TRANSPORT CANADA DAY/NIGHT VFR OPERATIONS MASTER MINIMUM EQUIPMENT LIST BELL MODEL 427 HELICOPTER FRONT SHEET

Revision A

Approved

A/Chief, Flight Test, Aircraft Certification, For Minister of Transport

Revision A Dated:

7 May 2003

Original Issue – January 30, 2001

MASTER MINIMUM EQUIPMENT LIST
BELL MODEL 427 HELICOPTER

Revision A May 7, 2003

Page I

LIST OF EFFECTIVE PAGES

| Title Page | Page No. | Page Revision |
|---|----------|------------------|
| List of Effective pages | I | Revision A |
| Log of Revisions | II | Original release |
| Temporary Revision Log | III | Original release |
| Preamble | IV | Original release |
| Preamble | V | Original release |
| Definitions | VI | Original release |
| Definitions | VII | Original release |
| Definitions | VIII | Original release |
| Definitions | IX | Original release |
| Definitions | X | Original release |
| Definitions | XI | Original release |
| Guidelines for (O) and (M) Procedures | XII | Revision A |
| Guidelines for (O) and (M) Procedures | XIII | Revision A |
| Highlights of Change | XIV | Revision A |
| ATA 21 - Air Conditioning | 21-1 | Original release |
| | 21-2 | Revision A |
| ATA 22 - Auto Flight | 22-1 | Original release |
| ATA 23 - Communications | 23-1 | Original release |
| ATA 24 - Electrical Power | 24-1 | Original release |
| ATA 25 - Equipment Furnishings | 25-1 | Original release |
| | 25-2 | Original release |
| ATA 27 - Flight Controls | 27-1 | Original release |
| ATA 28 - Fuel | 28-1 | Original release |
| | 28-2 | Original release |
| ATA 30 - Ice and Rain Protection | 30-1 | Original release |
| ATA 31 - Indicating / Recording Systems | 31-1 | Revision A |
| ATA 33 - Lights | 33-1 | Original release |
| | 33-2 | Original release |
| ATA 34 - Navigation | 34-1 | Original release |
| | 34-2 | Original release |
| ATA 35 - Oxygen | 35-1 | Original release |
| ATA 52 - Doors | 52-1 | Original release |
| ATA 63 - Rotor Drive | 63-1 | Original release |
| ATA 71 - Powerplant | 71-1 | Original release |

Original Release

Page II

MASTER MINIMUM EQUIPMENT LIST BELL MODEL 427 HELICOPTER

January 30, 2001

LOG OF REVISIONS

When revisions are received and inserted, record the relevant information in the appropriate columns of the LOG OF REVISIONS below:

| Revision Number | Date | Page Number | Initials |
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TRANSPORT CANADA MASTER MINIMUM EQUIPMENT LIST BELL MODEL 427 HELICOPTER TEMPORARY REVISION LOG

Page III Original Release January 30, 2001

Retain this index in the front of the MMEL. When temporary revisions are issued or cancelled, enter the relevant information in the columns below.

| Temp Rev Number | Date Inserted | Revision Removed | Subject Page Number |
|-----------------|---------------|------------------|---------------------|
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Original Release January 30, 2001

Page IV

PREAMBLE

All equipment installed on an aircraft in compliance with the Airworthiness Standards and the Operating Rules must be operative and in compliance with the airworthiness standards defined in type certificate data sheet H103 for day/night VFR flight. However, CAR 605.07 permits the publication of a Minimum Equipment List (MEL) where compliance with certain equipment requirements is not necessary in the interest 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 the required level of safety.

A Master Minimum Equipment List (MMEL) is developed by Transport Canada, with participation by the aviation industry, to improve aircraft utilization and thereby provide more convenient and economic air transportation for the public. The approved MMEL includes those items of equipment related to airworthiness and operating regulations and other items of equipment Transport Canada deems fit to remain inoperative and yet maintain the required level of safety by appropriate conditions and limitations; it does not contain obviously required items such as rotor blades and engines. The MMEL is the basis for development of individual operator MEL's which take into consideration the operator's particular aircraft equipment, configuration and operational conditions. Operator MEL's for configuration control, may include items not contained in the MMEL; however, relief for administrative control items must be approved. 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 airworthiness 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 Airworthiness Directives. It is important to remember that all equipment related to the airworthiness and the operating regulations of the aircraft not listed in the MMEL must be operative.

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 the required level of safety is maintained.

Page V Original Release January 30, 2001

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 the required 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. The item is then either repaired or deferred per the MEL. Note that in the event of a conflict between the MEL and the requirements of an Airworthiness Directive (AD), the Airworthiness Directive prevails [See CAR 605.09(2)]. Also note that the requirements of the MEL may not apply to an aircraft that is operated in compliance with the conditions of a flight permit that has been issued specifically for that purpose.

[See CAR 605.08(2)].

MEL conditions and limitations do not relieve the operator from determining that the aircraft is in a condition for safe operation with items of equipment inoperative. [See CAR 605.08(1)].

When these requirements are met, an Airworthiness Release, Aircraft Maintenance Record/Logbook entry, or other approved documentation is issued. 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 the required level of safety is maintained. When operating with multiple inoperative items the interrelationship 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.

DEFINITIONS

Page VI Original Release January 30, 2001

1. System Definition.

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.

NOTE: Where the MMEL shows a variable number installed, the MEL must reflect the actual number installed or an alternate means of configuration control must be approved by Transport Canada.

- 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 approved means of configuration control approved by Transport Canada.
- d. "Remarks or Exceptions" (Column 4) includes a statement either prohibiting or permitting operation with a specific number of items inoperative, (conditions and limitations) for such operation, and appropriate notes.
- e. References given in Column 4 are to bring attention to certain interrelationships between the subject item and other MMEL items or AFM material. These references are intended to assist with compliance but do not relieve the operator of responsibility for determining such other interrelationships, as stated in the preamble.

DEFINITIONS

Page VII Original Release January 30, 2001

- f. 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.
- g. A revision (change) bar adjacent to an item or page number indicates that the item or page was renumbered only and that no technical content change was made in the text.
- 2. "Airplane/Rotorcraft Flight Manual" (AFM/RFM) is the document required for type approval and approved by Transport Canada. The approved AFM / RFM for the specific aircraft is listed on the applicable Type Data Approval Sheet.
- 3. "As required by regulation" means that the listed item is subject to certain provisions (restrictive or permissive) expressed in the Canadian Aviation Regulations, the Airworthiness Manual or other operating rules. The number of items required by such a rule must be operative. Items installed that are in excess of the requirements may be permitted by the operator's MEL to be inoperative if not otherwise required by the MMEL.
- 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.
 - NOTE: Where the MMEL shows a variable number installed, the MEL must reflect the actual number installed or an alternate means of configuration control approved by Transport Canada.
- 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.

DEFINITIONS

Page VIII Original Release January 30, 2001

- 7. "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.
- 8. "Icing Conditions" means an atmospheric environment that may cause ice to form on the aircraft or in the engine(s).
- 9. Alphabetical symbol in Column 4 indicates a proviso (condition or limitation) that must be complied with for operation with the listed item inoperative.
- 10. "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 tolerances.
- 11. "NOTES:" in Column 4 provides additional information for crew member or maintenance consideration. Notes are used to identify applicable material which is intended to assist with compliance but does not relieve the operator of the responsibility for compliance with all applicable requirements. Notes are not a part of the provisos.
- 12. 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).
- 13. "(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 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.

Page IX Original Release January 30, 2001

DEFINITIONS

- 14. "(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 Transport Canada.
- 15. "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.
- 16. 'Visual Flight Rules' (VFR) is as defined in the CAR's. This precludes a pilot from filing an Instrument Flight Rules (IFR) flight plan.
- 17. "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.
- 18. "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.
- 19. "Passenger Convenience Items" means those items related to passenger convenience, comfort or entertainment such as, but not limited to, galley equipment, movie equipment, ashtrays, stereo equipment, overhead reading lamps, etc.
- 20. "Day of Discovery" is the calendar day an equipment/instrument malfunction was discovered. 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".

Page X Original Release

January 30, 2001

MASTER MINIMUM EQUIPMENT LIST BELL MODEL 427 HELICOPTER

DEFINITIONS

21. Repair Intervals: All users of a MEL 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 within this category shall be repaired within (3) consecutive calendar days excluding the day of discovery. For example, if it were discovered 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 excluding the day of discovery. For example, if it were discovered at 10 a.m. on January 26th, the ten-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 excluding the day of discovery.

22. "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 provided no relief is granted, or to provide conditions and limitations 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 Transport Canada. If the request results in review and approval, the item becomes a MMEL item rather than an administrative control item.

DEFINITIONS

Page XI Original Release January 30, 2001

- 23. "***" 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. The "***" symbol maybe considered equivalent to the term "if installed".
- 24. "Excess Items" means those items that have been installed and are redundant to the requirements.

Page XII Revision A May 7, 2003

Guidelines for (O) and (M) Procedures

A need has been identified 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 (M) Procedure to deactivate and secure bleed air heater
- 21-2 (M) Procedure to deactivate and secure air conditioner.
- 21-3 (O) Procedure to note change in OAT limitation
- 21-4 (O) Procedure to note change in OAT limitation
- 24-1 (M) Procedure to deactivate and secure generator.
- 24-1 (O) Procedure for flight planning to ensure a suitable landing site is within specified flying time.
- 25-1 (M) Procedure to block and placard seats to prevent use by passengers.
- 25-5 (M) Procedure to secure and de-activate the emergency floatation system.
- 27.1 (O) Procedure to add placard to instrument panel, stating V_{ne} is per airspeed activated pedal stop (AAPS) system failure.
 - (M) Procedure to de-activate, secure and disengage the AAPS system.
- 28-1 (O) Procedure to verify that fuel drain solenoid valve is closed.
 - (O) Procedure to manually drain fuel sumps.
- 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 verify that the OAT indicator is operative and that OAT is used to determine fuel temperature for fuel temperature limit calculations.

TRANSPORT CANADA MASTER MINIMUM EQUIPMENT LIST

BELL MODEL 427 HELICOPTER

Revision A May 7, 2003

Page XIII

Guidelines for (O) and (M) Procedures

(O) Procedure to establish the coldest temperature that the aircraft or fuel have been exposed to during the 8 hours prior to flight.

28-5 Dual channel Failure

- (M) Procedure to verify operation of transfer pumps.
- (M) Procedure to verify operation of the interconnect valve.
- (O) Procedure to maintain aircraft c.g. within acceptable limits.

28-5 <u>Single channel Failure</u>

- (M) Procedure to verify operation of both transfer pumps and the serviceable FTCU channel.
- (O) Procedure to maintain aircraft c.g. within acceptable limits.
- 28-6 (M) Procedure to verify that the fuel interconnect valve is in the 'closed' position.
 - (M) Procedure to verify operation of transfer pumps and both channels of the FTCU (fuel transfer control unit).
 - (O) Procedure to create a flight plan based on the quantity of unusable fuel in the aft following a dual transfer pump failure.
- 31-5 (M) Procedure to check all IIDS alternate sensors to confirm that the total number of inoperative sensors is not greater than 1.
- 34-5 (O) Procedure to set the heading for the gyro-stabilized heading indicator.
- 63-1 (M) Procedure to inspect, de-activate and secure the rotor brake system.
- 63-2 (M) Procedure to verify the transmission oil temperature warning light system is operative.
- 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.

Page XIV Revision A May 7, 2003

Highlights of Changes

| Revision | Date | Description |
|----------|---------------|---|
| A | April 8, 2003 | Allows relief for dispatch with one or two IIDS Cooling Fans inoperative. |

| Aircraft: | • | | | Page Rev | ision I | No Original Release Page: 21-1 |
|-----------|--------------------|-----|-----------|-------------|---------|--|
| Bell Mo | del 427 Helicopter | | | Date - Jan | uary : | 30th, 2001 |
| System 8 | & | 1 | 2. Number | r Installed | | |
| Sequenc | | RIC | | | r Regi | uired For Dispatch |
| Numbers | | | | | 4. Re | marks or Exceptions |
| 21 | AIR CONDITIONING | | | | | · |
| 1 | Bleed Air Heater | D | - | 0 | (M) | May be inoperative provided system is deactivated / secured. |
| 2 *** | Air Conditioner | D | • | 0 | (M) | May be inoperative provided system is deactivated / secured. |
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| Aircraft | !: | | | Page Rev | ision l | No. A Page: 21-2 |
|----------|--------------------|-----|-----------|-------------|---------|--|
| Bell Mo | del 427 Helicopter | | | Date - Ma | y 7, 20 | 003 |
| System | & | 1 | 2. Number | l Installed | | |
| Sequen | | RIC | | | r Regu | uired For Dispatch |
| Number | 'S | |] | | 4. Re | emarks or Exceptions |
| 21 | AIR CONDITIONING | | | | | |
| 3 | IIDS Cooling Fans | С | 2 | 1 | (O) | One fan may be inoperative provided Maximum sea level ambient air temperature for operation is +42.2C (+108F) and decreases with Hp at a standard lapse rate of 2C (3.6F) per 1,000 ft. IIDS operation on ground is limited to 25 minutes for OAT above +41.5C (+106.7F) |
| 4 | IIDS Cooling Fans | C | 2 | 0 | (O) | Both fans may be inoperative provided Maximum sea level ambient air temperature for operation is +42.2C (+108F) and decreases with Hp at a standard lapse rate of 2C (3.6F) per 1,000 ft. IIDS operation on ground is limited to 25 minutes for OAT above +41.5C (+106.7F) |
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| Aircraft | t: | | | Page Rev | ision No Original Release | Page 22- 1 |
|----------|--------------------|-----|----------|-------------|---------------------------|------------|
| Bell Mo | del 427 Helicopter | | | | nuary 30th, 2001 | |
| System | 8 | 11: | 2 Numbe | r Installed | | |
| Sequen | ce | RIC | L. Humbe | 3. Numbe | r Required For Dispatch | |
| Number | 'S | | | | 4. Remarks or Exceptions | |
| 22 | AUTO FLIGHT | | | | | |
| 1 | Autopilot | D | - | 0 | | |
| 2 | SAS | D | - | 0 | | |
| 3 | Force Trim System | D | - | 0 | | |
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| Aircraft: Bell Model 427 Helicopter | | Page Revision No Original Release Page 23-1 Date - January 30th, 2001 | | | |
|--|---|---|----------|---|---|
| System Sequen Number | ce | 1 RIC | 2. Numbe | | r Required For Dispatch 4. Remarks or Exceptions |
| 23 | COMMUNICATIONS | | | | |
| 1 | Communications System (FM, HF, UHF, VHF,etc.) | D | - | 0 | As required by regulations |
| 2 | Cockpit / Cabin Speaker | D | - | 0 | As required by regulations |
| 3 | Intercom System | С | - | 0 | May be inoperative provided the aircraft is flown in single pilot operation and all audio warnings in the pilot's headset function correctly. |
| 4 | External Loud Speaker | D | - | О | |
| 5 | Cockpit Voice Recorder | D | - | 0 | |
| 6 | Flight Data Recorder | D | <u>-</u> | 0 | |
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| Aircraft: Bell Model 427 Helicopter | | Page Revision No Original Release Page 24-1 Date - January 30th, 2001 | | | |
|--|--|---|-----------|---|--|
| System Sequen Number | ce | 1 RIC | 2. Number | | r Required For Dispatch 4. Remarks or Exceptions |
| 24 | ELECTRICAL POWER | | | | · |
| 1 | Starter / Generator (Generator function only) | Α | 2 | 1 | (M) One generator may be inoperative for daytime flight (O) for a flight, or series of flights to a base where repairs can be made provided:- (a) With the 17 Ah battery installed the A/C is within 20 minutes flying time of a suitable landing area, or, (b) With the 28 Ah battery installed the A/C is within 35 minutes flying time of a suitable landing area. |
| 2 | Generator Voltmeter | D | 2 | 0 | |
| 3 | Battery Voltmeter | C | 1 | 0 | |
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| Bell Model 427 Helicopter | | | Date - January 30th, 2001 | | |
| <u> </u> | 1 | 2. Number | l r Installed | | |
| e | RIC | | | er Required For Dispatch | |
| S | | | | 4. Remarks or Exceptions | |
| EQUIPMENT / FURNISHING | S | | | | |
| Passenger Seat(s) | D | - | 0 | May be inoperative provided:- (a) The seat does not block access to an emergency exit, and (M) (b) The affected seat(s) is not used and is blocked and placarded "DO NOT OCCUPY". Note - A seat with an inoperative safety belt or shoulder harness is classified as 'inoperative'. Note - The left seat, adjacent to the pilots seat, for single pilot operations, is considered as a passenger seat. | |
| Passenger Convenience Item(s) Note - PCI items to be listed in the operators MEL. | N/A | - | 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, ash trays, stereo equipment, overhead reading lamps, etc. Items addressed elsewhere in this document shall not be included. (M) and (O) procedures may be required and included in the operator's appropriate documentation. | |
| Emergency Medical Service (EMS) Equipment | D | - | 0 | (M) and/or (O) procedures may be required. | |
| Emergency Locator Transmitter (ELT) | C D D | - | 0 0 0 | (a) If required by regulations.(b) If not required by the regulations.(c) If in excess of that required by regulations. | |
| Emergency Floatation System | D | - | 0 | May be inoperative provided:- (a) A/C operation does not depend on serviceable float system to maintain level of safety. (M) (b) System is secured and de-activated to prevent inadvertent operation. | |
| | Passenger Convenience Item(s) Note - PCI items to be listed in the operators MEL. Emergency Medical Service (EMS) Equipment Emergency Locator Transmitter (ELT) Emergency Floatation | Passenger Convenience N/A Item(s) Note - PCI items to be listed in the operators MEL. Emergency Medical D Service (EMS) Equipment Emergency Locator C Transmitter (ELT) D Emergency Floatation D | Passenger Convenience N/A ltem(s) Note - PCI items to be listed in the operators MEL. Emergency Medical Service (EMS) Equipment Emergency Locator C Transmitter (ELT) D - Emergency Floatation D - | Date - Ja Date - Ja | |

| | Aircraft: Bell Model 427 Helicopter | | | Page Revision No Original Release Page 25-2 Date - January 30th, 2001 | | |
|--------------------------|--|----------|-----------|---|---|--|
| Systen Seque Numbe | nce | 1 RIC | 2. Number | | Required For Dispatch 4. Remarks or Exceptions | |
| 25 | EQUIPMENT / FURNISHING | 3S | | | | |
| 6 | Sonic Locator | D | - | 0 | | |
| 7 | Forward Looking Infra Red (FLIR) | D | - | 0 | | |
| 8 | Night Sun | D | - | 0 | | |
| 9 | TV Camera | D | - | 0 | | |
| 10 | Litter Kit | D | - | 0 | | |
| 11 | Cargo Suspension System | D | - | 0 | | |
| 12 *** | Hoist | D | - | 0 | | |
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| Aircraft: Bell Model 427 Helicopter | | Page Revision No Original Release Page 27-1 Date - January 30th, 2001 | | | |
|--|---|---|--------|------------------------|--|
| System Sequence Numbers | e | 1 2 RIC | | Installed 3. Number | Required For Dispatch 4. Remarks or Exceptions |
| 27 | FLIGHT CONTROLS | | | | • |
| 1 | Airspeed Activated Pedal Stop (AAPS) | В | 1 | 0 | May be inoperative provided:- (O) (1) Vne placarded to RFM limit for pedal stop failure. (M) (2) System is de-activated, secured and disengaged. |
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|--------------------------------|--------------------------------|----------|-----------|--|---|--|--|
| System & Sequenc Numbers | e | 1 RIC | 2. Number | r Installed 3. Number Required For Dispatch 4. Remarks or Exceptions | | | |
| 28 | FUEL | | | | | | |
| 1 | Solenoid Drain Valve System | С | 4 | 0 | May be inoperative provided:- (O) (a) The drain valve is verified closed prior to flight, and (O) (b) An alternate procedure is used for draining fuel sumps. | | |
| 2 | Fuel Flow Indicator | D | - | О | | | |
| 3 | Fuel Transfer Pump | С | 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 the quantity of unusable fuel in the aft tank as defined in the M427 RFM procedures for <i>Dual Transfer Pump Failure</i>. | | |
| 4 | Fuel Temperature Display | С | 1 | 0 | May be inoperative provided:- (O) (a) OAT indicator is operative and used to determine fuel temperatures, and (O) (b) 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. | | |

| Aircraft: | | | | Page Revision No Original Release Page 28-2 | | | |
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| Bell Mod | del 427 Helicopter | | | Date - Jar | nuary 30th, 2001 | | |
| System Sequence Numbers | e | 1 2. Number | | r Required For Dispatch 4. Remarks or Exceptions | | | |
| 28 | FUEL | | | | | | |
| 5 | Fuel Transfer Control Unit (FTCU) | В | 1 | 0 | Dual Channel Failure - may be inoperative provided:- (M) (a) Both transfer pumps are verified operative, and (M) (b) The interconnect valve is verified operative (O) (c) An alternate procedure is used to maintain aircraft Cg within acceptable limits. | | |
| | | С | 1 | 0 | Single Channel Failure - may be inoperative provided:- (M) (a) Both transfer pumps and the remaining FTCU channel are verified operative, and (b) The interconnect valve is maintained in the open position, and (O) (c) An alternate procedure is available to maintain aircraft Cg within acceptable limits. (d) The affected transfer pump is selected to 'OFF'. | | |
| 6 | Fuel Interconnect Valve | В | 1 | 0 | May be inoperative provided:- (M) (a) Valve is verified in closed position (M) (b) Both transfer pumps and both FTCU channels are verified operative. (O) (c) Flight planning is based on the quantity of unusable fuel in the aft tank as defined in the M427 RFM for Dual Transfer Pump Failure. | | |

| Aircraft: Bell Mod | Aircraft: Bell Model 427 Helicopter | | | | ision No Original Release Page 30-1 nuary 30th, 2001 |
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| System 8 | | | 2. Number | | |
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| Numbers | | | | Ì | 4. Remarks or Exceptions |
| 30 | ICE AND RAIN PROTECTION | ON | | | |
| 1 | Pitot / Static Port Heater | D | 1 | 0 | May be inoperative for day VFR provided OAT is above 5 degrees C. |
| | | С | 1 | 0 | May be inoperative for day VFR provided there is no visible moisture and flight is not conducted in known or forecast icing conditions. |
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| System & | | 1 | 2. Number | Installed | |
| Sequence | | RIC | Z. Number | | Required For Dispatch |
| Numbers | | · · · · · · · · · · · · · · · · · · · | | | 4. Remarks or Exceptions |
| 31 | INDICATING / RECORDING SYSTEMS | | | | |
| 1 | Clock displaying Hours, Minutes and Seconds | D | 1 | 0 | May be inoperative provided an alternate time piece is used e.g. a pilot's watch. |
| 2 | Elapsed Timer | D | 1 | 0 | May be inoperative provided an alternate time piece is used e.g. a pilot's watch. |
| 3 | Hour Meter | D | - | 0 | |
| 4 | Integrated Instrument Display System (IIDS) | Α | 2 | 1 | One may be inoperative provided the remaining IIDS is fully operative and displays the required data, and aircraft is only dispatched for non-passenger carrying daytime flights, or series of flights, to a base where repairs can be made. |
| 5 | IIDS Sensors (including primary and alternate sensors for Np, Ng, Nr, MGT & Engine Torque) | В | 2 | 1 | (M) Only one primary or alternate sensor may be inoperative. Note - This means, for example, dispatch is not allowed with #1 primary Np sensor and #2 alternate MGT sensor inoperative. Failed primary sensors are annunciated by "ALTN" adjacent to the affected parameter. Failed alternate sensors are annunciated by the message "ALTN FAULT" in the W/C/A area of the IIDS display. Note: For relief for IIDS Cooling Fans, refer to ATA 21 |
| 6 | Manual Warning Horn Mute System | C | 1 | 0 | May be inoperative provided the horn sounds properly at 70-95% Nr, but does not sound above 95% Nr. |

| 1 | Aircraft: Bell Model 427 Helicopter | | | Page Revision No Original Release Page No. 33-1 Date - January 30th, 2001 | | |
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| System Sequer Numbe | nce | 1 RIC | 2. Numbe | | r Required For Dispatch 4. Remarks or Exceptions | |
| 33 | LIGHTS | | | | | |
| 1 | Position Light System | D | 1 | 0 | May be inoperative for day operations. | |
| 2 | Anti - Collision Light System | С | 1 | 0 | May be inoperative for day operations. | |
| 3 | Landing Light System | D C | 1 1 | - 0 | May be inoperative for day operations. As required by regulations. | |
| 4 | Cockpit Instrument Lighting System | СВ | 1 1 | 0 | May be inoperative for day operations. 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, and (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. | |
| 5 | Cockpit Utility Light | ОС | 1 | 0 | May be inoperative for day operations. May be inoperative for night operations provided both the cockpit instrument lighting system and the cockpit flood light are operable. | |
| 6 | Cabin Lighting System | D C | 1 1 | 0 0 | May be inoperative for day operations. Inoperative lights do not exceed fifty percent (50%) of the total installed. | |
| 7 *** | External Utility Light(s) | D | - | 0 | May be inoperative if no passengers are carried. | |
| 8 | Cockpit Flood Light | D B | 1 1 | 0 | May be inoperative for day operations. May be inoperative for night operations provided both the cockpit instrument lighting system and the cockpit utility light are operable. | |
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| | | | | Page Revision No Original Release Page No. 33-2 Date - January 30th, 2001 | | | | |
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| 33 | LIGHTS | | | | | | | |
| 9 | Supplemental Lighting System | D | - | 0 | | | | |
| 10 | Taxi Light | D | - , | 0 | | | | |
| 11 | Search Light | D | - | 0 | | | | |
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| Systen Sequei Numbe | nce | 1 RIC | 2. Numbe | | r Required For Dispatch 4. Remarks or Exceptions | | | |
| 34 | NAVIGATION | | | | - Acceptions | | | |
| 1 | Gyroscopic Rate of Turn with Slip Indicator | С | - | 0 | | | | |
| 2 | Gyroscopic Direction Indicator | С | - | 0 | May be inoperative for daytime flights. | | | |
| 3 | ATC Transponder | D | - | 0 | As required by regulations. | | | |
| 4 *** | Navigation Equipment (VOR, ILS, ADF, GPS, RMI, etc.) | С | - | 0 | As required by regulations. | | | |
| 5 | Magnetic Compass (wet) | В | 1 | 0 | (O) May be inoperative for day VFR provided one gyrostabilized heading indicator is operative and alternate | | | |
| | | С | 1 | 0 | procedures are used to set the heading indicator. May be inoperative for day VFR provided one gyro- | | | |
| | | С | 1 | 0 | stabilized compass system is installed and operative. May be inoperative for flights that are entirely in areas of magnetic unreliability provided that at least 2 gyro- stabilized directional gyro systems are installed, operative and used in conjunction with approved free gyro navigation techniques. | | | |
| 6 | Skid and Slip Indicator | В | 1 | 0 | May be inoperative for daytime flight. | | | |
| 7 | OAT Display | С | 1 | 0 | May be inoperative provided approved, alternate onboard OAT source is available. | | | |
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| | Aircraft: Bell Model 427 Helicopter | | Page Revision No Original Release Page No. 34-2 Date - January 30th, 2001 | | | | |
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| Seque | System & Sequence Numbers | | 2. Number | Installed 3. Number Required For Dispatch 4. Remarks or Exceptions | | | |
| 34 | NAVIGATION | | | | | | |
| 8 | Attitude Indicator | С | - | 0 | May be inoperative for daytime flights. | | |
| 9 | Radio Altimeter | С | - | 0 | | | |
| 10 *** | Marker Beacon | D | - | 0 | | | |
| 11 *** | DME | D | - | 0 | | | |
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| Aircraft: Bell Model 427 Helicopter | | | | Page Revision No Original Release Page 35-1 Date - January 30th, 2001 | | | | |
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| System 8 | <u>&</u> | 1 | 2. Numbe | r Installed | ···· | | | |
| Sequenc | :e | RIC | z. Humbe | 3. Number_Required For Dispatch | | | | |
| | Numbers | | | J. Hambel | 4. Remarks or Exceptions | | | |
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| 35 | OXYGEN | | | | | | | |
| 1 *** | Oxygen System and Masks (Crew and Passengers) | D | - | 0 | As required by regulations | | | |
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| Aircraft: Bell Model 427 Helicopter | | | | Page Revision No Original Release Page 52-1 Date - January 30th, 2001 | | |
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| System Sequer | | | | r Installed | | |
| Numbe | | RIC | | 3. Numbe | r Required For Dispatch 4. Remarks or Exceptions | |
| | | 14. | | | 4. Remarks of Exceptions | |
| 52 | DOORS | | İ | | | |
| 1 | Baggage Door Caution System | С | 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. | |
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| Aircraft: Bell Model 427 Helicopter | | Page Revision No Original Release Page 63-1 Date - January 30th, 2001 | | | | |
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| System & 1 2. Nui Sequence RIC Numbers | | 2. Numbe | Installed 3. Number Required For Dispatch 4. Remarks or Exceptions | | | |
| 63 | ROTOR DRIVE | | | | | • |
| 1 | Rotor Brake System | D | - | 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 Temperature Indicating System | В | 1 | 0 | (M) | May be inoperative provided the transmission oil temperature warning light system is verified operative. |
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| Sequ | System & Sequence Numbers | | 2. Numbei | r Installed 3. Numbe | Installed 3. Number Required For Dispatch 4. Remarks or Exceptions | | | |
| 71 | POWERPLANT | | | | • | | | |
| 1 | Engine Air Particle Separator Purge System | С | 1 | 0 | (M) May be inoperative provided bleed air for particle separator is secured in 'closed' position. | | | |
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