

DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION  
WASHINGTON, D.C.

Revision: 22 d  
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M A S T E R   M I N I M U M   E Q U I P M E N T   L I S T

NAMC YS-11

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Highlights of Change

EFFECTIVE ABOVE DATE, the Nihon YS-11 Master Minimum Equipment List has been revised. This MMEL revision applies to all series YS-11 airplanes. Please replace pages: 21-3, 21-4, 23-1, 23-2, 23-3, 24-2, 25-3, 25-4, 25-5, 26-1, 27-1, 28-2, 33-2, 33-3, 34-3, and 34-4 for a complete and up to date MMEL.

Retain this sheet with your MMEL until the next revision is issued.

The changes made to this document are annotated with change bars.

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Definitions

1. System Definitions.

System numbers are based on the Air Transport Association (ATA) Specification Number 100 and items are numbered sequentially.

- a. "Item" (Column 1) means the equipment, system, component, or function listed in the "Item" column.
- b. "Number Installed" (Column 2) is the number (quantity) of items normally installed in the aircraft. This number represents the aircraft configuration considered in developing this MMEL. Should the number be a variable (e.g., passenger cabin items) a number is not required.
- c. "Number Required for Dispatch" (Column 3) is the minimum number (quantity) of items required for operation provided the conditions specified in Column 4 are met.

NOTE: Where the MMEL shows a variable number required for dispatch, the MEL must reflect the actual number required for dispatch or an alternate means of configuration control approved by the Administrator.

- d. "Remarks or Exceptions" (Column 4) in this column includes a statement either prohibiting or permitting operation with a specific number of items inoperative, provisos (conditions and limitations) for such operation, and appropriate notes.
- e. A vertical bar (change bar) in the margin indicates a change, addition or deletion in the adjacent text for the current revision of that page only. The change bar is dropped at the next revision of that page.

2. "Airplane/Rotorcraft Flight Manual" (AFM/RFM) is the document required for type certification and approved by the responsible FAA Aircraft Certification Office. The FAA approved AFM/RFM for the specific aircraft is listed on the applicable Type

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Certificate Data Sheet.

3. "As required by FAR" means that the listed item is subject to certain provisions (restrictive or permissive) expressed in the Federal Aviation Regulations operating rules. The number of items required by the FAR must be operative. When the listed item is not required by FAR it may be inoperative for time specified by repair category.

4. Each inoperative item must be placarded to inform and remind the crewmembers and maintenance personnel of the equipment condition.

NOTE: To the extent practical, placards should be located adjacent to the control or indicator for the item affected; however, unless otherwise specified, placard wording and location will be determined by the operator.

5. "-" symbol in Column 2 and/or Column 3 indicates a variable number (quantity) of the item installed.

6. "Deleted" in the remarks column after a sequence item indicates that the item was previously listed but is now required to be operative if installed in the aircraft.

7. "ER" refers to extended range operations of a two-engine airplane which has a type design approval for ER operations and complies with the provisions of Advisory Circular 120-42A.

8. "Federal Aviation Regulations" (FAR) means the applicable portions of the Federal Aviation Act and Federal Aviation Regulations.

9. "Flight Day" means a 24 hour period (from midnight to midnight) either Universal Coordinated Time (UCT) or local time, as established by the operator, during which at least one flight is initiated for the affected aircraft.

10. "Icing Conditions" means an atmospheric environment that may cause ice to form on the aircraft or in the engine(s).

11. Alphabetical symbol in Column 4 indicates a proviso (condition or limitation) that must be complied with for

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operation with the listed item inoperative.

12. "Inoperative" means a system and/or component malfunction to the extent that it does not accomplish its intended purpose and/or is not consistently functioning normally within its approved operating limit(s) or tolerance(s).

13. "Notes:" in Column 4 provides additional information for crewmember or maintenance consideration. Notes are used to identify applicable material which is intended to assist with compliance, but do not relieve the operator of the responsibility for compliance with all applicable requirements. Notes are not a part of the provisos.

14. Inoperative components of an inoperative system:  
Inoperative items which are components of a system which is inoperative are usually considered components directly associated with and having no other function than to support that system. (Warning/caution systems associated with the inoperative system must be operative unless relief is specifically authorized per the MMEL).

15. "(M)" symbol indicates a requirement for a specific maintenance procedure which must be accomplished prior to operation with the listed item inoperative. Normally these procedures are accomplished by maintenance personnel; however, other personnel may be qualified and authorized to perform certain functions. Procedures requiring specialized knowledge or skill, or requiring the use of tools or test equipment should be accomplished by maintenance personnel. The satisfactory accomplishment of all maintenance procedures, regardless of who performs them, is the responsibility of the operator. Appropriate procedures are required to be published as part of the operator's manual or MEL.

16. "(O)" symbol indicates a requirement for a specific operations procedure which must be accomplished in planning for and/or operating with the listed item inoperative. Normally these procedures are accomplished by the flight crew; however, other personnel may be qualified and authorized to perform certain functions. The satisfactory accomplishment of all procedures, regardless of who performs them, is the responsibility of the operator. Appropriate procedures are

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required to be published as a part of the operator's manual or MEL.

NOTE: The (M) and (O) symbols are required in the operator's MEL unless otherwise authorized by the Administrator.

17. "Deactivated" and "Secured" means that the specified component must be put into an acceptable condition for safe flight. An acceptable method of securing or deactivating will be established by the operator.

18. "Visual Flight Rules" (VFR) is as defined in FAR Part 91. This precludes a pilot from filing an Instrument Flight Rules (IFR) flight plan.

19. "Visual Meteorological Conditions" (VMC) means the atmospheric environment is such that would allow a flight to proceed under the visual flight rules applicable to the flight. This does not preclude operating under Instrument Flight Rules.

20. "Visible Moisture" means an atmospheric environment containing water in any form that can be seen in natural or artificial light; for example, clouds, fog, rain, sleet, hail, or snow.

21. "Passenger Convenience Items" means those items related to passenger convenience, comfort or entertainment such as, but not limited to, galley equipment, movie equipment, ash trays, stereo equipment, overhead reading lamps, etc.

22. Repair Intervals: All users of an MEL approved under FAR 121, 125, 129 and 135 must effect repairs of inoperative systems or components, deferred in accordance with the MEL, at or prior to the repair times established by the following letter designators:

Category A. Items in this category shall be repaired within the time interval specified in the remarks column of the operator's approved MEL.

Category B. Items in this category shall be repaired within three (3) consecutive calendar days (72 hours), excluding the day the malfunction was recorded in the aircraft maintenance

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record/logbook. For example, if it were recorded at 10 a.m. on January 26th, the three day interval would begin at midnight the 26th and end at midnight the 29th.

Category C. Items in this category shall be repaired within ten (10) consecutive calendar days (240 hours), excluding the day the malfunction was recorded in the aircraft maintenance record/logbook. For example, if it were recorded at 10 a.m. on January 26th, the 10 day interval would begin at midnight the 26th and end at midnight February 5th.

Category D. Items in this category shall be repaired within one hundred and twenty (120) consecutive calendar days (2880 hours), excluding the day the malfunction was recorded in the aircraft maintenance log and/or record.

The letter designators are inserted adjacent to Column 2.

23. Electronic fault alerting system - General

New generation aircraft display system fault indications to the flight crew by use of computerized display systems. Each aircraft manufacturer has incorporated individual design philosophies in determining the data that would be represented. The following are customized definitions (specific to each manufacturer) to help determine the level of messages affecting the aircraft's dispatch status. When preparing the MEL document, operators are to select the proper Definition No. 23 for their aircraft, if appropriate.

a. BOEING (B-757/767, B-747-400, B-777)

Boeing airplanes equipped with Engine Indicating and Crew Alerting Systems (EICAS), provide different priority levels of system messages (WARNING, CAUTION, ADVISORY, STATUS and MAINTENANCE). Any messages that affects airplane dispatch status will be displayed at a STATUS message level or higher. The absence of an EICAS STATUS or higher level (WARNING, CAUTION, ADVISORY) indicates that the system/component is operating within its approved operating limits or tolerances.

System conditions that result only in a maintenance level message, i.e. no correlation with a higher level EICAS message,

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do not affect dispatch and do not require action other than as addressed within an operators standard maintenance program.

b. DOUGLAS (MD-11)

Some Douglas aircraft are equipped with an alerting function which is a subsystem within the Electronic Instrument System (EIS). The alerting function provides various levels of system condition alerts (WARNING, CAUTION, ADVISORY, MAINTENANCE and STATUS).

Alerts that affect aircraft dispatch will include WARNING, CAUTION, STATUS or MAINTENANCE level. MAINTENANCE alerts are displayed on the status page of the EIS display panel under the maintenance heading.

A MAINTENANCE alert on the EIS indicates the presence of a system fault which can be identified by the Central Fault Display System (CFDS) interrogation. The systems are designed to be fault tolerant, however, for any MAINTENANCE alert, the MEL must be verified for dispatch purposes.

c. AIRBUS (A-300-600, A-310, A-320/319/321, A-330, A-340)

Airbus aircraft equipped with Electronic Centralized Aircraft Monitoring (ECAM) provide different levels of system condition messages (WARNING, CAUTION, STATUS, and ADVISORY). A-320/319/321, A-330, and A-340 also provide MAINTENANCE status messages.

Any message that effects airplane dispatchability will normally be at the WARNING, CAUTION or STATUS level. MAINTENANCE messages (A-320/319/321, A-330, and A-340 only) are also indicated on ECAM Status Page below the white Maintenance label.

A MAINTENANCE status (Class II) message on ECAM indicates the presence of a system fault which can be identified by CFDS (A-320/319/321) or CMS (A-330/A-340) interrogation. The systems are designed to be fault tolerant, however for any MAINTENANCE status (Class II) message, the A-320/319/321 MEL must be verified for dispatch capability. For the A-330 and A-340, MAINTENANCE status messages do not affect dispatch.

d. FOKKER (FK-100)

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## Definitions

Fokker aircraft are equipped with Multi Function Display System (MFDS) which provides electronic message referring to the different priority levels of system information (WARNING (red), CAUTION (amber), AWARENESS (cyan) AND STATUS (white). Any messages that affects aircraft dispatch will be at the WARNING, CAUTION or AWARENESS level. In these cases the MEL must be verified for dispatch capability and maintenance may be required.

System conditions that only require maintenance are not presented on the flight deck. These maintenance indications/messages may be presented on the Maintenance & Test Panel (MAP) or the Centralized Fault Display Unit (CFDU) and by dedicated Built In Test Evaluation (BITE) of systems.

24. "Administrative control item" means an item listed by the operator in the MEL for tracking and informational purposes. It may be added to an operator's MEL by approval of the Principal Operations Inspector provided no relief is granted, or provided conditions and limitations are contained in an approved document (i.e. Structural Repair Manual, airworthiness directive, etc.). If relief other than that granted by an approved document is sought for an administrative control item, a request must be submitted to the Administrator. If the request results in review and approval by the FOEB, the item becomes an MMEL item rather than an administrative control item.

25. "\*\*\*\*" symbol in Column 1 indicates an item which is not required by regulation but which may have been installed on some models of aircraft covered by this MMEL. This item may be included on the operator's MEL after the approving office has determined that the item has been installed on one or more of the operator's aircraft. The symbol, however, shall not be carried forward into the operator's MEL. It should be noted that neither this policy nor the use of this symbol provide authority to install or remove an item from an aircraft.

26. "Excess Items" means those items that have been installed that are redundant to the requirements of the FARs.

27. "Day of Discovery" is the calendar day an equipment/instrument malfunction was recorded in the aircraft

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maintenance log and or record. This day is excluded from the calendar days or flight days specified in the MMEL for the repair of an inoperative item of equipment. This provision is applicable to all MMEL items, i.e., categories "A, B, C, and D."

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## Preamble

(Effective 6/14/89)

The following is applicable for authorized certificate holders operating under Federal Aviation Regulations (FAR) Parts 121, 125, 129, 135: The FAR require that all equipment installed on an aircraft in compliance with the Airworthiness Standards and the Operating Rules must be operative. However, the Rules also permit the publication of a Minimum Equipment List (MEL) where compliance with certain equipment requirements is not necessary in the interests of safety under all operating conditions. Experience has shown that with the various levels of redundancy designed into aircraft, operation of every system or installed component may not be necessary when the remaining operative equipment can provide an acceptable level of safety. A Master Minimum Equipment List (MMEL) is developed by the FAA, with participation by the aviation industry, to improve aircraft utilization and thereby provide more convenient and economic air transportation for the public. The FAA approved MMEL includes those items of equipment related to airworthiness and operating regulations and other items of equipment which the Administrator finds may be inoperative and yet maintain an acceptable level of safety by appropriate conditions and limitations; it does not contain obviously required items such as wings, flaps, and rudders. The MMEL is the basis for development of individual operator MELs which take into consideration the operator's particular aircraft equipment configuration and operational conditions. Operator MELs, for administrative control, may include items not contained in the MMEL; however, relief for administrative control items must be approved by the Administrator. An operator's MEL may differ in format from the MMEL, but cannot be less restrictive than the MMEL. The individual operator's MEL, when approved and authorized, permits operation of the aircraft with inoperative equipment.

Equipment not required by the operation being conducted and equipment in excess of FAR requirements are included in the MEL with appropriate conditions and limitations. The MEL must not deviate from the Aircraft Flight Manual Limitations, Emergency Procedures or with Airworthiness Directives. It is important to remember that all equipment related to the airworthiness and the operating regulations of the aircraft not listed on the MMEL must be operative.

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Preamble  
(Effective 6/14/89)

Suitable conditions and limitations in the form of placards, maintenance procedures, crew operating procedures and other restrictions as necessary are specified in the MEL to ensure that an acceptable level of safety is maintained.

The MEL is intended to permit operation with inoperative items of equipment for a period of time until repairs can be accomplished. It is important that repairs be accomplished at the earliest opportunity. In order to maintain an acceptable level of safety and reliability the MMEL establishes limitations on the duration of and conditions for operation with inoperative equipment. The MEL provides for release of the aircraft for flight with inoperative equipment. When an item of equipment is discovered to be inoperative, it is reported by making an entry in the Aircraft Maintenance Record/Logbook as prescribed by FAR. The item is then either repaired or may be deferred per the MEL or other approved means acceptable to the Administrator prior to further operation. MEL conditions and limitations, do not relieve the operator from determining that the aircraft is in condition for safe operation with items of equipment inoperative.

When these requirements are met, an Airworthiness Release, Aircraft Maintenance Record/Logbook entry, or other approved documentation is issued as prescribed by FAR. Such documentation is required prior to operation with any item of equipment inoperative.

Operators are responsible for exercising the necessary operational control to ensure that an acceptable level of safety is maintained. When operating with multiple inoperative items, the interrelationships between those items and the effect on aircraft operation and crew workload will be considered.

Operators are to establish a controlled and sound repair program including the parts, personnel, facilities, procedures, and schedules to ensure timely repair.

WHEN USING THE MEL, COMPLIANCE WITH THE STATED INTENT OF THE PREAMBLE, DEFINITIONS, AND THE CONDITIONS AND LIMITATIONS SPECIFIED IN THE MEL IS REQUIRED.

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21-1

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			3.	NUMBER REQUIRED FOR DISPATCH	
21 AIR CONDITIONING					
1.	Cabin Altitude Indicator	C	1	0	(O)May be inoperative provided: a) Cabin Differential Pressure Indicator operates normally, and b) A chart is provided for the flightcrew to convert cabin differential pressure to cabin altitude. OR c) Flight is conducted in an unpressurized configuration.
2.	Cabin Superchargers	C	2	1	(M)(O)One may be inoperative provided the associated spill valve is secured open.
		C	2	0	(O)May be inoperative provided flight is conducted in an unpressurized configuration.
3.	Cabin Differential Pressure Indicator	C	1	0	(O)May be inoperative provided: a) Cabin Altitude Indicator operates normally, and b) A chart is provided for the flightcrew to convert cabin altitude to cabin differential pressure. OR c) Flight is conducted in an unpressurized configuration.
		C			
4.	Cabin Pressure Control				
	1) Automatic	C	1	0	(O)May be inoperative provided: a) Manual control system operates normally. OR
(Continued)					

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
21	AIR CONDITIONING					
4.	Cabin Pressure Control (Cont'd)					
	1) Automatic (Cont'd)	C				b) Flight is conducted in an unpressurized configuration.
	2) Manual	C	1	0	(O)May be inoperative provided:	
		C			a) Automatic mode operates normally.	
					OR	
		C			b) Flight is conducted in an unpressurized configuration.	
5.	Cabin Rate of Climb Indicator	C	1	0	(O)May be inoperative provided:	
		C			a) All remaining components and functions of the pressurization system operate normally.	
					OR	
		C			b) Flight is conducted in an unpressurized configuration.	
6.	Spill Indicator Lights	C	2	0	(M)(O)May be inoperative off provided:	
		C			a) Associated spill valve operates normally.	
					OR	
		C			b) Flight is conducted in an unpressurized configuration.	
7.	Cabin Supercharger Overheat Lights					DELETED REV. 22.

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21-3

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
21	AIR CONDITIONING				
8.	Temperature Control Systems				
1)	Automatic	C	1	0	(M)May be inoperative provided manual control operates normally.
2)	Manual	C	1	0	(M)May be inoperative provided automatic control operates normally.
9.	Radio Rack Cooling Fan				DELETED REV. 22.
10.	Cabin Supercharger Pressure Indicators	C	2	0	(M)May be inoperative provided associated spill valve system operates normally.
11.	Cabin Altitude Warning System	C	1	0	May be inoperative provided flight remains at or below 10,000 feet MSL.
12.	Cockpit Air Conditioning Unit (With STC 4110SW Freon System Installed) (All Cargo Operations Only)	C	1	0	(M)May be inoperative provided: a) Ram Air System operates normally, and b) An acceptable procedure is used to adequately cool the electrical compartment during ground operations.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
21	AIR CONDITIONING				
13.	Cockpit Heating *** System (Bleed Air) (With STC SA4261SW Installed) (All Cargo Operations Only)	C	2	1	(M)(O)One may be inoperative provided: a) Associated engine bleed air outlet line is secured closed by an acceptable procedure, and b) AFM limitations are observed.
		C	2	0	OR (M)Both may be inoperative provided: a) Both engine bleed air outlet lines are secured closed by an acceptable procedure, and b) Electric Supplemental Heat (STC SA1420GL) operates normally.
14.	Foot Warmer	C	1	0	
15.	Heater Fans *** (All Cargo Operations ONLY)	C	2	0	
16.	Electric *** Supplemental Heating System (With STC SA1420GL installed) (All Cargo Operations Only)	C	1	0	(M)May be inoperative provided at least one Bleed Air Heat system (STC SA4261SW) operates normally.

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22-1

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			3. NUMBER REQUIRED FOR DISPATCH		
-----					
22	AUTO FLIGHT				
1.	Autopilot System	C	1	0	May be inoperative provided approach minimums do not require its use.
***					NOTE: Any mode which functions normally may be used.
2.	Control Wheel	C	2	1	One may be inoperative provided the autopilot is not engaged below 1,500 feet AGL.
***	Disengage Switches	C	2	0	May be inoperative provided Auto-pilot is not used.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.		2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
23	COMMUNICATIONS						
1.	Communications System (VHF, HF, UHF)	C	-	-	-		(O)As required by FAR.
*** 1)	Excess Items	D	-	0	0		
2.	Passenger Address System						
1)	Passenger Configuration	B	1	0	0		(O)May be inoperative provided: a) Alternate, normal and emergency procedures and/or operating restrictions are established and used, and b) Flight Deck-Cabin Interphone function (two-way) operates normally.
2)	Cargo Configuration	D	1	0	0		
3.	Cabin Interphone System (Flight Deck to Cabin) (Cabin to Flight Deck)	C	-	0	0		(O)May be inoperative provided: a) Alternate, normal and emergency procedures are established and used, and b) PA system operates normally.
							NOTE: Not required for all cargo operations.

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23	COMMUNICATIONS				
4.	Crewmember Alerting System (Crew Call Light/Chime)				
1)	Passenger Configuration	C	1	0	May be inoperative provided flight deck crewmembers use headsets and monitor "SI" position on audio control panel.
2)	Cargo Configuration	D	1	0	
5.	Flight Deck Interphone System				
1)	Flight Deck to Ground	C	1	0	(0)May be inoperative provided: a) Procedures do not require its use. OR b) Alternate procedures are established and used.
6.	Flight Deck Speakers	C	-	0	May be inoperative provided: a) Procedures do not require their use, and b) Headsets are installed and operate normally.
7.	Cockpit Voice Recorder (CVR)	A	1	0	May be inoperative provided: a) Flight data recorder (FDR) operates normally, and b) Repairs are made within three flight days.

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			3.	NUMBER REQUIRED FOR DISPATCH	
-----					
23	COMMUNICATIONS				
8.	Selective Call *** (SELCAL) System	C	1	0	May be inoperative provided: a) Alternate procedures are established and used. OR b) Procedures do not require its use.
		D			
9.	Emergency Locator Transmitter (ELT)	C	1	0	As required by FAR.
10.	Static Dischargers	C	-	-	One may be missing from each control surface.
11.	Headsets/ Microphones	C	-	2	Any in excess of those required for flight deck crewmembers may be inoperative.
12.	Audio Control Panels		-		DELETED REV. 22.
13.	Boom Microphones				
	1) Input To Cockpit Voice Recorder Required	A	-	0	May be inoperative provided: a) Flight Data Recorder (FDR) operates normally, and b) Repairs are made within three flight days.
***	2) Input To Cockpit Voice Recorder Not Required	C	-	0	

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24	ELECTRICAL POWER				
1.	DELETED				
2.	CF Main Bus Fail Light	B	1	0	May be inoperative provided AC Instrument Power Fail Indicator System operates normally.
3.	Engine Driven AC Alternators	B	2	1	(M)(O)One may be inoperative provided: a) The cause of the malfunction is verified, b) Transfer system operates normally, and c) Aircraft is not operated in known or forecast icing conditions.
4.	Engine Driven DC Generators				DELETED REV. 22.
5.	AC Ammeters	C	2	0	(M)May be inoperative provided both associated Alternator Leak and Fail Lights operate normally.
6.	DELETED				
7.	AC Instrument *** Power Failure Indicator System	C	1	0	May be inoperative provided CF Main Bus Fail Light operates normally.
8.	Alternator Leak Lights	B	2	1	(M)One may be inoperative off provided associated alternator is considered inoperative and not used.

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24	ELECTRICAL POWER					
9.	Alternator Fail Lights	B	2	1		(M)One may be inoperative off provided associated alternator is considered inoperative and not used.
10.	DC Generator Fail Warning Lights	B	2	1		(O)One may be inoperative off provided DC voltmeter and both DC ammeters operate normally.
11.	DC Generator ON Lights					DELETED REV. 22.
12.	Main Batteries					
	1) 4 Battery System	B	4	2		
	2) 2 Battery System	B	2	1		One may be inoperative provided: a) Left Battery operates normally, and b) All other electrical system components operate normally.

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SYSTEM & SEQUENCE NUMBERS	1. ITEM	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
25	EQUIPMENT/FURNISHINGS			
1.	Crewmember Shoulder Harness (Flight Deck)			DELETED REV. 22.
2.	Flight Attendant Seat Assembly (single or dual position)	C -	-	(M)(O)One seat or assembly (dual seat position) may be inoperative provided: a) Affected seat or seat assembly is not occupied, b) Flight attendant(s) displaced by inoperative seat(s) occupies the passen- ger seat most accessible to his or her assigned exit, c) Alternate procedures are established for displaced flight attendant(s), d) Folding type seat is stowed or secured in the retracted position, and e) Passenger seat(s) assigned to flight attendant(s) is placarded "FOR FLIGHT ATTENDANT USE ONLY"
NOTE 1: A folding seat that will not stow automatically is considered inoperative.				
NOTE 2: A seat position with a missing or inoperative lap belt or shoulder harness is considered inoperative.				
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25	EQUIPMENT/FURNISHINGS				
2.	Flight Attendant Seat Assembly (single or dual position) (Cont'd)				NOTE 3: The above provisos apply only to required flight attendant seats. Seat positions in excess of those required may be inoperative provided they are properly stowed or secured in the retracted position. Individual operators, when operating with inoperative seats, will consider the locations and combinations of seats to assure that the proximity to exits and distribution requirements of the applicable FAR are met.
3.	"Fasten Seat Belt While Seated" Signs or Placards	C	-	-	One or more signs or placards may be illegible or missing provided a legible sign or placard is readable from each occupied passenger seat.
4.	Passenger Seats				
	1) Seat Backs	C	-	-	(M)May be inoperative secured in the upright position.
		C	-	-	(M)May be inoperative in other than the upright position provided: a) Does not block an Emergency Exit, b) Does not restrict any passenger from access to the main aircraft aisle, and

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25	EQUIPMENT/FURNISHINGS			
4.	Passenger Seats (Cont'd)			
	1) Seat Backs (Cont'd)			c) The associated seat(s) is blocked and placarded "Do Not Occupy".
				NOTE 1: A seat with an inoperative seatbelt is considered inoperative.
				NOTE 2: Inoperative seats do not affect the required number of flight attendants.
5.	Courier Seats *** (Cargo Configuration)	D -	-	(M)May be inoperative provided: a) Seat is not required for the operation conducted, b) Affected Seat is secured or deactivated so as to not block emergency egress to an aisle or exit, and c) Affected Seat is blocked using an accepted procedure and placarded "DO NOT OCCUPY".
				NOTE: A seat position with a missing or inoperative lap belt or shoulder harness, as originally outfitted, is considered inoperative.

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25	EQUIPMENT/FURNISHINGS				
6.	Megaphones	C	-	1	Any in excess of those required by FAR may be inoperative or missing provided: a) The inoperative megaphone is removed from the passenger cabin, and b) Required distribution is maintained.  NOTE: Not required for all-cargo operations.
7.	Forward Observer's Seat (Including Associated Equipment)	A	1	0	May be inoperative provided: a) A passenger seat in the passenger cabin is made available to an FAA Inspector for the performance of official duties. OR b) Second observers seat is available, functional, and acceptable, including peripheral equipment, to an FAA Inspector for the performance of official duties, and c) Operations are limited to not more than two flight days before repair is made.

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25	EQUIPMENT/FURNISHINGS				
8.	Passenger Convenience Item(s)	-	0		<p>Passenger convenience items, as expressed in this MMEL are those items related to passenger convenience, comfort or entertainment such as, but not limited to: galley equipment, movie equipment, ash trays, stereo equipment, overhead reading lamps, etc. Items addressed elsewhere in this document shall not be included. (M) and (O) procedures may be required and included in the air carrier's appropriate document.</p> <p>NOTE: Lavatory door ash trays are not considered convenience items.</p>
9.	Cabin Emergency Flashlight Holders/ Flashlights				
1)	Passenger And Mixed Configurations	C	-	-	<p>May be inoperative or missing provided the crewmember assigned to the associated position has a normally operating flashlight readily available.</p> <p>NOTE: Not required for all cargo operations.</p>

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.		2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
26	FIRE PROTECTION						
1.	Wheel Well Fire Warning and Detection Systems						
	1) Bell (Audio Warning)	A	1	0			Bell may be inoperative provided: a) All warning lights operate normally and, b) Repairs are made within three flight days.
2.	APU Fire Warning and Detection System	C	1	0			(O)May be inoperative provided: a) APU is used for engine start only, b) APU is continuously monitored by appropriately trained personnel during operation, c) APU is shut down immediately after engine start, and d) Passengers are not permitted in aircraft during APU operation. OR e) APU is not used.
		C					
3.	Portable Fire Extinguishers	D	-	-			(M)Any in excess of those required by FAR may be inoperative or missing provided: a) The inoperative fire extinguisher is tagged inoperative, removed from the installed location, and placed out of sight so it can not be mistaken for a functional unit, and b) Required distribution is maintained.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.		2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
26	FIRE PROTECTION						
4.	Fire Extinguisher Thermal Discharge Discs	C	-	-	-		(M)May be missing provided fire bottles are weighed, or adequate quantity is verified by another acceptable means before each departure.
5.	Class A Cargo Compartment Smoke Detector System						
	1) Passenger Airplanes						
	a) Forward Detector	B	1	0	0		(O)May be inoperative provided: a) Small door at the top of the baggage door remains open, and b) Cabin Attendant is advised of condition.
	b) Aft Detector	B	1	0	0		(O)May be inoperative provided: a) Cargo door remains open, and b) Cabin attendant is advised of condition.
	2) Combi Airplanes						
		B	1	0	0		(O)Smoke detector(s) aft of the the bulkhead separating cargo and passengers may be inoperative provided: a) Cabin Attendant is advised of condition. OR b) Compartment remains empty. OR c) Only non-combustible materials are carried.
		C					
		C					

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
26	FIRE PROTECTION				
5.	Class A Cargo Compartment Smoke Detector System (Cont'd)				
3)	Cargo Only Airplanes	B	1	0	(O)May be inoperative provided: a) Cabin door is secured open, and b) A qualified observer is carried to alert the crew of a potential hazard. OR c) Compartment remains empty. OR d) Only non-combustible materials are carried.
		C			
		C			
6.	Lavatory Fire Extinguisher System	C	-	-	(M)(O)For each lavatory, the lavatory fire extinguisher system may be inoperative provided: a) Lavatory Smoke Detection system operates normally. OR b) Lavatory waste receptacle is empty, c) Lavatory door is locked closed and placarded, "INOPERATIVE - DO NOT ENTER", and d) Lavatory is not used for any purpose.
		C			
					NOTE 1: These provisos are not intended to preclude lavatory inspections by crewmembers.
					NOTE 2: Not required for all-cargo operations.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
26	FIRE PROTECTION				
7.	Lavatory Smoke Detection System	C	-	-	(M) (O) For each lavatory, the lavatory smoke detection system may inoperative provided: <ul style="list-style-type: none"> <li>a) Lavatory fire extinguisher system(s) operates normally.</li> <li>OR</li> <li>b) Lavatory waste receptacle is empty,</li> <li>c) Lavatory door is locked closed and placarded "INOPERATIVE - DO NOT ENTER", and</li> <li>d) Lavatory is not used for any purpose.</li> </ul>
		C			NOTE 1: These provisos are not intended to preclude lavatory inspections by crewmembers.
					NOTE 2: A lavatory smoke detection system is not required for all-cargo operations.

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27		FLIGHT CONTROLS				
1.	Wing Flaps Electrical Control System (Pedestal Switch)	B	1	0	(M)(O)May be inoperative provided: a) Wing Flap Position Indicator operates normally, and b) Emergency Flap Control operates normally.	
2.	Wing Flap Position Indicator	B	1	0	(M)(O)May be inoperative provided: a) Correct takeoff flap position is verified before each departure, and b) Flap Overtravel System operates normally. OR c) Zero flap takeoffs and landings are conducted in accordance with AFM performance limitations.	
		B				
3.	Wing Flap Overtravel Warning System	C	1	0	May be inoperative provided Wing Flap Position Indicator operates normally.	
4.	Gust Lock System	C	1	0	(M)May be inoperative provided: a) An acceptable procedure is established and used to verify that the Gust Lock is not engaged, and b) Acceptable external gust locks are installed when the gust lock system would normally be used. OR c) Procedures are established to restrain control movement during gusty conditions on the ground.	
		C				

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			3.	NUMBER REQUIRED FOR DISPATCH	
28	FUEL				
1.	Main Tank Fuel Quantity Indicators (Underwing)	C	2	0	(M)May be inoperative provided fuel quantity is verified by an acceptable means at each refueling.
2.	Main Tank Fuel Quantity Indicators (Flight Deck)	C	2	1	(M)(O)One may be inoperative provided: a) Both fuel flow meters operate normally, and b) Fuel quantity in associated tank is verified by an acceptable means before each departure.
3.	Underwing Refueling System	C	1	0	
4.	Bag Tank Fuel *** Quantity Indicators	C	2	0	(M)(O)May be inoperative provided: a) Weight of bag tank fuel is verified by an acceptable means, b) Bag tank fuel is included as part of the zero fuel weight, and c) AFM weight and balance limitations are observed. OR d) Bag tanks are verified empty.
5.	Scavenge Pumps	C	-	0	(O)May be inoperative provided AFM unusable fuel restrictions applicable to the inoperative pump configuration are observed.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			3.	NUMBER REQUIRED FOR DISPATCH	
28	FUEL				
6.	Fuel Transfer *** Pumps	C	-	0	(M) (O) May be inoperative provided: a) Bag Tank Fuel Quantity Indicators operate normally, b) Bag tank fuel is included as part of the zero fuel weight, and c) AFM weight and balance limitations are observed. OR d) Bag Tanks are verified empty.
7.	Direct Reading (Magnetic) Underwing Fuel Quantity Indicators.	C	4	0	(M) May be inoperative provided fuel quantity is verified by an acceptable means at each refueling.

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			3.	NUMBER REQUIRED FOR DISPATCH	
29	HYDRAULIC POWER				
1.	Hydraulic Quantity Indicator (Flight Deck)	B	1	0	(M)May be inoperative provided reservoir level is verified to be adequate before each departure.
2.	Engine Driven Hydraulic Pump Low Pressure Warning Lights	C	2	0	(M)May be inoperative provided: a) Hydraulic Pressure Indica- ting System operates normally, and b) Both Engine Driven Hydraulic Pumps are verified to operate normally before each departure.

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			3.	NUMBER REQUIRED FOR DISPATCH	
30	ICE AND RAIN PROTECTION				
1.	Propeller Anti-Icing Systems	C	2	0	May be inoperative provided the airplane is not operated in known or forecast icing conditions.
2.	Engine Air Intake Anti-Icing System	B	2	1	One may be inoperative provided airplane is not operated in known or forecast icing conditions.
		B	2	0	May be inoperative for day VMC flight only provided airplane is not operated in known or forecast icing conditions.
3.	Wing/Tail Anti-Icing Systems				
	1) Automatic	C	1	0	May be inoperative provided Manual control operates normally.
	2) Manual	C	1	0	May be inoperative provided Automatic control operates normally.
	3) Automatic and Manual	B	2	0	May be inoperative provided aircraft is not operated in known or forecast icing conditions.
4.	Pitot/Static Heaters	B	2	1	One may be inoperative provided Aircraft is not operated in visible moisture nor in known or forecast icing conditions.

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30	ICE AND RAIN PROTECTION					
5.	Pitot/Static Heater Warning Lights	B	-	0	(M)May be inoperative provided:	
		C			a) Both heaters are verified operative before each departure.	
					OR	
					b) Airplane is not operated in visible moisture, nor known or forecast icing conditions.	
6.	Windshield Wipers	C	2	0	May be inoperative provided the airplane is not operated in precipitation within 5 nautical miles of the airport of takeoff or intended landing.	
7.	Windshield Heat Systems	C	2	0	May be inoperative provided the aircraft is not operated in known or forecast icing conditions.	
8.	Rain Repellent *** System	C	1	0	May be inoperative provided approach minimums do not require its use.	

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.		2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
31	INDICATING/RECORDING SYSTEMS						
1.	Clock(s)	C	-	1			One may be inoperative at either the pilot's or copilot's station.
2.	Flight Data Recorder (FDR)	A	1	0			May be inoperative provided: a) Cockpit Voice Recorder (CVR) operates normally, and b) Repairs are made within three flight days.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
32	LANDING GEAR				
1.	Antiskid System	C	1	0	(O)May be inoperative provided: a) Operations comply with AFM antiskid inoperative procedures and, b) AFM antiskid inoperative performance data is used.
2.	Downlock Visual Indicators				DELETED REV. 22.

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33	LIGHTS							
1.	Interior Emergency Exit Lighting System							
	1) All Cargo Configuration	D	1	0				
2.	Exterior Emergency Lighting System							
	1) Passenger Configuration	B	1	0			May be inoperative for day operations.	
	2) All Cargo Configuration	B	1	0				
3.	Position Lights System	C	1	0			May be inoperative for day operations.	
4.	Landing Lights	C	2	1			One may be inoperative for night operations provided taxi light operates normally.	
		C	2	0			May be inoperative for day operations.	
5.	Wing Illumination Lights	C	2	0			May be inoperative provided a portable lamp/light of adequate capacity for wing and/or control surface inspection is available for night operations in icing conditions.	
		C	2	0			May be inoperative for day operations.	
6.	Anti-Collision Lights (Red)	C	2	0			(0)May be inoperative for day operations.	

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33	LIGHTS			
7.	DELETED			
8.	Taxi Light	C 1	0	
9.	Passenger Loading Stair Light System	C 1	0	
10.	Flight Compartment and Instrument Lighting System	C 1	-	Individual lights may be inoperative provided remaining lights are: a) Sufficient to clearly illuminate all required instruments, controls, and other devices for which it is provided, b) Positioned so that direct rays are shielded from flight crewmembers eyes, and c) Lighting configuration and intensity is acceptable to the flight crew.
11.	Cabin Interior Illumination System	C 1	-	May be inoperative provided: a) Sufficient lighting is operative for the crew to perform required duties, and b) Lighting configuration at dispatch is acceptable to the flight crew.
1)	All Cargo Configuration (Class "E" Compartments)	D 1	0	

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33	LIGHTS					
12.	Passenger Notice System ("No Smoking/Fasten Seat Belt/Return to Cabin") Signs	C	-	-		(M) (O) No passenger, cabin attendant seat or lavatory may be occupied from which a "No Smoking/Fasten Seat Belt/Return to Cabin" sign is not readily legible or that seat or lavatory must be blocked and placarded - "DO NOT OCCUPY".
		C	-	-		(O) "No Smoking/Fasten Seat Belt/Return to Cabin" signs may be inoperative and the affected passenger seat(s), cabin attendant seat(s) or lavatories may be occupied provided: <ul style="list-style-type: none"> <li>a) PA system operates normally and can be clearly heard throughout the cabin during flight, and</li> <li>b) PA system is used to alert the cabin crew and to notify passengers when seat belts should be fastened and smoking is prohibited.</li> </ul>
	1) All Cargo Operations	D	1	0		
13.	Landing Gear Downlock Inspection Lights	C	3	1		Two may be inoperative provided: <ul style="list-style-type: none"> <li>a) Nose gear downlock inspection light operates normally during night operations, and</li> <li>b) A portable light/lamp of adequate capacity is available to illuminate the main gear downlock indicators.</li> </ul>
		C	3	0		May be inoperative for day operations.

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				3. NUMBER REQUIRED FOR DISPATCH	
33	LIGHTS				
14.	Baggage Compartment Light(s) (Passenger Aircraft Only)	C	-	0	May be inoperative provided a portable light/lamp of adequate capacity is available.
15.	Floor Proximity Emergency Escape Path Marking System	C	1	1	Individual lights may be inoperative provided FAA approved minimum acceptable lighting levels in one of the following documents are complied with: a) FAA engineering approval letter. OR b) FAA approved report of the type design holder. OR c) Limitations and Conditions section of the applicable Supplementary Type Certificate (STC). OR d) An FAA report incorporated in the Master Drawing List for the applicable STC.
		C			
		C			
		C			

NOTE: Not required for all cargo operations.

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34		NAVIGATION				
1.		Altimeters				
	1)	Basic Altimeters	C	-	2	May be inoperative provided: a) One altimeter operates normally at each pilot station, and b) At least one of the above is a pneumatic, or servo-pneumatic altimeter.
***	2)	Servo Pneumatic Altimeter Mode	C	-	0	(M)May be inoperative provided Altimeter remains in the pneumatic mode.  NOTE: Transponder mode "C" will be inoperative in barometric mode.
2.		DELETED				
3.		Standby Horizon Indicator	B	1	0	May be inoperative for day VMC operations only.
4.		DELETED				
5.		Turn and Slip Indicators	C	2	1	Turn function of one instrument may be inoperative provided two independent Attitude Indicators operate normally.
6.		Rate of Climb Indicator	C	2	1	One may be inoperative for day VMC operations only.
7.		Non-Stabilized Magnetic Compass	B	1	0	(O)May be inoperative provided any combination of three gyro or INS (IRU) stabilized compass systems operate normally.

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			3.	NUMBER REQUIRED FOR DISPATCH	
34	NAVIGATION				
7.	Non-Stabilized Magnetic Compass (Cont'd)	B	1	0	May be inoperative provided: a) Any combination of two gyro or INS (IRU) stabilized compass systems operate normally, and b) Airplane is operated with dual independent navigation capability and under positive radar control by ATC on the enroute portion of the flight. OR (O)May be inoperative for flights that are entirely within areas of magnetic unreliability provided at least two stabilized directional gyro systems operate normally and are used in conjunction with approved free gyro navigation techniques.
		C			
8.	Distance Measuring Equipment (DME)	C	-	-	As required by FAR.
9.	Weather Radar System	C	-	-	As required by FAR.
10.	ATC Transponders/ Automatic Altitude Reporting System	C	-	-	As required by FAR.
11.	Radio Compass (ADF) System	C	-	-	As required by FAR.
12.	VHF Navigation System (VOR/ILS)	C	-	-	As required by FAR.

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34	NAVIGATION				
13.	Glide Slope Receiver				DELETED, Rev. 22.
14.	Marker Beacon Receiver	C	- 0		May be inoperative provided approach minimums do not require its use.
15.	Outside Air Temperature Indicating System	C	- 0		May be inoperative provided an alternate air temperature indicator (TAT, SAT) operates normally.
16.	Airspeed Warning System	B	1 0		(O)May be inoperative provided the airplane remains at least 30 KIAS below Vmo.
17.	Flight Director Systems	C	2 0		May be inoperative provided approach minimums do not require their use.
18.	Instrument *** Comparator Warning System	C	1 0		(O)May be inoperative provided approach minimums do not require its use.
19.	Radio Altimeter System	A	- 0		May be inoperative provided: a) Dispatch deviation for ground proximity warning system is observed, b) Approach minimums or operating procedures do not require its use, and c) Repairs are made within two flight days
20.	Air Data Computer	A	1 0		(M)(O)May be inoperative provided: a) ATC altitude reporting is considered inoperative, b) Servo Altimeter is considered inoperative,

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			3.	NUMBER REQUIRED FOR DISPATCH	
34	NAVIGATION				
20.	Air Data Computer (Cont'd)				c) Autopilot is considered inoperative, d) Flight Director System is considered inoperative, e) GPWS is considered inoperative, and f) Repairs are made within two flight days.
21.	Ground Proximity Warning System (GPWS)				
1)	Terrain Avoidance (Modes 1 - 4)	A	1	0	(O)May be inoperative provided: a) Alternate Procedures are established and used, and b) Operations are limited to not more than two flight days before repair is made.
2)	Test Mode	A	1	0	May be inoperative provided: a) GPWS is considered inoperative, and b) Operations are limited to not more than two flight days before repair is made.
3)	Glideslope Deviation (Mode 5)	B	2	0	
*** 4)	Advisory Callouts (Minimums Warning)	C	-	0	(O)May be inoperative provided alternate procedures are established and used.
*** 5)	Windshear Mode	C	-	0	(O)May be inoperative provided alternate procedures are established and used.

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34	NAVIGATION			
22.	RMI			
	1) Heading Indication	C 2	1	One may be inoperative provided stabilized indication on the associated pilot's panel operates normally.
23.	Long Range Navigation Systems (INS, LORAN, GPS, etc.)	C -	-	As required by FAR.
24.	Microwave Landing System (MLS)	C -	-	As required by FAR.
25.	Altitude Alerting System	A -	0	(O)May be inoperative provided: a) Autopilot with altitude hold is operable, and b) Operations are limited to not more than three flight days before repairs are made.
26.	Windshear Alerting System	C -	-	(M)May be inoperative until required by FAR provided system is deactivated.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
34	NAVIGATION				
27.	Traffic Collision *** and Avoidance System (TCAS)	C	-	0	May be inoperative provided the system is deactivated and secured.
1)	Combined Traffic Alert (TA) and Resolution Advisory (RA) Dual Display	C	2	1	(O)May be inoperative on the non-flying pilot side provided: a) TA and RA elements and audio functions are operative on the flying pilot side, and b) TA and RA display indications are visible to the non-flying pilot.
2)	Resolution Advisory (RA) Display System(s)	C	2	1	(O)One may be inoperative on the non-flying pilot side.
		C	-	0	(O)May be inoperative provided: a) All Traffic Alert (TA) display elements and voice command audio functions are operative, and b) TA only mode is selected by the crew.
3)	Traffic Alert (TA) Display System(s)	C	-	0	(O)May be inoperative provided all installed RA display and audio functions are operative.
28.	Attitude Systems (Vertical Gyro, INS, IRU, etc.)	C	-	2	May be inoperative provided: a) An independent Attitude Reference source is available to each ADI, and b) Attitude Reference switching and selection capability operates normally.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
35	OXYGEN				
1.	Crew Oxygen System				DELETED, Rev. 22.
2.	Passenger Portable Oxygen System	B	-	-	As required by FAR.
3.	Protective Breathing Equipment (PBE) Smoke Hoods	D	-	-	Any in excess of those required by FAR may be inoperative provided: a) Inoperative unit is removed from passenger cabin, and b) Required distribution is maintained throughout the aircraft.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			3. NUMBER REQUIRED FOR DISPATCH		
49	AIRBORNE AUXILIARY POWER				
1.	Auxiliary Power *** Unit	C	1	0	
2.	APU Generator ***	C	1	0	
3.	APU Bleed Air ***	C	1	0	
4.	APU Caution and *** Warning Lights	C	5	0	May be inoperative provided APU is considered inoperative and not used.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
52 DOORS					
1. Door Warning Light System	B	-	0		(M)May be inoperative provided it is visually verified that all doors are closed and locked before each departure.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			3.	NUMBER REQUIRED FOR DISPATCH	
61 PROPELLERS					
1.	Synchronization System	C	1	0	
2.	High Stop Unsafe Light	B	1	0	May be inoperative provided: a) High Stop Switch remains in Normal position, b) HP lever remains in the High Stop Withdrawal position, and c) AFM speed limitations are observed.
3.	Propeller Brake	C	-	0	

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SYSTEM & SEQUENCE NUMBERS	ITEM	1. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH		4. REMARKS OR EXCEPTIONS
73	ENGINE FUEL & CONTROL					
1.	Fuel Flow Indicators	A	2	1		(O)One may be inoperative provided: a) Associated engine instruments and fuel quantity indicators operate normally, and b) Repairs are made within three flight days.
	1) Digital Readout (With STC ST247CH Installed)	C	2	0		
2.	Fuel Heaters					
	1) Automatic Mode	C	2	0		(M)(O)May be inoperative provided Manual mode is verified to operate normally.
3.	Fuel Temperature *** Indicators	C	2	0		

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
				3. NUMBER REQUIRED FOR DISPATCH	
77	ENGINE INDICATING				
	1. Torque Indicators				
	1) Digital Readout (With STC ST184CH Installed)	C	2	0	
	2. Tachometers				
	1) Digital Readout (With STC ST184CH Installed)	C	2	0	
	3. TGT Indicators				
	1) Digital Readout (With STC ST247CH Installed)	C	2	0	

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
				3. NUMBER REQUIRED FOR DISPATCH	
79	ENGINE OIL				
1.	Oil Pressure Warning Lights	B	2	1	(M)One may be inoperative off provided: a) Associated oil pressure, and oil temperature indicators operate normally, and b) Oil quantity is verified adequate before each departure.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			3.	NUMBER REQUIRED FOR DISPATCH	
82	WATER INJECTION				
1.	Water Methanol Systems	C	2	0	(O)May be inoperative provided AFM limitations and decrements are observed.
2.	Water Methanol Indicator Lights	C	2	1	(O)One may be inoperative provided it is verified that wet power is indicated on both torque meters.  NOTE: Not required for dry power operations.
3.	Water Methanol Quantity Indicator	C	1	0	(M) (O)May be inoperative provided: a) Water Methanol is not used, and b) AFM limitations and decrements for DRY operations are observed. OR c) Tank is verified full before each departure. OR d) Water Methanol quantity is verified adequate by an alternate procedure before each departure.
4.	Water Methanol Pumps	C	3	2	(M) (O)One pump may be inoperative provided: a) Pressure indicator lights operate normally, and b) Temperature remains at or below ISA +18 degrees C.
		C	3	0	(O)May be inoperative provided AFM limitations and decrements for DRY power are observed.