

TRANSNORTHERN AVIATION

3350 Old International Airport Road
Anchorage, Alaska 99502
Email: mel@transnorthern.com

MINIMUM EQUIPMENT LIST

Fairchild Metroliner
Model SA227
- Revision Three (a) -

N782C - N3114G - N75TN

Serial Numbers

AC-525 AC-583 AC-621B

APPROVED FAA-AAL-FSDO-03		OPERATOR ACCEPTANCE	
<i>see page 0.0.5</i>			
_____	_____	_____	_____
Aviation Safety Inspector	Date	Operator	Date

This MEL has been compiled from, and is no less restrictive than, the Master Minimum Equipment List, Revision 16b, dated 01/15/2016, provided by the FAA

TRANSNORTHERN

SA227 MINIMUM EQUIPMENT LIST

Applies to Serial Numbers

AC-525 AC-583 AC-621B

TABLE OF CONTENTS

<u>ATA</u>	<u>SYSTEM</u>	<u>PAGE</u>
	Cover Page	0.0.1
	Table of Contents	0.0.2
	Record of Revisions	0.0.3
	Highlights of Change	0.0.4
	List of Effective Pages	0.0.5
	Definitions	1.1.1
	Preamble	1.1.5
	Company Procedures	1.1.7
	MEL Management Program	1.1.8
21	Air Conditioning	1.21.1
22	Auto Flight	1.22.1
23	Communications	1.23.1
24	Electrical	1.24.1
25	Equipment/Furnishings	1.25.1
26	Fire Protection	1.26.1
27	Flight Controls	1.27.1
28	Fuel	1.28.1
29	Hydraulic Power	1.29.1
30	Ice and Rain Protection	1.30.1
31	Indicating/Recording Systems	1.31.1
32	Landing Gear	1.32.1
33	Lights	1.33.1
34	Navigation	1.34.1
35	Oxygen	1.35.1
37	Vacuum/Pressure	1.37.1
52	Doors	1.52.1
61	Propellers	1.61.1
71	Powerplant	1.71.1
73	Engine and Fuel Control	1.73.1
74	Ignition	1.74.1
77	Engine Indicating	1.77.1
80	Starting	1.80.1
82	Water Injection	1.82.1
Appendix A	Procedures Manual	2.0.1 thru 2.80.1

Highlight of Change ONE

1. Added 2nd Aircraft

Highlight of Change TWO

1. Changed Address on Cover page and Headers to reflect Rev 2.
2. Reformatted Columns IAW PL25R21 GC p3 ATA System Page description
3. Highlights of Change Page 0.0.4 added this page to manual
4. Updated Page 0.0.5 for Revision Two
5. Revised Definitions section to comply with PL 25 R21 GC.
6. Revised Page 1.1.8 – Company Procedures section
7. Revised Page 1.1.9 – MEL Management Program moved to GOM only.
8. Page 1.23.1 changed the ‘0’ to a ‘O’ in the remark column.
9. Page 1.23.1 Added ‘O’ to All cargo Ops with Courier’s Seat Occupied.
10. Page 1.23.3 modified to add ‘O’ procedure for Courier’s Seat Occupation.
11. Page 1.23.2 Item 7 – changed to reflect formatting in Rev b of the MMEL.
12. Page 1.23.2 Item 12 – Identified only one unit installed per aircraft. Added (M) procedure.
13. Page 1.25.2 Changed First Aid Kit to item “8 A)” instead of Item 8. Our aircraft are operated iaw ‘9 or less’ pax configuration therefore NONE are required by CFR14 part 135.
14. Deleted unneeded page 1.25.3
15. Page 1.26.1 Specified difference for 14CFR ops under 135 vs 91 and reformatted instructions for removing inoperative fire extinguishers. (Note: Variable number of fire extinguishers may be installed on individual aircraft predicated upon operating rule.)
16. Page 1.33.1 Item 3 – Changed Item title to reflect language of current MMEL
17. Page 1.33.2 Item 10 – added restriction that ground deicing procedures do NOT require Wing Ice Lights for day operations.
18. Page 1.34.1 Item 3 – Changed Item title to reflect language of current MMEL.
19. Page 1.34.3 Changed language for situation where two transponders are installed and one (not required to be there) is broke.
20. Page 1.35.1 Removed Item 2 BPE – Not installed or Required for TNA aircraft.
21. Page 1.52.1 Removed Item 3 – Only applicable to SA226 aircraft and renumbered subsequent items. (Including Item numbering on Page 1.52.2
22. Page 1.71.1 – Changed to (M) procedure (more restrictive than MMEL)
23. Page 1.82.1 – Deleted AWI system and renumbered items.

Highlight of Change THREE (a)

1. Added 3rd Aircraft

LIST OF EFFECTIVE PAGES

0.0.1	12/11/2020	1.34.6	03-11-2019	2.24.2	03-11-2019
0.0.2	03-11-2019	1.34.7	03-11-2019	2.25.1	03-11-2019
0.0.3	12/11/2020	1.35.1	03-11-2019	2.25.2	03-11-2019
0.0.4	12/11/2020	1.37.1	03-11-2019	2.26.1	03-11-2019
0.0.5	12/11/2020	1.46.1	03-11-2019	2.27.1	03-11-2019
1.21.1	03-11-2019	1.52.1	03-11-2019	2.28.1	03-11-2019
1.21.2	03-11-2019	1.52.2	03-11-2019	2.30.1	03-11-2019
1.21.3	03-11-2019	1.61.1	03-11-2019	2.30.2	03-11-2019
1.22.1	03-11-2019	1.71.1	03-11-2019	2.32.1	03-11-2019
1.23.1	03-11-2019	1.73.1	03-11-2019	2.32.2	03-11-2019
1.23.2	03-11-2019	1.74.1	03-11-2019	2.32.3	03-11-2019
1.23.3	03-11-2019	1.77.1	03-11-2019	2.32.4	03-11-2019
1.24.1	03-11-2019	1.80.1	03-11-2019	2.33.1	03-11-2019
1.25.1	03-11-2019	1.82.1	03-11-2019	2.34.1	03-11-2019
1.25.2	03-11-2019	2.1.1	03-11-2019	2.34.2	03-11-2019
1.26.1	03-11-2019	2.1.2	03-11-2019	2.34.3	03-11-2019
1.27.1	03-11-2019	2.1.3	03-11-2019	2.34.4	03-11-2019
1.28.1	03-11-2019	2.1.4	03-11-2019	2.34.5	03-11-2019
1.29.1	03-11-2019	2.21.1	03-11-2019	2.34.6	03-11-2019
1.30.1	03-11-2019	2.21.2	03-11-2019	2.34.7	03-11-2019
1.30.2	03-11-2019	2.21.3	03-11-2019	2.52.1	03-11-2019
1.31.1	03-11-2019	2.21.4	03-11-2019	2.52.2	03-11-2019
1.31.2	03-11-2019	2.21.5	03-11-2019	2.52.3	03-11-2019
1.32.1	03-11-2019	2.21.6	03-11-2019	2.52.4	03-11-2019
1.33.1	03-11-2019	2.21.7	03-11-2019	2.52.5	03-11-2019
1.33.2	03-11-2019	2.22.1	03-11-2019	2.52.6	03-11-2019
1.34.1	03-11-2019	2.22.2	03-11-2019	2.52.7	03-11-2019
1.34.2	03-11-2019	2.23.1	03-11-2019	2.73.1	03-11-2019
1.34.3	03-11-2019	2.23.2	03-11-2019	2.77.1	03-11-2019
1.34.4	03-11-2019	2.23.3	03-11-2019	2.77.2	03-11-2019
1.34.5	03-11-2019	2.24.1	03-11-2019	2.80.1	03-11-2019

This MEL has been compiled from, and is no less restrictive than, the Master Minimum Equipment List, Revision 16b, dated 01/15/2016, provided by the FAA.

<p align="center">FAA FINAL APPROVAL</p> <p>FAA-AAL-FSDO-03 EFFECTIVE DATE: 03/09/2021 Inspector Name: George O'Connor</p>	<p align="center">OPERATOR ACCEPTANCE</p> <hr style="width: 80%; margin: 10px auto;"/> <p align="center">Operator Date</p>
---	--

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 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.
 - 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 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. Placard. Each inoperative item must be placarded to inform and remind the crewmembers and maintenance personnel of the equipment condition. To the extent practical, placards should be located adjacent to the control or indicator for the item affected. Placard wording and location is specified in the "Company Procedures" section of the MEL.
5. "-" symbol in Column 2 and/or Column 3 indicates a variable number (quantity) of the item installed.

6. "Federal Aviation Regulations" (FAR) means the applicable portions of the Federal Aviation Act and Federal Aviation Regulations. CFR14 and FAR are interchangeable terms.
7. "Flight Day" means a 24 hour period (from midnight to midnight) 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, propellers or engine intake systems.
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 tolerance(s). May be abbreviated "Inop".
11. "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.
12. "Inoperative component". 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. This MEL will include specific maintenance procedures in Column 4 OR in an attached Procedures Manual (Appendix) for the MEL.
14. "(O)" symbol indicates an 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. This MEL will include specific operations procedures in Column 4 OR in an attached Procedures Manual (Appendix) for the MEL.

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 specific operations procedures in Column 4 OR in an attached Procedures Manual (Appendix) for the MEL.
16. "Visual Flight Rules" (VFR) is as defined in FAR Part 91. 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, ash trays, stereo equipment, overhead reading lamps, etc.
20. Repair Intervals: All users of a 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 "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 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.

The operator 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.

21. "Administrative control item" means an item listed in the MEL for tracking and informational purposes.
22. "Excess Items" means those items that have been installed that are redundant to the requirements of the FARs.
23. "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 MEL for the repair of an inoperative item of equipment. This provision is applicable to all MEL items, i.e., categories "A, B, C, and D."
24. "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 initial deferred item is repaired. Additional actions include: placarding, and complying with all remarks, exceptions.
25. "Is not used" in the provisos, remarks or exceptions of the MEL item may specify that another item relieved in the MEL "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.
26. "Continuing Authorization – Single Extension". An aircraft operator who has the authorization to use an FAA-Approved MEL may also have the authority to use a continuing authorization to approve a single (one-time) extension to the repair interval for category B or C items in accordance with Operations Specification D095. Continuing Authorization – Single Extension is not authorized for repair category A and D items.
27. "Takeoff". Takeoff is the act of beginning a flight in which the aircraft is accelerated from a state of rest to that of flight. For the purposes of MEL relief, this translates to the point at which the pilot physically begins to apply power to initiate the takeoff from the runway or takeoff surface.

28. “Operative”. An operative system and/or component will accomplish its intended purpose and is consistently functioning normally within its design operating limit(s) and tolerances(s).
29. “Provisos”. Provisos are indicated by a number or a lower-case letter in the “Remarks or Exceptions”. Provisos are conditions or limitations that must be complied with for operation with the listed instrument or equipment item inoperative.
30. Nonessential equipment and furnishings (NEF) are those items installed on the aircraft as part of the initial **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. “GPU” – Ground Power Unit.

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.1.6
Revision Two
Date 03-11-2019

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 or 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.

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.

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.1.7
Revision Two
Date 03-11-2019

Preamble (Cont'd)

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.

COMPANY PROCEDURES

In the metal box for the aircraft is a supply of "Aircraft Flight Log" sheets in the form of a bound volume and a supply of yellow stickers (see definition of Placard).

The 'Aircraft Flight Log' is utilized to record aircraft discrepancies of any nature. Discrepancies that are not found on the following pages of this MEL prohibit flight until corrected per Company Operations Manual. Discrepancies that are listed on the following pages may be deferred as per specific instructions found herein.

It is imperative that Pilots and Mechanics are completely familiar with all portions of this document before MELing any discrepancy.

Procedure for MELing an item:

1. Describe the item on the Discrepancy Column on the Aircraft Flight Log.
2. Locate the item on the following pages. Enter MEL number on the 'Aircraft Flight Log' and the day the discrepancy was noted (Day of Discovery). [Example: an inoperable CHT would be recorded in the discrepancy section as "MEL77-4 10/17/98".
3. Note the same information on the 1/2 X 3/4 self-adhesive sticker and place it on or immediately beside the inoperative component or its activating mechanism. - See Definition #4 – Placarding and PM – 2 in Appendix A for more information.
4. Any item with a "(M)" in the Remarks column requires that a certified mechanic perform the task listed the first time an item is MELED. Any company mechanic may perform this task. If a MEL-able discrepancy occurs where no company mechanic is available the pilot must notify the Director of Maintenance or his designee for instructions as how to proceed. IF the Item is a (M) item, a mechanic must sign the Corrective Action Column of the Aircraft Flight Log the first time the item is MELED describing the work required. The Pilot may sign off subsequent MELing of the same item until it is repaired.
5. The pilot, through the authority of the approved MEL, may enter: "Deferred <Letter designator repair interval>" in the 'Aircraft Flight Log' "Corrective Action" column and continue operation of the Aircraft as long as the MEL authorizes continued operation in accordance with the Repair Interval listed for the item. (See Definitions)
6. The pilot must assure that the TNA Director of Maintenance or his designee is made aware of the discrepancy at the earliest opportunity. Personal verbal or text notification is required... not a note or memo.
7. The Records Department will carry forward Any items noted as a Discrepancy on each successive Log page until corrected by Maintenance. (Do NOT carry forward the 'Corrective Action' Notation.
8. The pilot is required before flight of an aircraft with uncorrected MEL items to assure that the "Repair Interval" as indicated by the Letter Designator of the MEL item has not been past. In the case of MEL items with in the "Repair Interval" the Pilot may enter "Deferred <Letter designator repair interval>" and continue operation of the aircraft. If the "Repair Interval" is past or the flight will cause the "Repair Interval" to be passed; the aircraft may not be dispatched until the item is corrected and appropriate signoff entered on the 'Aircraft Flight Log' page. (Reference GOM and GMM for appropriate signoff procedures for maintenance items)

MEL Management Program

The MEL Management Program for TransNorthern is found in the Company's General Operations Manual Section I, current Revision.

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.21.1
Revision Two
Date 03-11-2019

1. ITEM REPAIR CATEGORY SYSTEM & SEQUENCE NUMBERS	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
21 <u>AIR CONDITIONING</u>				
1. Cabin Altitude Warning System C	1	0		(O)May be inoperative for unpressurized flight. Refer to PM 21-A for (O)
	1	0		May be inoperative for pressurized flight below 10,000 ft. MSL.
2. Cabin Altitude and Differential Pressure Indicator C	1	0		(O)May be inoperative for unpressurized flight Refer to PM 21-A for (O)
a) ALTITUDE Indication C	1	0		(O)May be inoperative provided: a) Cabin DIFFERENTIAL PRESSURE portion of the indicator is operative. b) A chart is provided to the crew to convert cabin differential pressure to cabin altitude. Refer to PM 21-2A for (O)
b) DIFFERENTIAL PRESSURE Indication C	1	0		(O)May be inoperative provided: a) Cabin ALTITUDE portion of the indicator is operative, and b) A chart is provided to the crew to convert cabin altitude to cabin differential pressure. Refer to PM 21-2A for (O)
3. Cabin Rate of Climb Indicator C	1	0		May be inoperative.

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.21.2
Revision Two
Date 03-11-2019

1. ITEM REPAIR CATEGORY		2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH		4. REMARKS OR EXCEPTIONS
SYSTEM & SEQUENCE NUMBERS						
<u>21 AIR CONDITIONING</u>						
4. Flow Control	C	2	1			(M)(O) May be inoperative in the closed position provided: a) Cockpit fresh air fan is operable with gear retracted, b) Oxygen and masks are provided for all occupants as required by FAR, and c) Other air conditioning system is operative. Refer to PM 21-4A for (M)&(O)
5. Automatic Pressure Controller	C	1	0			(O) May be inoperative for unpressurized flight. Refer to PM 21-A for (O)
	C	1	0			(O) May be inoperative for pressurized flight provided manual pressurization controller is operative. Refer to PM 21-5A for (M)
6. Manual Pressure Controller	C	1	0			(O) May be inoperative for unpressurized flight. Refer to PM 21-A for (O)
	C	1	0			(O) May be inoperative for pressurized flight provided automatic pressurization controller is operative. Refer to PM 21-6A for (M)
7. Automatic Temperature Control System	C	1	0			Automatic system may be inoperative provided manual system is operative.

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.21.3
Revision Two
Date 03-11-2019

1. ITEM REPAIR CATEGORY SYSTEM & SEQUENCE NUMBERS	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. <u>REMARKS OR EXCEPTIONS</u>
21 <u>AIR CONDITIONING</u>				
8. Manual Temperature Control System C	1	0		Manual system may be inoperative provided automatic system is operative.
9. Air Conditioning System C	2	1		(O) One may be inoperative provided: <ul style="list-style-type: none"> a) Cockpit Fresh Air Fan is operable with Landing Gear retracted, b) Oxygen and Masks are provided for all occupants, as required by 14 CFR, and c) The other Flow Control Valve and Air Conditioning System are operative. <p style="text-align: center;">Refer to PM21-9A for (O)</p>
10. Cabin Dump Valve C	1	0		(O)(M) May be inoperative provided the Cabin Dump Valve is secured in open position and aircraft remains VMC. <p style="text-align: center;">Refer to PM 21-10A for (O)(M)</p> <p>NOTE: Alternate Static System will be unusable.</p>
11. Cabin Temperature Indicator C	1	0		May be INOP

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.22.1
Revision Two
Date 03-11-2019

1. ITEM	REPAIR CATEGORY	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH		4. <u>REMARKS OR EXCEPTIONS</u>
SYSTEM & SEQUENCE NUMBERS						
22 <u>AUTOPILOT</u>						
1. Autopilot System	C	-	0			<p><i>May be not installed in some aircraft.</i> (M) May be inoperative provided operations do not require its use.</p> <p style="text-align: center;">Refer to PM 22-1A for (M)</p>
2. Yaw Damper	C	-	0			<p>May be not installed. (M) May be inoperative provided the circuit breaker is pulled or turned off</p> <p style="text-align: center;">Refer to PM 22-2A for (M)</p>
3. Autopilot Disconnect Functions (Quick Release Controls)	C	-	1			<p><i>May be not installed in some aircraft.</i> One may be inoperative provided: a) Autopilot is not used below 1,500 ft AGL, and b) Approach minimums do not require use of autopilot</p>
	B	-	0			<p>May be inoperative provided Autopilot is not used.</p>

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.23.1
Revision Two
Date 03-11-2019

1. ITEM REPAIR CATEGORY SYSTEM & SEQUENCE NUMBERS	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. <u>REMARKS OR EXCEPTIONS</u>
23. <u>COMMUNICATIONS</u>				
1. Communications Equipment				
a) VHF COMM System	C	2	0	(O) May be inoperative provided operations are not predicated on the use of affected VHF communications system.
<p>FAR 135 Operations: Refer to PM 23-A for (O).</p> <p>FAR 91 Operations: Refer to PM 23-B for (O).</p>				
2. Cockpit Speaker	C	2	0	May be inoperative provided two operative headsets are available to flight crew.
3. Audio Amplifier	C	2	0	May be inoperative provide two operative headsets are available to flight crew.
<i>May be not installed in some aircraft.</i>				
4. Passenger Address System				
a) Passenger Configuration	B	1	0	(O) May be inoperative provided alternate, normal, and emergency procedures, and/or restrictions are established and used. Refer to PM 23-4A for (O)
b) Cargo Configuration	D	1	0	May be inoperative when courier seat is unoccupied
	D	1	0	IF courier seat is occupied: (O) May be inoperative provided alternate, normal, and emergency procedures, and/or restrictions are established and used. Refer to PM 23-4A for (O)

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.23.2
Revision Two
Date 03-11-2019

1. ITEM	REPAIR CATEGORY	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. <u>REMARKS OR EXCEPTIONS</u>
SYSTEM & SEQUENCE NUMBERS					
23 COMMUNICATIONS(Cont'd)					
5. Cockpit Voice Recorder (CVR)					
1) Flight Data Recorder (FDR) Not Required by FAR	A	1	0		May be inoperative provided repairs are made within three flight days.
2) Flight Data Recorder (FDR) Required by FAR	A	1	0		May be inoperative provided Flight Data Recorder is operative and repairs are made within three flight days.
6. Cockpit Voice Recorder (CVR) Under Water Locating Device (ULD)					
1) Flight Data Recorder (FDR) Not required by FAR	A	1	0		May be inoperative provided repairs are made within three flight days.
2) Flight Data Recorder (FDR) Required by FAR	A	1	0		May be inoperative provided Flight Data Recorder is operative and repairs are made within three flight days.
7. Flight Deck Headsets/Earphones/ and Boom/Hand Microphones					
A) Headset Boom Microphone	A	-	0		May be inoperative provide: a) Flight Data Recorder (FDR) (In Installed) Operates normally, and b) Repairs are made within three days.
	D	-	0		Any in excess of those required by 14 CFR may be Inoperative (i.e. single pilot operations)
B) Headsets Earphone/ Headsets	C	-	1		May be inoperative provided associated flight deck speaker operates normally.
C) Active Noise Cancelling/ Reduction Function	D	-	0		May be inoperative provided normal audio function of headset is operative.
D) Flight Deck Hand Micorphones	C	-	0		May be inoperative provided associated boom microphone operates normally
	D	-	0		Any in excess of those required by 14 CFR may be Inoperative (i.e. single pilot operations)

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.23.3
Revision Two
Date 03-11-2019

1. ITEM	REPAIR CATEGORY	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. <u>REMARKS OR EXCEPTIONS</u>
SYSTEM & SEQUENCE NUMBERS					
23. <u>COMMUNICATIONS CONT'D</u>					
7. Boom Microphones (cont'd)					
B) Cockpit Voice Recorder Without Flight Data Recorder Installed					
1) Cockpit Voice Recorder equipped to record Boom Microphone per FAR 121.359(g) 135.151(d) or 125.227(e)	A	-	0		May be inoperative provided repairs are made within three flight days.
2) Cockpit Voice Recorder Not Equipped to record Boom Microphones	D	-	0		Any in excess of those required by 14 CFR may be inoperative.
8. Avionics Master Switch	C	1	0		May be inoperative provided both Left and Right Auxiliary Avionics Master Switches are operative.
10. Push to Talk Switch	C	2	1		May be inoperative provided an operative hand mike is available on the affected side.
11. Static Discharge Wicks					
1) S/N 567 and earlier, except TT447,465,471,483,521, and 582-733.	C	-	5		The wick on the rudder and the outboard wick on each wing and elevator must be installed. Any one of the remaining wicks may be missing.
12. Emergency Locator Transmitter (ELT)					
A) Fixed ELTs	A	1	0		(M) May be inoperative provided: a) System is deactivated by maintenance by securing circuit breaker in the Open Position. b) Repairs are made within 90 days.

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.24.1
Revision Two
Date 03-11-2019

1. ITEM REPAIR CATEGORY SYSTEM & SEQUENCE NUMBERS	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
<u>24. ELECTRICAL</u>				
1. DC Voltmeter (Combination Indicator) C	1	1		(O) May be inoperative for Day-VMC provided opposite battery and DC voltmeter are operative. Refer for PM 24-2A for (O)
2. Inverters C (All aircraft except SA226-T SN's 201-248 and SA 226-AT, SN-002 unless modified to a DC Generator/Invertor system).	2	1		One may be inoperative for Day VMC. NOTE: With third inverter modification, two may be provided operative inverter powers AC bus.
3. AC Warning Lights C	2	1		One may be inoperative provided AC voltmeter is operative.
4. AC Voltmeter C	1	0		AC Voltmeter may be inoperative provided both AC warning lights are operative.
5. Battery Disconnect Warning Lights B	2	1		(M) One may be inoperative provided: a) The associated Battery Switch is in OFF b) The associated Battery Cable is disconnected from the battery and SECURED, and c) A GPU is used for starting. Refer to PM 24-8A for (M)
6. DC Generator Warning Lights C	2	0		May be inoperative provided ammeters are monitored throughout the flight.

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.25.1
Revision Two
Date 03-11-2019

1. ITEM REPAIR CATEGORY SYSTEM & SEQUENCE NUMBERS	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. <u>REMARKS OR EXCEPTIONS</u>
<u>25. EQUIPMENT/FURNISHINGS</u>				
1. Cockpit Seat	B	2	1	<p>Right side may be inoperative for single pilot operations provided right seat remains unoccupied.</p> <p>NOTE: A seat with an inoperative seat belt or shoulder harness is considered to be inoperative.</p>
2. Passenger Seat(s)	D	-	0	<p>All may be inoperative provided:</p> <ul style="list-style-type: none"> a) Seat does not block an Emergency Exit. b) Seat does not restrict any passenger from access to the main aircraft aisle, and c) The affected seat(s) are blocked and placarded "DO NOT OCCUPY" <p>NOTE 1: A seat with an inoperative seat belt is considered inoperative.</p> <p>NOTE 2: Inoperative seats do not affect the required number of Flight Attendants</p> <p>NOTE 3: Affected seat(s) may include the seat(s) behind and/or adjacent outboard seats.</p>
3. Approved Flotation	C	0-12	0	<p>(O) May be inoperative provided applicable FAR does not require affected flotation device for operation conducted.</p> <p>FAR 135 operations: Refer to PM 25-3A for (O)</p> <p>FAR 91 operations: Refer to PM 25-3B for (O)</p>

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.25.2
Revision Two
Date 03-11-2019

1. ITEM	REPAIR CATEGORY	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
SYSTEM & SEQUENCE NUMBERS					
25. <u>EQUIPMENT/FURNISHINGS Con't</u>					
4. Crew Arm Rests	C	4	0		May be inoperative provided Arm Rest(s) can be Secured in the DOWN position.
5. Aft Cargo Tie-Down Net	C	-	0		May be inoperative or missing provided: <ul style="list-style-type: none"> a) Cargo or baggage is not carried in the compartment, or b) Cargo or baggage is secured by another approved means having enough strength to eliminate the possibility of shifting under all normally anticipated flight and ground conditions and ultimate load condition.
6. Aft Cargo Tie-Down Rings	C	1	0		May be inoperative provided: <ul style="list-style-type: none"> a) Cargo or baggage is not carried in the Compartment, or b) Cargo or baggage is secured by another approved means having enough strength to eliminate the possibility of shifting under all normally anticipated flight and ground conditions and ultimate load condition.
7. Nose Cargo Blanket Liner Assembly	C	1	0		May be missing or inoperative
8. Emergency Medical Equipment					<ul style="list-style-type: none"> A) First Aid Kits D <ul style="list-style-type: none"> 1 0 Any in excess of those required by 14CFR may be incomplete or missing or inoperative. None are required for 9 or less operations.
9. "Fasten Seat Belt While Seated" Sign or Placard.	C	-	-		One or more Signs or Placards may be illegible or missing provided a legible Sign or Placard is visible from each occupied Passenger Seat.

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.26.1
Revision Two
Date 03-11-2019

1. ITEM REPAIR CATEGORY SYSTEM & SEQUENCE NUMBERS	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
<u>26 FIRE PROTECTION</u>				
1. Portable Fire Extinguishers	D	-	1	FAR 135 Operations: (Aircraft configured for 9 or less passenger seats). 1 required on flight deck. §135.155
	D	-	2	FAR 91 Operations: Large & Turbine Powered Multi-engine Airplanes. 1 required on flight deck and 1 required in the passenger compartment when aircraft is configured for 6 or more passenger seats. §91.513
Any in excess of those required by FAR may be inoperative or missing provided:				
<ul style="list-style-type: none"> a) The inoperative fire extinguisher is tagged inoperative, removed from the installed location, and placed out of sight so it cannot be mistaken for a functional unit, and b) Required distribution is maintained. 				
2. "E" (Empty) Light(s) on Engine Fire Extinguisher Control Panel	C	2	0	(O) May be inoperative provided bottle pressure is visually checked and determined to be within the required range prior to each departure. Refer to PM 26-3A for (O)

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.27.1
Revision Two
Date 03-11-2019

1. ITEM REPAIR CATEGORY SYSTEM & SEQUENCE NUMBERS	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
<u>27 FLIGHT CONTROLS</u>				
1. Trim-in-Motion Sonalerts C	2	1		One may be inoperative provided Stabilizer Position Indicator is operative.
2. Stabilizer Position Indicator System C	1	0		May be inoperative provided: <ul style="list-style-type: none"> a) Both Trim-in-Motion Sonalerts are operative, b) Stabilizer check is accomplished, c) Stabilizer takeoff position is set and visually checked prior to each departure, d) Stabilizer is not moved after being set until the aircraft is airborne, and e) Pitch Trim out-of-trim (takeoff position) aural warning is operative.
3. Flap Position Indicator System C	1	0		May be inoperative provided a flap preselect system is installed.
4. Gust Lock System C	1	0		(O)(M) May be inoperative provided: <ul style="list-style-type: none"> a) Maintenance assures that flight control locking pins are secured in the unlocked positions, and b) Flight controls must not be left unattended unless gust protection can be provided. <p style="text-align: center;">Refer to PM 27-4A for (O)(M)</p>

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.28.1
Revision Two
Date 03-11-2019

1. ITEM REPAIR CATEGORY SYSTEM & SEQUENCE NUMBERS	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
<u>28 FUEL</u>				
1. Fuel Quantity System	C	2	1	<p>(O) One fuel tank indicator may be inoperative provided:</p> <ul style="list-style-type: none"> a) Either the Fuel Crossflow Switch Annunciator Or Crossflow Valve Position Light is installed and operative, b) A reliable means is established to determine That the fuel quantity on board meets the regulatory requirement for the flight, and c) Both Fuel Flowmeters are operative. <p>Aircraft with Magnasticks: Refer to PM 28-1A for (O)</p> <p>NOTE: MAGNASTICKS READING ARE INVALID ABOVE 155 GALLONS AND BELOW 30 GALLONS.</p>
2. Fuel Boost Pumps	C	4	2	One boost pump per side may be inoperative.
3. Fuel Magna-stick	C	2	0	NOTE: See Fuel Quantity System and Fuel Quantity Push to Test System.
4. Fuel Crossflow Switch Annunciator	C	1	0	May be inoperative provided Crossflow Valve Position Light is operative.
5. Crossflow Valve Position Light	C	1	0	May be inoperative provided Fuel Crossflow Switch Annunciator is operative.
6. Fuel Totalizer	C	1	0	May be inoperative.
7. Fuel Quantity Push To Test System	C	1	0	May be inoperative provided fuel quantity indications are verified by use of the magnasticks.

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.29.1
Revision Two
Date 03-11-2019

1. ITEM REPAIR CATEGORY		2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH		4. REMARKS OR EXCEPTIONS	
SYSTEM & SEQUENCE NUMBERS							
<u>29 HYDRAULIC POWER</u>							
1. Hydraulic Pressure Gauge	C	1	0			May be inoperative provided both Low Hydraulic Pressure Warning Lights are operative.	
2. Low Hydraulic Pressure Warning Light System	C	2	1			One light may be inoperative provided the engine with the inoperative light is started first.	

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.30.1
Revision Two
Date 03-11-2019

1. ITEM REPAIR CATEGORY SYSTEM & SEQUENCE NUMBERS	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. <u>REMARKS OR EXCEPTIONS</u>
<u>30 ICE AND RAIN PROTECTION</u>				
1. Propeller Deicing Systems	C	2	1	May be inoperative provided aircraft is not operated in visible moisture and OAT less than +5 degrees Centigrade.
2. Propeller Heat Ammeter	C	1	0	May be inoperative provided aircraft is not operated in visible moisture and OAT less than +5 degrees Centigrade.
3. SAS Heat System	C	1	0	May be inoperative provided aircraft is not operated in visible moisture and OAT less than +5 degrees Centigrade.
4. Pitot Heaters	B	2	0	May be inoperative provided: a) Passengers are not carried under IFR, and b) Aircraft is not operated in visible moisture and OAT less than +5 degrees centigrade.
5. Pitot Heater Loadmeter/Ammeter	B	1	0	May be inoperative provided: a) Passengers are not carried under IFR, and b) Aircraft is not operated in visible moisture and OAT less than + 5 degrees Centigrade.
6. Heated Windshield System	C	2	0	May be inoperative provided aircraft is not operated in visible moisture and OAT less than +5 degrees Centigrade.
7. Wing and Tail Deicing System	C	1	0	May be inoperative provided aircraft is not operated in visible moisture and OAT less than +5 degrees Centigrade
8. Wing and Tail Deicing Automatic Control	C	1	0	May be inoperative provided manual control is operative.
9. Wing and Tail Deicing Manual Control	C	1	0	May be inoperative provided automatic control is operative.
10. Deicing Pressure Indicator	C	1	0	(O) May be inoperative Refer to PM 30-10A for (O)
11. Engine Inlet Anti-Icing	C	2	1	May be inoperative provided aircraft is not operated in visible moisture and OAT less than +5 degrees Centigrade and not otherwise required by the AFM.
12. Windshield Wipers	C	2	0	May be inoperative provided flight is not conducted in precipitation within 5 nautical miles of the airport of takeoff or intended landing.

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.30.2
Revision Two
Date 03-11-2019

1. ITEM REPAIR CATEGORY SYSTEM & SEQUENCE NUMBERS	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
<u>30 ICE AND RAIN PROTECTION Con't</u>				
13. Windshield Wiper Park Mode	C	2	1	(O) May be inoperative: Refer to PM 30-13A for (O)
14. Windshield Wiper Slow Mode	C	2	0	May be inoperative provided windshield wipers are operative in fast mode.
15. Oil Cooler Inlet Lip DC Thermal Anti-ice Heater	C	2	0	May be inoperative provided aircraft is not operated in visible moisture and OAT less than +5 degrees Centigrade and not otherwise required by the AFM.
16. Oil Cooler Inlet Lip DC Thermal Anti-Ice Heater Cycle Lights	C	2	0	May be inoperative provided the applicable generator ammeter indicates a minimum of 7.5 ampere increase When activating each lip anti-ice heater.
17. Pitot Heat Indicating System (Required by Certification or Operating Rules)	B	-	0	May be inoperative provided: a) All other Elements of the Pitot Heat System are operate normally, And b) Airplane is not operated into known or forecast icing conditions.
18. Pitot Heat Indicating System (Not Required by Certification or Operating Rules)	C	-	0	May be inoperative provided: a) All other Elements of the Pitot Heat System are operate normally, And b) Airplane is not operated into known or forecast icing conditions.

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.31.1
Revision Two
Date 03-11-2019

1. ITEM REPAIR CATEGORY SYSTEM & SEQUENCE NUMBERS	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
31 <u>INDICATING/RECORDING SYSTEMS</u>				
1. Clock with sweep hand or digital clock	C	1	0	May be inoperative for VFR
2. Flight Data Recorder (FDR) System	C	-	-	Any in excess of those required by FAR may be inoperative.
	A	-	0	May be inoperative provided: <ul style="list-style-type: none"> a) Cockpit Voice Recorder (CVR) operates normally, b) Airplane is not dispatched from Anchorage International Airport unless: <ul style="list-style-type: none"> 1. The FDR failure occurs after pushback but prior to takeoff or 2. The FDR repair was attempted but was not successful. c) In those cases where repair is attempted but not successful, the aircraft may be dispatched on a flight or series of flights until the aircraft returns to Anchorage International Airport where repair must be accomplished prior to dispatch, and d) Repairs are made within three flight days.
A) For Air Carrier and Commercial Operators				
1) FDR Recording Parameters Required By FAR	A	-	-	May be inoperative provided: <ul style="list-style-type: none"> a) Cockpit Voice Recorder (CVR) operates normally and b) Repairs are made within 20 calendar days.
2) FDR Recording Parameters Not Required by FAR	A	-	-	May be inoperative provided repairs are made prior to the completion of the next heavy maintenance check.
				(Continued)

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.31.2
Revision Two
Date 03-11-2019

1. ITEM REPAIR CATEGORY SYSTEM & SEQUENCE NUMBERS	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
<p>31 <u>INDICATING/RECORDING SYSTEMS</u></p> <p>B) Operators other than Holders of Air Carrier Or Commercial Operators Certificates</p> <p>4. Flight Data Recorder (FDR) Underwater Locating Device (ULD) (FDR Required by FAR)</p> <p>A) Flight Data Recorder (FDR) Underwater Locating Device (ULD) (FDR Not Required by FAR)</p>	<p>C</p> <p>A</p> <p>A</p> <p>C</p>	<p>-</p> <p>-</p> <p>0</p> <p>0</p> <p>0</p>	<p>-</p> <p>0</p> <p>0</p> <p>0</p>	<p>Any in excess of those required by 14 CFR may be inoperative.</p> <p>May be inoperative provided repairs are made in accordance with applicable FARs.</p> <p>May be inoperative provided Cockpit Voice Recorder is operative and repairs are made within three flight days</p> <p>May be inoperative.</p>

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.32.1
Revision Two
Date 03-11-2019

1. ITEM REPAIR CATEGORY	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
SYSTEM & SEQUENCE NUMBERS				
32 LANDING GEAR				
1. Nose Wheel Steering System (SA227 aircraft built per ECP 603 or modified by SB 227-32-030)	C	1	0	(O)(M) May be inoperative provided the system is deactivated by: Refer to PM 32-1A for (O)(M)
2. Nose Wheel Steering Speed Lever Microswitch	C	1	0	(O) May be inoperative Refer to PM 32-2A for (O)
3. Parking Brake	C	1	0	(O) May be inoperative Refer to PM 32-5A for (O)
4. Gear Door Warning System	C	1	0	May be inoperative provided a flight crew member confirms by visual inspection that main gear doors are CLOSED prior to each departure.
5. Landing Gear Control Latch Solenoid	C	1	0	(O) May be inoperative in the LATCHED position provided manual over-ride mechanism operates normally and aircraft is operated with a crew of two. Refer to PM 32-7A for (O)

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.33.1
Revision Two
Date 03-11-2019

1. ITEM REPAIR CATEGORY	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
SYSTEM & SEQUENCE NUMBERS				
<u>33 LIGHTS</u>				
1. Cockpit/Flight Deck/ Flight Compartment and Instrument Lighting System	C	1	0	Individual lights may be inoperative provided: <ul style="list-style-type: none"> a) Sufficient lighting is operative to make each required instrument, control and other device for which it is provided, easily readable. b) Remaining lights are positioned so that direct rays are shielded from flight crewmember eyes, and c) Lighting configuration and intensity is acceptable to the flight crew.
2. Cabin Light Systems	C	1	0	May be inoperative provided lighting configuration is acceptable to the flight crew.
3. Passenger Lighted Information Sign	C	1	0	(O) May be inoperative provided appropriate verbal briefings are given to the passengers Refer to PM 33-3A for (O)
4. Anti-Collision Beacon Light System	B	1	0	May be inoperative for day operations.
5. Strobe Lights	C	3	0	May be inoperative.
6. Landing Lights	C	2	0	May be inoperative for day operations. One may be inoperative for night operations. When wing mounted landing/recognition lights are installed both landing lights may be inoperative for night flights if both recognition lights and the taxi light are operative.
7. Position Light(s)	C	3	0	May be inoperative for day operations OR For night operations, individual bulbs may be inoperative provided at least one bulb is operative in each position light assembly.
	C	6	3	

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.33.2
Revision Two
Date 03-11-2019

1. ITEM REPAIR CATEGORY	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
SYSTEM & SEQUENCE NUMBERS				
33 <u>LIGHTS</u>				
8. Taxi Light	C	1	0	May be inoperative.
9. Recognition Lights	C	2	0	May be inoperative.
10. Wing Ice Lights	C	-	0	May be inoperative provided: a) aircraft is not operated in known or forecast icing conditions at night, and b) Ground deicing procedures do not require use of Wing Ice Lights
	C	2	1	May be inoperative provided: a) Left Light is operative for single pilot operations, and b) Ground deicing procedures do not require use of Wing Ice Lights.
11.. Baggage Compartment Lights	C	3	0	May be inoperative.
12. Normal Annunciator Dim Switch System	C	1	0	May be inoperative. Bright position must be available for day.

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.34.1
Revision Two
Date 03-11-2019

1. ITEM REPAIR CATEGORY	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
SYSTEM & SEQUENCE NUMBERS				
<u>34 NAVIGATION</u>				
1. Gyroscopic Rate of Turn/Slip Skid Indicator	B	2	1	Must be operative on left side for IFR, passenger carrying VFR over the top, and passenger carrying VFR night flights.
2. Vertical Speed Indicator	B	2	1	Must be operative on left side for IFR passenger carrying operations.
3. ATC Transponders and Automatic Altitude Reporting Systems	B	-	0	(O) May be inoperative provided: a) Operations do not require it's use, and. b) Prior to flight, approval is obtained from ATC facilities having jurisdiction over the planned route of flight. Refer to PM 34-C for (O).
	D	-	1	If dual transponders are installed ONE may be Inoperative.
4. Navigation Equipment				
VOR Navigation System	C	2	0	(O) May be inoperative provided operations are not predicated on the use of affected VOR navigation system. FAR 135 Operations: Refer to PM 34-A for (O). FAR 91 Operations: Refer to PM 34-B for (O).
Glide Slope System	C	2	0	(O) May be inoperative provided operations are not predicated on the use of affected Glide Slope navigation System. FAR 135 Operations: Refer to PM 34-A for (O). FAR 91 Operations: Refer to PM 34-B for (O).
Localizer System	C	2	0	(O) May be inoperative provided operations are not predicated on the use of affected Localizer navigation system. FAR 135 Operations: Refer to PM 34-A for (O). FAR 91 Operations: Refer to PM 34-B for (O).

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.34.2
Revision Two
Date 03-11-2019

1. ITEM	REPAIR CATEGORY	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
SYSTEM & SEQUENCE NUMBERS					
34 <u>NAVIGATION continued</u>					
GPS Navigation System	C	1	0		<p>(O) May be inoperative provided operations are not predicated on the use of affected GPS navigation system.</p> <p>FAR 135 Operations: Refer to PM 34-A for (O). FAR 91 Operations: Refer to PM 34-B for (O).</p>
5. Weather Radar/Thunderstorm	C	-	0		<p>FAR 135 operations: May be inoperative provided:</p> <p>a) Aircraft is operated in the State of Alaska. OR</p> <p>b) Aircraft is not operated carrying passengers under IFR or night VFR with a passenger seating configuration, excluding any pilot seat, of 10 seats or more when current weather reports indicate that thunderstorms or other potentially hazardous weather conditions that can be detected with airborne thunderstorms detection equipment may be reasonably be expected along the route to be flown.</p>
	C	1	0		<p>FAR 91 operations: May be inoperative.</p>
A) Radar Stabilization	C	-	0		<p>May be inoperative.</p>
6. Marker Beacon	C	1	0		<p>May be inoperative provided approach does not require its usage.</p>
7. Flight Director	C	-	0		<p>May be inoperative provided landing minimums are not based on its use.</p>
8. Radar Altimeter	C	1	0		<p>May be inoperative provided landing minimums are not based on its use.</p> <p>NOTE: Deferral may affect GPWS operation</p>

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.34.3
Revision Two
Date 11-21-08

1. ITEM	REPAIR CATEGORY	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. <u>REMARKS OR EXCEPTIONS</u>
SYSTEM & SEQUENCE NUMBERS					
34 <u>NAVIGATION continued</u>					
9. Distance Measuring Equipment (DME) Systems	C	1	0		<p>May be inoperative provided:</p> <p>a) Operations are not predicated on the use of DME</p> <p>b) Flight is not conducted at or above FL 240. However when the DME fails at and above FL 240, the PIC will notify ATC immediately, and may continue operations at and above FL 240 to the next airport of intended landing at which repair or replacement can be made.</p>
10. Standby Attitude Indicator	C	-	0		<p>May be inoperative for aircraft certified for 9 or less Passengers.</p>
11. Altitude Alerting System	A	-	0		<p>May be inoperative for FAR Part 91 or FAR Part 135 operations.</p>
12. ADF	C	-	0		<p>(O) May be inoperative provided operations are not predicated on the use of affected ADF navigation system.</p> <p>FAR 135 Operations: Refer to PM 34-A for (O).</p> <p>FAR 91 Operations: Refer to PM 34-B for (O).</p>
13. Radio Magnetic Indicator (RMI)	C	-	0		<p>May be inoperative.</p>

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.34.4
Revision Two
Date 03-11-2019

1. ITEM	REPAIR CATEGORY	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
SYSTEM & SEQUENCE NUMBERS					
34 <u>NAVIGATION</u> continued					
14. Nonstabilized Magnetic Compass	B	1	0	(O)May be inoperative provided any combination of three gyros of the stabilized compass system are operative.	
	B	1	0	(O)May be inoperative provided: a) any combination of two gyro of the stabilized compass system are operative, and b) aircraft is operated with dual independent navigation capability and under positive radar control by ATC on the enroute portion of the flight.	
	B	1	0	(O)May be operative for flights that are entirely within areas of magnetic unreliability provided at least two stabilized directional gyro system are installed, operative, and used in conjunction with approved free gyro navigation techniques.	
				Refer to PM 34-18B for (O).	
15. Traffic Alert and Collision Avoidance System (TCAS I)	B	-	0	(M) May be inoperative provided: a) System is deactivated and secured, and b) Enroute or approach procedures do not require it's use.	
	C	-	0	(M) May be inoperative provided: a) Not required by FAR.. (Not required for all cargo or 9 or less passenger carrying operations). b) System is deactivated and secured, and c) Enroute or approach procedures do not require it's use.	
				Refer to PM 34-16 for (M)	

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.34.5
Revision Two
Date 11-21-08

1. ITEM REPAIR CATEGORY SYSTEM & SEQUENCE NUMBERS	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
34 <u>NAVIGATION continued</u>				
16. Terrain Awareness And Warning System				
A) Class B TAWS Equipment Required				§ 135.154 – TAWS B equipment required for turbine- powered airplanes configured with 6-9 passenger seats
1) Ground Proximity Warning System	A	1 0	(O) May be inoperative provided:	a) Alternate procedures are established and used b) and Repairs are made within two flight days. Refer to PM 34-17 for (O)
a) Modes 1 & 3	A	2 0	(O) May be inoperative provided:	a) Alternate procedures are established and used b) and Repairs are made within two flight days. Refer to PM 34-17 for (O)
b) Test Mode	A	1 0	May be inoperative provided:	a) GPWS is considered inoperative, and b) Repairs are made within two flight days.
c) Modes 2, 4 & 5	A	1 0	May be inoperative.	
d) Advisory Callouts	B	- 0	(O) Maybe inoperative provided alternate procedures are established and used	Refer to PM 34-17 for (O)
e) Terrain Displays	C	- 0	May be inoperative.	
17. Gyroscopic Direction Indicator Slaved Mode	C	2 0	(O) May be inoperative provided DG mode is operative.	Refer to PM 34-18A for (O).
18. Overspeed Warning Sensor	B	1 0	May be inoperative provided AFM speed limitations are observed.	

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.34.6
Revision Two
Date 03-11-2019

1. ITEM REPAIR CATEGORY		2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH		4. <u>REMARKS OR EXCEPTIONS</u>
SYSTEM & SEQUENCE NUMBERS						
34 <u>NAVIGATION continued</u>						
19. Outside Air Temperature (OAT) Indicating System	C	1	1			May be inoperative provided OAT is provided by another calibrated system that allows determination of true OAT.
20. Externally Mounted Airspeed Bugs	C	-	0			May be inoperative, broken, or missing.
21. Navigation Management System						
A) Navigation Databases	C	1	0			(O) May be inoperative provided: a) Current Aeronautical Charts are used to verify Navigation Fixes prior to dispatch, b) Procedures are established and used to verify status and suitability of Navigation Facilities used to define route of flight, and c) Approach Navigation Radios are manually tuned and identified. Refer to PM 34-21 for (O).
22. Airspeed Indicator	B	2	1			May be inoperative on right side provided: a) Copilot's pitot system is functioning normally, and b) A functioning pneumatic indicator is installed and available to the pilot.
Cargo Operations only Second in command not required						

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.34.7
Revision Two
Date 03-11-2019

1. ITEM REPAIR CATEGORY		2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH		4. REMARKS OR EXCEPTIONS
SYSTEM & SEQUENCE NUMBERS						
34 <u>NAVIGATION continued</u>						
23. Gyroscopic Bank and Pitch Indicator	B	2	1			May be inoperative on right side provided: a) Two independent power sources are available to drive the left side instruments, and b) Aircraft does not have an Electronic Attitude Direction Indicator (EADI) installed on left side.
Cargo Operations only second in command not required.						
24. Gyroscopic Direction Indicator	B	2	1			May be inoperative on right side provided: a) Magnetic compass is operative, b) Two independent power sources are available to drive the left side instruments, and c) Aircraft does not have an Electronic Horizontal Situation Indicator (EHSI) installed on the Left side.
Cargo Operations Only Second in Command not Required						
25. Altimeter, Barometric Pressure Adjustable	B	2	1			May be inoperative on right side provided a functioning pneumatic altimeter, adjustable for barometric pressure, is installed and available to the pilot.
Cargo Operations only second in Command not Required						

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.35.1
Revision Two
Date 03-11-2019

1. ITEM	REPAIR CATEGORY	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. <u>REMARKS OR EXCEPTIONS</u>
<u>SYSTEM & SEQUENCE NUMBERS</u>					
35 <u>OXYGEN</u>					
1. Crew Oxygen System	C	1	1		A two hour oxygen supply required for each pilot or greater for flight above 12,000 MSL.

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.37.1
Revision Two
Date 03-11-2019

1. ITEM REPAIR CATEGORY	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. <u>REMARKS OR EXCEPTIONS</u>
SYSTEM & SEQUENCE NUMBERS				
37 <u>VACUUM/PRESSURE</u>				
1. Low Suction Warning Light C	1	0		May be inoperative provided the suction gauge is operative.

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.46.1
Revision Two
Date 03-11-2019

1. ITEM REPAIR CATEGORY SYSTEM & SEQUENCE NUMBERS	2. NUMBER INSTALLED			
46 <u>INFORMATION SYSTEMS</u> Not Installed	<table border="1"><thead><tr><th data-bbox="769 409 1495 464">3. NUMBER REQUIRED FOR DISPATCH</th></tr></thead><tbody><tr><td data-bbox="769 472 1495 1925"><table border="1"><thead><tr><th data-bbox="824 472 1489 527">4. <u>REMARKS OR EXCEPTIONS</u></th></tr></thead><tbody></tbody></table></td></tr></tbody></table>	3. NUMBER REQUIRED FOR DISPATCH	<table border="1"><thead><tr><th data-bbox="824 472 1489 527">4. <u>REMARKS OR EXCEPTIONS</u></th></tr></thead><tbody></tbody></table>	4. <u>REMARKS OR EXCEPTIONS</u>
3. NUMBER REQUIRED FOR DISPATCH				
<table border="1"><thead><tr><th data-bbox="824 472 1489 527">4. <u>REMARKS OR EXCEPTIONS</u></th></tr></thead><tbody></tbody></table>	4. <u>REMARKS OR EXCEPTIONS</u>			
4. <u>REMARKS OR EXCEPTIONS</u>				

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.52.1
Revision Two
Date 03-11-2019

1. ITEM	REPAIR CATEGORY	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
<u>SYSTEM & SEQUENCE NUMBERS</u>					
52 <u>DOORS</u>					
1. Cabin Door Closed Warning Light System	C	1	0	(O) May be inoperative provided:	Refer to PM 52-1A for (O)
2. Aft Cargo Door Closed Warning Light System	C	1	0	(O) May be inoperative provided:	Refer to PM 52-2A for (O)
3. Aft Cargo Door Secondary Warning and Test System (SFAR 41 Aircraft)	C	1	0	Switches normal (green light). May be inoperative provided all aft cargo door switches are visually checked to ensure they have extended to their relaxed (door open) position prior to departure. The door unsafe light may be inoperative provided all latches are visually checked in the closed and latched position. and not reopened prior to departure, or the aft cargo door closed warning light (annunciator panel) is operative.	
4. Aft Cargo Door Latches	C	8	7	(O)(M) One may be removed provided aircraft is operated unpressurized and the latches are visually checked in the closed and latched position and not reopened prior to departure.	Refer to PM 52-6A for (O)(M)
	C	8	7	(O)(M) One may be removed provided aircraft is operated unpressurized and the aft cargo door warning system is operative for the remaining door latches.	Refer to PM 52-6B for (O)(M).
5. Door Seals Systems	C	2	0	(M) May be inoperative provided the Fasten Seat Belt sign remains on, or the passengers are orally briefed to remain seated with their seat belt fastened.	Refer to PM 52-7A for (M)

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.52.2
Revision Two
Date 03-11-2019

1. ITEM	REPAIR CATEGORY	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH		4. <u>REMARKS OR EXCEPTIONS</u>
<u>SYSTEM & SEQUENCE NUMBERS</u>						
52 <u>DOORS (CONT'D)</u>						
6. Passenger Door/Gas Springs	C	2	0			<p>May be inoperative provided door is manually restrained by the crew and inoperative snubber/gas spring does not interfere with door operation.</p> <p>Placard door area both inside and outside: SNUBBER/GAS SPRING CLOSERS NOT INSTALLED. DO NOT DROP DOOR.</p> <p>NOTE: Second snubber is an option. No placard is required when one snubber is operative.</p>

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.61.1
Revision Two
Date 03-11-2019

1. ITEM	REPAIR CATEGORY	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH		4. <u>REMARKS OR EXCEPTIONS</u>
<u>SYSTEM & SEQUENCE NUMBERS</u>						
61 <u>PROPELLERS</u>						
1. Propeller Synchronizing/ Synchrophaser System	C	1	0			May be inoperative.

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.71.1
Revision Two
Date 03-11-2019

1. ITEM REPAIR CATEGORY	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
SYSTEM & SEQUENCE NUMBERS				
<p>71 <u>POWERPLANT</u></p> <p>1. Engine Case Ground Heating System (Tanis Type) D</p>	-	0		<p>(M) One or both may be inoperative provided Unit security and Wire are inspected by authorized persons to assure that routing remains unaffected.</p>

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.73.1
Revision Two
Date 03-11-2019

1. ITEM REPAIR CATEGORY	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. <u>REMARKS OR EXCEPTIONS</u>
SYSTEM & SEQUENCE NUMBERS				
<u>73 ENGINE FUEL & CONTROL</u>				
1. Fuel Flow meters	B	2	1	(O) One may be inoperative. Refer to PM 73-1A for (O).

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.74.1
Revision Two
Date 03-11-2019

1. ITEM	REPAIR CATEGORY	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH		4. <u>REMARKS OR EXCEPTIONS</u>
<u>SYSTEM & SEQUENCE NUMBERS</u>						
74 <u>IGNITION</u>						
1. Ignition Lights	C	2	0			Both may be inoperative provided: <ul style="list-style-type: none"> a) Continuous and override ignition systems are audibly checked prior to each engine start, and b) Aircraft is not operated in visible moisture and OAT less than +5 degrees Centigrade.

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.77.1
Revision Two
Date 03-11-2019

1. ITEM	REPAIR CATEGORY	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. <u>REMARKS OR EXCEPTIONS</u>
<u>SYSTEM & SEQUENCE NUMBERS</u>					
77 <u>ENGINE INDICATING</u>					
1. SRL Computer System (SA227 aircraft with SRL Inoperative AFM Supplements only)	C	2	0		May be inoperative provided operations are conducted in accordance with SRL Inoperative Supplement Data contained in AFM/POH.
2. Temperature Limiter and Indicator Light (SA226-T(B) and SA227 series only)	C	2	0		May be inoperative in accordance with AFM.
3. EGT Compensator	C	2	1		(O)(M) One may be inoperative provided: Refer to PM 77-6A for (O)(M).

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.80.1
Revision Two
Date 03-11-2019

1. ITEM	REPAIR CATEGORY	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. <u>REMARKS OR EXCEPTIONS</u>
<u>SYSTEM & SEQUENCE NUMBERS</u>					
80 <u>STARTING</u>					
1. Auto-Start System	C	2	0		(O) May be inoperative provided AFM manual start procedures are used. Refer to PM 80-1A for (O).

**TRANSNORTHERN
MINIMUM EQUIPMENT LIST
SA227**

Page 1.82.1
Revision Two
Date 03-11-2019

1. ITEM REPAIR CATEGORY SYSTEM & SEQUENCE NUMBERS	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
82 <u>WATER INJECTION</u>				
1. CAWI System	C	1	0	May be inoperative provided AFM performance does not require its use
2. AWI/ CAWI Quantity Indicator	C	1	0	May be inoperative provided: <ul style="list-style-type: none"> a) Visual check of the quantity is made prior to Departure, and b) Landing performance is not predicated upon its use.

GENERAL

The following are general procedures to be used any time a maintenance (M) or an operating (O) procedure is to be accomplished by authorized personnel. Authorized Personnel is defined as a person qualified in accordance with applicable Federal Aviation Regulations who has been given the responsibility by appropriate company management to perform these procedures.

NOTE: Procedures requiring specialized knowledge or skill, or requiring the use of tools or test equipment should be accomplished by maintenance personnel.

PM 1 Circuit Breaker Disengagement, Safetying and Fuse Removal

This describes the requirements when authorized personnel disengage a circuit breaker (CB) and the maintenance procedure for safetying CBs in the off position and/or fuse removal. Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

- A. On aircraft to depart from an airport where company authorized maintenance is not available:
 - 1. Appropriate CB is disengaged (pulled or turned off) as required by the applicable MEL authorized inoperative item procedure.

- B. On aircraft to depart an airport where company authorized maintenance is available:
 - 1. Toggle type CBs are safetyed in the off position by securing the toggle with twisted safety wire to a nearby screw.
 - 2. Push button type CBs are locked in the off position by slipping a CB lockout Device over the push button shaft or by tying off with a plastic bundle tie.
 - 3. Fuses are inspected and replaced or removed if necessary.

NOTE: Verify that deactivation of circuit breaker does not affect another system.

PM 2 Placarding Procedures

This describes the requirements when authorized personnel placard inoperative items of equipment. Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

An authorized inoperative item is required by the MEL, it shall be placarded as follows:

- A. The Placard shall preferably be yellow, self-adhesive and with the wording specified in the MEL. If a yellow self-adhesive placard is not available, a piece of paper with the specified wording written on it shall be taped in place.
- B. When the MEL or the Procedures Manual do not specify the wording then the yellow self-adhesive INOP placards shall be used stating the MEL number and the maximum date that operation is authorized. In the absence of a yellow self-adhesive INOP placard, a piece of paper with INOP written on it shall be taped in place.

INOP MEL xx-x due xx-xx-xx

- C. When the position is not specified then the placard shall be placed on or immediately adjacent to the defective instrument, control, switch, or device.

Installation of a placard is not maintenance. Therefore, the actual installation or removal of the placard does not require a maintenance release for approval for return to service.

PM 3 Crew Operating Procedures

MEL authorized inoperative items marked with an (O) require specific operating procedures be performed. Prior to conducting further operations, the following procedures and/or restrictions shall be complied with by authorized personnel:

- A. Determine that continued operation with the inoperative item is authorized according to the approved MEL.
- B. Determine that continued operations with the authorized item inoperative will not affect the safety of the flight.
- C. Determine that any MEL required alternate equipment is operative.
- D. Whenever a two pilot crew is used, the PIC will brief the SIC on the procedure to be used during the flight.

PM 4 Maintenance Procedures

MEL authorized inoperative items marked with an (M) require specific maintenance procedures be performed. Prior to conducting further operations, the following procedures and/or restrictions shall be complied with by authorized personnel:

- A. Determine that continued operation with the inoperative item is authorized according to the approved MEL.
- B. Determine that continued operations with the authorized item inoperative will not affect the safety of the flight.
- C. Determine that any MEL required alternate equipment is operative.
- D. Authorized personnel shall utilize the procedures in the Manufacturer's Maintenance Manuals and Technical Publications any time maintenance is being performed.

PM 5 Stowing Electrical Wiring or Connectors

Whenever a procedure calls for disconnecting, unplugging or stowing an electrical wire or electrical connector, the following procedures shall be accomplished:

A. For Electrical Wiring

1. Assure the electrical wire(s) will not arc or short and, if necessary, wrap wire ends in a non-conductible material.
2. Place end of wire(s) in a liquid proof material (plastic bag, etc.) and tie-wrap.
3. Secure the wire(s) to a suitable nearby stationary object.

B. For Electrical Connector

1. Place electrical connector in a liquid proof material (plastic bag, etc.) and tie-wrap.
2. Secure the electrical connector to a suitable nearby stationary object.

NOTE: Fuel lines, hydraulic lines, control cables, etc. are not suitable objects for securing electrical wires or electrical connectors. Protection against chafing, battery acids, fluids, personnel and cargo, high temperatures, and protection in wheel wells and landing gear areas must be assured.

PM 21-A

GENERAL

This describes the procedures to be used when the aircraft is required to remain unpressurized.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Set the Cabin Dump switch to DUMP.
- B. Set the Bleed Air switches to OFF.
- C. When flight planning for an unpressurized flight:
 - 1. Verify that fuel on board is adequate for planned flight considering higher fuel consumption rates for lower flight altitudes.
 - 2. Verify that oxygen on board is adequate for planned flight considering planned flight altitude.

PM 21-2A

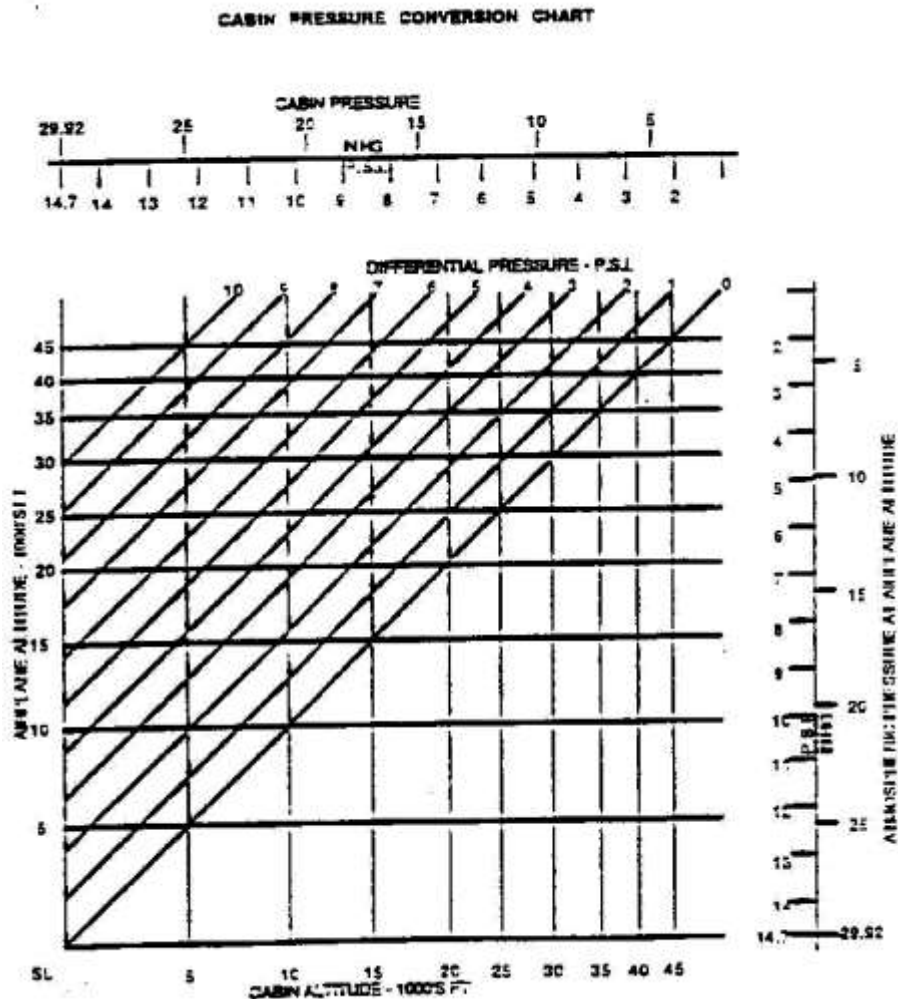
GENERAL

This describes the procedures to be used when the Cabin Altitude or Differential Pressure Indicator is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Determine that required indication operates normally.
- B. Utilize the following chart when necessary to convert cabin altitude or cabin differential pressure.



PM 21-4A

GENERAL

This describes the procedures to be used when a Flow Control Valve is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(M) MAINTENANCE PROCEDURES

- A. Determine that the affected Flow Control Valve is in the closed position as follows:
 - 1. Operate associated engine.
 - 2. Set associated Bleed Air Switch to ON.
 - 3. Verify that no air is flowing from the conditioning air ducts.
 - B. Determine that the cockpit fresh air fan operates normally with the gear retracted as follows:
 - 1. With aircraft on jacks, energize electrical system.
 - 2. Retract landing gear.
 - 3. Set the Cockpit Fresh Air Fan switch to ON. Check that fan operates normally.
- OR
- 4. Cause authorized personnel to perform a maintenance flight. After retracting gear, check that the Cockpit Fresh Air Fan operates normally.
- C. Determine by a functional check that the other Air Conditioning system operates normally.
- (O) Flight Crew to confirm that Oxygen and Masks are provided for all occupants as required by 14 CFR.

PM 21-5A

GENERAL

This describes the procedures to be used when a Automatic Pressurization Controller is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and or restrictions:

(M) MAINTENANCE PROCEDURES

- A. Determine that the manual pressurization controller operates normally as follows:
1. Start engines.
 2. Open CABIN PRESS DUMP circuit breaker on left console.
 3. Position cabin pressure dump switch to NORM.
 4. Position both BLEED AIR switches ON.
 5. Position pressurization mode selector to MANUAL.
 6. Close manual rate control. Verify cabin rate of climb indicator indicates a descent.
 7. Slowly open manual rate control. Verify that rate of climb indicator indicates a climb.
 8. When cabin pressure reaches 0.5 psi or less, reset the CABIN PRESS DUMP circuit breaker.
 9. Return aircraft to desired configuration.

PM 21-6A

GENERAL

This describes the procedures to be used when the Manual Pressurization Controller is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(M) MAINTENANCE PROCEDURES

- A. Determine that the automatic pressurization controller operates normally as follows:
 1. Start engines.
 2. Open CABIN PRESS DUMP circuit breaker on left console.
 3. Position cabin pressure dump switch to NORM.
 4. Position both BLEED AIR switches ON.
 5. Position pressurization mode selector to AUTO.
 6. Rotate cabin altitude control to position cabin altitude pointer at the six o'clock position. As the airplane begins to pressurize, position RATE selector to MIN. Verify rate of climb is 50 feet per minute down.
 7. Position RATE selector to MAX. Verify rate of climb is 2000 feet per minute down.
 8. Position altitude selector to 2000 feet. Verify cabin rate of climb indicator indicates a climb.
 9. Position the RATE selector to MIN. When cabin pressure reaches 0.5 psi or less, reset the CABIN PRESS DUMP circuit breaker.
 10. Return aircraft to normal configuration.

PM 21-9A

GENERAL

This describes the procedures to be used when the Air Conditioning System is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Determine on a maintenance flight that the Cockpit Fresh Air Fan operates normally with the landing gear retracted.
- B. Select the affected bleed air switch to OFF and placard INOP.
- C. Determine the other Flow Control Valve and Air Conditioning System operates normally as follows:
 - 1. Operate the engine associated with the operative air conditioning system.
 - 2. Set associated Bleed Air switch to ON.
 - 3. Verify that air is flowing from the conditioning air ducts.
 - 4. Vary the air conditioning temperature control and check that the conditioned air temperature varies corresponding to control movement.
- D. Verify that oxygen and masks are provided for all occupants, as required by FAR.

PM 21-10A

GENERAL

This describes the procedures to be used when the Cabin Dump Valve is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Set the Cabin Dump switch to DUMP.
- B. Set the Bleed Air switches to OFF.
- C. When flight planning for an unpressurized flight:
 - 1. Verify that fuel on board is adequate for planned flight considering higher fuel consumption rates for lower flight altitudes.
 - 2. Verify that oxygen on board is adequate for planned flight considering planned flight altitude.

(M) MAINTENANCE PROCEDURES

- A. Secure the Cabin Dump Valve in the open position by inserting a clip or safetying a block in the valve opening. Use a block that will not damage the valve such as wood or plastic.

PM 23-A

GENERAL

The following restrictions apply any time an airplane is flown with an item or items of communications equipment inoperative when conducting operations under FAR 135.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Two communication systems appropriate to the ground facilities to be used must be operative as follows:
 - 1. When conducting operations under Instrument Flight Rules.
 - 2. When conducting extended over water operations

- B. One communication system appropriate to the ground facilities to be used must be operative as follows:
 - 1. When conducting operations under VFR at night.
 - 2. When conducting operations under VFR Over-the-Top.
 - 3. Wherever Air Traffic Control is being exercised.

PM 23-B

GENERAL

The following restrictions apply any time an airplane is flown with an item or items of communications equipment inoperative when conducting operations under FAR 91.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. One communication system appropriate to the ground facilities to be used must be operative as follows:
 - 1. When conducting operations under IFR
 - 2. Wherever Air Traffic Control is being exercised.

PM 23-4A

GENERAL

This describes the procedures to be used when the Passenger Address System is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Ensure that passengers have been orally briefed on normal and emergency procedures prior to each departure.
- B. Orally brief the passengers during flight any time a briefing is required for normal or emergency operations.

This procedure is also applicable to all cargo operations when the Courier Seat is Occupied.

PM 24-2A

GENERAL

This describes the procedures to be used when a DC Voltmeter (with a Combination Indicator) is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Determine that the opposite Battery and Generator are operative as follows:
 - 1. Set Battery switch associated with operative DC Voltmeter to ON and verify that the DC Voltmeter indicates 24 VDC.
 - 2. Operate engine opposite from affected DC Voltmeter and verify that the DC Voltmeter indicates 28 VDC.
- B. Monitor the Generator and Battery Lights to ensure system with inoperative DC Voltmeter operates normally.

PM 24-8A

GENERAL

This describes the procedures to be used when a Battery Disconnect Warning Light is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(M) MAINTENANCE PROCEDURES

- A. Determine by visual inspection that the associated Battery does not show indications of overheating.
- B. Disconnect and stow the affected Battery connector as follows:
 - 1. Check that all electrical control switches in the cockpit are set to OFF.
 - 2. Ensure that electrical ground power unit is not connected to receptacle.
 - 3. Gain access to batteries.
 - 4. Disconnect removable power connectors from battery.
 - 5. Stow connector as per PM 5.

PM 25-3A

This describes the procedures to be used when any Floatation Equipment is inoperative when conducting operations under FAR 135.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Remove the affected floatation equipment from its normal location to prevent possible use. The affected floatation equipment may be stored in a baggage compartment until reaching a company facility where it may be removed for repair or replacement.

Flight Crew Notes for FAR 135 operations:

- A. Approved floatation gear readily available to each occupant and at least one pyrotechnic signaling device is required for flights conducted over water beyond power-off gliding distance from shore.
- B. For extended over water flights the following are required:
 - 1. An approved life preserver equipped with an approved survivor locator light for each occupant of the airplane.
 - 2. Enough approved life rafts of a rated capacity and buoyancy to accommodate the occupants of the airplane. An approved survival type emergency locator transmitter must be attached to one of the life rafts.

PM 25-3B

This describes the procedures to be used when any Floatation Equipment is inoperative when conducting operations under FAR 91.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Remove the affected floatation equipment from its normal location to prevent possible use. The affected floatation equipment may be stored in a baggage compartment until reaching a company facility where it may be removed for repair or replacement.

Flight Crew Notes for FAR 91 operations:

- A. Flights operated for hire beyond power off gliding distance from shore require the following:
 - 1. Approved floatation gear, readily available to each occupant.
 - 2. At least one pyrotechnic signaling device.

PM 26-3A

GENERAL

This describes the procedures to be used when "E" (Empty) Light(s) on Engine Fire Extinguisher Control Panel is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Determine prior to each takeoff by a visual check of the pressure gauge on the affected bottle(s) that the bottle pressure is within the required range. The required range is determined from the pressure vs. temperature placard located near the bottle.

PM 27-4A

GENERAL

This describes the procedures to be used when Gust Lock System is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Monitor the flight controls until gust protection is in place as follows:
 - 1. Secure flight control wheel in the full aft position with the seat belt.
 - 2. Secure the rudder with either an external gust lock or by a rudder pedal locking tube.
- B. Prior to each takeoff flight control freedom of movement is verified by moving controls through full travel.

(M) MAINTENANCE PROCEDURES

- A. Determine that the Flight Control Locking Pins are secured in the unlocked positions as follows:
 - 1. Safety Flight Control Lock lever in the unlocked position.
 - 2. Verify that the flight controls have full, unrestricted freedom of movement.

PM 28-1A

GENERAL

This describes the procedures to be used when one Fuel Quantity System is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Determine prior to each takeoff that the Fuel Crossflow Annunciation operates normally as follows:
 - 1. Set the Fuel Crossflow switch to OFF.
 - 2. With power applied to the annunciators, verify that the Fuel Crossflow annunciator is extinguished.
 - 3. Set the Fuel Crossflow switch to ON and verify that the Fuel Crossflow light illuminates.
- B. Determine with both engines operating prior to each takeoff by observing the Fuel Flowmeters indicate that they operating normally.
- C. Prior to each takeoff use the Fuel Magnasticks to determine that the fuel tank quantity is adequate for the planned flight and that fuel quantities in each sight are equal unless the tanks are filled to capacity.

PM 30-10A

GENERAL

This describes the procedures to be used when the De-Ice Pressure Indicator is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Check the deice boots for proper inflation cycle as follows:
 - 1. With either or both engines operating, select the Deice switch to MANUAL and verify that deice boots inflate.
 - 2. Set the Deice switch to OFF and verify that deice boots deflate.
 - 3. While boots are deflating verify that the vacuum indicator indication momentarily decreases.

PM 30-13A

GENERAL

This describes the procedures to be used when the Park Mode of a Windshield Wiper is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) OPERATIONAL PROCEDURES

- A. Manually park the affected wiper blade as follows:
 - 1. Place wiper blade in a position that allows a field of vision satisfactory to the flight crew.
 - 2. Disengage the affected Windshield Wiper circuit breaker as per PM 1.

PM 32-1A

GENERAL

This describes the procedures to be used when the Nose Wheel Steering is inoperative on SA227 aircraft built per ECP 603 or modified by SB 227-32-030.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Verify that arming valve operates normally during VALVE TEST portion of TAXI check.
- B. Maintain directional control with rudder, differential braking, and/or differential power.

(M) MAINTENANCE PROCEDURES

- A. If the NWS system has an electrical malfunction, deactivate the system by setting the Nose Wheel Steering switch to OFF.

CAUTION: Do not pull the NWS circuit breaker to deactivate the system. The circuit breaker must be IN to enable the NOSE WHEEL STEER FAIL amber annunciator light to warn of a leaky arming valve.

NOTE: There is no approved method of deactivating the nose wheel steering system by cutting off hydraulic power to the system.

- B. Determine that the arming valve operates normally and has not failed (leaky).

PM 32-2A

GENERAL

This describes the procedures to be used when the Nose Wheel Steering Speed Lever Microswitch is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Whenever necessary to activate steering:
 - 1. Check that nose wheel steering arm switch is ARMED.
 - 2. Depress the power lever microswitch.

PM 32-5A

GENERAL

This describes the procedures to be used when the Parking Brake is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Monitor the brakes when either the wheel chocks are not installed or the aircraft is not tied down.

PM 32-7A

GENERAL

This describes the procedures to be used when the Parking BrakeLanding Gear Control Latch Solenoid is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Check that landing gear control lever is latched.
- B. To reposition landing gear control lever from DN to UP after takeoff, manually override the locking mechanism.

PM 33-3A

GENERAL

This describes the procedures to be used when the Passenger Notice System (Fasten Seat Belt/No Smoking Light) is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Orally brief the passengers each time smoking is permitted or restricted and each time seat belts are or are not required to be fastened.

PM 34-A

GENERAL

The following restrictions apply any time an aircraft is flown with an item or items of navigation equipment inoperative for operations conducted under FAR 135.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Two navigation systems appropriate to the ground facilities to be used must be operative when conducting operations under the following conditions:
 - 1. IFR
 - 2. Extended overwater conditions
- B. One navigation system appropriate to the ground facilities to be used must be operative when conducting operations under the following conditions:
 - 1. VFR Over-the-Top
 - 2. Night VFR
- C. One VOR navigation system must be operative when conducting IFR operations in Class B airspace.

PM 34-B

GENERAL

The following restrictions apply any time an aircraft is flown with an item or items of navigation equipment inoperative for operations conducted under FAR 91.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. One navigation system appropriate to the ground facilities to be used must be operative in areas where Instrument Flight Rules are mandatory.
- B. One VOR navigation system must be operative when conducting IFR operations in Class B airspace.

PM 34-C

GENERAL

This describes the procedures to be used when the ATC Transponder/Automatic Altitude Reporting Systems are inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. One ATC Transponder with automatic pressure altitude reporting equipment is required:
1. When operations are conducted in Class A, Class B, and Class C airspace areas.
 2. When operations are conducted above the ceiling and within the lateral boundaries of a Class B or Class C airspace area designated for an airport upward to 10,000 feet MSL.
 3. When operations are conducted in all airspace of the 48 contiguous states and the District of Columbia at and above 10,000 feet MSL, excluding the airspace at and below 2,500 feet above the surface.
 4. When operations are conducted into or out of the United States or into, within, or across the contiguous US ADIZ.
 5. When operations are conducted in the airspace within 30 nautical miles of an airport listed below from the surface upward to 10,000 feet MSL:

Atlanta, GA	The William B. Hartsfield Atlanta Int'l Airport
Baltimore, MD	Baltimore/Washington international Airport
Boston, MA	General Edward Lawrence Logan Int'l Airport
Chantilly, VA	Washington Dulles International Airport
Charlotte, NC	Charlotte/Douglas International Airport
Chicago, IL	Chicago-O'Hare International Airport
Cleveland, OH	Cleveland-Hopkins International Airport
Covington, KY	Cincinnati Northern Kentucky International Airport
Dallas, TX	Dallas/Fort Worth Regional Airport
Denver, CO	Denver International Airport
Detroit, MI	Metropolitan Wayne County Airport
Honolulu, HI	Honolulu International Airport
Houston, TX	George Bush Intercontinental Airport/Houston
Kansas City, MO	Mid-Continent International Airport
Las Vegas, NV	McCarran International Airport

Cont'd

PM 34-C Cont'd

Los Angeles, CA	Los Angeles International Airport
Memphis, TN	Memphis International Airport
Miami, FL	Miami International Airport
Mineapolis, MN	Mineapolis-St. Paul International Airport
Newark, NJ	Newark International Airport
New Orleans, LA	New Orleans International Airport-Moisant Field
New York, NY	John F. Kennedy International Airport
New York, NY	La Guardia Airport
Orlando, FL	Orlando International Airport
Philadelphia, PA	Philadelphia International Airport
Phoenix, AS	Phoenix Sky Harbor International Airport
Pittsburgh, PA	Greater Pittsburgh International Airport
St. Louis, MO	Lambert-St. Louis International Airport
Salt Lake City, UT	Salt Lake City International Airport
San Diego, CA	San Diego International Airport
San Francisco, CA	San Francisco International Airport
Seattle, WA	Seattle-Tacoma International Airport
Tampa, FL	Tampa International Airport
Washington, DC	Ronald Reagan Washington National Airport and Andrews Air Force Base

- B. Flight Crew may request ATC authorized deviations from the above requirements as follows:
1. For aircraft with an operating Transponder, but without operating automatic pressure altitude reporting equipment having a Mode C capability, the request may be made at any time.
 2. For operation of an aircraft with an inoperative transponder to the airport of ultimate destination, including any intermediate stops, or to proceed to a place where suitable repairs can be made or both, the request may be made at any time.
 3. For operation of an aircraft that is not equipped with a transponder, the request must be made at least one hour before the proposed operation.

PM 34-16

GENERAL

This describes the procedures to be used when the Traffic Alerter Collision Avoidance System is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(M) MAINTENANCE PROCEDURES

- A. Pull and Tie-wrap the TCAS Circuit Breaker.

(O) FLIGHT CREW PROCEDURES

- A. Verify that enroute or approach procedures do not require the use of Traffic Alert and Collision Avoidance System. (See NOTE)

NOTE: Operator has no published procedure which would require the use of Traffic Alert and Collision Avoidance System for enroute or approach flight segments.

PM 34-17

GENERAL

This describes the procedures to be used when the Ground Proximity Warning System is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. “GPWS Modes 1-4 Inop” placard shall be placed near the GPWS Control Panel
- B. “GPWS Test Mode Inop” placard shall be placed near the GPWS Control Panel.
- C. “GS DEV (Mode 5) Mode Inop” placard shall be placed near the GPWS Control Panel.
- D. “Advisory Callouts Inop” placard shall be placed near the GPWS Control Panel.
Pilots will ensure that all standard callouts regarding altitude, positional and performance deviations and status are clearly made when due.

PM 34-18A

GENERAL

This describes the procedures to be used when the Gyroscopic Direction Indicator Slaved Mode is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Verify that directional gyro erects normally.
- B. Monitor the directional gyro for precessing. Adjust as necessary.

PM 34-18B

GENERAL

This describes the procedures to be used when the Nonstabilized Magnetic Compass is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Verify DG indications utilizing known runway headings prior to each takeoff.
- B. Utilize GPS “track” and “bearing” functions to monitor DG indications.

PM 34-21

GENERAL

This describes the procedures to be used when the Flight Management System Navigation Database is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Verify Navigation Fixes utilizing current Aeronautical Charts prior to dispatch
- B. Contact FFS and/or check Notams to determine status of Navigation Facilities that define the route of flight.

PM 52-1A

GENERAL

This describes the procedures to be used when the Cabin Door Closed Warning Light System is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Determine by visual inspection prior to each takeoff that the latches are in the closed and latched position.
- B. Do not reopen the door after the latches have been inspected unless another inspection is made prior to departure.
- C. Brief the passengers to remain seated with seat belts fastened throughout the flight.
- D. If Fasten Seat Belt Sign is operative, leave it on throughout the flight.
- E. Operate the aircraft unpressurized as per PM 21-A.

PM 52-2A

GENERAL

This describes the procedures to be used when the Aft Cargo Door Closed Warning Light System is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Determine by visual inspection prior to each takeoff that the latches are in the closed and latched position.
- B. Do not reopen the door after the latches have been inspected unless another inspection is made prior to departure.
- C. Brief the passengers to remain seated with seat belts fastened throughout the flight.
- D. If Fasten Seat Belt Sign is operative, leave it on throughout the flight.
- E. Operate the aircraft unpressurized as per PM 21-A.

PM 52-3A

GENERAL

This describes the procedures to be used when the Aft Cargo Door Test Light is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Determine the Cargo Door Closed Warning Light System (Item 52-2) operates normally by verifying that the annunciator is illuminated when the cargo door is open and extinguishes when the cargo door is closed.
- B. Check that the annunciator is extinguished prior to departure.

PM 52-3B

GENERAL

This describes the procedures to be used when the Aft Cargo Door Test Light is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Determine by visual inspection prior to each takeoff that the latches are in the closed and latched position.
- B. Do not reopen the door after the latches have been inspected unless another inspection is made prior to departure.
- C. Brief the passengers to remain seated with seat belts fastened throughout the flight.
- D. If Fasten Seat Belt Sign is operative, leave it on throughout the flight.
- E. Operate the aircraft unpressurized as per PM 21-A.

PM 52-6A

GENERAL

This describes the procedures to be used when an Aft Cargo Door Latch (Click Clack) is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Operate the aircraft unpressurized as per PM 21-A.
- B. Determine prior to each takeoff by visual inspection that the remaining Click Clack Latches are closed and latched.
- C. Do not reopen the door after the latches have been inspected unless another inspection is made prior to departure.

(M) MAINTENANCE PROCEDURES

- A. One Click Clack Latch may be removed from the door as follows:
 - 1. Remove upholstery from door.
 - 2. Remove bolt connecting the affected push-pull rod.
 - 3. Remove bayonet from push-pull rod.
- B. Remove upholstery trim strips from door frame.
- C. Verify by visual inspection that the remaining Click Clack latches engage properly.

PM 52-6B

GENERAL

This describes the procedures to be used when an Aft Cargo Door Latch (Click Clack) is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Operate the aircraft unpressurized as per PM 21-A.
- B. Check that the Annunciator is extinguished prior to each departure.

(M) MAINTENANCE PROCEDURES

- A. One Click Clack Latch may be removed from the door as follows:
 - 1. Remove upholstery from door.
 - 2. Remove bolt connecting the affected push-pull rod.
- B. Remove upholstery trim strips from door frame.
- C. Verify by visual inspection that the remaining Click Clack latches engage properly.
- D. Secure the microswitch in the off position on the removed bayonet.
- E. Determine the Cargo Door Closed Warning Light System (Item 52-2) operates normally by verifying that the annunciator is illuminated when the cargo door is open and extinguishes when the cargo door is closed.

PM 52-7A

GENERAL

This describes the procedures to be used when an Door Seal(s) is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(M) MAINTENANCE PROCEDURES

- A. Disconnect, cap, and plug door seal pressure line either at the door or at the door seal shutoff valve to prevent excessive air leakage from system.

PM 73-1A

GENERAL

This describes the procedures to be used when an Fuel Flowmeter is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Determine that both Fuel Quantity Indications are operative by noting indication increases as fuel is added to the aircraft fuel tanks.
- B. The affected side fuel flow may be determined by timing fuel quantity changes.
- C. Placard fuel totalizer INOP.

NOTE: The fuel totalizer will be inaccurate when one fuel flowmeter is inoperative.

PM 77-5A

GENERAL

This describes the procedures to be used when an ITT Compensator is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(M) MAINTENANCE PROCEDURES

- A. Mark the ITT Gauge with the uncompensated limiting temperature. Refer to aircraft engine log to determine the uncompensated limiting temperature.
- B. Deactivate the ITT Compensator circuit breaker as per PM 1.

PM 77-6A

GENERAL

This describes the procedures to be used when an EGT Compensator is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Monitor the EGT gauges to assure EGT limits are not exceeded.

(M) MAINTENANCE PROCEDURES

- A. Set the movable red line (bug) on the EGT Gauge to the uncompensated limiting temperature. The supplement for TPE-331-10UA-511G engines, Section 4, Performance “Takeoff Power Set Chart” is utilized to determine the uncompensated limiting temperature.
- B. Placard the EGT gauge “EGT COMP INOP – USE MARKED TEMP LIMITS”.

PM 80-1A

GENERAL

This describes the procedures to be used when an Auto Start System is inoperative.

Aircraft may continue in service provided authorized personnel comply with the following procedures and/or restrictions:

(O) FLIGHT CREW PROCEDURES

- A. Refer to “Battery Start” in the Airplane Flight Manual for manual start procedures. Manually hold the speed switch override switch or the speed switch through the speed range until self sustaining speed, as determined from AFM, is reached.
- B. Refer to “Airstart Procedure” in the Airplane Flight Manual for manual airstart procedures.