.
	40	AIR SUPPLY	The portion of the system common to more than one subsystem used for pressurizing supply tanks to ensure fluid flow.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
39		ELECTRICAL/ ELECTRONIC COMPONENTS AND MULTIFUNCTION UNITS	Subsystem 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 galleys, lavatories, etc.
	00	GENERAL	
	10	INSTRUMENT AND CONTROL PANELS	The portion of the system pictorial coverage showing 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	The portion of the system pictorial coverage of all electrical and electronic equipment racks.
	30	ELECTRICAL AND ELECTRONIC JUNCTION BOXES	The portion of the system pictorial coverage of junction boxes.
	40	MULTIFUNCTION UNITS	The portion of the system pictorial coverage of units that have multiple functions but are normally maintained as a unit, e.g., passenger service units, accessory modules, etc.
	50	INTEGRATED CIRCUITS	The portion of the system that contains general devices having integrated components, in monolithic structure, that perform complete circuit functions. Includes integrated logic devices.
	60	PRINTED CIRCUIT CARD ASSEMBLIES	The portion of the system that contains general coverage of plug-in assemblies or subassemblies that perform a complete circuit function and are used on more than one specific system. Includes power supply cards, isolation amplifiers, servo control modules, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
40		STANDARD PRACTICES: INTEGRATED AVIONICS	The subsystem components that contain standard mechanical, electrical, electronic, and engineering practices applicable to an integrated avionics package. Excludes practices covered in other manuals or systems. Does include practices for a particular application the appropriate system as part of the procedure.
	00	GENERAL	The portion of the system that contains standard practices applicable to the integrated avionics package.
	10 THRU 90		The portion of the system containing subsystem numbers assigned by the manufacturer to suit generic standard practices related to the integrated avionics package.

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

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
42		INTEGRATED AVIONICS ARCHITECTURE	The avionic subsystems that provide the functions of multiple systems but are contained in one system.
	00	GENERAL	
	10	SOFTWARE	The portion of the system containing the structure and use of the integrated avionics software package.
	20	COMMON PROCESSING	The portion of the system that provides processing for or multiple functions within the integrated avionics package.
	30	DISPLAYS AND INDICATORS	Those portion of the system that provides visual or aural cues concerning operation, mode, function, etc. Includes multifunction displays, controls, indicators, remote displays, etc. Does not include items related to specific systems.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
43		COMMUNICA-TION: STAFF	Those subsystem components that 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)	The portion of the system using UHF/SHF/EHF carriers. Includes transmitters, receivers, control panels, encryption devices, selcal decoder, antennas, etc.
	20	VERY HIGH FREQUENCY (VHF)	The portion of the system using VHF carriers. Includes transmitters, receivers, control panels, encryption devices, selcal decoder, antennas, etc.
	30	HIGH FREQUENCY (HF)	The portion of the system using HF carriers. Includes transmitters, receivers, power supply, encryption devices, control panels, antennas, antenna couplers, etc.
	40	LOW/VERY LOW FREQUENCY (LF/VLF)	The portion of the system using LF/VLF carriers. Includes transmitters, receivers, power supply, control panels, encryption devices, antennas, antenna coupler, etc.
	50	AUDIO INTEGRATING	The portion of the system that controls the output of the communications and navigation receivers to the staff's headphones and speakers, and the output of the staff's microphones to the communications transmitters. Includes audio selector control panel, microphones, headphones, loudspeakers, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
43		COMMUNICA-TION: STAFF	Continued
	60	DIGITAL	The portion of the system using CW for aircraft-to-aircraft or aircraft-to-ground station communication. Includes teletypewriters, modems, keyers, encryption devices, etc.
	70	MULTIPLEX AND AUDIO SWITCHING	The portion of the system using telephone communications between aircraft or ground stations. Includes telephones and multiplexing equipment.
	80	PASSENGER ADDRESS/ INTERPHONE	The portion of the system used to communicate between areas of the aircraft. Includes amplifiers, speakers, handsets, control panels, audio, video, and film equipment. Does not include the interphone system within the flight compartment (see 43-50, AUDIO INTEGRATING)
	90	SATELLITE COMMUNICA-TIONS	The portion of the system used for aircraft to satellite communications. Includes receivers, transmitters, encryption devices, modems, amplifiers, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
44		IN-FLIGHT REFUELING: TANKER	The subsystem components that store and deliver fuel to another aircraft while in flight. Includes fuel storage units, distribution system, controls, sensors, etc., specifically used for in-flight refueling supply. Also, includes interfaces with other systems. Does not include any dual purpose item identified with another system.
	00	GENERAL	
	10	STORAGE	The portion of the system that stores fuel for in-flight refueling. Includes tanks, tank sealing, bladder-type cells, ventilating system, cell and tank interconnects, over wing filler necks, caps, etc. Also includes reservoir feed pumping systems and reservoirs within the tanks that are not part of the distribution system.
	20	DISTRIBUTION	The portion of the system used to distribute fuel from the filler connector to the storage system, and from the storage system to the receiving aircraft. Includes the vehicle-to- vehicle transfer interface, plumbing, pumps, valves, controls, etc.
	30	DELIVERY	The portion of the system that accepts fuel from the distribution subsystem and conducts it to the receiving vehicle. Includes refueling boom and nozzle, hose and drogue, boom control surfaces, actuators, and hoist and stowage components. Does not include operator controls.
	40	CONTROLS	The portion of the system used to control the transfer of fuel between tanker and receiving aircraft. Includes operator controls, indicators, inter-vehicular communications, etc.
	50	INDICATING	The portion of the system used to indicate fuel quantity, temperature, and pressure. Includes pressure warning systems for pumping within the storage and distribution areas.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
44		IN-FLIGHT REFUELING: TANKER	Continued
	60	DUMP	The portion of the system used to dump fuel overboard during flight. Includes tanker vehicle dump system interface (see 28-30, FUEL DUMP) when used is used, plumbing, controls, indicators, chutes, etc.

NOTE: When systems and components serve both the operating and refueling systems, they are included in System 28, FUEL.

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

NOTE: Subsystem Code is selected to match applicable system interface. For example, 45-21-XX could 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 45 would be appropriately cross referenced and provided in System 21. Similarly, 45-32-XX could identify landing gear monitoring and testing provided by the CMS. 45-45-XX could identify the CMS itself.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
46		SYSTEM INTEGRATION AND DISPLAY	The subsystem 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	ACQUISITION	The portion of the system used to acquire data for integration and processing. Excludes components covered by the applicable system.
	20	PROCESSING AND INTEGRATION	The portion of the system used to integrate and process data acquired from a variety of sources and output signals to displays or warning devices. Includes interfaces, central processing units, data bus controls, etc.
	30	DISPLAY	The portion of the system used to 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	The portion of the system used to provide information about the software packages applicable to more than one system of the aircraft and classified as multi-system applicable software. This includes software for computers that, in the event of failure of the computer(s) in another system, assume management of that system.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
47		LIQUID/GASEOUS NITROGEN	The subsystem components that 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	The portion of the system that generates and stores nitrogen. Includes tanks, cells, reservoirs, accumulators, etc. Does not include plumbing, pumps, valves, controls, etc.
	20	DISTRIBUTION	The portion of the system used to distribute nitrogen to the using systems. Includes plumbing, pumps, valves, regulators, etc.
	30	CONTROLLING	The portion of the system that meters nitrogen to distribution components and to using systems. Includes levers, switches, cables, etc.
	40	INDICATING	The portion of the system used to indicate nitrogen flow rate, temperature, and pressure. Includes transmitters, indicators, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
48		COMMUNICA-TION/ NAVIGATION/ IDENTIFICATION (CNI)	Those subsystem components that furnish a means of communication within the aircraft, and between the aircraft, other aircraft, ground stations, and ground crew, for navigation, and emergency location signals. Includes voice, data continuous wave communicating components, intercom, tape recorder-record player, and emergency signal transmitters. This system includes integrated communication, navigation, and identification (CNI) systems.
	00	GENERAL	
	10	ANTENNAS/ APERTURES/ ARRAYS	The portion of the system used for transmission and reception of signals. Includes antennas, apertures, arrays, antenna couplers, transmission lines, etc.
	20	PROCESSING AND INTEGRATION	The portion of the system used for navigation and emergency transmission, communication with ground crew, between aircraft, between flight crew personnel, and with ground stations. Includes encryption devices, decoders, processors, transmitters, receivers, amplifiers, power supplies, recorders, etc.
	30	CONTROLS/ DISPLAYS	The portion of the system that provides control and display of CNI functions. Includes function selection devices, node selection, signal power levels, control panels, frequency control and display, signal volume, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
49		AIRBORNE AUXILIARY POWER	The power plants (engines) installed on the aircraft that generate and supply any combination of auxiliary electric, hydraulic, pneumatic or other power. Includes power and drive section, fuel, ignition, control systems, wiring, indicators, plumbing, valves, and ducts to the power unit. Does not include generators, alternators, hydraulic pumps, etc., or their connecting systems that supply power to aircraft systems.
	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	See System 74 and 80 for definition.
	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	SUB-SYSTEM	TITLE	DEFINITION
50		UNASSIGNED	

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
51		STANDARD PRACTICES: STRUCTURES	The subsystems that contain the standard practices applicable to the entire structure of the aircraft. Excludes practices covered in other manuals or systems. Practices for a particular application are included in the appropriate structure system.
	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; permissible contour variations, gaps, and mismatch data.
	20	PROCESSES	Includes special processes. Does not include general engineering practices unless specific deviations are required. Unique processes, such as welding specifications, relative to a single repair, are included in the applicable repair and only referenced here.
	30	MATERIALS	Includes description of materials (metallic and nonmetallic) including extrusions, formed sections, sheet, sealants, adhesives, and special materials used. Permissible substitutes and sources of supply are also included.
	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.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
51		STANDARD PRACTICES: STRUCTURES	Continued
	50	SUPPORT OF AIRPLANE FOR REPAIR AND ALIGNMENT CHECK PROCEDURES	Includes procedures for supporting the airplane to relieve loads during repairs, locating supports and contour dimensions required, ground equipment, checking principal alignment or symmetry dimensions and permissible variations, etc.
	60	CONTROL SURFACE BALANCING	Includes procedures for adjusting the mass balance of control surfaces after repair.
	70	REPAIRS	Includes typical repairs suitable for general use, not limited to one system.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
52		DOORS	The subsystem removable components for entrance, exit, and 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 portion of the system used for entrance and exit of the passengers and flight crew to and from the aircraft. Includes structure, latching mechanisms, handles, insulation, lining, controls, integral steps, ramps, handrails, attached fittings, etc.
	20	EMERGENCY EXIT	The portion of the system that includes exit doors used to facilitate evacuation but not normally used for exit. Includes structure, latching mechanisms, handles, insulation, lining, controls, attached fittings, etc.
	30	CARGO/WEAPONS BAYS	The portion of the system that includes exterior doors used primarily to gain access to cargo compartments or weapons bays. Includes structure, latching mechanisms, handles, insulation, lining, controls, integral steps, ramps, handrails, etc.
	40	SERVICE	The portion of the system that includes exterior doors used primarily to gain access for servicing aircraft systems and equipment. Includes structure, latching mechanisms, handles, insulation, lining, controls, integral steps, handrails, etc.
	50	FIXED INTERIOR	The portion of the system that includes doors inside the fuselage installed in fixed partitions. Includes structure, latching mechanisms, handles, lining, etc. Does not include doors installed in movable partitions (see System 25, EQUIPMENT/FURNISH-INGS).

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
52		DOORS	Continued
	60	ENTRANCE STAIRS	The portion of the system that includes stairs that operate in conjunction with but are not integral to entrance doors. Includes structure, actuating mechanisms and controls, handrails, attached fittings, etc.
	70	DOOR WARNING	The portion of the system used to indicate when doors are closed and properly latched. Includes switches, lights, bells, horns, etc. Does not include landing gear or weapons bay door warnings (see System 32, LANDING GEAR and System 94, WEAPON SYSTEM).
	80	LANDING GEAR	The portion of the system that includes the structure of doors used to enclose the landing gear compartments. Includes structure, latching mechanisms, handles, insulation, lining, controls, attached fittings, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
53		FUSELAGE	The subsystem components and structural members that make up 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, fittings, load curtain, cables, ballonets, etc. Also includes structural and removable pylons used for the carriage of external stores other than weapons (see System 94, WEAPON SYSTEM).
	00	GENERAL	
	10	MAIN FRAME	The portion of the system that includes the primary skeleton of the fuselage. Includes frames, bulkheads, formers, longerons, stringers, keel, frames around openings, etc.
	20	AUXILIARY STRUCTURE	The portion of the system that includes the secondary structure of the fuselage. Includes floors, internal stairs and fixed partitions. Does not include movable partitions (see System 25, EQUIPMENT/FURNISHING).
	30	PLATES/SKIN	The portion of the system that includes the exterior covering of the fuselage including doublers and access covers not covered in System 52, DOORS.
	40	ATTACH FITTINGS	The portion of the system that includes 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 the fuselage. Includes seat tracks, cargo basket rails, instrument brackets, etc.
	50	AERODYNAMIC FAIRINGS	The portion of the system used for fixed or variable aerodynamic fairings such as those on the nose and tail, and between the fuselage and wing and stabilizers. Includes wing and fuselage fillets, nose and tail cones, radome, visor, and droop nose, etc. Does not include the functioning and maintenance aspects of variable aerodynamic fairings (see System 27, FLIGHT CONTROL).

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
54		NACELLES/ PYLONS	The subsystem components and structural members that furnish a means of housing and mounting the power plant or rotor assembly. Includes skin, longerons, belt frames, stringers, clamshells, scuppers, doors, nacelle fillets, 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. Does not include structural portions of the exhaust system not integral with the airframe.
	00	GENERAL	
	10	NACELLE MAIN FRAME	The portion of the system that forms the primary skeleton of the nacelle, including frames, bulkheads, firewalls, stringers, keel, frames around openings, etc.
	20	NACELLE AUXILIARY STRUCTURE	The portion of the system that forms the secondary structure in the nacelle including leading and trailing edge structure, etc. Does not include plates or skin.
	30	NACELLE PLATES/SKIN	The portion of the system that forms the exterior covering of the nacelle. Includes access covers, cowling and doublers.
	40	NACELLE ATTACH FITTINGS	The portion of the system used to attach the nacelle to its connecting structure, power plant, or thrust reverser, and for the support of equipment within the nacelle.
	50	PYLON MAIN FRAME	The portion of the system that forms the primary skeleton of the pylon. Includes frames, bulkheads, firewalls, stringers, keel, frames around openings, etc.
	60	PYLON AUXILIARY STRUCTURE	The portion of the system that forms the secondary structure in the pylons. Includes leading and trailing edge structure, etc. Does not include plates or skin.
	70	PYLON PLATES/ SKINS	The portion of the system that forms the exterior covering of the pylons. Includes access covers, cowling, and doublers.
	80	PYLON ATTACH FITTINGS	The portion of the system used to attach the pylon to its connecting structure, power plant, or thrust reverser, and for the support of equipment within the pylon.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
54		NACELLES/ PYLONS	Continued
	90	FILLETS/ FAIRINGS	The portion of the system that forms aerodynamic fairings between the nacelle or pylon and it's connecting structure.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
55		STABILIZERS	The subsystem components that form the horizontal and vertical stabilizers including the structure of the elevator and rudder.
	00	GENERAL	
	10	HORIZONTAL STABILIZER OR CANARD	The portion of the system that forms the horizontal airfoil of the tail or nose section where the elevator/canard attaches. Includes spars, ribs, stringers, plates/skin, access covers, tips, attached fittings, etc.
	20	ELEVATOR	The portion of the system that forms the removable airfoil used for pitch control. Includes spars, ribs, stringers, plates, skin, access covers, tabs, balance devices, attached fittings, etc.
	30	VERTICAL STABILIZER	The portion of the system that forms the vertical airfoil where the rudder attaches. Includes spars, ribs, stringers, plates, skin, access covers, tips, attached fittings, etc.
	40	RUDDER	The portion of the system that forms the removable airfoil attached to the vertical stabilizer used for yaw control. Includes spars, ribs, stringers, plates/skin, access covers, tabs, balance devices, attached fittings, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
56		WINDOWS AND CANOPIES	The subsystem components of the fuselage and flight crew compartment windows and canopies including windshield, windows installed in doors, and associated electrical, hydraulic, and pneumatic actuation systems.
	00	GENERAL	
	10	FLIGHT COMPARTMENT WINDOWS/ CANOPIES	The portion of the system used for flight compartment transparent material, the frame of sliding and fixed windows, windshields, canopies, handles, latching mechanisms, and associated electrical, hydraulic, and pneumatic actuation systems, etc. Does not include door or inspection/observation windows.
	20	FUSELAGE COMPARTMENT WINDOWS/ CANOPIES	The portion of the system used for passenger, tactical crew, or cargo compartment transparent material, framing, frost shields, etc.
	30	DOOR WINDOWS	The portion of the system used for doors in the flight and fuselage compartments. Includes transparent material, framing, etc. Does not include emergency exit windows.
	40	INSPECTION AND OBSERVATION WINDOWS/ CANOPIES	The portion of the system that includes windows used for examining compartments and equipment in and about the airplane, celestial navigation astrodomes, and in-flight refueling operator's windows. Includes transparent material, framing, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
57		WINGS	The subsystem components that form the center and outer wing structure and associated components and members. Includes integral fuel tank structure and components, spars, skin, ribs, stringers, clamshells, scuppers, flaps, ailerons, spoilers, tabs, etc.
	00	GENERAL	
	10	CENTER WING	The portion of the system comprised of skin, primary structure, fillets, and fairings of the center wing, including attached fittings.
	20	OUTER WING	The portion of the system that forms the skin, primary structure, fillets, and fairings of the outer wing including attached fittings.
	30	WING TIP	The portion of the system that forms the skin and structure of the wing tip including attach-ed fittings.
	40	LEADING EDGE AND LEADING EDGE DEVICES	The portion of the system that forms the skin and structure of the wing leading edge, removable leading edge airfoils such as flaps, slats, attached fittings, etc.
	50	TRAILING EDGE AND TRAILING EDGE DEVICES	The portion of the system that forms the skin and structure of the wing trailing edge, removable trailing edge airfoils such as flaps, attached fittings, etc.
	60	AILERONS AND ELEVONS	The portion of the system that forms the skin and structure of ailerons, elevons, and tabs, including balancing devices, attached fittings, etc.
	70	SPOILERS	The portion of the system that forms the skin and structure of wing mounted spoilers, airbrakes, lift dampers, attached fittings, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
58 AND 59		UNASSIGNED	

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
60		STANDARD PRACTICES: PROPELLERS	The subsystems containing the standard mechanical and electrical and electronic engineering practices applicable to more than one propeller or rotor system and not covered in Systems 61 thru 69. Does not include those practices covered in other manuals or systems. Excludes rotor anti-ice system (see System 30, ICE AND RAIN PROTECTION).
	00	GENERAL	The portion of the system applicable to all propeller or rotor subsystems.
	10 THRU 90		Subsystems 10 thru 90 describe standard practices and are assigned by the manufacturer to suit generic standard practices related to more than one propeller or rotor system.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
61		PROPELLERS/ PROPULSORS	The subsystem components that include the complete mechanical or electrical propeller, pumps, motors, governor, alternators, and the components external to or integral with the engine used to control the propeller blade angle. Includes propeller spinner, synchronizers, propulsor duct assemblies, aerodynamic fairing of mechanical components, stators, vectoring systems, etc.
	00	GENERAL	
	10	PROPELLER ASSEMBLY	The portion of the system that rotates, except the engine propeller shaft. Includes blades, dome, hub, spinner, slip ring, deicer boot, distributor valve, etc.
	20	CONTROLLING	The portion of the system that controls propeller blade pitch such as governors, synchronizers, switches, wiring, cables, levers, etc. Also includes those components for the propulsor vector drive system. Includes flight deck control, drive motors, gearboxes, drive shafts, synchronizing shaft, etc. Does not include any parts that rotate with the propel-ler assembly.
	30	BRAKING	The portion of the system 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.
	40	INDICATING	The portion of the system used to indicate operation or activation of propeller/propulsor systems. Includes lights, switches, wiring, etc.
	50	PROPULSOR DUCT	The portion of the system covering the complete duct assembly including vector drive attachment, fairings, stators, gearbox covers, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
62		ROTORS	The subsystem components that include the rotor head assembly and rotor blades, swashplate assembly, and the rotor shaft unit, if not an integral part of the gearbox. Does not include the rotor anti-icing system (see System 30, ICE AND RAIN PROTECTION).
	00	GENERAL	
	10	ROTOR BLADES	The portion of the system consisting of rotor blade assemblies, including the heating mat (electrical resistors) for anti-icing.
	20	ROTOR HEAD	The portion of the system covering the complete rotor head, including blade folding system, sleeves, spindles, dampers, rotor head fairings, rotor shaft, and swashplate, if the rotor head and shaft constitute a non-dissociable assembly.
	30	ROTOR SHAFT/ SWASHPLATE ASSEMBLY	The portion of the system covering the rotor shaft and swashplate components if not included in Subsystem 20.
	40	INDICATING	The portion of the system that indicates operation or activation of rotor systems. Includes lights, gauges, switches, wiring, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
63		ROTOR DRIVES	The subsystem components that transmit power to the rotors. Includes engine coupling components, drive shafts, clutch and free wheel units, gear boxes, components, systems, and securing elements.
	00	GENERAL	
	10	ENGINE/ GEARBOX COUPLINGS	The portion of the system covering drive shafts between engines and main gear boxes and, if applicable, clutch and free wheel units.
	20	GEARBOXES	The portion of the system that drives the rotor. Includes mechanical power takeoff, accessory drives, gearbox lubricating system, and, if part of the gearbox, the rotor brake. Does include the accessories themselves (alternators, hydraulic pumps, etc.).
	30	MOUNTS, ATTACHMENTS	Includes suspension bars, vibration damping systems, etc., providing attachment of the gearboxes to the airframe.
	40	INDICATING	The portion of the system that indicates operation or activation of rotor systems. Includes lights, gauges, switches, wiring, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
64		TAIL ROTOR	The subsystem components providing yaw control by rotating in a plane nearly parallel to the symmetry plane and delivering a thrust opposing the main rotor torque. Includes the rotor blades and rotor head. Does not include the rotor anti-icing system (see System 30, ICE AND RAIN PROTECTION).
	00	GENERAL	
	10	ROTOR BLADES	The portion of the system that forms the blade assemblies, including the heating mats (electrical resistors) for anti-icing.
	20	ROTOR HEAD	The portion of the system that forms the tail rotor head.

NOTE: For an integral unit, only one subsystem (10 or 20) is required.

	30	UNASSIGNED	
	40	INDICATING	The portion of the system that indicates operation or activation of rotor systems. Includes lights, gauges, switches, wiring, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
65		TAIL ROTOR DRIVE	The subsystem components transmitting power to the tail rotor. Includes drive, rotor braking, blade angle, and attitude control. Does not include the rotor anti-icing system (see System 30, ICE AND RAIN PROTECTION).
	00	GENERAL	
	10	SHAFTS	The portion of the system that includes drive shafts, bearing, flexible couplings, etc.
	20	GEARBOXES	The portion of the system that includes intermediate and tail gearboxes.
	30	UNASSIGNED	
	40	INDICATING	The portion of the system used to indicate operation or activation of rotor systems. Includes lights, gauges, switches, wiring, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
66		FOLDING BLADES/PYLON	The subsystem components that provide automatic or manual folding and spreading of the rotor blades and tail pylon.

NOTE: Such rigging also affects the components described in other systems.

	00	GENERAL	
	10	ROTOR BLADES	The portion of the system providing rotor blade folding and spreading. Includes the mechanical, hydraulic, and electrical components permanently fitted on the aircraft.
	20	TAIL PYLON	The portion of the system providing tail pylon folding and spreading. Includes mechanical, hydraulic, and electrical components permanently fitted on the aircraft.
	30	CONTROLS AND INDICATING	The portion of the system that controls the folding/spreading sequences and for indicating system operation. Includes the control units, caption lights, indicators, wiring, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
67		ROTOR FLIGHT CONTROLS	The subsystem components that provide a means of manually controlling the flight attitude of the helicopter. Includes control linkage and cables for collective pitch, cyclic pitch, directional control, servo controls and corresponding subsystem. Also includes 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 (see System 22), blade pitch change rod (see System 63), and swashplate.

	00	GENERAL	
	10	ROTOR CONTROL	The portion of the system that controls the attitude of the angle of attack of the rotor blades. Includes 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)	The portion of the system that controls the direction of the helicopter (yaw control). Includes 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	The portion of the system that distributes power source output to the rotor servo control system. Includes pressure relief valves, electronic valves, check valves, accumulators, 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, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
68 AND 69		UNASSIGNED	

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
70		STANDARD PRACTICES: ENGINE	The subsystem procedures that contain standard mechanical, electrical, electronic, and engineering practices applicable to more than one engine system not covered in Systems 71 thru 84. Does not include items covered in other manuals. Practices for a particular application are included in the appropriate engine system.
	00	GENERAL	The portion of the system covering standard practices applicable to all engine associated systems.
	10 THRU 90		Subsystems 10 thru 90 describe standard engine 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	TITLE	DEFINITION
71		POWER PLANT	The subsystem components included in the overall power package. Include engine air intake, mount, cowling, scoops, cowl flaps, etc.
	00	GENERAL	The portion of the system that includes general information, limits, and procedures. This subsystem covers engine changes, run-up, externally mounted spare power plants, etc.
	10	COWLING	The portion of the system that includes removable coverings that extend over and around the power plant assembly. Includes the functioning and maintenance aspects of accessory section cowls, cowl flaps, cowling supports, attach and locking mechanisms, etc. Does not include the structure integral with the airframe (see System 54, NACELLES/ PYLONS).
	20	MOUNTS	The portion of the system that covers the framework, either of buildup construction or forgings, that supports the engine and attaches it to the nacelle or pylon. Includes engine mounts, vibration dampeners, support links, mounting bolts, etc.
	30	FIRESEALS	The portion of the system used to isolate areas subject to fire. Includes fire resistant partitions and seals mounted on or about the power package. Does not include firewalls (see System 54, NACELLES/PYLONS).
	40	ATTACH FITTINGS	The portion of the system covering fittings and brackets used for the support of equipment in and about the power package.
	50	ELECTRICAL HARNESS	The portion of the system covering electrical cables, conduits, plugs, sockets, etc., that serve several power plant systems, are banded together to facilitate removal, and installation of the power plant. Does not include wiring covered under another system.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
71		POWER PLANT	Continued
	60	AIR INTAKES	The portion of the system that directs and may vary the mass air flow to the engine. Includes 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 airframe structure (see System 54, NACELLES/PYLONS).
	70	ENGINE DRAINS	The portion of the system that drain off excess fluids from the power plant and its accessories. Includes drain lines, manifolds, tanks, flame arresters, vents, and supporting brackets, etc. Also includes components that are an integral part of, or fitted to, the power plant cowling.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
72		ENGINE	The subsystem components comprising the power portion of the power plant, exclusive of engine air intake, mount, cowling, scoops, cowl flaps, etc. Includes those components that: Induce and convert fuel-air mixture into power. Includes, for turbine engines, air inlet, compressor, diffuser, combustion chambers, turbine, exhaust, etc, and, for reciprocating engine, blower and clutch, clutch control valve, cylinders, cylinder baffles, intake pipes, crankshaft assembly, etc. Transmit power to the propeller shaft, if any, and accessory drives. Includes reduction gearing, gear trains, extension shaft, and torque-meter. Are used to supplement the functioning of other defined systems external to the engine, within the profile of the basic engine. Includes accessory drives, mechanical portions of the spark advance mechanism, oil transfer tubes from the propeller governor pad to the propeller shaft, etc. 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	TITLE	DEFINITION
72 (1)		ENGINE: TURBINE/ TURBOPROP	
	00	GENERAL	The portion of the system that covers general information, limits, and procedures.
	10	REDUCTION GEAR AND SHAFT SECTION (TURBOPROP)	The portion of the system that contains the propeller shafts and reduction gears. Includes drives for nose mounted accessories, etc.
	20	AIR INLET SECTION	The portion of the system through which the air enters the compressor section. Includes guide vanes, shrouds, cases, etc.
	30	COMPRESSOR SECTION	The portion of the system where air is compressed. Includes cases, vanes, shrouds, rotors, diffusers, etc. Also includes maintenance of stator blades, but not the operation of variable stator blades (see System 75, AIR). Does not include compressor bleed system.
	40	COMBUSTION SECTION	The portion of the system where air and fuel are combined and burned. Includes burner cans, cases, etc.
	50	TURBINE SECTION	The portion of the system containing the turbines. Includes turbine nozzles, turbine rotors, cases, etc.
	60	ACCESSORY SECTION	The portion of the system covering mechanical power takeoffs to drive accessories. Includes engine mounted gearboxes, gears, seals, pumps, etc. Does not include remotely installed gearboxes (see System 83, ACCESSORY GEARBOXES).
	70	BYPASS SECTION	The portion of the system that 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	TITLE	DEFINITION
72 (2)		ENGINE: RECIPROCATING	
	00	GENERAL	The portion of the system covering general information, limits, and procedures.
	10	FRONT SECTION	The portion of the system containing propeller shafts and reduction gears. Includes drives for nose mounted accessories, etc.
	20	POWER SECTION	The portion of the system containing the crankshaft, master and link rod assemblies, cams, cam drive gears, tappet guides, rollers, carriers, etc.
	30	CYLINDER SECTION	The portion of the system containing the cylinders, valves, pistons, push rods, intake pipes, baffles, etc. Also includes rocker arm assembly, valve springs, etc.
	40	SUPERCHARGER/ TURBOCHARGER SECTION	The portion of the system containing cases, shroud plates, Power Recovery Turbine (PRT) coupling and gearing, impellers and drives, accessory drives, bushings, etc.
	50	LUBRICATION	The portion of the system used to distribute oil throughout the engine. Includes front and rear pressure and scavenger pumps, sumps, strainers, valves, etc. Also includes oil lines not included in System 79, OIL. Does not include items that form integral passages within the engine.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
73		ENGINE FUEL AND CONTROL	For turbine engines, the subsystem components and associated mechanical systems or electrical circuits that furnish or control fuel to the engine beyond the main fuel quick disconnect and thrust augmenter, fuel flow rate sensing, transmitting, and 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 augmenter 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, the subsystem components that deliver metered fuel and air to the engine. The fuel portion includes the carburetor/master control from the inlet side to the discharge nozzles, injection pumps, carburetors, 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 (see System 28, FUEL).
	00	GENERAL	
	10	DISTRIBUTION	The portion of the system, from the main quick disconnect to the engine, that distributes fuel to the engine burner section and the thrust augmenter. Includes plumbing, pumps, temperature regulators, valves, filters, manifold, nozzles, etc. Does not include the main or thrust augmenter fuel control.
	20	CONTROLLING	The portion of the system that meters fuel to the engine and the thrust augmenter. Includes hydromechanical or electronic fuel control, levers, cables, pulleys, linkages, sensors, valves, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
73		ENGINE FUEL AND CONTROL	Continued
	30	INDICATING	The portion of the system used to indicate the flow rate, temperature, and pressure of the fuel. Includes transmitters, indicators, wiring, etc. Does not include indication if accomplished as part of an integrated engine instrument system (see System 77, ENGINE INDICATING).

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
74		ENGINE IGNITION	The subsystem components that 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 augmenters 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	The portion of the system that generates electrical current for the purpose of igniting the fuel- air mixture. Includes magnetos, distributors, booster coils, exciters, transformers, storage capacitors, compositors, etc.
	20	DISTRIBUTION	The portion of the system that 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 ignition harness, high tension leads, coils as used in "low tension" systems, spark plugs, igniters, etc.
	30	SWITCHING	The portion of the system that provides a means of rendering the electrical power supply inoperative. Includes ignition switches, wiring, connectors, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
75		ENGINE AIR	For turbine engines, the subsystem external components and integral basic engine parts that 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, cooling air systems, and heated air systems (engine anti-icing). Does not include aircraft anti-icing, engine starting systems or exhaust supplementary air systems.
	00	GENERAL	
	10	ENGINE ANTI-ICING	The portion of the system using bleed air to prevent or eliminate the formation of ice in all parts of the engine, includes valves, plumbing, wiring, radiators, etc. Excludes power plant cowling and electrical anti-icing (see System 30, ICE AND RAIN PROTECTION).
	20	COOLING	The portion of the system used to ventilate the engine and accessories. Includes valves, plumbing, wiring, jet pumps, vortex spoilers, etc.
	30	COMPRESSOR CONTROL	The portion of the system used to control the flow of air through the engine. Includes governors, valves, actuators, linkages, etc. Also includes the operation of variable stator blades. Does not include maintenance covered in System 72, ENGINE.
	40	INDICATING	The portion of the system used to indicate temperature, pressure, control positions, etc., of the air systems. Includes transmitters, indicators, wiring, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
76		ENGINE CONTROLS	The subsystem controls that govern operation of the engine. Includes units and components 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 specifically included in other systems.
	00	GENERAL	
	10	POWER CONTROL	The portion of the system that furnishes a means of controlling the main fuel control or coordinator. Includes controls to the propeller regulator on turboprop engines. Includes linkages, cables, levers, pulleys, switches, wiring, etc. Does not include the units themselves.
	20	EMERGENCY SHUTDOWN	The portion of the system that furnishes a means of controlling the flow of fluids to and from the engine during emergency procedures. Includes levers, cables, pulleys, linkages, switches, wiring, etc. Does not include the units themselves.

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

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
78		ENGINE EXHAUST	The subsystem components that direct 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 augmenters, stacks, clamps, etc. Excludes exhaust driven turbines.
	00	GENERAL	
	10	COLLECTOR/ NOZZLE	The portion of the system that collects exhaust gases from the cylinders or turbines and conducts them overboard. Includes collector rings, exhaust, and thrust augmenter ducts (unless included in Subsystem 50, AUGMENTER), variable nozzles, actuators, plumbing, linkages, wiring, position indicators, warning systems, etc. Does not include power recovery turbines, turbo/superchargers, noise suppressors, or thrust reversers when they are not an integral part of the nozzle system.
	20	NOISE SUPPRESSOR	The portion of the system that reduces the noise generated by the exhaust gases. Includes pipes, baffles, shields, actuators, plumbing, linkages, wiring, position indicators, warning systems, etc. Use Subsystem 10, COLLECTOR/NOZZLE, when an integral part of the nozzle system.
	30	THRUST REVERSER	The portion of the system used to change the direction of the exhaust gases for reverse thrust. Includes clamshells, linkages, levers, actuators, plumbing, wiring, position indicators, warning systems, etc. Use Subsystem 10, COLLECTOR/NOZZLE, when an integral part of nozzle system.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
78		ENGINE EXHAUST	Continued
	40	SUPPLEMEN-TARY AIR	The portion of the system that varies and controls supplementary air flow to the exhaust system. Includes tertiary air doors, actuators, linkages, springs, plumbing, wiring, position indicators, warning systems, etc.
	50	AUGMENTER	The portion of the system that provides additional thrust for takeoff and in flight at the command of the pilot. Includes liners, rings, ducts, actuators, linkages, wiring, indicators, warning systems, etc. Does not include augmentation external to the power plant (see System 84, PROPULSION AUGMENTATION).

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
79		ENGINE OIL	The subsystem 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, auxiliary oil systems, etc.
	00	GENERAL	
	10	STORAGE	The portion of the system used for storage of oil. Includes tanks, filling systems, internal hoppers, baffles, tank sump and drain, etc. Does not include tanks that are an integral part of the engine.
	20	DISTRIBUTION	The portion of the system used to conduct oil from and to the engine. Includes plumbing, valves, temperature regulator, control systems, etc.
	30	INDICATING	The portion of the system used to indicate the quantity, temperature, and pressure of the oil. Includes transmitters, indicators, wiring, warning systems, etc. Does not include indication if accomplished as part of an integrated engine instrument system (see System 77, ENGINE INDICATING).

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
80		ENGINE STARTING	The subsystem components and associated systems used for starting the engine. Includes electrical, inertia air, or other starter systems. Does not include ignition systems (see System 74, IGNITION).
	00	GENERAL	
	10	CRANKING	The portion of the system used to perform the cranking portion of the starting operation. Includes plumbing, valves, wiring, starter, switches, relays, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
81		TURBINES	For reciprocating engines only. The subsystem components that include Power Recovery Turbine (PRT) assembly and turbo/super-charger unit when external to the engine.
	00	GENERAL	
	10	POWER RECOVERY	The portion of the system that includes turbines that extract energy from the exhaust gases and are coupled to the crankshaft.
	20	TURBO/SUPER-CHARGER	The portion of the system that includes turbines that extract energy from the exhaust gases and drive an air compressor.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
82		WATER INJECTION	The subsystem components that furnish, meter, and inject water or water mixtures into the induction system. Includes tanks, pumps, regulators, etc.
	00	GENERAL	
	10	STORAGE	The portion of the system used for the storage of water or water mixtures. Includes tank sealing, attachment of bladder type cells, ventilating system, cell and tank inter-connectors, filling systems, etc.
	20	DISTRIBUTION	The portion of the system used to conduct water or water mixtures from the tanks or cells to the engine. Includes plumbing, cross-feed system, pumps, valves, controls, etc.
	30	DUMPING AND PURGING	The portion of the system used to dump injection water and to purge the system. Includes plumbing, valves, controls, etc.
	40	INDICATING	The portion of the system used to indicate the quantity, temperature, and pressure of the water or water mixtures. Includes transmitters, indicators, wiring, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
83		ACCESSORY GEARBOX	The subsystem components remotely installed and connected to the engine by a drive shaft and that drive multiple types of accessories. Does not include those accessory drives bolted on and immediately adjacent to the engine (see System 72, ENGINE).
	00	GENERAL	
	10	DRIVE SHAFT SECTION	The portion of the system used to conduct power from the engine to the gearbox. Includes drive shaft, adapters, seals, etc.
	20	GEARBOX SECTION	The portion of the system that includes the case, gear trains, and shafts. Includes gears, shafts, seals, oil pumps, coolers, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
84		PROPULSION AUGMENTATION	The subsystem components that, 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)	The portion of the system containing controls, mounting provisions, indicators, and JATO units.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
85 THRU 90		UNASSIGNED	

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
91		CHARTS/ DIAGRAMS	The system containing miscellaneous charts, diagrams, and lists applicable to multiple systems, no particular system, 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.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
92		ELECTRICAL POWER MULTIPLEXING	The subsystem components that provide multiplexing of electrical power. Includes computers, remote terminals and related interfaces to transmit and receive electrical power control signals.
	00	GENERAL	
	10	DATA BUS	The portion of the system used to transmit multiplexed data between control boxes and remote terminals. Includes data link terminals and related wiring.
	20	TERMINALS	The portion of the system 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 included in the controls for the using system.
	30	SYSTEM INTEGRATION INTERFACE	The portion of the system that 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 (see System 40, SYSTEM INTEGRATION).
	40	ADDRESSING AND INITIALIZATION INTERFACES	The portion of the system used to configure the system for proper communication and initialization. Includes power controller, latch reset function and control switch, terminal address jumpers and connector verification jumpers.
	50	POWER CONTROLLER ASSEMBLY INTERFACES	The portion of the system 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.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
92		ELECTRICAL POWER MULTIPLEXING	Continued
	60	CAUTION AND WARNING INTERFACES	The portion of the system 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 (see System 33, LIGHTS).

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
93		SURVEILLANCE	The subsystem components that furnish a means of sensing the surrounding environ-ment and process, display, and record the resulting information.
	00	GENERAL	
	10	DATA PROCESSING	The portion of the system that provides computation, switching, and storage of signals acquired.
	20	DATA DISPLAY	The portion of the system that provides the data display of information acquired by sensors.
	30	RECORDING	The portion of the system that provides the recording of information acquired by sensors.
	40	IDENTIFICATION	The portion of the system that provides identification of information acquired by sensors.
	50	INFRARED SENSORS	The portion of the system that uses heat sensing devices, such as infrared scanners, infrared image, and detection to acquire information.
	60	LASER SENSORS	The portion of the system that uses laser devices to acquire information for distance measuring, identification, etc.
	70	SURVEILLANCE RADAR	The portion of the system that uses radar for surveillance or mapping purposes. Includes devices such as antennas, receivers, transmitters, indicators, etc.
	80	MAGNETIC SENSORS	The portion of the system that senses magnetic anomalies. Includes devices such as magnetometers, amplifiers, computers, indicators, etc.
	90	SONAR SENSORS	The portion of the system that senses objects underwater. This includes devices such as modulators, computers, transducers, indicators, etc.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
94		WEAPONS	The subsystem components that furnish a means of acquiring a target, performing release calculations based on ballistics, winds, air and ground speed, altitude, attitude, etc., and stores release, automatic or manual.
	00	GENERAL	
	10	WEAPONS RELEASE	The portion of the system required to release, fire or jettison stores. Includes computers, displays, controls, stores management, etc.
	20	UNASSIGNED	
	30	WEAPONS SUSPENSION	The portion of the system that provides interconnecting equipment to transport and release or fire weapons. Includes multipurpose pylons if used for any weapon mounting role, special pylons, ejection racks, launchers, etc.
	40	UNASSIGNED	
	50	GUNNERY	The portion of the system consisting of all guns and equipment necessary to fire stores.
	60	UNASSIGNED	
	70	WEAPONS CONTROL	The portion of the system that furnishes a means of designating and acquiring a target, includes radar, computers, displays, etc., necessary to provide weapons release decision (aiming cues).

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

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

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
97		IMAGE RECORDING	The subsystem components that furnish a means of recording on film, video, disc, tape, etc. Does not include recording systems that are part of any other system.
	00	GENERAL	
	10	STRIKE	The portion of the system used for recording the results of an air strike.
	20	OFFENSIVE WEAPONS SYSTEM	The portion of the system used for recording instruments and results of dropped bombs.
	30	FIRE CONTROL SYSTEM	The portion of the system used for recording rockets and gunfire.
	40	INSTRUMENTA-TION SYSTEM	The portion of the system used for recording meters, dials, displays, etc.
	50	RANGE SYSTEM	The portion of the system used for range recording. Includes installations such as forward and oblique recording systems.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
98		METEOROLO-GICAL AND ATMOSPHERIC RESEARCH	The subsystem components that provide and record measurement of natural or man-made magnetic and gravitational force, and atmospheric phenomena.
	00	GENERAL	
	10	WEATHER	The portion of the system used to measure and record moisture, temperature, cloudiness, wind, etc.
	20	CLEAR AIR TURBULENCE	The portion of the system used to detect, measure, and record clear air turbulence.
	30	POLLUTANTS	The portion of the system used to detect, measure, and record contaminated particles.
	40	MAGNETIC/ GRAVITATIONAL	The portion of the system used to detect, measure, and record the earth's magnetic and gravitational force.

SYSTEM	SUB-SYSTEM	TITLE	DEFINITION
99		ELECTRONIC WARFARE	The subsystem components that furnish a means of detecting, jamming, or nullifying the effectiveness of defensive detection devices.
	00	GENERAL	
	10	ACTIVE	The portion of the system consisting of receivers, transmitters, repeaters, blanking, and modulation devices, etc.
	20	PASSIVE	The portion of the system that contains no active elements, e.g., chaff.
	30	ELINT (Electronic Intelligence)	The portion of the system consisting of electronic intelligence systems, such as receivers, monitors, recorders, and analysis devices.

6. NOTES

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

6.1 Intended use. This standard is to be used for system, subsystem, and sub-subsystem numbering for engineering drawings and technical manuals for aircraft, missile and space systems, engines, and ground communication-electronic equipment. It may also be used for supportability analysis, configuration management, work unit codes, and additional maintainability applications.

6.2 Issue of DoDISS. When this standard is used in acquisition, the applicable issue of the DoDISS must be cited in the solicitation (see 2.2.1)

6.3 Tailoring guidance. To ensure proper application of this standard, invitations for bids, requests for proposal, and contractual statements of work should tailor the requirements in sections 4 and 5 of this standard to exclude any unnecessary requirements.

6.4 Subject (keyword) list.

Configuration Management
Data Collection
Engineering Data
Logistics Management Information (LMI)
Maintenance Manual
Schematic Diagrams
Supportability Analysis
Wiring Data

6.5 Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

CONCLUDING MATERIAL

Preparing Activity
Air Force - 16
Project Number TMSS - F633

Reviewing Activity
Air Force - 10, 11, 13, 19, 99

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

INSTRUCTIONS

1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.
2. The submitter of this form must complete blocks 4, 5, 6, and 7.
3. The preparing activity must provide a reply within 30 days from receipt of the form.

NOTE: This form may not be used to request copies of documents, nor to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waiver any portion of the referenced document(s) or to amend contractual requirements.

I RECOMMEND A CHANGE:	1. DOCUMENT NUMBER MIL-STD-1808A	2. DOCUMENT DATE (YYMMDD) 96/12/01

3. DOCUMENT TITLE
System Subsystem Sub-subsystem Numbering

4. NATURE OF CHANGE *(Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.)*

5. REASON FOR RECOMMENDATION

6. SUBMITTER

a. NAME *(Last, First, Middle Initial)*	b. ORGANIZATION	
c. ADDRESS *(include Zip Code)*	d. TELEPHONE *(Include Area Code)* (1) Commercial (2) AUTOVON *(If applicable)*	e. DATE SUBMITTED *(YYMMDD)*

8. PREPARING ACTIVITY

a. NAME	b. TELEPHONE *(Include Area Code)*	
Steven C. Holloway	(1) Commercial (513) 257-3085	(2) AUTOVON 787-3085
c. ADDRESS *(Include Zip Code)* Det 2, HQ ESC/AV-2C 4027 Col. Glenn Hwy., Suite 300 Dayton, OH 45431-1672	**IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT:** Defense Quality and Standardization Office 5203 Leesburg Pike, Suite 1403, Falls Church, VA 22041-3466 Telephone (703) 756-2340 AUTOVON 289-2340	