

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

Revision: ORIGINAL  
Date: 12/22/2004

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

BH-427

Federal Aviation Administration  
FTW-AEG FSDO  
FORT WORTH, TX 76193-0270

TELEPHONE: (817) 222-5270  
FAX: (817) 222-5295

BH-427

## Table of Contents

SYSTEM NO.	SYSTEM	PAGE
--	Table of Contents	I
--	Log of Revisions	II
--	Control Page	III
--	Highlights of Change	IV
--	Definitions	V, VI, VII, VIII
--	Definitions	IX, X, XI, XII
--	Preamble	XIII, XIV
--	Guidelines for (O) & (M) Procedures	XV, XVI
21	Air Conditioning	21-1
23	Communications	23-1
24	Electrical Power	24-1
25	Equipment/Furnishings	25-1, 2
26	Fire Protection	26-1
27	Flight Controls	27-1
28	Fuel	28-1, 2
30	Ice and Rain Protection	30-1
31	Indicating/Recording Systems	31-1
33	Lights	33-1, 2
34	Navigation	34-1, 2
35	Oxygen	35-1
52	Doors	52-1
65	Rotors	65-1
71	Powerplant	71-1

BH-427

Log of Revisions

-----  
| REV.NO. | DATE | PAGE NUMBERS | INITIALS |  
-----

-----

BH-427

## Control Page

SYSTEM	PAGE	REV NO.	CURRENT DATE
Cover Page	-	ORIGINAL	12/22/2004
Table of Contents	I	ORIGINAL	12/22/2004
Log of Revisions	II	ORIGINAL	12/22/2004
Control Page	III	ORIGINAL	12/22/2004
Highlights of Change	IV	ORIGINAL	12/22/2004
Definitions	V	6	01/31/1995
	VI	6	01/31/1995
	VII	6	01/31/1995
	VIII	6	01/31/1995
	IX	6	01/31/1995
	X	6	01/31/1995
	XI	6	01/31/1995
	XII	6	01/31/1995
Preamble	XIII	2	06/14/1989
	XIV	2	06/14/1989
Guidelines for (O) & (M) Procedures	XV	ORIGINAL	12/22/2004
	XVI	ORIGINAL	12/22/2004
21	21-1	ORIGINAL	12/22/2004
23	23-1	ORIGINAL	12/22/2004
24	24-1	ORIGINAL	12/22/2004
25	25-1	ORIGINAL	12/22/2004
	25-2	ORIGINAL	12/22/2004
26	26-1	ORIGINAL	12/22/2004
27	27-1	ORIGINAL	12/22/2004
28	28-1	ORIGINAL	12/22/2004
	28-2	ORIGINAL	12/22/2004
30	30-1	ORIGINAL	12/22/2004
31	31-1	ORIGINAL	12/22/2004
33	33-1	ORIGINAL	12/22/2004
	33-2	ORIGINAL	12/22/2004
34	34-1	ORIGINAL	12/22/2004
	34-2	ORIGINAL	12/22/2004
35	35-1	ORIGINAL	12/22/2004
52	52-1	ORIGINAL	12/22/2004
65	65-1	ORIGINAL	12/22/2004
71	71-1	ORIGINAL	12/22/2004

BH-427

Highlights of Change

BH-427

## 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

BH-427

Definitions

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

BH-427

## Definitions

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

BH-427

Definitions

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

BH-427

## Definitions

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,

BH-427

## Definitions

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)

BH-427

Definitions

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

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

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

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

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

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

BH-427

## Definitions

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."

BH-427

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.

BH-427

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.

BH-427

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:

- 21-3 (M) Procedure to deactivate and secure bleed air heater.
- 21-4 (M) Procedure to deactivate and secure air conditioner.
- 21-5 (O) Refer to RFM operating limitations.  
(M) Procedure to deactivate and secure IIDS Fan(s).
- 23-4 (O) Procedure to establish alternate means for passenger notification of normal and emergency procedures.
- 24-1 (M) Procedure to deactivate and secure generator.
- 24-3 (M) Procedure to determine adequate starting voltage.
- 27-1 (M) Procedure to de-activate, secure and disengage the AAPS system.
- 28-1 (O) Procedure to verify that fuel drain solenoid valve is closed.
- 28-3 (M) Procedure to verify remaining fuel transfer pump and fuel transfer control unit (FTCU) are both operative.  
(O) Procedure to create flight plans based on a known quantity of unusable fuel in the aft fuel cell.
- 28-4 (O) Procedure to determine the fuel temperature.
- 28-5 (O) Dual Channel Failure  
Procedure to verify operation of transfer pumps, the interconnect valve, and procedure to maintain aircraft c.g. within acceptable limits.

BH-427

Guidelines for (O) & (M) Procedures

Single Channel Failure

- (M) Procedure to verify remaining fuel transfer pump and fuel transfer control unit (FTCU) are both operative.
- 28-6 (M) Procedure to verify that the fuel interconnect valve is in the "closed" position, and verify operation of the transfer pumps and both channels of the FTCU.
- 65-1 (M) Procedure to inspect, de-activate and secure the rotor brake system.
- 71-1 (M) Procedure to secure particle separator bleed air to "closed" position to inhibit the supply of bleed air to the particle separator purge line.

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

BH-427

REVISION NO: ORIGINAL

PAGE:

DATE: 12/22/2004

21-1

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			3. NUMBER REQUIRED FOR DISPATCH		
21	AIR CONDITIONING				
1.	Fresh Air Vent	C	2	1	
2.	Defog Air Blower	C	2	-	May be inoperative provided: a) Bleed Air Heater (Item 21-3) is installed and operative. OR b) Air Conditioner (item 21-4) is installed and operative.
3.	Bleed Air Heater ***	C	-	0	(M) May be inoperative provided system is deactivated and secured.
4.	Air Conditioner ***	C			(M) May be inoperative provided system is deactivated and secured.
5.	IIDS Cooling Fans	C			(O) Refer to RFM for operating limitations. (M) May be inoperative provided system is deactivated and secured.

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

BH-427

REVISION NO: ORIGINAL

PAGE:

DATE: 12/22/2004

23-1

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
23	COMMUNICATIONS				
1.	Communications Systems (FM, HF, UHF, VHF, etc.)	C	-	0	As required by FAR.
2.	Headset	C	-	1	Pilot's must be operative.
3.	ICS				
***	1) Cockpit	C	-	1	Copilot's may be inoperative for single pilot operations.
	2) Cabin	C	-	0	
4.	Cabin Public Address System	C	-	0	(O)May be inoperative provided: a) Alternate normal and emergency procedures and/or operating restrictions are established and utilized for passenger notification. OR b) For nonpassenger carrying operations.
***					
5.	Cockpit Voice Recorder (CVR)	A	-	0	May be inoperative provided repairs are made within three flight days.
***					
6.	External Loud Speaker	C	-	0	
***					

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

BH-427

REVISION NO: ORIGINAL

PAGE:

DATE: 12/22/2004

24-1

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			3. NUMBER REQUIRED FOR DISPATCH		
24	ELECTRICAL POWER				
1.	Starter/Generator (Generator Function Only)	B	2	1	(M) One may be inoperative for day VFR provided the inoperative generator is deactivated and secured.
2.	Generator Voltmeter(s)	C	2	0	
3.	Battery Voltmeter	C	1	1	(M) May be inoperative provided alternate means of assuring starting voltage is determined.
4.	Ammeter	C	2	1	One may be inoperative provided operative ammeter and respective Generator (Item 24-1) are both operative.
5.	Generator I/ Generator II Caution Message(s)	C	2	0	May be inoperative provided respective Ammeter (Item 24-4) and Voltmeter (Item 24-2) are operative.

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

BH-427

REVISION NO: ORIGINAL

PAGE:

DATE: 12/22/2004

25-1

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			-	0	
			3. NUMBER REQUIRED FOR DISPATCH		
25 EQUIPMENT/FURNISHINGS					
1. ***	Helicopter Flotation Devices	C	-	0	As required by FAR.
2.	Passenger Seat Belts and Shoulder Harnesses Devices	C	-	0	One for each occupied seat. If inoperative or missing, seat must be blocked & placarded.
3. ***	First Aid Kit	D	-	-	Any in excess of those required by FAR may be incomplete or missing provided required distribution is maintained.
4. ***	Emergency Locator Transmitter (ELT)	C	-	0	As required by FAR.
5. ***	EMS Equipment	C	-	0	May be inoperative provided system is deactivated and secured. (M) and/or (O) procedures may be required and included in the air carrier's appropriate document.
6. ***	Sonic Locator	C	-	0	
7. ***	Forward Looking Infra Red (FLIR)	C	-	0	
8. ***	Hoist System	C	-	0	
9. ***	Aerial Camera System (i.e. Wescam)	C	-	0	
10 ***	Cargo Suspension System	C	-	0	

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

BH-427

REVISION NO: ORIGINAL

PAGE:

DATE: 12/22/2004

25-2

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
25	EQUIPMENT/FURNISHINGS				

11.	Passenger *** Convenience Item(s)	C	-	0	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, etc. Items addressed elsewhere in this document shall not be included. (M) and/or (O) procedures may be required and included in the air carrier's appropriate document.
-----	---	---	---	---	---

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

BH-427

REVISION NO: ORIGINAL

PAGE:

DATE: 12/22/2004

26-1

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
26	FIRE PROTECTION				

1.	Engine Fire Extinguisher Agent Bottles	B	2	1	One Fire Extinguisher Agent bottle may be inoperative.
----	--	---	---	---	--

2.	Portable Fire Extinguisher	D	-	-	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.

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

BH-427

REVISION NO: ORIGINAL

PAGE:

DATE: 12/22/2004

27-1

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)	B	1	0	May be inoperative provided: (M) a) AAPS System is de-activated and secured, and b) Comply with RFM VNE limitations for AAPS inoperative.
----	--------------------------------------	---	---	---	---

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

BH-427

REVISION NO: ORIGINAL

PAGE:

DATE: 12/22/2004

28-1

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			3. NUMBER REQUIRED FOR DISPATCH		
28	FUEL				
1.	Solenoid Drain Valve System	D	4	0	(O) May be inoperative provided the manual drain valve is verified closed prior to flight.
2.	Fuel Flow *** Indicator	C	-	0	May be inoperative provided flight is not predicated on its use.
3.	Fuel Transfer Pump	C	2	1	May be inoperative provided: (M) a) The remaining pump and its associated FTCU channel are verified operative, and B) The interconnect valve is maintained in the open position, and (O) c) Flight planning is based on quantity of unusable fuel in the aft tank as defined in the RFM procedures for Dual Transfer Pump Failure.
4.	Fuel Temperature Display	C	1	0	(O) May be inoperative provided an alternate means is used to determine the fuel temperature.

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

BH-427

REVISION NO: ORIGINAL

PAGE:

DATE: 12/22/2004

28-2

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
28	FUEL				

5.	Fuel Transfer Control Unit (FTCU)	B	1	0	(O) Dual Channel Failure May be inoperative provided: a) Both transfer pumps are verified operative, b) The interconnect valve is verified operative, and c) An alternate procedure is used to maintain aircraft CG within acceptable limits.
----	-----------------------------------	---	---	---	---

		C	1	0	Single Channel Failure May be inoperative provided: a) The affected transfer pump is selected to "OFF". (M) b) The remaining pump and its associated FTCU channel are verified operative, and c) The interconnect valve is maintained in the open position.
--	--	---	---	---	---

6.	Fuel Interconnect Valve	B	1	0	(M) May be inoperative in the closed position provided both Transfer Pumps and both FTCU channels are verified operative.
----	-------------------------	---	---	---	---

		B	1	0	May be inoperative in the open position.
--	--	---	---	---	--

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

BH-427

REVISION NO: ORIGINAL

PAGE:

DATE: 12/22/2004

30-1

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			3. NUMBER REQUIRED FOR DISPATCH		
30	ICE AND RAIN PROTECTION				
1.	Pitot Tube Heat	C	2	0	May be inoperative provided aircraft is not operated in visible moisture with OAT below 4 degrees C (40 degrees F).
3.	Static Port Heaters	C	2	0	May be inoperative provided aircraft is not operated in visible moisture with OAT below 4 degrees C (40 degrees F).

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

BH-427

REVISION NO: ORIGINAL

PAGE:

DATE: 12/22/2004

31-1

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
31	INDICATING/RECORDING SYSTEMS					
1.	Clock Displaying Hours, Minutes, and Seconds.	C	-	1		Operative clock must be located on the instrument panel in a position that makes it plainly visible to, and usable by, any pilot at the pilot's station.
		C	-	0		May be inoperative provided Elapsed Timer (item 31-2) is operative.
2.	Elapsed Timer	C	-	0		May be inoperative provided Clock is operative.
3.	Hour Meter ***	C	-	0		
4.	IIDS Sensor Sources for:					May be inoperative provided:
	Np	B	2	1		a) Only one sensor per engine is inoperative,
	or					OR
	Ng	B	2	1		b) Only one Nr sensor is inoperative.
	or					
	Nr	B	2	1		
	or					
	MGT	B	2	1		
	or					
	Engine Torque	B	2	1		
5.	Rotor RPM Warning Horn Mute System	C	1	0		May be inoperative provided Horn sounds properly at 70-95% Nr, but does not sound above 95% Nr.
6.	Aircraft/Engine *** Monitoring System	D	-	0		
7.	Vibration *** Monitoring System	D	-	0		

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

BH-427

REVISION NO: ORIGINAL

PAGE:

DATE: 12/22/2004

33-1

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			3. NUMBER REQUIRED FOR DISPATCH		
33	LIGHTS				
1.	Position Light System	C	1	0	May be inoperative for day operations.
2.	Anti-Collision Light System	B	1	0	May be inoperative for day operations.
3.	Landing/Search Light System	C	1	0	May be inoperative for day operations.
4.	Cockpit/Flight Deck/Flight Compartment and Instrument Lighting System	C	-	-	Individual lights may be inoperative provided remaining lights are: a) Sufficient to clearly illuminate all required instruments, controls, and other devices for which it is provided, b) Positioned so that direct rays are shielded from flight crewmembers eyes, and c) Lighting configuration and intensity is acceptable to the flight crew.
5.	Cockpit Emergency Instrument Light	C	1	0	May be inoperative for day operations  OR May be inoperative for night operations provided the Cockpit/Flight Deck/Flight Compartment and Instrument Lighting System (item 33-4) and Cockpit Utility Light (item 33-6) are operative.

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

BH-427

REVISION NO: ORIGINAL

PAGE:

DATE: 12/22/2004

33-2

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
33	LIGHTS				
6.	Cockpit Utility Light	C	1	0	May be inoperative for day operations OR May be inoperative for night Operations provided the Cockpit/ Flight Deck/Flight Compartment and Instrument Lighting System (Item 33-4) and Cockpit Emergency Light (Item 33-5) are operative.
7.	Cabin Lighting System	C	1	0	May be inoperative provided: a) For day operations only. OR b) Inoperative lights do not exceed fifty (50) percent of the total installed.
8.	Search Light *** System	C	-	0	
9.	Supplemental *** Lighting System	C	-	0	
10.	Strobe Light System ***	C	-	0	
11.	External Utility *** Light(s)	C	-	0	
12.	High Intensity *** Search Light (i.e. SX5, SX16, etc.)	C	-	0	

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

BH-427

REVISION NO: ORIGINAL

PAGE:

DATE: 12/22/2004

34-1

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			3. NUMBER REQUIRED FOR DISPATCH		
34	NAVIGATION				
1. ***	Gyroscopic Bank and Pitch Indicator	B	-	0	As required by FAR.
2. ***	Gyroscopic Direction Indicator	B	-	0	As required by FAR.
3. ***	Gyroscopic Rate- of-Turn Indicator	B	-	0	As required by FAR.
4.	Slip-Skid Indicator	B	1	0	As required by FAR.
5. ***	Horizontal Situation Indicator	C	-	0	As required by FAR.
6. ***	Slaved Compass System	C	-	0	
7.	OAT/Free Air Temperature Indicator	C	1	0	May be inoperative provided temperature can be obtained from an approved alternate onboard source.
8. ***	Navigation Systems (VOR, ILS, ADF, GPS, etc.)	C	-	0	As required by FAR.
9. ***	Marker Beacon	C	-	0	May be inoperative provided approach is not predicated on its use.
10. ***	DME	C	-	0	May be inoperative provided navigation is not predicated on its use.
11. ***	Flight Director	C	-	0	

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

BH-427

REVISION NO: ORIGINAL

PAGE:

DATE: 12/22/2004

34-2

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
34	NAVIGATION				
12. ***	ATC Transponder	C	-	0	As required by FAR.
13. ***	Altitude Encoding System	C	-	0	As required by FAR.
14. ***	Radio Altimeter	C	-	0	As required by FAR.
15. ***	Thunderstorm Detection System	C	-	0	As required by FAR.
16. ***	Traffic Alert/ Advisory Systems (i.e., TCAS, TCAD, TAS, etc.)	C	-	0	

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

BH-427

REVISION NO: ORIGINAL

PAGE:

DATE: 12/22/2004

35-1

SYSTEM & SEQUENCE NUMBERS	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.
----	---	---	---	---	---------------------

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

BH-427

REVISION NO: ORIGINAL

PAGE:

DATE: 12/22/2004

52-1

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
52	DOORS				

1.	Baggage Door Caution System	C	1	0	Baggage door caution system may be inoperative provided it is determined through a physical check that door is closed and latched prior to flight.
----	--------------------------------	---	---	---	--

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

BH-427

REVISION NO: ORIGINAL

PAGE:

DATE: 12/22/2004

65-1

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
65 ROTORS					
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 brake disk is free.	
2. Transmission Oil Temperature Warning Light system	B	1	0	May be inoperative provided: a) Transmission oil temperature indicating system is operative, and b) Transmission oil pressure indicating and warning light systems are operative.	
3. Transmission Oil Pressure Warning Light System	B	1	0	May be inoperative provided: a) Transmission oil pressure indicating system is operative, and b) Transmission oil temperature indicating and warning light systems are operative.	
4. Transmission Oil Temperature Indicating System	B	1	0	May be inoperative provided: a) Transmission oil temperature warning light system is operative, and b) Transmission oil pressure indicating and warning light systems are operative.	
5. Transmission Oil Pressure Indicating System	B	1	0	May be inoperative provided: a) Transmission oil pressure warning light system is operative, and b) Transmission oil temperature indicating and warning light systems are operative.	

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

BH-427

REVISION NO: ORIGINAL

PAGE:

DATE: 12/22/2004

71-1

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
71	POWERPLANT				

1.	Engine Air Particle Separator Purge System	C	1	0	(M) May be inoperative provided bleed air for Particle Separator is secured in "closed" position.
----	--	---	---	---	--

