

Cv880r22. txt

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

Revision: 22
Date: 04/12/78

MASTER MINIMUM EQUIPMENT LIST

CONVAIR CV-880/990 (ALL MODELS)

Federal Aviation Administration
Flight Standards Division
Aircraft Evaluation Group, ANM-270L
4340 Donald Douglas Drive
Long Beach, CA 90808

Telephone: (213) 548-2871
FTS: 796-2871

FEDERAL AVIATION ADMINISTRATION
MASTER MINIMUM EQUIPMENT LIST

Page: I
Revision: 22
Date: 04/12/78

CONVAIR CV-880/990 (All Models)

Table of Contents

Page 1

SYSTEM NO.	SYSTEM	PAGE
--	Table of Contents	I
--	Control Page	II, III
--	Highlights of Change	IV
--	Note and Definition	V
--	Preamble	VI, VII
21	Air Conditioning	21-1, 2, 3, 4
22	Auto Flight	22-1
23	Communications	23-1, 2, 3
24	Electrical Power	24-1, 2
25	Equipment/Furnishings	25-1, 2, 3
26	Fire Protection	26-1, 2
27	Flight Controls	27-1, 2, 3
28	Fuel	28-1, 2, 3, 4, 5
28	Fuel	28-6
29	Hydraulic Power	29-1, 2
30	Ice and Rain Protection	30-1, 2, 3
31	Indicating/Recording Systems	31-1
32	Landing Gear	32-1
33	Lights	33-1, 2, 3
34	Navigation	34-1, 2, 3, 4
35	Oxygen	35-1
36	Pneumatic	36-1
52	Doors	52-1
73	Engine Fuel & Control	73-1
74	Ignition	74-1
75	Bleed Air	75-1
77	Engine Indicating	77-1, 2, 3
78	Engine Exhaust	78-1
79	Engine Oil	79-1

FEDERAL AVIATION ADMINISTRATION

Page: II

MASTER MINIMUM EQUIPMENT LIST

Revision: 22

Date: 04/12/78

CONVAIR CV-880/990 (All Models)

Control Page

SYSTEM	PAGE	REV NO.	CURRENT DATE
Cover Page	-	22	04/12/78
Table of Contents	I	22	04/12/78
Control Page	II	22	04/12/78
	III	22	04/12/78
Highlights of Change	IV	22	04/12/78
Note and Definition	V	22	04/12/78
Preamble	VI		03/10/78
	VII		03/10/78
21	21-1	17	12/01/66
	21-2	17	12/01/66
	21-3	17	12/01/66
	21-4	19	10/01/69
22	22-1	16	06/01/66
23	23-1	22	04/12/78

Cv880r22. txt

	23-2	22	04/12/78
	23-3	15	12/01/65
24	24-1	16	06/01/66
	24-2	16	06/01/66
25	25-1	22	04/12/78
	25-2	22 A	08/26/86
	25-3	22 A	08/26/86
26	26-1	22 A	08/26/86
	26-2	22 A	08/26/86
27	27-1	16	06/01/66
	27-2	17	12/01/66
	27-3	17	12/01/66
28	28-1	16	06/01/66
	28-2	16	06/01/66
	28-3	16	06/01/66
	28-4	16	06/01/66
	28-5	16	06/01/66
	28-6	16	06/01/66
29	29-1	21	08/15/73
	29-2	21	08/15/73
30	30-1	16	06/01/66
	30-2	17	12/01/66
	30-3	17	12/01/66
31	31-1	22	04/12/78
32	32-1	22	04/12/78
33	33-1	16	06/01/66

FEDERAL AVIATION ADMINISTRATION

Page: III

MASTER MINIMUM EQUIPMENT LIST

Revision: 22

Date: 04/12/78

CONVAIR CV-880/990 (All Models)

Control Page

SYSTEM	PAGE	REV NO.	CURRENT DATE
	33-2	20	02/07/72
	33-3	22 A	08/26/86
34	34-1	18	12/15/67
	34-2	22	04/12/78
	34-3	22	04/12/78
	34-4	22	04/12/78
35	35-1	15	12/01/65
36	36-1	15	12/01/65
52	52-1	15	12/01/65
73	73-1	16	06/01/66
74	74-1	16	06/01/66
75	75-1	15	12/01/65
77	77-1	22	04/12/78
	77-2	22	04/12/78
	77-3	22	04/12/78
78	78-1	16	06/01/66
79	79-1	16	06/01/66

FEDERAL AVIATION ADMINISTRATION

Page: IV

Revision: 22

Cv880r22.txt
 MASTER MINIMUM EQUIPMENT LIST Date: 04/12/78
 CONVAIR CV-880/990 (All Models)

Highlights of Change 22

Effective above date, insert the pages listed below in the CONVAIR CV-880/990 Master Minimum Equipment List and, as applicable, remove the like numbered pages they replace.

Remove pages	Dated	Insert pages	Dated
--		Log of Pages	Apr 12, 1978
Table of Contents	Feb 7, 1972	Tables of Contents	Apr 12, 1978
Preamble	Undated	Preamble	
		Pages I, II	Mar 10, 1978
23-1	Dec 1, 1963	23-1	Apr 12, 1978
--	--	23-1A	Apr 12, 1978
25-1	Feb 7, 1972	25-1	Apr 12, 1978
31-1	Jun 1, 1966	31-1	Apr 12, 1978
32-1	Jun 1, 1966	32-1	Apr 12, 1978
34-2	Feb 7, 1972	34-2	Apr 12, 1978
34-3	Feb 7, 1972	34-3	Apr 12, 1978
34-4	Feb 7, 1972	34-4	Apr 12, 1978
77-1	Jun 1, 1966	77-1	Apr 12, 1978
77-2	Jun 1, 1966	77-2	Apr 12, 1978

FEDERAL AVIATION ADMINISTRATION Page: V
 MASTER MINIMUM EQUIPMENT LIST Revision: 22
 CONVAIR CV-880/990 (All Models) Date: 04/12/78

Note and Definition

NOTE: (1) Asterisk (*) requires inoperative unit or components to be
 Page 4

- pl acarded.
- (2) Hash Mark (#) requires appropriate procedures to be established, published and complied with if flight is accomplished with item inoperative.
 - (3) Dash (-) in Column 1 indicates a variable quantity.
 - (4) Definitions for the purpose of this list:
 - A. "VFR flight conditions" means VFR atmospheric conditions for the area of flight and does not pertain to the dispatch release, flight plan or clearance.
 - B. "Icing condition" means the atmospheric environment is such that ice can form on the aircraft or in the engine.
 - C. "Regulations" means the applicable portion of the Federal Aviation Act and Federal Aviation Administration Regulations in force during the flight.
 - D. "Inoperative" means any time a system and/or component malfunctions to the extent that it does not accomplish its intended purpose and/or is not consistently functioning within its designed operating limit(s) or tolerance(s).

FEDERAL AVIATION ADMINISTRATION

Page: VI

MASTER MINIMUM EQUIPMENT LIST

Revision:

Date: 03/10/78

CONVAIR CV-880/990 (All Models)

Preamble

If some deviations from the type certificated configuration and equipment required by the operating rules were not permitted, the aircraft could not be flown unless all such equipment was operable. Experience has proven that the operation of every system or component installed on the aircraft is not necessary when the remaining operative instruments and equipment provide continued safe operations. Therefore certain deviations from these requirements are authorized to permit continued or uninterrupted operation of the aircraft. The Federal Aviation Regulations permit the publication of a MINIMUM EQUIPMENT LIST (MEL) designed to provide

owners/operators with the authority to operate an aircraft with certain items or components inoperative provided the Administrator finds an acceptable level of safety maintained by appropriate operations limitations, by a transfer of the function to another operating component or by reference to other instruments or components providing the required information.

For the sake of brevity, the MEL does not include obviously required items such as wings, rudders, flaps, engines, landing gear, etc. Also, the list may not include items which do not affect the airworthiness of the aircraft, such as galley equipment, entertainment systems, passenger convenience items, etc. However, it is important to note that ALL ITEMS WHICH ARE RELATED TO THE AIRWORTHINESS OF THE AIRCRAFT AND NOT INCLUDED ON THE LIST ARE AUTOMATICALLY REQUIRED TO BE OPERATIVE.

Unless otherwise specified in the remarks column, the FAA does not define "where" or "when" an inoperative item is to be repaired or replaced; but rather indicates through approval of MELs those instruments and items of equipment that may be inoperative for certain flight conditions with the intent that no flight can take off from an airport with inoperative equipment other than that specified. The failure of instruments or items of equipment in excess of those allowed to be inoperative by the MEL causes the aircraft to be unairworthy. The FAA makes no distinction in the MEL for dispatch or operation of a flight between points of origin and termination, including intermediate stops or flights beyond the scheduled termination of the flight. The MEL was never intended to provide for continued operation of the aircraft for an indefinite period with inoperative items. The basic purpose of the MEL is to permit the operation of an aircraft with inoperative equipment within the

Continued on next page

FEDERAL AVIATION ADMINISTRATION

Page: VII

MASTER MINIMUM EQUIPMENT LIST

Revision:

Date: 03/10/78

CONVAIR CV-880/990 (All Models)

Preamble

framework of a controlled and sound program of repairs and parts replacement. It is important that the owner/operator make repairs at the first airport where repairs or replacements may be made but, in any case, repair should be accomplished at the terminating airport, since additional malfunctions may require the aircraft to be taken out of service.

Owners/operators are responsible for exercising the necessary operational control to assure that no aircraft is dispatched or flown with multiple MEL items inoperative without first determining that any interface or interrelationship between inoperative systems or components will not result in a degradation in the level of safety and/or undue increase in crew workload.

The exposure to additional failures during continued operation with inoperative systems or components must also be considered in determining that an acceptable level of safety is being maintained. The MEL may not deviate from requirements of the AFM limitations

section, emergency procedures or airworthiness directive unless the airworthiness directive or AFM provides otherwise.

U. S. DEPARTMENT OF TRANSPORTATION		MASTER MINIMUM EQUIPMENT LIST	
FEDERAL AVIATION ADMINISTRATION			
AIRCRAFT: CONVAIR CV-880/990 (All Models)		REVISION NO: 17	PAGE:
		DATE: 12/01/66	21-1
SYSTEM & SEQUENCE NUMBERS	1. ITEM	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH
		4. REMARKS OR EXCEPTIONS	
21	AIR CONDITIONING		
1.	Turbo-Compressors	2	0 *#Both turbo-compressors may be inoperative for unpressurized flight. One turbo-compressor may be inoperative for pressurized flight provided alternate bleed air is available and the electronic cooling fan and valve are operative.
2.	Alternate Pressurization Bleed Air Valve	2	1 *#One may be inoperative provided one turbo-compressor is operative.
3.	Ram Air Valves	2	0 *#Both may be inoperative in closed position for pressurized flight provided two air sources and air condition systems are functioning. Valves(s) may be failed open for unpressurized flight.
4.	Cabin Altitude Indicator	1	0 *#May be inoperative provided cabin differential pressure indicator is

Cv880r22.txt

5.	Cabin Differential Pressure Indicator	1	0	operating normally and a chart is provided at the engineer's position to convert cabin differential pressure to cabin altitude. *#May be inoperative provided the cabin altitude indicator is operating normally and a chart is provided at the engineer's position to convert cabin altitude to differential pressure.
6.	Cabin Rate-of-Climb Indicator	1	0	*#May be inoperative provided all other instruments and functions of pressurization system operate normally.

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:
CONVAIR CV-880/990 (All Models)

REVISION NO: 17

PAGE:

DATE: 12/01/66

21-2

SYSTEM & SEQUENCE NUMBERS	ITEM	1. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
		2.	3. NUMBER REQUIRED FOR DISPATCH	
21	AIR CONDITIONING			
7.	Cabin and Flight Deck Air Flow Indicators	-	0	*Not required by Regulation.
8.	Cabin Altitude Warning System	1	0	*#May be inoperative for flight below 10,000 feet.
9.	Turbo-Compressor Bearing Temperature Indicators	-	0	*Not required by Regulation.
10.	Cabin Pressure Control			
	Automatic	1	0	*May be inoperative.
	Manual	2	0	*#May be inoperative for unpressurized flight.
11.	Re-circulating Fan	1	0	*#May be inoperative.
12.	Cabin Outflow Valves	2	1	*#One may be inoperative, provided the inoperative valve is electrically positioned to the closed position and further

Cv880r22.txt

			provided that the emergency relief valve of the inoperative valve remains functional.
13. Re-circulation Shut-off Valve	1	0	*#May be inoperative provided failed unit is fixed in the closed position and fan inoperative.
14. Electric Heaters	-	0	*

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

CONVAIR CV-880/990 (All Models)

REVISION NO: 17

DATE: 12/01/66

PAGE:

21-3

SYSTEM & SEQUENCE NUMBERS	1. ITEM	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
21 AIR CONDITIONING				
15. Freon Systems		2	0	*#The following conditions apply for ambient temperature ranges: 1. 85 DEGREES F AND BELOW No Freon system operation or ground pre-cooling required.
		2	-	2. 85 DEGREES F TO 95 DEGREES F No Freon system required provided ground cooling to at least 85 degrees F is used. One operative Freon system required if pre-cooling not used.
		2	1	3. ABOVE 95 DEGREES F AMBIENT One operative Freon system required.
16. Condenser Ground Cooling Shut-off Valve		2	-	*#May be inoperative provided Freon System on failed side is not operated at speeds under 185 knots or on the ground.
17. Condenser In-flight Cooling Shut-Off Valve		2	1	*#If valve failed closed, do not operate Freon system on failed side in flight; if failed open, do not operate Freon system on ground.

Cv880r22.txt

18. Condenser Cooling Fan	2	-	*#Either may be inoperative, provided respective Freon package is turned off at speeds under 185 Knots and for ground operation.
19. Electronics Compartment Cooling Fan	1	0	*#May be inoperative provided cooling valve is operative. Must be operative for dispatch with one turbo-compressor and one alternate bleed air valve inoperative.

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:
CONVAIR CV-880/990 (All Models)

REVISION NO: 19

PAGE:

DATE: 10/01/69

21-4

SYSTEM & SEQUENCE NUMBERS	ITEM	1. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
		2. NUMBER REQUIRED FOR DISPATCH	3. NUMBER REQUIRED FOR DISPATCH	
21	AIR CONDITIONING			
20.	Electronics Compartment Cooling Valve	1	0	*#May be inoperative provided cooling fan is operative. Must be operative for dispatch with one turbo-compressor and one alternate bleed air valve inoperative.
21.	Flight Deck Temperature Control	1	-	*#Automatic or Manual must be operative.
22.	Cabin Temperature Control	1	-	*#Automatic or Manual must be operative.
23.	Cabin Differential Temperature Control	1	0	*
24.	Cabin Air Temperature Indicating System	1	0	*
25.	Freon Excess Heat Light (If Installed)	2	1	*#One may be illuminated provided: (1) Freon drive ducts are inspected and found free from leaks and has adequate insulation. (2) Over-heat loop inspected for damage. (3) Freon isolation valve is closed. (4) Electrical plug from the Freon isolation valve is disconnected. (5) Isolation switch in off position. (6) All wing and forward fuselage bleed air emergency isolation valves are operative. (7)

Cv880r22.txt

Conditions for operative freon systems page 21-3 item 15 are observed.

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

CONVAIR CV-880/990 (All Models)

REVISION NO: 16

DATE: 06/01/66

PAGE:

22-1

SYSTEM & SEQUENCE NUMBERS	1. ITEM	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
22 AUTO PILOT				
1. Auto Pilot System		1	-	*#May be inoperative except components associated with the axes being used must be operative. One control wheel disengage switch may be inoperative provided use of auto pilot restricted to 10,000 MSL or above. Complete system required for coupled approaches except as approved for split axes coupled approaches and those items listed below: A - Altitude Hold B - Preselct Heading Mode
2. Yaw Damper		1	0	*

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

CONVAIR CV-880/990 (All Models)

REVISION NO: 22

PAGE:

DATE: 04/12/78

23-1

SYSTEM & SEQUENCE NUMBERS	ITEM	1. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
		2.	3. NUMBER REQUIRED FOR DISPATCH	
23	COMMUNICATIONS			
1.	Flight Deck Speakers (if installed)	-	-	*Must be operative when procedures are predicated on its use.
2.	Public Address System	1	0	*#May be inoperative provided: (1) It is not required for emergency procedures, (2) Alternate normal and emergency procedures and/or operating restrictions established and utilized, (3) Cabin attendant's interphone system is operative.
3.	VHF Communications Transmitters and Receivers	-	-	*#As required by FAR's; or o One transmitter and two independent communications receivers required for all operations. o One of the required receivers may be a VHF navigation receiver provided: a. If the transmitter/receiver system powered by the battery system (following loss of the electrical generating system) is inoperative, the flight shall be restricted to VFR meteorological conditions, and b. The aircraft may not depart an airport where repairs or replacements can be made, and

c. Aircraft must be repaired within 24 elapsed hours from time of the radio failure.

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

CONVAIR CV-880/990 (All Models)

REVISION NO: 22

DATE: 04/12/78

PAGE:

23-2

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH		4. REMARKS OR EXCEPTIONS
23 COMMUNICATIONS						
4.	Cockpit Interphone System		1	-		Required for all crew members on flight deck duty.
5.	Cabin Attendant's Interphone System		1	0		*#May be inoperative provided: (1) Procedures are not predicated on its use, (2) Public Address System is operative.
6.	Audio Selector Panels		-	-		*#Pilot's and Co-Pilot's required for all operations. Other may be inoperative provided interphone system available to all flight deck stations occupied.
7.	Service Interphone System		1	0		*#May be inoperative provided procedures are not predicated on its use.
8.	Selective Call System (SELCAL)		1	0		*

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

CONVAIR CV-880/990 (All Models)

REVISION NO: 15

PAGE:

DATE: 12/01/65

23-3

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			3. NUMBER REQUIRED FOR DISPATCH		
23	COMMUNICATIONS				
9.	Static Discharges (Applicable to 880M and 990 only) L. Wing R. Wing L. Stabilizer R. Stabilizer Vertical Fin and Rudder ASB's (1 on each) (990)	-	-		<p>*#The aircraft may not be dispatched with more than 2 NFD 610 static dischargers missing from a wingtip or 1 NFD 610 static discharger missing from any empennage (stabilizer or rudder) extremity.</p> <p>The aircraft may not be dispatched with more than 2 NFD-611 static dischargers missing from any one aircraft trailing edge extremity which shall include not more than 1 missing from the two outermost or uppermost locations on a wing, stabilizer or rudder extremity.</p>
	Static Dischargers (880)	-	-		Refer to Section 3, Page 3-21 of AFM (Paragraph entitled ADF OPERATION).

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

CONVAIR CV-880/990 (All Models)

REVISION NO: 16

PAGE:

DATE: 06/01/66

24-1

SYSTEM & SEQUENCE NUMBERS	1. ITEM	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
24	ELECTRICAL POWER			
1.	Generators and Constant Speed Drive Units	4	3	*#One generator or CSD may be inoperative (three generators must be operative). See AFM for in-flight limitations.
2.	Essential Power Selector Switch	1	1	*#One generator position may be inoperative provided three generator direct sources may be selected.
3.	Generator Parallel System	1	0	*#Not required with four operative generators.
4.	Generator Overheat Warning Lights	4	3	*#The light associated with an inoperative generator may be inoperative.
5.	CSD Malfunction Lights	4	3	*#The light associated with an inoperative CSD may be inoperative.
6.	Generator Load Reduction Systems	2	0	
7.	Transformer-Rectifier System	4	3	*#One of the TR systems may be inoperative provided the essential bus relay is operative.
8.	Frequency Meter	1	1	
9.	AC Voltmeter	1	1	
10.	DC Voltmeter	1	1	
11.	AC Loadmeter	4	0	*#Any number may be inoperative provided the respective Watt-Var meter is operative.
12.	Watt-Var Meters	4	0	*#Any number may be inoperative provided the respective AC loadmeter is operative.

U. S. DEPARTMENT OF TRANSPORTATION

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:
CONVAIR CV-880/990 (All Models)

REVISION NO: 16

PAGE:

DATE: 06/01/66

24-2

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	4. REMARKS OR EXCEPTIONS
			3. NUMBER REQUIRED FOR DISPATCH	
24	ELECTRICAL POWER			
13.	DC Ammeter/ Loadmeter	4	4	
14.	Battery System	1	1	
15.	Auxiliary Power (Ground) System	1	1	
16.	Static Inverter	1	1	

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:
CONVAIR CV-880/990 (All Models)

REVISION NO: 22

PAGE:

DATE: 04/12/78

25-1

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
25	EQUIPMENT/FURNISHINGS				
1.	Megaphones	-	-		In event the megaphone(s) is malfunctioning, inoperative, or missing, the airplane may continue the flight, or series of flights, but may not depart an airport where repairs or replacements can be made.
2.	Crewmember Shoulder Harness	-	-		*As required by FAR. If a harness becomes inoperative, the aircraft may continue the flight or series of flights but shall not depart an airport where repairs or replacements can be made.

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:
CONVAIR CV-880/990 (All Models)

REVISION NO: 22 A

PAGE:

DATE: 08/26/86

25-2

SYSTEM & SEQUENCE NUMBERS	1. ITEM	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
25	EQUIPMENT/FURNISHINGS			
3.	Flight Attendant Seat (Single or Dual Position)			
	1) Seats Required by FAR	-	-	<p>*(M)(0)One single or dual position seat may be inoperative provided:</p> <ul style="list-style-type: none"> a) Affected seat position(s) is not occupied, b) Flight Attendant(s) displaced by inoperative position(s) occupies the passenger seat(s) most accessible to their assigned exit, c) Alternate operations procedures are established for displaced flight attendant(s), d) Folding type seat that will not stow automatically is stowed or secured in the retracted position, e) Passenger seat(s) assigned to Flight Attendant(s) is placarded "FOR FLIGHT ATTENDANT USE ONLY" and f) Aircraft shall not depart an airport where repair can be made. <p>NOTE: A folding type seat that will not stow automatically is considered inoperative.</p> <p>(Continued)</p>

U. S. DEPARTMENT OF TRANSPORTATION

FEDERAL AVIATION ADMINISTRATION

MASTER MINIMUM EQUIPMENT LIST

AIRCRAFT:
CONVAIR CV-880/990 (All Models)

REVISION NO: 22 A

PAGE:

DATE: 08/26/86

25-3

SYSTEM &	1.	2. NUMBER INSTALLED
----------	----	---------------------

SEQUENCE NUMBERS	ITEM			3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
25	EQUIPMENT/FURNISHINGS				
3.	Flight Attendant Seat (Single or Dual Position) (Continued)				
	2) Seats in Excess of the Number Required by FAR	-	0	* (M) All may be inoperative provided: a) Affected seat position(s) is not occupied and b) A folding seat that will not stow automatically is stowed or secured in the retracted position.	
					NOTE 1: A folding seat that will not stow automatically is considered inoperative. NOTE 2: Individual operator MELs will be specific as to the numbers and locations of inoperative seat and combinations of seats and ensure the proximity to exits and distribution requirements of the applicable FAR are met.
4.	Flight Attendant Seat Lap Belt	-	-		* One may be inoperative provided associated Flight Attendant seat position is considered inoperative.

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:
CONVAIR CV-880/990 (All Models)

REVISION NO: 22 A

PAGE:

DATE: 08/26/86

26-1

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

26	FIRE PROTECTION			
1.	Hand Fire Extinguishers	-	-	
2.	Engine Fire Detection Systems 990 880	4 4	4 4	*#Cockpit test feature may be inoperative provided an alternate procedure is established to insure integrity of system.
3.	Firewall Shut-off Systems	4	4	
4.	Engine Fire Extinguisher Thermal Discharge Discs	4	0	*#May be missing provided gauge readings are made to determine adequate charge.
5.	Engine Fire Extinguisher Agent Low Pressure Lights	-	0	*
6.	Lavatory Smoke Detection Systems	-	-	* (M) (0) For each Lavatory, the smoke detection system may be inoperative provided: a) Lavatory Fire Extinguisher system operates normally. OR b) Lavatory waste receptacle is empty, c) Lavatory door is locked CLOSED and placarded, "INOPERATIVE - DO NOT ENTER" and d) Lavatory is not used for any purpose. NOTE 1: These provisos are not intended to prohibit lavatory inspections by crewmembers.
(Continued)				

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

CONVAIR CV-880/990 (All Models)

REVISION NO: 22 A

PAGE:

DATE: 08/26/86

26-2

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
26	FIRE PROTECTION				
6.	Lavatory Smoke				NOTE 2: A lavatory smoke detection

Cv880r22. txt

Detection System (Continued)	-	-	system is not required for all -cargo operations
7. Lavatory Fire Extinguisher Systems			<p>* (M) (0) For each Lavatory, the fire extinguisher system may be inoperative provided:</p> <ul style="list-style-type: none"> a) Lavatory Smoke Detection system operates normally. OR b) Lavatory waste receptacle is empty, c) Lavatory door is locked CLOSED and placarded, "INOPERATIVE - DO NOT ENTER" and d) Lavatory is not used for any purpose. <p>NOTE 1: These provisions are not intended to prohibit lavatory inspections by crewmembers.</p> <p>NOTE 2: A lavatory fire extinguisher system is not required for all -cargo operations.</p>

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

CONVAIR CV-880/990 (All Models)

REVISION NO: 16

PAGE:

DATE: 06/01/66

27-1

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
27 FLIGHT CONTROLS					
1. Stabilizer Trim Systems 880 Hydraulic		1	1		

Electric (Standby)	1	0	*#Electric (Standby) may be inoperative.
Manual	1	1	
1a Stabilizer Trim Systems 990 Hydraulic	2	2	*#Beep Trim may be inoperative. Manual (palm lever) Hydraulic control must be operative.
Electrical Standby	1	1	
2. Speed Stability System	1	0	*#May be inoperative provide AFM limitations and procedures are followed.
3. Horizontal Stabilizer Trim Movement Indicator (Visual & Aural - 990)	1	-	*#(Aural "clacker" or visual indicator must be operative.)
4. Stabilizer Trim Hydraulic Shut-off Switch	1	1	
5. Horizontal Stabilizer Position Indicator	1	1	
6. Horizontal Stabilizer Trim Indicators 880 - 880M	2	2	

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

CONVAIR CV-880/990 (All Models)

REVISION NO: 17

PAGE:

DATE: 12/01/66

27-2

SYSTEM & SEQUENCE NUMBERS	ITEM	1. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
		2.	3. NUMBER REQUIRED FOR DISPATCH	
27	FLIGHT CONTROLS			
7.	Flap Position Indicator	1	-	*#One needle may be inoperative provided flight crew is advised and visual inspection of flap position is accomplished prior to takeoff.
8.	Takeoff Function Warning Horn	1	1	

9. Elevator Down Spring Annunciator (990)	1	1	
10. Flap Extend Airspeed Warning System (990)	1	0	*#
11. Flap Anti-Canting Switches (990)	-	0	*
12. Flap Asymmetrical Shut-off Switch Assemblies	2	2	
13. Krueger & Slats Warning Lights	-	-	*#Green lights (flap position lights) may be inoperative. Amber intransit lights must function at all times.
14. Power or Boosted Rudder System - Including Warning Lights (880M and 990)	1	1	
15. Rudder Side Slip Sensing Device - Beta Box (880)	1	1	
16. Spoiler Deactivation System	1	1	

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:
CONVAIR CV-880/990 (All Models)

REVISION NO: 17

PAGE:

DATE: 12/01/66

27-3

SYSTEM & SEQUENCE NUMBERS	1. ITEM	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
27	FLIGHT CONTROLS			
17.	Vortex Generators:			
	Vertical Stabilizer (880)	54	-	#No more than 4 may be missing from either side.
	Wing (880 & 880M)	30	-	#A total of 6 may be missing; however, no more than 4 may be missing from one wing.
	Horizontal Stabilizer (990)		-	#No more than 7 may be missing from any surface and no more than 4 may

Cv880r22.txt

18. Wing Flap Track Seal Plate (Cookie Sheet) (990)	12	-	may be missing from the 15 on the inboard half of the stabilizer.
19. Horizontal Stabilizer Screw Jack Heating System (If Installed)	1	1	*#One may be CDL from each flap section.

U. S. DEPARTMENT OF TRANSPORTATION

FEDERAL AVIATION ADMINISTRATION

MASTER MINIMUM EQUIPMENT LIST

AIRCRAFT:
CONVAIR CV-880/990 (All Models)

REVISION NO: 16

PAGE:

DATE: 06/01/66

28-1

SYSTEM & SEQUENCE NUMBERS	1. ITEM	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
28	FUEL			
1.	Fuel Boost Pumps (Wing Tanks)	8	4	*#One boost pump may be inoperative per fuel tank. (See AFM for appropriate limitations.)
2.	Boost Pump Pressure Warning Systems (Wing Tank)	8	4	*#One may be inoperative per fuel tank. If the boost pump pressure warning system is inoperative, consider the respective boost pump inoperative and apply appropriate AFM restrictions and limitations.
3.	Center Tank Jettison Valve Open Light	2	-	*#Both may be inoperative provided center tank jettison valves are not

Cv880r22.txt

(880M and 990)				required to be operative.
4. Center Section Jettison Selector Valve	2	0		*#Both may be inoperative provided no fuel is carried in center section.
5. Fuel Scavenge Pumps	2	-		*#May be inoperative except as required when respective jettison pumps are inoperative.
6. Fuel Dump System	1	0		*#May be inoperative provided takeoff gross weight does not exceed 105% of certificated maximum landing weight and if performance is not predicated on fuel dumping for enroute engine(s) out procedures. Jettison pumps in tanks 2 and 3 may be inoperative at any time provided the respective scavenge pumps are operative.
7. Fuel Totalizer Quantity Indicator (If Installed)	1	0		*Not required by Regulation.

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

CONVAIR CV-880/990 (All Models)

REVISION NO: 16

DATE: 06/01/66

PAGE:

28-2

SYSTEM & SEQUENCE NUMBERS	1. ITEM	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
28 FUEL				
8. Fuel Quantity Indicators (Main Tank)		4	3	*#One may be inoperative provided: 1. Drip stick readings are taken to determine fuel quantity in all tanks prior to each flight. 2. If the aircraft is not equipped with operating fuel flow totalizers, additional fuel equal to at least ten percent of the FAA required reserves (i.e., fuel carried which is in addition to the fuel needed for flight to destination) must be carried. If uncalibrated fuel flow totalizers are used, additional fuel equal to at least 5% of the FAA required

Cv880r22.txt

9. Fuel Quantity Gauge (Center Section) (880M and 990)	1	0	<p>reserves must be carried. If calibrated fuel flow meters are used and the crew furnished with calibration information, if applicable, no additional fuel is required.</p> <p>3. Fuel flow readings and fuel consumption rates are logged.</p> <p>4. Fuel loading and use schedule in AFM must be followed.</p> <p>*#May be inoperative provided no center tank fuel carried or if fueled and fuel in tank not required to make flight. Quantity gauge may be inoperative provided approved compensating procedures are applied.</p>
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U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:
CONVAIR CV-880/990 (All Models)

REVISION NO: 16
DATE: 06/01/66

PAGE:
28-3

SYSTEM & SEQUENCE NUMBERS	1. ITEM	2. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
28 FUEL					
10.	Fuel Heaters	4	0		*#May be inoperative in closed position provided aircraft operated with engine fuel temperature zero degrees Centigrade or above.
11.	Fuel Temperature Sensing System and Gauge (five positions)	1	-		*#The fuel tank temperature and one engine inlet temperature position may be inoperative. Refer to AFM for limitations and procedures.
12.	Pressure Fueling System	1	0		*#
13.	Wing Refuel Control Panel Fuel Quantity Indicators	-	0		*#
14.	Refuel Shut-off Indicator Lights	-	0		*#

(990)			
15. Center Section Refuel Selector Valve	1	0	*#
16. Defueling Systems	-	0	*#If inoperative, valves must be secured in the closed position.
17. Defuel Valve Indicator Lights	-	0	*#If inoperative, valves must be secured in the closed position.
18. Refuel Precheck Solenoid and Switch Systems (880)	-	0	*#
19. Center Section Boost/Jettison Pump (990 and 880M)	2	1	*#One may be inoperative. Refer to AFM for appropriate procedures and limitations None required if no fuel in center tank.

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

CONVAIR CV-880/990 (All Models)

REVISION NO: 16

PAGE:

DATE: 06/01/66

28-4

SYSTEM & SEQUENCE NUMBERS	1. ITEM	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
28	FUEL			
20.	Fuel Transfer Pumps			
	Tanks 1 & 4 (outboard)	2	-	*(See AFM for appropriate limitations.) None required for dispatch provided appropriate operating procedures and instructions have been established by the air carrier to provide for proper fuel management, distribution increase in unusable fuel and center of gravity control.
	Tanks 1 & 4 (inboard)	2	-	
	Tanks 2 & 3 (main)	2	-	
	Tanks 2 & 3 (repleni sh)	2	-	
	Inboard Shock Body (990)	2	0	*#May be inoperative provided no IASB fuel is carried.
	Outboard Shock Body (990)	4	-	*#One pump in each OASB may be inoperative when no OASB fuel is carried provided the respective tank fuel quantity gauge and indicating system, excess fuel float switch and indicating system are determined to be operative and OASB quantity is monitored for

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:
 CONVAIR CV-880/990 (All Models)

REVISION NO: 16

PAGE:

DATE: 06/01/66

28-5

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			3.	NUMBER REQUIRED FOR DISPATCH	
28	FUEL				
21.	Transfer Pump Pressure Switches and Warning Systems				
	Tanks 1 & 4 (outboard)	2	-	*(See AFM for appropriate restrictions and limitations.) If the transfer switch or light is inoperative, consider the respective transfer pump or pumps inoperative.	
	Tanks 1 & 4 (inboard)	2	-		
	Tanks 2 & 3 (main)	2	-		
	Tanks 2 & 3 (repleni sh)	2	-		
	Inboard Shock Body (990)	2	0	*(May be inoperative provided no IASB fuel is carried.	
	Outboard Shock Body (990)	4	-	*(One system in each OASB may be inoperative when no OASB fuel is carried provided the respective tank fuel quantity gauge and indicating system, excess fuel float switch and indicating system are determined to be operative and OASB quantity is monitored for feed-back.	
22.	Center Section Pump	2	1	*(One may be inoperative. If the	

Cv880r22.txt

	Pressure Switch and Warning System (990 and 880M)			boost pump pressure system is inoperative, consider the respective boost pump inoperative and apply appropriate AFM restrictions and limitations.
23.	Low Level Float and Switches in OASB (990)	2	2	
24.	Fuel Line Valves and Switches	4	4	

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

CONVAIR CV-880/990 (All Models)

REVISION NO: 16

DATE: 06/01/66

PAGE:

28-6

SYSTEM & SEQUENCE NUMBERS	1. ITEM	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
28	FUEL			
25.	Fuel Cross Feed Valves	6	5	*#One may be inoperative provided that failed valve is fixed open.
26.	Line Valve Intransit Lights	-	0	*#Not required by Regulation. Valves must have been determined to be operative prior to each takeoff.
27.	Crossfeed Valve Intransit Lights	6	5	*#One may be inoperative provided valve has been determined to be operative prior to each takeoff.
28.	Drip Stick	16	0	Not Required.

U. S. DEPARTMENT OF TRANSPORTATION

FEDERAL AVIATION ADMINISTRATION

MASTER MINIMUM EQUIPMENT LIST

AIRCRAFT:
CONVAIR CV-880/990 (All Models)

REVISION NO: 21

PAGE:

DATE: 08/15/73

29-1

SYSTEM & SEQUENCE NUMBERS	ITEM	1. NUMBER INSTALLED		3. NUMBER REQUIRED FOR DISPATCH		4. REMARKS OR EXCEPTIONS
29	HYDRAULIC POWER					
1.	Engine Driven Hydraulic Pumps	4	-			*#Depressurizing feature may be inoperative provided valve is failed in the on position and supply shut-off valve is operative.
2.	Hydraulic Pump Supply Line Boost Pumps	2	2			
3.	Hydraulic System High Pressure Filters	6	6			
4.	Low Pressure Filters 880 and 880M 990	5 9	5 9			
5.	Fluid Temperature Control Valve	1	0			*#
6.	Auxiliary Electric Hydraulic Pump	1	0			*#May be inoperative provided it is determined the pump failure is not internal breakage & hydraulic system is not contaminated.
7.	Auxiliary Electric Hydraulic Pump Filter	1	0			*#Auxiliary pump not to be used if filter is inoperative.
8.	Hydraulic System Fluid Quantity Gauges (Cockpit and Hydraulic Compartment)	3	2			*Hydraulic reservoir sight gauge may be inoperative provided an alternate positive method of determining the fluid quantity is utilized.

9. Hydraulic System Pressure Indicating (Cockpit and Hydraulic Compartment)	7 6	7 6	CV-880. CV-990.
10. Hydraulic Systems Low Supply Pressure Warning	-	0	

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

CONVAIR CV-880/990 (All Models)

REVISION NO: 21

DATE: 08/15/73

PAGE:

29-2

SYSTEM & SEQUENCE NUMBERS	1. ITEM	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
29	HYDRAULIC POWER			
11.	Hydraulic Pump Outlet Pressure Warning Systems	4	-	*#One on each hydraulic system may be inoperative provided the respective pump(s) are determined to be operating normally prior to takeoff and landing by deactivating the pump having the operative warning light, depleting pressure in the respective system and noting system pressure build-up. Further provided that pump having operative pressure warning system shall normally remain pressurized except for checks set forth above. System gauges must be monitored carefully.
12.	Hydraulic Fluid Temperature Indicator	2	2	

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:
CONVAIR CV-880/990 (All Models)

REVISION NO: 16

PAGE:

DATE: 06/01/66

30-1

SYSTEM & SEQUENCE NUMBERS	1. ITEM	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
30	ICE AND RAIN PROTECTION			
1.	Engine Anti-Icing System (Includes components and indicators except valves)	4	4	Must be operative.
2.	Engine Anti-Ice Valve	8	7	*#Any one of the two anti-ice valves on one engine may be inoperative provided it is in closed position and the aircraft not operated in icing conditions. On the remaining three engines, all anti-ice valves must be operative.
3.	Empennage Deicing System (If Installed)	1	0	*#May be inoperative provided aircraft is not operated in icing conditions. Refer to AFM for flight in icing conditions with inoperative components.
4.	Wing Anti-Ice System (Except anti-ice valve lights)	1	0	*#May be inoperative provided aircraft is not operated in icing conditions. Inoperative valve(s) must be closed.
5.	Wing Anti-Ice Valve Lights	6	0	*#May be inoperative provided temperature indicator is operative.
6.	Pitot Heater	2	1	*#Pilot's may be inoperative with no flight permitted in visible moisture or icing conditions. Co-pilot's must be operative at all times.
7.	Windshield Anti-Icing (Pilot's and	2	0	*#Neither required for flight in non-icing conditions. Either

Co-Pilot's)

pilot's or co-pilot's (not both) may be inoperative for flight in icing conditions provided rain clearing is operative.

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

CONVAIR CV-880/990 (All Models)

REVISION NO: 17

PAGE:

DATE: 12/01/66

30-2

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
30	ICE AND RAIN PROTECTION				
8.	Windshield Anti-Fog		2	0	*#May be inoperative provided that AFM speed and altitude restrictions are observed, and further provided that anti-icing is operative on the panel(s) with anti-fog inoperative. (The anti-icing requirement insures anti-fog capability.)
9.	Center Windshield Panel				
	Anti-Icing		1	0	*#May be inoperative for all flight conditions except as required when anti-fog is inoperative.
	Anti-Fog		1	0	*#May be inoperative provided AFM speed and altitude restrictions are observed, and further provided that anti-icing is operative on center windshield. (The anti-icing requirement insures anti-fog capability.)
10.	Windshield Rain Clearing System		1	0	*#Required for operation in precipitation within departure and arrival areas and as required when pilot's or co-pilot's windshield anti-ice is inoperative. When permitted inoperative, valve must be fixed in the closed position.
11.	Rain Repellent System (If Installed)		1	0	*Must be operative when procedures are premised on its use.
12.	Cockpit Sliding and Fixed Side Window "Defog" Heating		1	0	*

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

CONVAIR CV-880/990 (All Models)

REVISION NO: 17

PAGE:

DATE: 12/01/66

30-3

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			3. NUMBER REQUIRED FOR DISPATCH		
30	ICE AND RAIN PROTECTION				
13.	Rudder "Q" Feel Ram Air Intake Heater (If Applicable)	1	0		*#May be inoperative for flight in non-icing conditions.
14.	Elevator Ram Air Duct Heater (990)	2	0		*#May be inoperative for flight in non-icing conditions.
15.	Wing Spar Vent Inlet Heaters	-	0		*
16.	Engine Ice Detector (Including Light)	-	0		*

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

CONVAIR CV-880/990 (All Models)

REVISION NO: 22

PAGE:

DATE: 04/12/78

31-1

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
31	INDICATING/RECORDING SYSTEMS				
1.	Clock	1	1		
2.	Flight Recorder	1	0		In the event of malfunctioning or failure of the flight recorder, the airplane may continue the flight or series of flights but may not depart an airport where repairs or replacements can be made.
3.	Cockpit Voice Recorder	1	0		In the event of malfunctioning or failure of the voice recorder, the airplane may continue the flight or series of flights but may not depart an airport where repairs or replacements can be made.

U. S. DEPARTMENT OF TRANSPORTATION

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

CONVAIR CV-880/990 (All Models)

REVISION NO: 22

PAGE:

DATE: 04/12/78

32-1

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			3.	NUMBER REQUIRED FOR DISPATCH	
32	LANDING GEAR				
1.	Main Gear Anti-Skid System	1	0		*#May be inoperative provided operations conducted in compliance with AFM.
2.	Nose Wheel Brakes and Anti-Skid System	1	0		*#May be inoperative provided operations conducted in compliance with AFM.
3.	Anti-Skid Test/Lockout Circuit (990)	1	0		*
4.	Parking Brake	1	0		*#In the event of malfunctioning or failure of the parking brake, the airplane may continue the flight or series of flights but may not depart an airport where repairs or replacements can be made.
5.	Landing Gear Warning and Indicating System, including Horn	1	1		
6.	Air Brake Pressure Gauge	1	1		
7.	Air Brake Pressure Gauge (Nose Wheel Well)	1	0		*#

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

SYSTEM & SEQUENCE NUMBERS	1. ITEM	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
33	LIGHTS			
1.	Cockpit and Instrument Lighting	-	-	*#Lights sufficient to illuminate all instruments and controls clearly must be provided.
2.	Cabin Interior Illumination	-	-	*Lighting must be sufficient for cabin attendants to perform their duties.
3.	Lower Nose Compartment Lights	-	-	*May be inoperative provided flashlights used in lieu of.
4.	Cargo Compartment Light Systems	-	-	*Not required for class "D" compartments.
5.	Hydraulic, Air Conditioning and Tail Compartment Lights	-	0	*
6.	Passenger Notice System ("Fasten Seat Belt - No Smoking")	1	0	*#System may be inoperative provided: (1) Satisfactory procedures are established & used which include alerting the cabin attendants & notifying the passengers & attendants by use of public address systems when seat belts should be fastened and smoking is prohibited. (2) The call bells & cockpit-to-cabin interphone systems are operative. (3) The P. A. system is operative & can be clearly heard throughout the cabin during flight.
7.	Flight Compartment Dome Lights	2	-	*Red lights may be inoperative. White lights in each dome light must be operative.

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

SYSTEM & SEQUENCE NUMBERS	1. ITEM	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
33	LIGHTS			
8.	Anti -Collisi on Lights 880 and 880M 990	2 3	- -	*#Anti -collision lights may be inoperative for day operation. One beacon light oscillating position lights are installed and operating normally. One beacon or any number of bulbs may be inoperative provided the field of coverage, flashing characteristics, color and intensity requirements of the Regulations are satisfied. (Ref. FAR 25.1401)
9.	Wing Illumi nati on Li ghts	2	0	*#Not required for day or night operations provided a portable lamp is available for night operations in icing conditions.
10.	Landi ng Li ghts	4	-	*May be inoperative for daylight operation. One on each side may be inoperative for night operation.
11.	Taxi Turn-Off Li ghts	-	0	*
12.	Posi ti on Li ghts (Wing Tips and Tail)	3	0	*May be inoperative for daylight operation.
13.	Emergency Exit Li ghti ng System	1	1	This "system" consists of those passenger emergency exit lights required for certification of the aircraft configuration.
14.	Pylon Refuel i ng Panel Li ghti ng System	1	0	*
15.	Exteri or Emergency Illumi nati on System	1	0	*May be inoperative for daylight operations.

U. S. DEPARTMENT OF TRANSPORTATION

FEDERAL AVIATION ADMINISTRATION

MASTER MINIMUM EQUIPMENT LIST

AIRCRAFT:

CONVAIR CV-880/990 (All Models)

REVISION NO: 22 A

PAGE:

DATE: 08/26/86

33-3

SYSTEM &	1.	2. NUMBER INSTALLED
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SEQUENCE NUMBERS	ITEM		3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
33	LIGHTS			
16.	Floor Proximity Emergency Escape Path Marking System Lights	-	-	<p>*(M)Individual lights may be inoperative provided maintenance procedures are established to determine that FAA approved minimum acceptable lighting level(s) is maintained by remaining operative lights.</p> <p>NOTE: Reference the following documents for FAA approved minimum acceptable lighting levels:</p> <ul style="list-style-type: none"> a) FAA engineering approval letter, b) FAA approved report of the Type Design holder, c) Limitations and conditions section of the applicable Supplemental Type Certificate (STC) d) FAA approved report incorporated in the Master drawing list for the applicable STC.

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:
CONVAIR CV-880/990 (All Models)

REVISION NO: 18

PAGE:

DATE: 12/15/67

34-1

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

34	NAVIGATION			
1.	True Airspeed Indicator (If Installed)	1	0	*
2.	Airspeed Indicators (IAS)	2	2	*One required at each pilot's station.
3.	Mach Indicators	2	1	*#One may be inoperative provided mach warning and those systems that receive information from the mach indicator such as the speed stability and mach trim systems are operative.
4.	Mach/Airspeed Warning System	1	0	*#May be inoperative provided speed stability inoperative limitations in AFM are observed and both Mach meters are operative. If the warning sounds below the speed stability inoperative speed deactivate the circuit breaker. Do not deactivate an oral warning that sounds above speed stability inoperative speed. However, the airplane must be operated at the speed stability inoperative speed.
5.	Altimeters	2	2	#One required at each pilot station. (If KIFIS is not installed or inoperative, altimeter correction must be available to flight crew.)
6.	Altimeter Vibrators	2	1	*#One may be inoperative provided terminal VFR exist at departing and arriving airports.
7.	Rate of Climb Indicator	2	2	*One required at each pilot's station.

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

CONVAIR CV-880/990 (All Models)

REVISION NO: 22

PAGE:

DATE: 04/12/78

34-2

SYSTEM & SEQUENCE NUMBERS	ITEM	1. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
		2.	3. NUMBER REQUIRED FOR DISPATCH	
34	NAVIGATION			
8.	Static Air	1	0	*#May be inoperative provided RAT

Cv880r22.txt

Temperature Indicator (If Installed)			indicator is operative.
9. Ram Air Temperature Indicator	1	0	*#May be inoperative provided SAT indicator is operative.
10. Horizon Indicators	2	2	*#For VFR night & IFR flight conditions, two independently slaved gyro horizon indicators are required (one at each pilot station). For VFR day flight conditions only, a third self-contained gyro horizon indicator (if installed) may be substituted for one of the slaved instruments, provided: that gyro attitude information is available at both pilot stations.
11. Vertical Gyro System	-	-	"See Horizon Indicators"
12. Angle of Attack Indicator (If Installed)	1	0	*
13. Turn and Bank Indicator	2	-	*Turn function of one instrument may be inoperative for VFR flight conditions only. *Both rate of turn indicators may be inoperative if the standby attitude gyro required by FAR 121.305(j) is installed.

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

CONVAIR CV-880/990 (All Models)

REVISION NO: 22

PAGE:

DATE: 04/12/78

34-3

SYSTEM & SEQUENCE NUMBERS	1. ITEM	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
34	NAVIGATION			
14.	Directional Gyro Compass Systems	2	1	*#One directional gyro may be inoperative for VFR flight conditions only provided at least one compass heading indication is

Cv880r22.txt

			available on each pilot's instrument panel.
			NOTE: Flight Recorder requirements must be considered if applicable.
15. Magnetic Compass	1	0	*#May be inoperative provided both directional gyro compass systems are operative. The airplane may continue the flight or series of flights, but may not depart an airport where repairs or replacements can be made.
16. Flight Director System (If Installed)	1	0	*Not required unless landing minimums are predicated on its use.
17. Distance Measuring Equipment (DME)	1	-	*#As required by FAR.
18. Marker Beacon	1	-	*#As required by FAR.
19. Doppler Navigation System_(If Installed)	1	-	*#As required by FAR.
20. Weather Radar	1	-	*#As required by FAR.
21. Radio Compass (ADF)	2	-	*#As required by FAR.
22. Visual OMNI Range (VOR)	2	-	*#As required by FAR.
23. ILS	2	-	*#As required by FAR.
24. ATC Transponder	1	-	*#As required by FAR.

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

CONVAIR CV-880/990 (All Models)

REVISION NO: 22

PAGE:

DATE: 04/12/78

34-4

SYSTEM & SEQUENCE NUMBERS	1. ITEM	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
34	NAVIGATION			
25.	Instrument Comparator or Warning Systems (If Installed)	-	0	*#Not required unless weather minimums are predicated on their use.
26.	KIFIS	1	-	*#Mach portion may be inoperative provided AFM limitations and procedures for speed stability

Cv880r22.txt

			system inoperative are followed. (See page 27-1, item 2.)
27. Radio Altimeter (If Installed)	1	0	*Not required unless weather minimums are predicated on its use.
28. Fault Detection Computer (Smart Box) (If Installed)	1	0	*Not required unless weather minimums are predicated on its use.
29. Standby Attitude Indicator	1	0	*May be inoperative for day VFR conditions only. The airplane may continue the flight or series of flights, but may not depart an airport where repairs or replacements can be made.
30. Altitude Alerting System	1	0	*In the event of malfunction or failure, the airplane may continue the flight or series of flights, but may not depart an airport where repairs or replacements can be made.
31. Ground Proximity Warning System	1	0	*In the event of malfunctioning or failure of the GPWS, the airplane may continue the flight or series of flights but may not depart an airport where repairs or replacements can be made.

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

CONVAIR CV-880/990 (All Models)

REVISION NO: 15

PAGE:

DATE: 12/01/65

35-1

SYSTEM & SEQUENCE NUMBERS	1. ITEM	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
35	OXYGEN			
1.	Oxygen System and Supply	-	-	Refer to AFM for crew protective requirements.

U. S. DEPARTMENT OF TRANSPORTATION

FEDERAL AVIATION ADMINISTRATION

MASTER MINIMUM EQUIPMENT LIST

AIRCRAFT:
CONVAIR CV-880/990 (All Models)

REVISION NO: 15

PAGE:

DATE: 12/01/65

36-1

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			3.	NUMBER REQUIRED FOR DISPATCH	
36 PNEUMATIC					
1.	Main Bleed Air Pressure Regulator	4	3		*#One may be inoperative for flight into non-icing conditions. Refer to AFM for limitations and procedures.
2.	Main Bleed Air Pressure Regulator Indicator Lights	4	3		*#One indicator light may be inoperative. If inoperative, consider the respective regulator inoperative and refer to AFM for limitations and procedures.
3.	Bleed Air Duct Pressure Indicating	1	0		*#May be inoperative provided over-pressure light and switch are

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Cv880r22. txt
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U. S. DEPARTMENT OF TRANSPORTATI ON

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FEDERAL AVI ATI ON ADMI NI STRATI ON

AI RCRAFT:
CONVAI R CV-880/990 (AI I Model s)

REVI SI ON NO: 15
DATE: 12/01/65

PAGE:
52-1

SYSTEM & SEQUENCE NUMBERS	1. ITEM	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
52 DOORS				
1.	Door Warni ng Li ght System	1	0	*#Door warni ng li ghts may be i noperati ve provided it is determined by visual inspecti on that the door(s) is closed and locked.

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:
CONVAIR CV-880/990 (All Models)

REVISION NO: 16
DATE: 06/01/66

PAGE:
73-1

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
			3. NUMBER REQUIRED FOR DISPATCH		
73	ENGINE FUEL & CONTROL				
1.	Engine Power Reduction System	1	0	*	

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:
CONVAIR CV-880/990 (All Models)

REVISION NO: 16
DATE: 06/01/66

PAGE:
74-1

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
74 IGNITION					
1. Engine Ignition System		8	7		*#One may be inoperative provided engine anti-ice system is operative on the affected engine.

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:
CONVAIR CV-880/990 (All Models)

REVISION NO: 15
DATE: 12/01/65

PAGE:
75-1

SYSTEM & SEQUENCE NUMBERS	ITEM	1.	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
75	BLEED AIR				
1.	Engine Vortex Destroyer System (If Applicable)	4	0		*

U. S. DEPARTMENT OF TRANSPORTATION

FEDERAL AVIATION ADMINISTRATION

MASTER MINIMUM EQUIPMENT LIST

AIRCRAFT:

CONVAIR CV-880/990 (All Models)

REVISION NO: 22

PAGE:

DATE: 04/12/78

77-1

SYSTEM & SEQUENCE NUMBERS	ITEM NUMBERS	1. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
		2.	3. NUMBER REQUIRED FOR DISPATCH	
77	ENGINE INDICATING			
1.	Starter Valve Position Light Indicators	4	0	*#May be inoperative provided an approved starting procedure is used to determine starter valve closed prior to flight.
2.	Fuel Flow Meter	4	3	*#One fuel flow meter may be inoperative provided acceptable monitoring procedures are established and followed to determine fuel flow rate and respective main tank quantity indicating system is operative.
3.	EPR (880 and 880M)	4	3	*#One may be inoperative provided: (1) Prior to loss of EPR gauge all engine indications are normal. (2) Prior to each takeoff a visual check of the engine with the inoperative EPR is made. (3) Engine RPM, EGT, and Fuel Flow on all engines must operate normally. (4) The aircraft will not be dispatched out of or through an airport where repairs or replacements can be made with an inoperative EPR when 25 hours of flying time have been accumulated

Cv880r22.txt

since the EPR gauge became inoperative.

(5) Operating procedure is established as follows:

- a. Set takeoff thrust -
 - 1. Engine RPM - no lower than the highest of the other three engines.
 - 2. Fuel flow - no lower than the lowest of the other three engines.
 - 3. Do not exceed maximum EGT.

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:
CONVAIR CV-880/990 (All Models)

REVISION NO: 22

PAGE:

DATE: 04/12/78

77-2

SYSTEM & SEQUENCE NUMBERS	1. ITEM	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
77	ENGINE INDICATING			
3.	EPR (880 and 880M) (Cont'd)			b. In-flight - See AFM for maximum continuous power setting and takeoff power setting.
4.	EPR (including Movable Indexes) (990A)	4	-	<p>*#One of the movable indexes may be inoperative provided the instrument is appropriately marked with white grease pencil or instrument marking tape prior to each takeoff.</p> <p>*#One may be inoperative provided:</p> <p>(1) Prior to loss of EPR gauge all engine indications are normal.</p> <p>(2) Prior to each takeoff a visual check of the engine with the inoperative EPR is made.</p> <p>(3) Engine RPM, EGT, Fuel Flow and Fan RPM on all engines must operate normally.</p> <p>(4) The aircraft will not be dispatched out of or through an airport where repairs or replacements can be made with an inoperative EPR when 25 hours of flying time have been accumulated since the EPR gauge became inoperative.</p> <p>(5) Operating procedure is established as follows:</p> <ul style="list-style-type: none"> a. Set takeoff thrust -

Cv880r22.txt

1. Engine RPM - no lower than the highest of the other three engines.
2. Fuel flow and fan RPM - no lower than the lowest of the other three engines.
3. Do not exceed maximum EGT.

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:

CONVAIR CV-880/990 (All Models)

REVISION NO: 22

PAGE:

DATE: 04/12/78

77-3

SYSTEM & SEQUENCE NUMBERS	1. ITEM NUMBERS	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
77	ENGINE INDICATING			
4.	EPR (including Movable Indexes) (990A) (Cont'd)			b. In-flight - See AFM for maximum continuous power setting and takeoff power setting.
5.	RPM (Engines)	4	4	Must be operative.
6.	RPM (Fan) (Including Movable Indices)	4	-	*#One of the movable indices may be inoperative provided the instrument is appropriately marked with white grease pencil or instrument marking tape prior to each takeoff.
7.	EGT (Including Flag, If Flag Installed)	4	4	
8.	Emergency "T" Handle Fuel Shutoff Indicator Lights	4	4	
9.	Engine Fuel Pump Low Pressure Warning Lights	4	0	*#Any number may be inoperative provided the respective fuel tank boost pumps and warning lights are operative.
10.	Engine Vibration System	4	0	*#May be inoperative unless be maintenance procedure.

U. S. DEPARTMENT OF TRANSPORTATION

MASTER MINIMUM EQUIPMENT LIST

FEDERAL AVIATION ADMINISTRATION

AIRCRAFT:
CONVAIR CV-880/990 (All Models)

REVISION NO: 16

PAGE:

DATE: 06/01/66

78-1

SYSTEM & SEQUENCE NUMBERS	1. ITEM	2. NUMBER INSTALLED		4. REMARKS OR EXCEPTIONS
		3. NUMBER REQUIRED FOR DISPATCH		
78	ENGINE EXHAUST			
1.	Thrust Reversers	4	2	*#A maximum of two reversers may be inoperative; operative reversers must be symmetrically opposite.
2.	Reverse Thrust Position Indicator Lights (Amber) 990	4	2	*#Not required for the associated inoperative reverser(s).
	880 and 880M	4	0	*#May be inoperative provided in-transit lights are operative.
3.	Thrust Reverser Latch Unlocked Indicator Lights (Blue) (990)	4	0	*
4.	Reverse Thrust In-Transit Lights (Blue) (880 and 880M)	4	0	*#May be inoperative provided position Indicator Lights are operative.

U. S. DEPARTMENT OF TRANSPORTATION

FEDERAL AVIATION ADMINISTRATION

MASTER MINIMUM EQUIPMENT LIST

AIRCRAFT:

CONVAIR CV-880/990 (All Models)

REVISION NO: 16

PAGE:

DATE: 06/01/66

79-1

SYSTEM & SEQUENCE NUMBERS	1. ITEM	2. NUMBER INSTALLED	3. NUMBER REQUIRED FOR DISPATCH	4. REMARKS OR EXCEPTIONS
79	ENGINE OIL			
1.	Oil Quantity Indicating System	4	3	*#One may be inoperative provided: (1) It is determined prior to each takeoff that the oil tank is filled to the maximum recommended capacity. (2) There is no evidence of above normal oil consumption or leakage.
2.	Oil Temperature Gauges	4	4	Must be operative.
3.	Oil Pressure Gauge	4	4	Must be operative.
4.	Oil Low Pressure Warning Lights	4	3	*#One May be inoperative provided the respective oil pressure, temperature and oil quantity gauges are operative and monitored.

