

DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

Revision: 2  
Date: 12/07/2000

WASHINGTON, D.C.

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

MARTIN M-404

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## MARTIN M-404

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Highlights of Change

Effective above date, the Martin M-404 Master Minimum Equipment List (MMEL) is revised. This is a complete revision, which is a result of an internal Federal Aviation Administration (FAA) review. Several new items are given relief in this revision. Current FAA MMEL Policy Letters are incorporated into this revision.

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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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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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FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

MARTIN M-404

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
21	AIR CONDITIONING				
1.	Cabin Pressurization System	C	1	0	(O)May be inoperative provided: a) Aircraft is operated in an accepted unpressurized configuration, and b) Aircraft is operated at or below 10,000 feet MSL.
2.	Cabin Pressurization Control System	C	1	0	May be inoperative provided aircraft is operated unpressurized.
3.	Cabin Altitude and Differential Pressure Indicator	C	1	0	May be inoperative provided aircraft is operated unpressurized.
4.	Cabin Differential Pressure Indicator				Combined with item 3.
5.	Cabin Rate Climb System	C	1	0	May be inoperative provided aircraft is operated unpressurized.
6.	Cabin Supercharger (S/C)	C	1	0	May be inoperative provided Cabin Pressurization System is considered inoperative.
7.	S/C Power Indicating System	C	1	0	May be inoperative provided Cabin Supercharger is considered inoperative.
8.	S/C Oil Temperature Indicating System	C	1	0	May be inoperative provided S/C is considered inoperative.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
21	AIR CONDITIONING				
9.	S/C Oil Pressure Indicating System	C	1	0	May be inoperative provided: a) S/C Oil Temperature Indicating System is operative, and b) S/C Oil Pressure Warning Light System is installed and operative.
		C	1	0	May be inoperative provided the S/C is considered inoperative.
10.	S/C Oil Pressure Warning Light System	C	1	0	May be inoperative provided the S/C Oil Pressure Indicating System is operative.
		C	1	0	May be inoperative provided the S/C is considered inoperative.
11.	Cabin Heating System	C	2	1	
12.	Temperature Control System				
	1) Manual Function	C	1	0	May be inoperative provided Cockpit Temperature remains above 50 F.
		C	1	0	May be inoperative provided Automatic Temperature Control is operative.
	2) Automatic Function	C	1	0	May be inoperative provided Manual Function is operative.
13.	Vent Fan	C	2	1	
14.	Cabin Cooling System	C	1	0	

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SYSTEM & SEQUENCE NUMBERS		1. ITEM	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
22		AUTO FLIGHT			
1.	Aircraft with only *** one Autopilot System installed	B	1	0	
***	Aircraft with two or more Autopilot Systems installed	C	1	0	
		B	-	0	
2.	Autopilot *** Disconnect Switch (Control Wheel Button)	C	2	1	One may be inoperative provided: a) With Autopilot engaged, the pilot controlling the airplane has an operative Disconnect Switch on his control wheel, and b) Autopilot is not used below 1500 feet AGL.

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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 Systems (VHF, HF UHF, etc.)	D	-	1	Any in excess of those required by FAR may be inoperative provided one Communications System powered by Essential Buses is operative.
2.	Passenger Address System				
	1) Passenger Configuration	B	1	0	(O)May be inoperative provided: a) Cabin Interphone System is operative, b) Alternate, Normal and Emergency procedures are established and used.
	2) Cargo Configuration	D	1	0	
3.	Cabin Interphone System				
	1) Passenger Configuration	C	1	0	(O)May be inoperative provided: a) Public Address (PA) System is operative, and b) Procedures do not required use of the Cabin Interphone System.
	2) Cargo Configuration	D	1	0	
4.	Speaker (Cockpit)	C	2	0	(O)Both may be inoperative provided: a) An operative headset is available for each person on flight deck duty, and b) Affected Speaker is not required for aural warning.
***					

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
23	COMMUNICATIONS				
5.	Cockpit Microphones *** (Boom and Handheld)				
	1) Handheld Microphones	D	- 0		May be inoperative provided associated Boom Microphone is operative.
	2) Boom Microphone				
	a) Cockpit Voice Recorder Equipped to Record Boom Microphone per FAR 121.359(e), 135.151(d), 125.227(e)	A	- 0		May be inoperative provided: a) Associated Hand Held Mike is operative, b) Flight Data Recorder (FDR) is operative, and c) Repairs are made within three flight days.
	b) Cockpit Voice Recorder Not Equipped to Record Boom Microphone	D	- 0		May be inoperative provided associated Hand Held Mike is operative.
*** 3)	Mask/Boom Microphone Selector SW	D	- 0		May be inoperative provided: a) Boom Mike is not required for Cockpit Voice Recorder, and b) Mask Mike is operative.
6.	Chime System ***	C	1 0		(O)May be inoperative provided: a) PA System is operative, and b) Alternate, Normal and Emergency procedures are established and used.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
23	COMMUNICATIONS				
7. ***	Handset (Cabin)	C	-	-	May be inoperative provided one is operative at each required Flight Attendant Station.
8. ***	ARINC Communications/ Addressing and Reporting System (ACARS)	C	1	0	(M) (O) May be inoperative provided: a) Affected System is appropriately secured, and b) Alternate operations procedures are established and used.
9. ***	Cockpit Voice Recorder (CVR)	A	1	0	May be inoperative provided: a) Flight data recorder is operative, and b) Repairs are made within three flight days.
	a) CVR without FDR installed	A	1	0	May be inoperative provided repairs are made within three flight days.

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SYSTEM & SEQUENCE NUMBERS		1. ITEM	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
24		ELECTRICAL POWER			
1.	Main Inverter	C	2	1	(M)One may be inoperative provided: a) Airplane is operated in Day VMC only, and b) Affected Inverter is secured using an accepted procedure.
2.	Inverter Failure *** Warning Light System	C	2	1	One may be inoperative provided AC Instrument Power Failure Indication is installed and operative.
		C	2	1	One may be inoperative provided Associated Main Inverter is considered inoperative.
3.	Alternators *** Instrument	C	2	1	One may be inoperative in Day VMC only.
4.	AC Instrument *** Power Failure Indication System	C	1	0	May be inoperative provided aircraft is operated in Day VMC only.

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25	EQUIPMENT/FURNISHINGS				
1.	Flight Attendant *** Seat Assembly (Single or Dual Position)				
	1) Seats Required By FAR	B	-	-	(M)(O)One Single or one Dual Position Seat Assembly may be inoperative provided: a) Affected Seat Position(s) is not occupied, b) Flight Attendants displaced by inoperative seat position(s) occupies the Passenger Seat(s) most accessible to their assigned exit, c) Alternate operations procedures are established for displaced Flight Attendant(s), d) Folding type seat that will not stow automatically 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".

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25	EQUIPMENT/FURNISHINGS				
1.	Flight Attendant Seats (Single or Dual Position) (Cont'd)				
*** 2)	Seats In Excess of Those Required By FAR	C	-	-	(M) (O) May be inoperative provided: a) Affected Seat Position(s) is not occupied, and b) Folding type seat that will not stow automatically is stowed or secured in the RETRACTED position.  NOTE 1: An automatic folding seat that will not stow automatically is considered inoperative.  NOTE 2: A seat position with an inoperative or missing lap belt is considered inoperative.  NOTE 3: Individual Operators, when operating with inoperative seats, will consider the locations and combinations of seats to ensure that the proximity to exits and distribution requirements of the applicable FAR are met.

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25	EQUIPMENT/FURNISHINGS				
2.	Passenger Seats	D	-	-	<p>May be inoperative provided:</p> <p>a) Seat does not block an Emergency exit,</p> <p>b) Seat does not restrict any passenger from access to the main aircraft aisle, and</p> <p>b) The affected seat(s) are blocked and placarded "DO NOT OCCUPY".</p> <p>NOTE 1: A seat with an inoperative seat belt is considered inoperative.</p> <p>NOTE 2: Inoperative seats do not affect the required number of Flight Attendants.</p> <p>NOTE 3: Affected seat(s) may include the seat(s) behind and/or adjacent outboard seats.</p>
1)	Recline Mechanism	D	-	-	<p>May be inoperative and seat occupied provided seat is secured in the up-right position.</p>
2)	Underseat Baggage Restraining Bars	D	-	-	<p>(O)May be inoperative provided:</p> <p>a) Baggage is not stowed under seat with inoperative restraining bar,</p> <p>b) Associated seat is placarded "DO NOT STOW BAGGAGE UNDER THIS SEAT", and</p> <p>c) Procedures are established to alert Cabin Crew of inoperative restraining bar.</p>

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25	EQUIPMENT/FURNISHINGS				
3.	Crewmember Shoulder C *** Harness	-	-	-	May be inoperative provided associated seat position is considered inoperative.
4.	Flotation Equipment C (Crew and Passenger)	-	-	-	Any in excess of those required by FAR may be inoperative.
5.	Emergency Locator Transmitter (ELT)	A	1	-	(M)May be inoperative provided: a) Affected ELT is deactivated or removed using accepted procedures, and b) Repair is made within FAR time limits.
6.	"Fasten Seat Belt While Seated" Sign or Placard	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.
7.	Cabin Emergency Flashlight and Holder (Flight Attendant Position)	C	-	-	May be inoperative provided crewmember assigned to the associated position has an operative flashlight readily available.

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25	EQUIPMENT/FURNISHINGS				
8.	Megaphones				
	1) Passenger Configuration	D	-	-	(M)Any in excess of those required by FAR may be inoperative provided: a) The inoperative megaphone is removed from the passenger cabin, and b) Required Distribution is maintained.
*** 2)	Cargo Configuration	D	-	0	
9.	Passenger Convenience Items (Passenger and Cargo Aircraft)		-	-	Passenger Convenience Items, as expressed in this MMEL, are those related to passenger convenience, comfort or entertainment such as, but not limited to, galley equipment, movie equipment, ash trays, stereo equipment, overhead reading lamps. 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.  NOTE: Lavatory Ash Trays are not to be included.
10.	Observer Seat (Including Associated Equipment)	A	-	1	May be inoperative provided: a) A passenger seat in the passenger cabin is available to an FAA inspector for the performance of official duties, and b) Repairs are made within two flight days.

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25	EQUIPMENT/FURNISHINGS				
11.	First Aid Kit	D	-	-	Any in excess of those required by FAR may be incomplete or missing provided required distribution is maintained.
12.	Exterior Lavatory Door Ashtrays				
	1) Airplanes with more then one exterior lavatory door ashtray installed	A	-	-	One may be missing provided it is replaced within 10 calendar days.
	2) Airplanes with only one exterior lavatory door ashtray installed	A	1	0	May be missing provided it is replaced within 3 calendar days.
13.	Galley Waste Receptacles Access Doors/Covers	C	-	-	(M)May be inoperative provided the container is empty and the access is secured to prevent waste introduction into the compartment.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
25	EQUIPMENT/FURNISHINGS				
14.	Cargo Restraint Systems	C	-	-	(M)May be inoperative, or missing such that the effect is that the item must be considered inoperative, provided acceptable cargo loading limits from an approved source, i.e., an Approved Cargo Loading Manual, or Weight and Balance Document are observed.
		C	-	-	May be inoperative, or missing such that the effect is that the item must be considered inoperative, provided cargo compartment remains empty.
		C	-	-	May be inoperative, or missing such that the effect is that the item must be considered inoperative, provided pallet with inoperative lock(s) is removed.

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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.	Portable Fire Extinguisher	D	-	-		Any in excess of those required by FAR may be inoperative 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.
2.	Fire Extinguisher *** Bottle Thermal Discharge Indicator Disks	C	2	0		(M)May be missing provided associated bottle charge is verified by an accepted maintenance procedure (such as weighing or gauge reading) once each flight day.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
26	FIRE PROTECTION				
3.	Lavatory Smoke Detection Systems	C	-	-	For each lavatory, the Lavatory Smoke Detection System may be inoperative provided Lavatory Fire Extinguisher System is operative.
		C	-	-	(M) (O) For each lavatory, the Lavatory Smoke Detection System may be inoperative provided: a) Lavatory waste receptacle is empty, b) Lavatory door is locked CLOSED and placarded, "INOPERATIVE - DO NOT ENTER", and c) Lavatory is not used for any purpose.
					NOTE 1: These provisos are not intended to preclude lavatory inspections by crewmembers.
					NOTE 2: Lavatory Smoke Detection Systems are 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				
4.	Lavatory Fire Extinguisher Systems	C	-	-	For each lavatory, the Lavatory Fire Extinguisher System may be inoperative provided Lavatory Smoke Detection System is operative.
		C	-	-	(M) (O) For each lavatory, the Lavatory Fire Extinguisher System may be inoperative provided: a) Lavatory waste receptacle is empty, b) Lavatory door is locked CLOSED and placarded, "INOPERATIVE - DO NOT ENTER", and c) Lavatory is not used for any purpose.
					NOTE 1: These provisos are not intended to preclude lavatory inspections by crewmembers.
					NOTE 2: Lavatory Fire Extinguisher Systems are not required for all-cargo operations.

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26	FIRE PROTECTION				
5. ***	Cargo Compartment Fire Detection/ Suppression Systems	C	- 0		May be inoperative provided associated cargo compartment remains empty.  NOTE 1: Does not preclude the carriage of empty cargo containers, pallets, ballast, etc.  NOTE 2: Class E cargo compartments require only the installation of smoke or fire detection systems (not suppression).

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
27	FLIGHT CONTROLS				
1.	Wing Flap Position *** Indicating System (Dual Needle)	B	2	1	(O)One may be inoperative provided procedures are established to visually check flap position before each takeoff after setting takeoff flaps.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
28	FUEL				
1.	Under Wing Fuel *** Quantity Indicating System	C	4	0	(O)May be inoperative provided: a) Fuel Quantity Indicating System (Cockpit) for associated tank is operative, and b) Alternate refueling procedures are established and used.
2.	Cockpit Fuel Quantity Indicating System	C	2	1	(O)One may be inoperative provided fuel quantity in the associated tank is determined by an accepted means before each departure.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
29	HYDRAULIC POWER				
1.	Main System Pressure Indicator (Cockpit)	C	2	1	Either the 1500 pound or the 3000 pound pressure indicator must be operating on the normal system.
2.	Electric Pump	C	1	0	May be inoperative a) Crew is advised that the rear pump must be operated by hand pump, and b) It is not required by FAR.
***					

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SYSTEM & SEQUENCE NUMBERS		1. ITEM	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
30	ICE AND RAIN PROTECTION				
1.	Wing And Tail Anti-Ice System	B	1	0	May be inoperative provided aircraft is not operated into known or forecast icing conditions.
2.	Heaters - Thermal *** Deicing	C	4	0	May be inoperative provided aircraft not operated in icing conditions.
3.	Propeller Deicing System	C	2	0	May be inoperative provided aircraft is not operated into known or forecast icing conditions.
4.	Windshield Heating *** System (NESA Panels)				
	1) Main Panels (Pilot's and Copilot's)	C	2	1	One may be inoperative provided the pilot's side is operative.
		C	2	0	May be inoperative provided aircraft is not operated in known or forecast icing conditions.
	2) Direct Vision (DV) Panels (Pilot's and Co-Pilot's)	C	2	1	One may be inoperative provided both Main Panels are operative.
		C	2	0	May be inoperative provided aircraft is not operated in known or forecast icing conditions.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
30	ICE AND RAIN PROTECTION				
5.	Pitot Heater System C	2	1	1	One may be inoperative provided: a) Aircraft is not operated in visible moisture with the static air temperature (SAT) below +4 Degrees C, b) Aircraft is not operated into known or forecast icing conditions, c) Aircraft is operated in VMC Conditions only, and d) Associated pitot heater switch remains OFF.
6. ***	Static Port Heater C System (For Airspeed)	4	3	3	One may be inoperative provided: a) Aircraft is not operated in visible moisture with the static air temperature (SAT) below +4 Degrees C, b) Aircraft is not operated into known or forecast icing conditions, and c) Aircraft is operated in VMC Conditions only.
7.	Windshield Wiper C System	1	0	0	May be inoperative provided aircraft is not operated in precipitation within 5 miles of the airport of takeoff of intended landing.
8. ***	Carburetor Alcohol C System	2	0	0	May be inoperative provided carburetor heat available and Temperature Indicator is operative.

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30	ICE AND RAIN PROTECTION				
9. ***	Pitot Heater Inoperative Indicating System	B	1	0	(M) (O)May be inoperative provided: a) All other Pitot Heat System Components are verified operative using an accepted procedure before each departure, b) Pitot Heater Loadmeter is operative, and c) Aircraft is not operated in known or forecast icing conditions.
		C	1	0	(O)May be inoperative provided associated Pitot Heat System is considered inoperative.

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31	INDICATING/RECORDING SYSTEMS						
1.	Clocks (Cockpit)	C	-	1			
2.	Flight Data *** Recorder (FDR) System	A	1	0		May be inoperative provided: a) Cockpit Voice Recorder (CVR) is operative, and b) Repair is made within 3 flight days.	
4.	Hobbs Hour Meter	C	1	0			

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
32	LANDING GEAR				
3. ***	Anti-Skid System	C	1	0	(M) (O) May be inoperative provided: a) Anti-Skid System is secured as necessary to assure no interference with the normal brake systems, and b) Aircraft is operated in accordance with AFM provisions for inoperative anti-skid.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
33	LIGHTS					
1.	Exterior Emergency Exit Light System	C	1	0		May be inoperative provided aircraft is not operated at night.
2.	Position Light Flasher System	C	1	0		
3.	Position Light System (Wing Tips and Tail)	C	1	0		May be inoperative provided aircraft is not operated at night.
4.	Wing Inspection 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 operation in icing conditions.
5.	Landing Lights	C	2	1		One may be inoperative provided a Taxi Light of 600 watts or greater is installed and operative.
		C	2	0		May be inoperative provided aircraft is not operated at night.
6.	Anti-Collision Light System	C	1	0		May be inoperative provided aircraft is not operated at night
7.	Taxi Light	C	1	0		May be inoperative provided both Landing Lights are operative.
		C	1	0		May be inoperative provided aircraft is not operated at night.
8.	Wheel Well Light	C	3	0		

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33	LIGHTS				
9.	Passenger Loading Stair Light	C	1	0	May be inoperative provided lighting sufficient to illuminate the steps is available.
		C	1	0	May be inoperative provided aircraft is not operated at night.
10.	Cockpit and Instrument Lighting Systems (Excluding EFIS and MFDS and Emergency Lighting)	C	-	-	May be inoperative provided: a) Sufficient lighting is operative to make each instrument, control and other device for which it is provided easily readable, b) Direct rays and reflections do not impair visibility either inside or outside of the aircraft, c) Lighting intensity can be controlled, or is preset to a satisfactory level for expected flight conditions, and d) Lighting configuration at dispatch is acceptable to the flight crew.
11.	Cabin Interior Lights	C	-	-	May be inoperative provided: a) Cabin emergency lighting is operative, b) Sufficient lighting is operative for crew to perform required duties, and c) Lighting configuration at dispatch is acceptable to flight crew.

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33	LIGHTS				
12.	No Smoking/ Fasten Seat Belt Signs				
	1) Passenger Configuration	C	-	-	May be inoperative provided Passenger or Flight Attendant Seats from which a readily legible NO SMOKING/FASTEN SEAT BELT sign cannot be seen are placarded inoperative and "DO NOT OCCUPY."
		C	-	-	(O)May be inoperative provided Operations procedures are established for alerting the cabin attendants and notifying the passengers by use of the Passenger Address System when seat belts should be fastened and smoking is prohibited.
	2) Cargo Configuration	D	-	0	
13.	Strobe Light System *** (Supplemental System)	C	1	0	
14.	Baggage Compartment Lights	C	-	-	May be inoperative provided Sufficient Lights are operative to illuminate the baggage compartment.
15.	Logo Light Systems ***	D	-	-	
16.	Nacelle *** Illumination Lights	C	2	0	

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33	LIGHTS				
17. Floor *** Proximity Escape Path Marking Lights System Light	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. b) FAA approved report of the Type Design holder. c) Limitations and Conditions section of the applicable Supplemental Type Certificate (STC). d) FAA approved report incorporated in the Master drawing list for the applicable STC.

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34	NAVIGATION				
1.	Turn and Slip Indicator (Turn Indication)	C	2	1	May be inoperative provided third Gyroscopic Bank and Pitch Indicator is installed and operative.
		C	2	1	May be inoperative provided aircraft is operated in Day VMC.
2.	Non-Stabilized Magnetic Compass	C	1	0	May be inoperative provided: a) Standby Compass is not required by AFM Limitations, and b) Two independent magnetic stabilized directional compass systems are operative.
3.	Automatic Direction Finding (AD) System	C	-	-	As required by FAR.
4.	VHF Navigation Systems (VOR, ILS)	C	-	-	As required by FAR.
5.	Marker Beacon Receiver System	C	-	-	May be inoperative provided Marker Beacon is not required for the approach to be flown.
6.	Outside Air Temperature (OAT) Indicating System	C	1	-	May be inoperative provided: a) OAT data is either available to or not required for other required systems, and b) Applicable FAR does not require OAT Indicating system for operation being conducted.

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34	NAVIGATION				
7.	Altitude Alerting System	A	-	0	(O)May be inoperative provided: a) Autopilot with altitude hold is operative, and b) Repairs are made within three flight days.
8.	Ground Proximity A Warning System (GPWS)	A	-	0	(O)May be inoperative provided: a) Alternate procedures are established and used, and b) Repairs are made within two flight days.
	1) Modes 1 - 4	A	-	0	(O) May be operative provided: a) Alternate procedures are established and used, and b) Repairs are made within two flight days.
	2) Test Mode	A	1	0	May be inoperative provided: a) The GPWS is considered inoperative, and b) Repairs are made within two flight days.
	3) Glideslope Deviation (Mode 5)	B	2	0	
***	4) Advisory Callouts	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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SYSTEM & SEQUENCE NUMBERS	ITEM	1. NUMBER INSTALLED		2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
34	NAVIGATION						
8.	Ground Proximity A Warning System (GPWS) (Cont'd)						
*** 6)	TAWS	C	-	0			
9.	Long Range Navigation Systems (INS, LORAN, VLF/ OMEGA, etc.)	C	-	-		As required by FAR.	
10.	TACAN System	C	-	-		As required by FAR.	
11.	Radio Altimeter System	C	-	-		(O)May be inoperative provided: a) Dispatch deviation for GPWS is observed, and b) Radio Altimeter is not required for the approach to be flown.  NOTE: Radio Altitude may be required for the Autopilot, GPWS, or Flight Director.	
12.	Radio Magnetic Indicator (RMI)	C	2	1		One may be inoperative provided affected HSI is not a Basic "T" instrument.	
13.	Standby Attitude Indicator (Third Attitude Indicator)	C	1	0			

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
34	NAVIGATION				
14.	Flight director *** System	C	2	0	(M)(O)May be inoperative provided: a) It is verified that the Command Bars will remain retracted, and b) Affected Flight director is not required for the approach to be flown.
15.	Vertical Speed Indicator	C	2	1	One may be inoperative provided aircraft is operated in Day VMC only.
16.	Attitude System Sensors (Vertical Gyro, AHRS, IRS, etc)	C	-	2	May be inoperative provided independent Primary Attitude information is available on each pilot's panel.
17.	Compass System Sensors (Directional Gyro, AHRS, IRS, etc.)	C	-	2	May be inoperative provided: a) Both Directional Compass Systems are operative from independent sources, and b) Each pilot's panel has independent heading information.
18.	Traffic Alert and Collision Avoidance System (TCAS I)	C	-	0	(M)May be inoperative provided the System is deactivated and secured.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			3.	NUMBER REQUIRED FOR DISPATCH	
34	NAVIGATION				
	Traffic Alert and Collision Avoidance System (TCAS II)	C	-	0	(M)May be inoperative provided the System is deactivated and secured.
***	1) Combined Traffic Alert (TA) and Resolution Advisory (RA) Dual Display	C	2	1	One may be inoperative on the non-flying pilot's side provided TA and RA audio functions are operative on the flying pilot's side.
	2) Resolution Advisory (RA) Display Systems	C	2	1	(O)One may be inoperative on the non-flying pilot's side.
		C	-	0	(O)May be inoperative provided: a) Traffic Alert (TA) visual display and audio functions are operative, and b) TA only mode is selected by the crew.
	3) Traffic Alert (TA) display System	C	-	0	(O)May be inoperative provided all installed RA display and audio functions are operative.
19.	Distance Measuring Equipment (DME) Systems	D	-	-	Any in excess of those required by FAR may be inoperative.
20.	Weather Radar	C	1	-	As required by FAR.
21.	ATC Transponder and Automatic Altitude Reporting Systems	C	-	-	As required by FAR.
		D	-	-	Any in excess of those required by FAR may be inoperative.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
34	NAVIGATION				
22. ***	Windshear Detection and Guidance System	C	-	0	(O)May be inoperative provided alternate procedures are established and used.
23. ***	Global Positioning System (GPS)	D	-	0	May be inoperative provided procedures 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
35	OXYGEN				
1.	Oxygen System (Cabin)				
	1) Passenger Configuration	C	-	-	As required by FAR.
	2) Cargo Only Configuration	C	-	0	May be inoperative provided no persons are carried in the cabin.
2.	Portable Oxygen Dispensing Unit	C	-	-	Any in excess of those required by FAR may be inoperative.
3.	Protective Breathing Equipment (PBE)	D	-	-	Any in excess of those required by FAR may be inoperative.

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SYSTEM & SEQUENCE NUMBERS		1. ITEM	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
49	AIRBORNE AUXILIARY POWER				
1.	Auxiliary Power	C	1	0	
***	Unit				

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
52	DOORS				
1.	Access Doors - Belly Access and Cargo Doors	B	8	8	*#If a hinge is broken on any of the eight belly access and cargo doors, the airplane may be dispatched PRESSURIZED provided all of the door locking arms are operating properly. If any locking mechanism malfunctions to the point that it does not engage within the detent, it must either be repaired or the airplane dispatched UNPRESSURIZED.
2.	Aft Passenger Ramp	C	1	1	*#The aft passenger ramp is not considered an emergency exit. If the ramp is hydraulically or electrically inoperative but can be opened or closed and locked manually, the airplane may be dispatched.

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SYSTEM & SEQUENCE NUMBERS		1. ITEM	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
61		PROPELLERS			
1.	Synchronization System	C	2	0	
2.	Reverse Pitch Indicating System	C	2	1	One may be inoperative provided associated reverse system is considered inoperative.
3.	Auto Feathering System	C	1	0	May be inoperative provided aircraft is operated in accordance with applicable AFM procedures.
4.	Propeller Pitch Limit Lights System				
***	1) Curtis Electric Propellers	C	2	0	
***	2) Hamilton Standard Propellers	C	2	0	(O)May be inoperative provided: a) Manifold Pressure indicating System for associated engine is operative, and b) Alternated operations procedures are established and used.
5.	Reverse System	A	2	0	(M)May be inoperative provided reverse system is deactivated.
***					
NOTE: Reference AFM Procedures and performance Sections for operations without Reverse.					

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SYSTEM & SEQUENCE NUMBERS		1. ITEM	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
73		ENGINE FUEL & CONTROL			
1.	Fuel Pressure Indicating System	C	2	1	May be inoperative provided: a) Associated Fuel Flow indicating System is operative, b) Associated Fuel Pressure Warning Light System is operative.
2.	Fuel Flow Indicating System	C	2	0	Both may be inoperative provided: a) Associated Fuel Quantity Indicating System is operative, and b) Associated Torque Indicating System is operative.
3.	Fuel Pressure Warning Light System	C	2	1	May be inoperative provided: a) Associated Fuel Pressure indicating System is operative, and b) Associate Fuel flow Indicating System is operative.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
77	ENGINE INDICATING				
1.	Torque Indicating System (BEMP)	C	2	1	(M) (O) One may be inoperative provided: a) Auto Feathering System is verified operative before each flight, and b) Alternate procedures are established and used to set Takeoff power.
		C	2	1	(O) One may be inoperative provided: a) Auto Feathering is considered inoperative, and b) Alternate procedures are established and used to set Takeoff power.
2.	Carburetor Air Temperature Indicating System	C	2	1	One may be inoperative provided: a) Associated Manifold Pressure Indicating System is operative, b) Fuel Flow Indicating System for associated engine is operative, c) Aircraft is not operated in visible moisture, d) Aircraft is not operated in known of forecast icing conditions.
3.	Cylinder Head Temperature Indicating System	C	2	1	One may be inoperative provided associated Oil Temperature indicating System is operative.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
77	ENGINE INDICATING				
4.	Manifold Pressure Indicating System	C	2	1	One may be inoperative provided associated Torque Indicating System is operative.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
79	ENGINE OIL				
1.	Oil Temperature Control System				
***	a) Automatic	C	1	0	May be inoperative provided Manual Control System is operative.
***	b) Manual	C	1	0	May be inoperative provided Automatic Control System is operative.
2.	Pressure Warning Lights	C	2	0	Both May be inoperative provided associated Oil Pressure Indicators are operative.
3.	Oil Temperature Indicators	C	2	1	One may be inoperative provided: a) Associated Oil Pressure Indicator is operative, and b) Associated Cylinder Head Temperature Indicators are operative.
5.	Oil Dilution	C	2	0	
***					
6.	Oil Quantity Indicators	C	2	0	Both may be inoperative provided: a) Associated Oil Temperature indicators are operative, b) Associated Oil Pressure indicators are operative, and c) Oil Tank Quantity is verified adequate at each flight.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
82	WATER INJECTION				
1.	Anti-Detonation *** Inspection (ADI) System	C	2	0	May be inoperative provided aircraft is operated in accordance with appropriate AFM procedures.
2.	ADI Fluid Quantity *** Indicating System	C	1	0	(M)May be inoperative provided ADI Tank quantity is verified adequate (Full or dipstick) before each flight.
		C	1	0	May be inoperative provided ADI System is considered inoperative.
3.	ADI Fluid Pressure Indicating System	C	1	0	May be inoperative provided ADI System is considered inoperative.
***	1) ADI Light	C	1	0	One may be inoperative provided associated ADI Pressure Gauge is operative.
	2) ADI Pressure Gauge	C	2	1	One may be inoperative provided associated ADI Light is operative.