

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

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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

Bell Helicopter

BH-429

/S/

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MASTER MINIMUM EQUIPMENT LIST

Revision:Original

Date:06/14/2010

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Highlights of Change

EFFECTIVE ABOVE DATE, the BH-429 Series Master Minimum Equipment List (Original) is established.

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Definitions

1. System Definitions.

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

a. "Item" (Column 1) means the equipment, system, component, or function listed in the "Item" column. Repair interval categories (A, B, C, and D) are listed on right side of column 1. Repair intervals are described in definition 22.

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 MMEL revision.

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 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. The term "14 CFR" may be substituted for "FAR" in MMELs or operator MELs.

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. As used in MMELs, "ER" refers to Extended Operations (ETOPS) of an airplane with operational approval to conduct ETOPS in accordance with the applicable regulations.

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 (structural) or in the engine(s) (induction).
 11. Alphabetical symbol in Column 4 indicates a proviso (condition or limitation) that must be complied with for 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 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" Deleted see NEF #30.

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. For time intervals specified in "calendar days" or "flight days," the day the malfunction was recorded in the aircraft maintenance record/logbook is excluded. For all other time intervals (flights, flight legs, cycles, hours, etc), repair tracking begins at the point when the malfunction is deferred in accordance with 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 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.

An operator who has the authorization to use an MEL also has the authority to approve extensions to the maximum repair interval for category B and C items provided the responsible Flight Standards District Office (FSDO) is notified within 24 hours of the MEL extension. The operator is not authorized to extend A and D items in the MEL. Misuse of the MEL extension authority may result in the operators OpSpecs/Mspecs being amended by removing the authority for the operator to use the MEL extension authority and/or use an MEL.

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 (747-400, 757, 767, 777, 787)

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

b. BOEING (B-717, MD-10, MD-11)

These 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 (A300-600, A310, A318/319/320/321, A330, A340, A380)

Airbus aircraft equipped with Electronic Centralized Aircraft Monitoring (ECAM) provide different levels of system condition messages {WARNING (red), CAUTION (amber)}. On A318/319/320/321, A330 and A340, the ECAM STATUS page also provides MAINTENANCE STATUS messages.

Any message that affects airplane dispatch is displayed at the WARNING or CAUTION level.

For A318/319/320/321, MAINTENANCE STATUS messages may also affect airplane dispatch.

System faults that result only in messages on the Central Maintenance System (CMS) (for A330, A340 and A380) or on the Centralized Fault Display System (CFDS) (for A318/319/320/321) do not affect airplane dispatch and do not require action other than as addressed within the operator's standard maintenance program.

d. FOKKER (FK-100)

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.

e. CANADAIR (CL-65, CL-604)

Canadair aircraft equipped with Engine Indication and Crew Alerting Systems (EICAS) provide four classes of messages (WARNING, CAUTION, ADVISORY, and STATUS). Any message that affects aircraft dispatch will be at the WARNING, CAUTION, or STATUS level. System conditions that only require maintenance are not visible to the flight crew. These maintenance indications/messages are only activated by maintenance personnel using the Maintenance Diagnostics Computer.

f. EMBRAER (EMB-135/145, ERJ-170/190 Series)

The EMB-135/145 and ERJ-170/190 are equipped with an Engine Indicating and Crew Alerting System (EICAS) that provides three different message levels: WARNING, CAUTION, and ADVISORY. The ERJ-170/190 Series add STATUS messages. Failures that effect dispatchability are presented to the flight crew at one of these levels. Other failures may be presented only to the maintenance personnel on the Multi Function Display (MFD) maintenance pages or through the download of the Central Maintenance Computer (CMC). System conditions that result only in a maintenance level message, i.e. no correlation with a higher level EICAS message, do not affect dispatch and do not require action other than as addressed within an operator's standard maintenance program.

g. GULFSTREAM (G-IV, G-V, GV-SP, GIV-X, G-150 and G-200)

Gulfstream airplanes equipped with EICAS provide different priority levels of system messages: WARNING (red), CAUTION (amber), ADVISORY, STATUS and MAINTENANCE (cyan or blue). Any WARNING or CAUTION message affects airplane dispatch status and requires that the Airplane Flight Manual or the MEL be used to determine dispatch capability. STATUS messages which indicate a system failure (e.g., FMS 1 fail) require that the Airplane Flight Manual or the MEL be used to determine dispatch capability. MAINTENANCE messages do not affect airplane dispatch status. They indicate the presence of a system fault which can be identified by Maintenance Data Acquisition Unit (MDAU on the G-V) interrogation, Central Maintenance Computer (CMC on the GV-SP/GIV-X) interrogation or by reference to the Airplane Flight Manual.

Gulfstream mid-cabin airplanes (G-150, G-200) equipped with EICAS provide different priority levels of system messages: WARNING (red), CAUTION (amber), ADVISORY (green), and STATUS (white). The Airplane Flight Manual prohibits take off with any WARNING message displayed. CAUTION, ADVISORY and STATUS messages may affect airplane dispatch status and requires the Airplane Flight Manual or the MEL be used to determine dispatch capability. The airplane may dispatch with CAUTION, ADVISORY and STATUS messages that indicate proper system operation and are not illuminated due to a system failure (i.e. FUEL STBY PUMP ON when the pump is selected ON, GND A/B OUT with LAND selected on the ground, or APU GEN OFF with the switch OFF). MAINTENANCE and MAINTENANCE DATA STATUS messages do not affect airplane dispatch status. They indicate the presence of a system fault which can be retrieved from the Maintenance Diagnostics Computer. In all cases, the Airplane Flight Manual must be referenced and procedures compiled with for the displayed message prior to applying MEL dispatch relief.

h. De-HAVILLAND (DASH 8 SERIES 400)

Series 400 aircraft are equipped with a Caution/Warning Panel that annunciates all cautions and warnings. Advisory messages are displayed by the Electronic Indication System (EIS) or individual advisory lights supplied in the cockpit. "Class 1 failures" are failures that prevent continued operation of a specific Line Replacement Unit or channel and are annunciates via advisory messages: caution, warning or advisory lights in the flight compartment. Dispatch with such posted failures are to be in accordance with the MMEL. "Class 2 failures" are failures which do not prevent continued system function. These faults will not be annunciates to the flight crew and the absence of the higher level alert (warning, caution, advisory) indicates that the system/component is operating within its approved operating limits or tolerances. Such faults would be evident during maintenance interrogation performed during maintenance activities. Class 2 faults do not affect dispatch and will be listed in the Fault Isolation Manual (FIM). Class 2 faults will be left to the discretion of the operators when these faults are to be rectified.

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 provides 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 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."

28. "Considered Inoperative", as used in the provisos means that item must be treated for dispatch, taxi and flight purposes as though it were inoperative. The item shall not be used or operated until the original deferred item is repaired. Additional actions include: documenting the item on the dispatch release (if applicable), placarding, and complying with all remarks, exceptions, and related MMEL provisions, including any (M) and (O) procedures and observing the repair category.

29. "Is not used" in the provisos, remarks or exceptions for an MMEL item may specify that another item relieved in the MMEL "is not used." In such cases, crewmembers should not activate, actuate, or otherwise utilize that component or system under normal operations. It is not necessary for the operators to accomplish the (M)

procedures associated with the item. However, operational requirements must be complied with, and an additional placard must be affixed, to the extent practical, adjacent to the control or indicator for the item that is not used to inform crewmembers that a component or system is not to be used under normal operations.

30. Nonessential equipment and furnishings (NEF) are those items installed on the aircraft as part of the original type certification, supplemental type certificate, or other form of alteration that have no effect on the safe operation of flight and would not be required by the applicable certification rules or operational rules. They are those items that if inoperative, damaged or missing have no effect on the aircraft's ability to be operated safely under all operational conditions. These nonessential items may be installed in areas including, but not limited to, the passenger compartment, flight deck area, service areas, cargo areas, crew rest areas, lavatories, and galley areas. NEF items are not items already identified in the MEL or CDL of the applicable aircraft. They do not include items that are functionally required to meet the certification rule or for compliance with any operational rule. Operator's NEF process shall not provide for deferral of items within serviceable limits identified in the manufacturer's maintenance manual or operator's approved maintenance program such as wear limits, fuel/hydraulic leak rates, oil consumption, etc. Cosmetic items that are fully serviceable but worn or soiled may be deferred under an operator's NEF process.

31. As used in MMELs, Heavy Maintenance Visit (HMV) is a scheduled C-check/D-check or airworthiness maintenance program inspection where the aircraft is scheduled to be out of service for 4 or more days.

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Preamble

Insert Preamble here. Use Policy Letter 36 (PL-36) Preamble for Part 91 operations MELs. Use Policy Letter 34 (PL-34) Preamble for all other MELs

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Guidelines for (O) & (M) Procedures

The FOEB has identified a need for certain procedures to provide an adequate level of safety while providing relief for some items. Those procedures must be established by the operator. The following guidelines specify the objectives of the required procedures:

- 21-1 (O) Procedure to ensure cockpit and cabin ventilation system is operative, or bleed air heater is operative.
- 21-2 (M) Procedure to deactivate the Bleed Air Heater system.
- 21-3 (M) Procedure to deactivate the Air Conditioner system.
- 21-5 (O) Procedure to ensure one DU cooling fan is operating.
- 22-1 (O) Procedure to ensure both Autopilot systems have been deactivated.
- 22-3 (O) Procedure to ensure collective trim is unlatched.
- 23-4 (O) Procedure to insure the passenger briefing can be provided orally by the pilot or by using the cabin ICS system.
- 24-1 (O) Procedure to ensure corresponding starter/generator is deactivated.
- 25-1 (M) Procedure to secure the passenger seat in the upright position and placarded "DO NOT OCCUPY".
- 25-9 (M) Procedure to deactivate the Hoist system.
- 25-10 (M) Procedure to deactivate the Forward Looking Infra Red (FLIR) system.
- 25-13 (M) Procedure to inspect and secure position flight crew seats.
- 26-1 (M) Procedure to placard the inoperative fire extinguisher(s) as inoperative, removed from installed location and placed out of sight so it cannot be mistaken for functional unit.

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- 28-1 (O) Procedure to ensure manual drain valve is verified closed prior to flight.
- 28-2 (O) Procedure to ensure transfer valve is verified open, and flight plan is based on 150 lbs of unusable fuel in forward tanks.
- 28-3 (O) Procedure to ensure OAT indicator is operative and fuel temperature is assumed to match OAT or alternate source is available.
- 28-4 (O) Procedure to ensure the valve is in closed position and the balance pump and fuel transfer pump are operational.
- 28-5 (O) Procedure to ensure the valve is in closed position, and the fuel transfer pump and balance pump are operative.
- 28-6 (O) Procedure to ensure the transfer valve is in open position.
- 31-4 (O) Procedure to ensure remaining ADIU channel is operational.
- 34-9 (O) Procedure to ensure both autopilot systems are deactivated.
- 52-1 (O) Procedure to ensure the Baggage door is closed and latched prior to flight.
- 52-2 (O) Procedure to ensure the Passenger door is closed and latched prior to flight.
- 52-3 (O) procedure to ensure the Aft door is closed and latched prior to flight.
- 63-1 (M) Procedure to disable rotor brake by securing the handle in the locked-off position. Verify by inspection the rotors pads are disengaged from the rotor disk and the rotor system is free to rotate. Placard the Rotor Brake as "INOPERATIVE".
- 63-2 (O) Procedure to ensure the transmission oil temperature display is operative.
- 63-3 (O) Procedure to ensure the oil pressure warning system is operative.

- 71-1 (O) Procedure to ensure that flights are not conducted in a dusty environment, the filter is serviceable, and the bypass door is operational.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			2.	3. NUMBER REQUIRED FOR DISPATCH	
21 AIR CONDITIONING					
1.	Defog Blower Fan	C	2	1	(O) May be inoperative provided Cockpit air vent is verified operative.
2.	Bleed Air Heater ***	C	-	0	(M) May be inoperative provided system is deactivated and secured.
3.	Air Conditioner ***	D	-	0	(M) May be inoperative provided system is deactivated and secured.
4.	Instrument Fan	A	1	0	May be inoperative per RFM provided planned flight OAT is less than 47°C.
5.	DU Fans	C	-	-	(O) One fan per DU may be inoperative.
6.	Avionics Blower	C	1	0	

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			2.	3. NUMBER REQUIRED FOR DISPATCH	
22 AUTO FLIGHT					
1	Autopilot (AP)	C	2	0	(O) May be inoperative for VFR provided: a) Both autopilot systems are deactivated, and b) Operations do not require its use.
2	Flight Directors	C	2	0	As required by FAR.
3 ***	Collective Trim	C	-	0	(M) May be inoperative provided collective trim checked unlatched.
4	Force Trim	B	1	0	May be inoperative for VFR.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			3. NUMBER REQUIRED FOR DISPATCH		
23	COMMUNICATIONS				
1 ***	Communications System (FM, HF, UHF, etc.)	C	-	0	As required by FAR.
2	Communications System (VHF-AM)	C	2	0	Any in excess of those required by FAR may be inoperative provided it is not powered by an Emergency DC Bus or, Battery Bus, and is not required for emergency procedures.
3	Cockpit Audio Control	C	1	0	May be inoperative provided: a) The aircraft is flown in single pilot operation, and b) All audio warnings in the pilot's headset function correctly.
4 ***	Cabin Intercom System	C	-	0	As required by FAR.
		C	-	0	(O) Any in excess of those required may be inoperative provided alternate procedures are established and used.
5 ***	Cockpit Voice Recorder With FDR (CVR+FDR)	A	-	0	May be inoperative provided: a) Flight Data recorder operates normally, and b) Repairs are made within three flight days.
	Cockpit Voice Recorder without FDR (CVR only)	A	-	0	May be inoperative provided repairs are made within three flight days.
	Cockpit Voice Recorder (CVR) installed for an Operator other than the holder of an Air Carrier, or Commercial Operator Certificate	A	-	0	May be inoperative provided repairs are made in accordance with applicable FAR's.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
23	COMMUNICATIONS					
6 ***	Aircraft Tracking System	C	-	0		
7 ***	External Loud Speaker	C	-	0		
8	Static Wicks	C	7	4		

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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		Starter / Generator (Generator function only)	B	2	1	(O) One Generator may be inoperative provided: a) Operations are restricted to VFR, and b) The associated starter/generator is deactivated.
2		Generator Ammeter	B	2	1	One Ammeter may be inoperative provided operations are restricted to VFR.
3		Generator Voltmeter	C	2	0	
4		Battery Voltmeter	C	1	0	

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2.	NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
25	EQUIPMENT/FURNISHINGS					
1	Passenger Seat(s)	D	-	0	(M) May be inoperative provided:	<p>a) Seat does not block access to an emergency exit,</p> <p>b) Seat does not restrict any passenger access to the main aircraft isle, and</p> <p>c) The affected seat(s) is blocked and placarded "DO NOT OCCUPY".</p> <p>Note - A seat with an inoperative safety belt or shoulder harness is classified as 'inoperative'.</p> <p>Note - The left seat, adjacent to the pilot's seat, for single pilot operations, is considered as a passenger seat.</p>
2	Non-Essential Equipment and Furnishings (NEF)	***	-	0	May be inoperative, damaged or missing provided that the item(s) is deferred in accordance with the operator's defect rectification and control procedures. The NEF policies are outlined in the operator's Maintenance Control Manual. (M) and (O) procedures, if required, must be available to the flight crew and included in the operator's appropriate document.	
3	Emergency Medical Service (EMS) Equipment	***	-	0	(M) and/or (O) procedures may be required.	
4	Emergency Locator Transmitter (ELT)	***	-	0	As required by FAR.	
5	Automatically Deployable Emergency Locator Transmitter (ADELT)	***	-	-	As required by FAR.	
6	Survival Emergency Locator Transmitter (ELT)	***	-	-	As required by FAR.	

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			3. NUMBER REQUIRED FOR DISPATCH		
25	EQUIPMENT/FURNISHINGS				
7 ***	Emergency Floatation System	C	-	0	As required by FAR.
8 ***	Life-rafts	C	-	-	As required by FAR.
9 ***	Hoist	C	-	0	(M) May be inoperative provided system is deactivated and secured.
10 ***	Forward Looking Infra Red (FLIR)	C	-	0	(M) May be inoperative provided system is deactivated and secured.
11 ***	Wire Strike Protection	D	-	0	
12 ***	Cargo Suspension System	D	-	0	
13	Flight Crew Seats				
	a) Fore/Aft adjustment	C	1	0	(M) May be inoperative provided seat is secured in a position acceptable to crew member and egress is not impaired.
	b) Height adjustment	C	1	0	(M) May be inoperative provided seat is secured in a position acceptable to crew member and egress is not impaired.

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SYSTEM & SEQUENCE NUMBERS	1. ITEM	1.	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
26	FIRE PROTECTION					
1 ***	Portable Fire Extinguisher	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
27	FLIGHT CONTROLS					
1	Airspeed Activated Pedal Stop (AAPS)	C	1	0		May in inactive provided (AAPS) is not in the engaged position, and the pilot maintains feet on pedals at all times.

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SYSTEM & SEQUENCE NUMBERS		1.	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
28 FUEL						
1	Solenoid Drain Valve System	D	3	0		(O) May be inoperative provided the drain valve is verified closed prior to flight, and an alternate procedure is used for draining fuel sumps.
2	Fuel Transfer Pump	C	1	0		(O) May be inoperative provided: a) Transfer valve is verified open, and b) Flight plan is based on 150lbs of unusable fuel in forward tanks as defined in RFM procedures.
3	Fuel Temperature Display	C	1	0		(O) May be inoperative provided: a) OAT indicator is operative, and b) Fuel temperature is understood to match OAT or alternate source is available. Note: If using Jet-A type fuel*, the fuel temperature, for the purpose of fuel temperature limitation, is assumed to be the coldest temperature to which the aircraft or fuel have been exposed during the previous eight hours. * Jet-A, Jet-A1, JP-5, JP-8, F34 & F44

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			1	0	
			3. NUMBER REQUIRED FOR DISPATCH		
28 FUEL					
4	Interconnect Valve	B	1	0	(O) May be inoperative provided: a) Adequate fuel quantity in forward and aft tanks is verified for the planned flight, b) Interconnect valve is verified in the closed position, and c) Balance pump, transfer valve and fuel transfer pump are operational.
5	Transfer Valve (Closed)	A	1	0	(O) May be inoperative for flight or series of flights to maintenance facility provided: a) Transfer valve is verified in the closed position, and b) Fuel transfer pump, and balance pump are operative. Note: Balance pump may be used during refueling.
6	Transfer Valve (Open)	B	1	0	(O) May be inoperative per RFM provided: a) Transfer valve is verified in the open position, and b) Flight plan is based on 150lbs of unusable fuel in forward tanks as defined in RFM procedures.
7 ***	Fuel Heater	C	-	0	May be inoperative provided anti-ice additive is used in accordance with RFM.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			2.	3. NUMBER REQUIRED FOR DISPATCH	
30	ICE AND RAIN PROTECTION				
1	Pitot / Static Port Heater System	C	2	1	May be inoperative for VFR.
		C	2	0	May be inoperative provided: a) OAT is above +4 degrees C, or b) No visible moisture is present below +4 degrees C.
2	Windshield Wipers	C	-	0	

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			3.	NUMBER REQUIRED FOR DISPATCH	
31	INDICATING/RECORDING SYSTEMS				
1	Clock Displaying Hours, Minutes and Seconds	C	1	0	As required by FAR.
2	Elapsed Timer	C	1	0	May be inoperative provided an alternate time source is available.
3	Hour Meter	C	1	0	
4	Aircraft Data Interface Unit (ADIU) Channel	A	2	1	(O) Only applicable for "ADIU A MAINT" or "ADIU B MAINT" Advisory Message. One may be inoperative for VFR provided remaining ADIU channel is fully operational. NOTE: Must be repaired within one day.
5	Display Unit (DU)	A	2	1	One may be inoperative for day VFR provided: a) The standby instruments are operative, and b) The flight is conducted to a maintenance facility. NOTE: Must be repaired within one day.
6	3rd Display Unit (DU) ***	C	-	0	As required by FAR.
7	Health Usage Monitoring System (HUMS) ***	D	-	0	
8	Hanger Bearing Monitoring ***	D	-	0	
9	Flight Data Recorder ***	C	-	0	Any in excess of those required by FAR may be inoperative.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			1	0	
			3. NUMBER REQUIRED FOR DISPATCH		
33	LIGHTS				
1	Position Lights	C	1	0	As required by FAR.
2	Anti - Collision Light	B	1	0	As required by FAR.
3	Landing Light	C	1	0	As required by FAR.
4	Secondary Landing Light	C	1	0	As required by FAR.
***	(Search light)				
5	Cockpit Instrument Lighting System	C	1	0	May be inoperative for daylight operations.
		C	1	0	For night operations individual lights may be inoperative provided remaining lights are:
					a) Sufficient to clearly illuminate all required instruments, controls and other devices for which lighting is provided,
					b) Positioned so that direct rays are shielded from flight crew member's eyes, and
					c) Lighting configuration and intensity are acceptable to the flight crew.
6	Cockpit Utility Light System	C	1	0	May be inoperative for day operations.
		C	1	0	May be inoperative for night operations provided either the cockpit instrument lighting system or the emergency instrument light is operable.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
					3. NUMBER REQUIRED FOR DISPATCH
33	LIGHTS				
7	Cabin Lighting System	C	-	0	May be inoperative for daylight operations. May be inoperative provided: a) No passengers are carried, or b) For night operations, inoperative lights do not exceed fifty (50) percent of the total installed.
		C	-	-	
8	Baggage Bay Lights	C	4	0	
9	Emergency Instrument Lighting System	C	3	0	May be inoperative for daylight operations.
		B	3	0	May be inoperative for night operations provided both the cockpit instrument lighting system and the cockpit utility light are operable.
10	External Utility Light(s)	C	-	0	

11	Supplemental Lighting System	C	-	0	

12	NVG Compatible Lighting System	C	-	-	Unaided operation(without NVG's)may be permitted with inoperative NVG supplemental lights; cracked or missing filters, provided the remaining lights are: a) Sufficient to clearly illuminate all required instruments, controls, and other devices for which they are provided. b) Positioned so that direct light rays are shielded from flight crew members eyes, and c) Lighting configuration and intensity are acceptable to the flight crew.

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SYSTEM & SEQUENCE NUMBERS	1. ITEM	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
33 LIGHTS				
13 Strobe Light ***	C	-	0	

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			3. NUMBER REQUIRED FOR DISPATCH		
34	NAVIGATION				
1	ATC Transponder	C	-	0	As required by FAR.
2	Navigation Equipment ***				
	a) (VOR / ILS, GPS)	C	2	-	Any navigation function in excess of those required by FAR may be inoperative.
	b) (ADF, RMI, etc.)	C	-	0	As required by FAR.
3	Skid and Slip Indicator	C	-	0	As required by FAR
4	OAT Display System	C	2	0	May be inoperative provided alternate onboard OAT source is available and Vne limitations are observed per placard as described in the RFM.
5	Standby Attitude Indicator	C	1	0	May be inoperative provided not required by FAR.
		B	1	0	May be inoperative provided: a) Operations are conducted in day VMC only, and b) Operations are not conducted into known or forecast over-the-top conditions.
6	Standby Airspeed Indicator	B	1	0	May be inoperative for VFR operations only, provided both ADHARS are operational.
7	Standby Altimeter	C	1	0	May be inoperative for VFR operations only, provided both ADHARS are operational.
8	Marker Beacon	C	1	0	As required by FAR.

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			3. NUMBER REQUIRED FOR DISPATCH		
34	NAVIGATION				
9	Air Data Heading Reference System(ADAHRS) Channel	B	2	1	(O) One may be inoperative for day VFR provided both autopilot systems are deactivated.
10	Radar Altimeter ***	C	-	0	As required by FAR.
11	DME Systems ***	C	-	0	Any in excess of those required by FAR may be inoperative.
12	Standby compass	C	-	0	May be inoperative for VFR provided at least one direction indication is displayed.
13	Weather Radar System ***	C	-	0	As required by FAR.
14	Moving map display ***	C	-	0	
15	Thunderstorm/ lightning *** detection system	C	-	0	
16	Flight Management System ***	C	-	0	
17	Enhanced Ground Proximity *** Warning System (EGPWS)	C	-	0	
18	Traffic Collision Alert *** System (ie. TCAS, TCAD etc.)	C	-	0	As required by FAR.

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SYSTEM & SEQUENCE NUMBERS	1. ITEM	1.	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
35	OXYGEN					
1. ***	Oxygen System and Masks (Crew and Passengers)	C	-	0		As required by FAR.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			3.	NUMBER REQUIRED FOR DISPATCH	
52	DOORS				
1	Baggage Door Caution System	C	1	0	(O) Baggage door caution system may be inoperative provided the door is closed and latched prior to flight.
2	Passenger Door Caution System	C	1	0	(O) Door caution system may be inoperative provided the door is closed and latched prior to flight.
3 ***	Aft Doors Caution (Clamshell) System	C	-	0	(O) Door caution system may be inoperative provided the door is closed and latched prior to flight.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			2.	3. NUMBER REQUIRED FOR DISPATCH	
63	ROTOR DRIVE				
1 ***	Rotor Brake System	C	-	0	(M) May be inoperative provided rotor brake master cylinder is secured or de-activated and inspection is performed to determine that the rotor is free.
2	Transmission Oil Sensor System	B	2	1	(O) May be inoperative provided the transmission oil temperature is displayed. NOTE: See ATA 31-4 for ADIU channel
3	Transmission Oil Pressure Indicating System	B	1	0	(O) May be inoperative provided the transmission oil pressure warning system is verified operative.

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SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			2.	3. NUMBER REQUIRED FOR DISPATCH	
71	POWERPLANT				
1 ***	IBF Pressure Transducer	C	2	0	(O) May be inoperative provided: a) Filter is serviceable, b) Bypass door is operational (Bypass door may be open when additional engine power margin is required), and c) Flying in severe dusty environment is avoided.
2 ***	IBF Bypass Door	C	2	0	May be inoperative provided the bypass door is in the fully open position.