BY ORDER OF THE COMMANDER
AIR MOBILITY COMMAND

AIR MOBILITY COMMAND PAMPHLET 24-2
VOLUME 4, ADDENDUM D

21 NOVEMBER 2011

Transportation

CIVIL RESERVE AIR FLEET LOAD PLANNING – BOEING (McDonnell-Douglas) MD-80 Series

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This pamphlet series is intended as a load planning guide and provides the basic information, data, and technical specifications needed in order for planners (both long range and individual movement) to load plan aircraft in the Civil Reserve Air Fleet (CRAF). Equipment and methods listed are compatible with all CRAF aircraft and cargo areas discussed. **It must be noted that, unlike military cargo aircraft, civilian airframes are not standardized, and can vary widely, even within each carrier's fleet. Final approval, therefore, ultimately rests with the individual contractor providing airlift services to the DOD.**

This pamphlet series enables application of DTR 4500.9-R, Defense Transportation Regulation – Part III Mobility, Appendix V, Aircraft Load Planning and Documentation; as well as AMCI 10-402, Civil Reserve Air Fleet (CRAF). The guidance contained herein is applicable to all USAF, AFRC, ANG and DOD agencies whenever they are charged with using the CRAF assets contained herein, in accordance with DOD, inter-service, and/or MAJCOM agreements.

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SUMMARY OF CHANGES

This document is substantially revised and must be completely reviewed.

Series has been renumbered, reorganized, and data added.

TABLE OF CONTENTS

Chapter 1

GENERAL INFORMATION

1.1. Purpose. This pamphlet series is non-directive in nature. It provides the basic information, data, and technical specifications needed in order for planners to more efficiently and effectively load plan aircraft in the CRAF.

1.2. Scope. CRAF aircraft specifications listed herein are current as of the date of this printing. Equipment and methods listed are compatible with all CRAF aircraft and cargo areas discussed. **It must be noted that, unlike military cargo aircraft, civilian airframes are not standardized, and can vary widely, even within each carrier's fleet. Final approval, therefore, ultimately rests with the individual contractor providing airlift services to the DOD.**

1.2.1. Volume 4, Boeing (McDonnell Douglas). AMCPAM 24-2 Volume 4 deals specifically with aircraft originally manufactured by McDonnell Douglas Corporation. McDonnell Douglas Corp. first formed in 1967 after the Douglas Co. (founded 1920) and McDonnell Aircraft Corp. (originating in 1928) merged. Through the last merger into the Boeing Company in 1997, the Boeing Company has melded the companies founded by aerospace pioneers William Boeing, Donald Douglas, James McDonnell, James "Dutch" Kindelberger, and Howard Hughes Jr. As of the date of this publication, the Boeing Company has produced almost 17,000 commercial jet aircraft alone, with over 12,100 still in service.

1.3. Arrangement. This pamphlet series is designed for easy reference and access to the most commonly needed information for planning purposes. Essentially, Volume 1 will contain all information common to the entire CRAF program and most, if not all, carriers. Volumes 2 through 5 will contain information specific to a particular manufacturer's airframes, with each sub-volume addendum addressing a different series or type. Each can be referenced separately from another; however, each addendum needs to be used in conjunction with Volume 1.

1.3.1. Volume 4, Boeing (McDonnell Douglas) Addenda. Volume 4 is not separated from each subsequent addendum, but is published as a "cover" document along with and as an introduction for each addendum. The same information for Volume 4 essentially gets republished--unchanged with each Boeing (McDonnell Douglas) model's addendum.

1.3.2. Volume 4, Boeing (McDonnell Douglas) Quick Reference Tables. All chapter descriptions for various models are designed to be used in conjunction with Chapter 2 Quick Reference Tables. The information in the Quick Reference Tables will generally not be restated in the expanded chapters as they are meant primarily for pictorial figures.

1.4. Supplements. Changes or supplements to this pamphlet by agencies, other than AMC, are prohibited. This does not preclude its use as a reference document for preparation of intra-agency instructional directives.

1.5. Acronyms. An explanation of the acronyms used in this pamphlet is in AMCPAM 24-2, Volume 1, Attachment 1.

1.6. Copyrights. All drawings and diagrams, unless otherwise noted, are derived from copyright © or copyrightable material of The Boeing Company. Used by permission. All rights reserved.

1.7. Description. Addendum D. Boeing (McDonnell Douglas) MD-80 Series.

The MD-80 Series aircraft are narrow body, single-aisle, twin-engine aircraft, designed for medium range. Originally designated as part of the DC-9 Series, the first MD-80 models actually went by the names "DC-9-80 Series" or the "Super 80's" before being redesignated as the MD-80. The MD-80 was the first aircraft to combine the "M" for McDonnell and the "D" for Douglas, and renaming it from the DC-9-80 was thought to be for marketing purposes. However, with a longer fuselage, redesigned wings, more range, more capacity, and engine & avionics upgrades, it seems to have earned a separate series name. From the initial delivery in 1980 until December 1999 when the last MD-80 was delivered, 1,191 MD-80's were manufactured.

The first model in the Series, the **MD-81,** was type-certified as the DC-9-81 in August 1980. While sharing the same fuselage diameter and fuselage aft-mounted engines as the DC-9, the MD-81 was at least 15 feet longer. Also, the MD-81 (and all models of the MD-80 Series) featured a unique, middle lower cargo compartment, in addition to the forward and aft sections. These two innovations effectively doubled the amount of passengers and cubic feet of cargo the MD-81 could carry. Overall, 123 MD-81's were produced until the last delivery in 1994.

MD-82. The next model in the Series, the MD-82, received type-certification as the DC-9-82 on July 1981. The MD-82 had more powerful engines, which enabled an increased maximum takeoff weight and overall range with the same passenger/cargo capabilities. This was the most popular model in the MD-80 Series, with 569 being produced and delivered from 1981 to 1997.

The **MD-83** was the first model in the Series to come out after the redesignation into MD-80's, although it was still type-certified as a DC-9-83 in October 1985. The MD-83 featured more powerful engines and added fuel capacity, making it the highest gross weight and longest ranged model of the Series. Overall, 248 of the MD-83 models were manufactured, and the MD-83 was actually the last production model of the Series to be delivered in December 1999.

The **MD-87** was the only model in the Series with a different, smaller fuselage length. This model was type-certified as the DC-9-87 on October 1987. Although able to carry less passengers/cargo than other MD-80 models, it is able to attain ranges only slightly less than the MD-83. This is the least produced model; only 73 were manufactured until 1992.

The **MD-88** was type-certified (as the MD-88) in December 1987. It is virtually identical in all aspects to the MD-82 except for its avionics. A total of 142 MD-88 models were produced.

AMCPAM 24-2, Volume 4, Addendum D will focus primarily on the:
MD-82
MD-83
MD-87
MD-88

Chapter 2

QUICK REFERENCE TABLES

2.1. Ranges. Most numbers are shown as a range, due to representing all-passenger to all-freight versions OR due to different modifications within a series/type. Also, within a series, several different engines/weight classes may exist.

2.2. Pallets. Unless otherwise noted, pallet information is based on the civilian pallet IATA code PAG- / P1P- type LD7 which measures 88" × 125"**.**

2.3. Table Legends.
2.3.1. Compartments. Unless otherwise noted, compartments are: M=Main/Upper; F=Forward/Lower Lobe; A=Aft/Lower Lobe; B=Bulk/Lower Lobe.

2.3.2. "X". An "X" represents the information does NOT apply for that series/type (ex: an all-passenger version would have an "X" by Main Compartment Door)

2.3.3. Question Mark "?". A "?" represents that the information should apply, but no information exists in the manufacturer's technical manuals.

2.3.4. Exclamation Point "!". An "!" represents information that should apply, but has been derived from a reliable, but non-manufacturer source.

2.4. After-Market Conversions. As a reminder, individual airlines may have converted an airframe apart from the manufacturer's original specifications. These tables and the charts in the following chapters do not account for this.

2.5. Tables. The following tables (Tables 2.1 through 2.6) will vary with each AMCPAM 24-2, Volume 4 Addendum.

2.6. Tables. Addendum D. Boeing (McDonnell Douglas) MD-80 Series.

Table 2.1. Cargo Planning.

Aircraft Type	Pallets (88"×125") Max Ht	Range w/ Max ACL (NM)	Maximum ACL (ST) per Leg Length (NM)				Ferry Range w/ No Cargo (NM)
			2000	2500	3000	3500	
MD-82	M= 0, F= 0, Mid= 0, A= 0	1,200	15.89	5.25	X	X	2,700
MD-83	M= 0, F= 0, Mid= 0, A= 0	42,314	19.75	16	6.25	X	3,300
MD-87	M= 0, F= 0, Mid= 0, A= 0	37,120 – 38,726	16 – 18.67	11.0 – 16.0	0 –11	1.5	3,000 – 3,600
MD-88	M= 0, F= 0, Mid= 0, A= 0	1,200	15.89	5.25	X	X	2,700

Table 2.2. Passenger Planning.

Aircraft Type	Standard Seating	Max Seats (One Class)	Range w/ Max Troops (NM)	Maximum Troops per Leg Length (NM)			
				2,000	2,500	3,000	3,500
MD-82	155	172	1,700	155	48	X	X
MD-83	155	172	2,250	172	156	60	X
MD-87	130	139	2,350 –2,850	139	109 – 139	0 – 107	0 – 14
MD-88	155	172	1,700	155	48	X	X

Table 2.3. Door Clearances/Sizes.

Aircraft Type	Door Height from ground (in inches)					Door Size (W×H) (in inches)			
	Front/ Side Pax	Main/ Upper Deck	Lower Lobe FWD	Lower Lobe MID	Lower Lobe AFT	Main Deck	Lower Lobe FWD	Lower Lobe MID	Lower Lobe AFT
MD-82	87 to 94	X	43 to 51	48 to 56	57 to 65	X	53 × 50	53 × 50	53 × 50
MD-83	87 to 94	X	43 to 51	48 to 56	57 to 65	X	53 × 50	53 × 50	53 × 50
MD-87	87 to 93	X	44 to 49	50 to 55	58 to 65	X	53 × 50	53 × 50	36 × 50
MD-88	87 to 94	X	43 to 51	48 to 56	57 to 65	X	53 × 50	53 × 50	?

Table 2.4. Compartment Dimensions.

Aircraft Type	Compartment Dimensions (L×W×H) (in inches)				Compartment Weight limit (lbs)			
	Main/ Upper Deck	Lower Lobe FWD	Lower Lobe MID	Lower Lobe AFT	Main/ Upper Deck	Lower Lobe FWD	Lower Lobe MID	Lower Lobe AFT
MD-82	X	323! × 32.8(@ fl) 68 × 39.1	245.5! × 32.8(@fl) 68 × 39.1	313! × 32.8(@fl) 68 × 39.1(max w/o taper/fuel)	X	6960 (150 lb/ft^2)!	6920 (150 lb/ft^2)!	6645 (150 lb/ft^2)!
MD-83	X	304! × 32.8(@ fl) 68 × 39.1	186.5/264.5! × 32.8(@fl) 68 × 39.1	168/239! × 32.8(@fl) 68 × 39.1 (max w/o taper)	X	6045/6510 (150 lb/ft^2)!	5060/7520 (150 lb/ft^2)!	4890 (150 lb/ft^2)!
MD-87	X	189! × 32.8(@ fl) 68 × 39.1	186.7/264.7! × 32.8(@fl) 68 × 39.1	122/218! × 32.8(@fl) 68 × 39.1(max w/o taper)	X	3780 (150 lb/ft^2)!	5060/7520 (150 lb/ft^2)!	2310/4650 (150 lb/ft^2)!
MD-88	X	304! × 32.8(@ fl) 68 × 39.1	186.5/264.5! × 32.8(@fl) 68 × 39.1	168/239! × 32.8(@fl) 68 × 39.1(max w/o taper)	X	6045/6510 (150 lb/ft^2)!	5060/7520 (150 lb/ft^2)!	4890 (150 lb/ft^2)!

Table 2.5. Weight Information.

Aircraft Type	Maximum Design Weight (lbs)						
	Ramp/ Taxi (MTW)	T/O (MTW)	Land (MLW)	Zero Fuel (MZFW)	Oper Empty (OEW)	Max Payload	Max Cargo Vol. (FT^3)
MD-82	150,500	149,500	130,000	122,000	77,976	44,024	1,253
MD-83	161,000	160,000	139,500	122,000	79,686	42,314	1,013
MD-87	141,000 –150,500	140,000 –149,500	128,000 –130,000	112,000	73,274 – 74,880	37,120 – 38,726	695 – 938
MD-88	150,500	149,500	130,000	122,000	77,976	44,024	1,253

Table 2.6. Airfield Suitability Information.

Aircraft Type	Max Usable Fuel (US Gal)	T/O Min RWY at MTW (FT)	LND Min RWY at MLW (FT)	Parking Ramp Footprint (L×W)	Electrical (Ground Op's & Maintenance)	Air (Starting) (SL, Std Day)	Gear Type
							New FAA / USAF
MD-82	5,846	7,300	5,000	147' 10" × 107' 10.2"	120/208V 3-ph, 400 Hz 60 KVA	Min - 41 PSIA 260° C	D/DW / TD
MD-83	6,981	8,000	5,250	147' 10" × 107' 10.2"	120/208V 3-ph, 400 Hz 60 KVA	Min - 41 PSIA 260° C	D/DW / TD
MD-87	5,845 –6,980	6,100 – 7,500	5,000 –5,100	130' 5" × 107' 10.2"	120/208V 3-ph, 400 Hz 60 KVA	Min - 41 PSIA 260° C	D/DW / TD
MD-88	5,846	7,300	5,000	147' 10" × 107' 10.2"	120/208V 3-ph, 400 Hz 60 KVA	Min - 41 PSIA 260° C	D/DW / TD

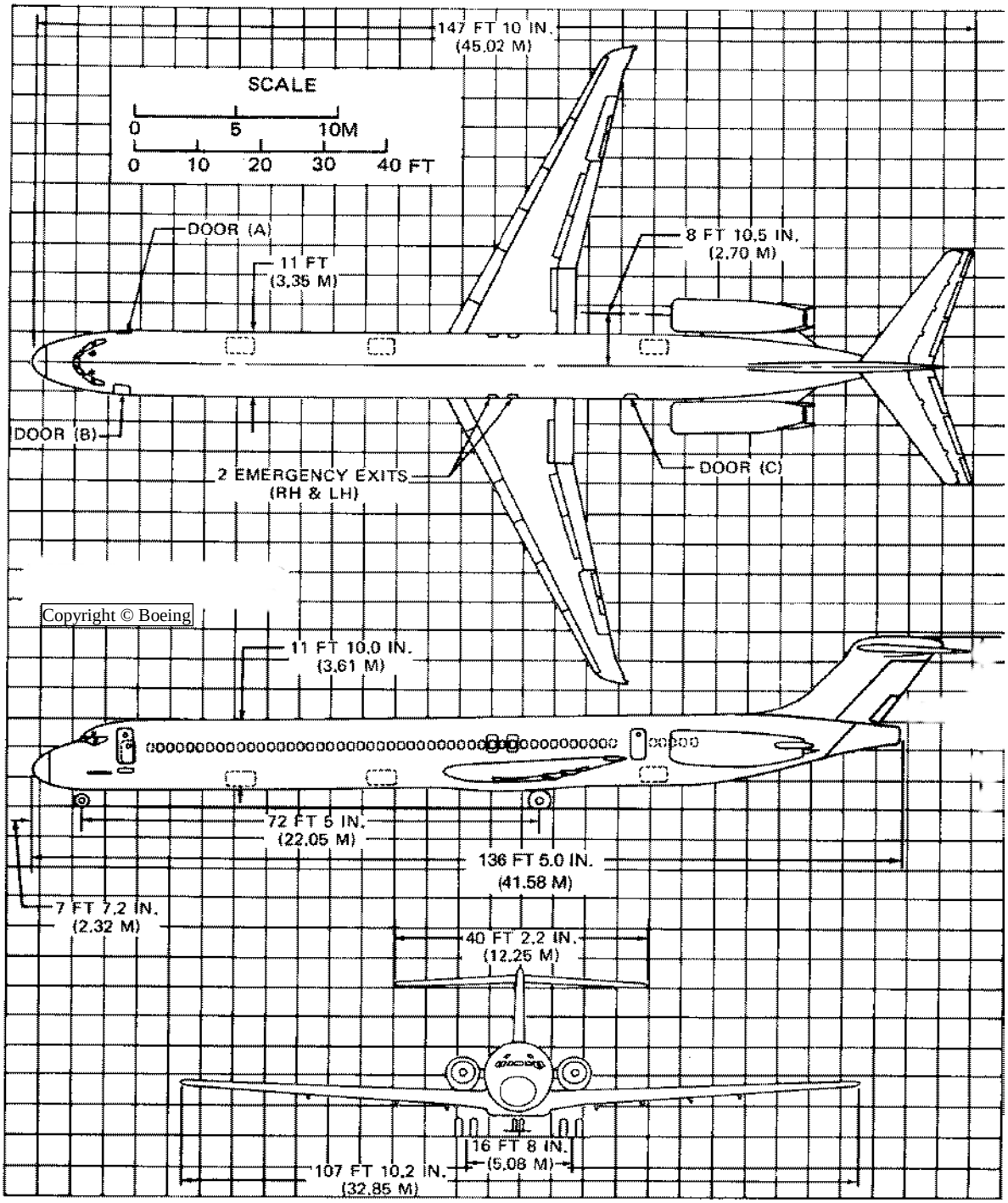
Chapter 3

MD-82 & MD-88

3.1. DIMENSIONS.

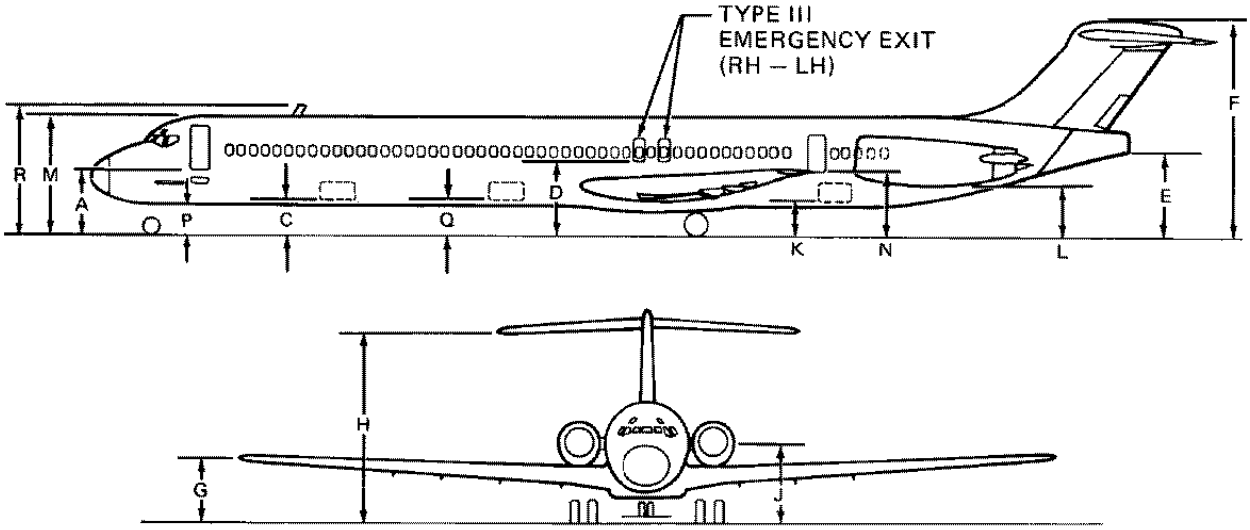
3.1.1. General Dimensions.

Figure 3.1. General Dimensions MD-82/MD-88.



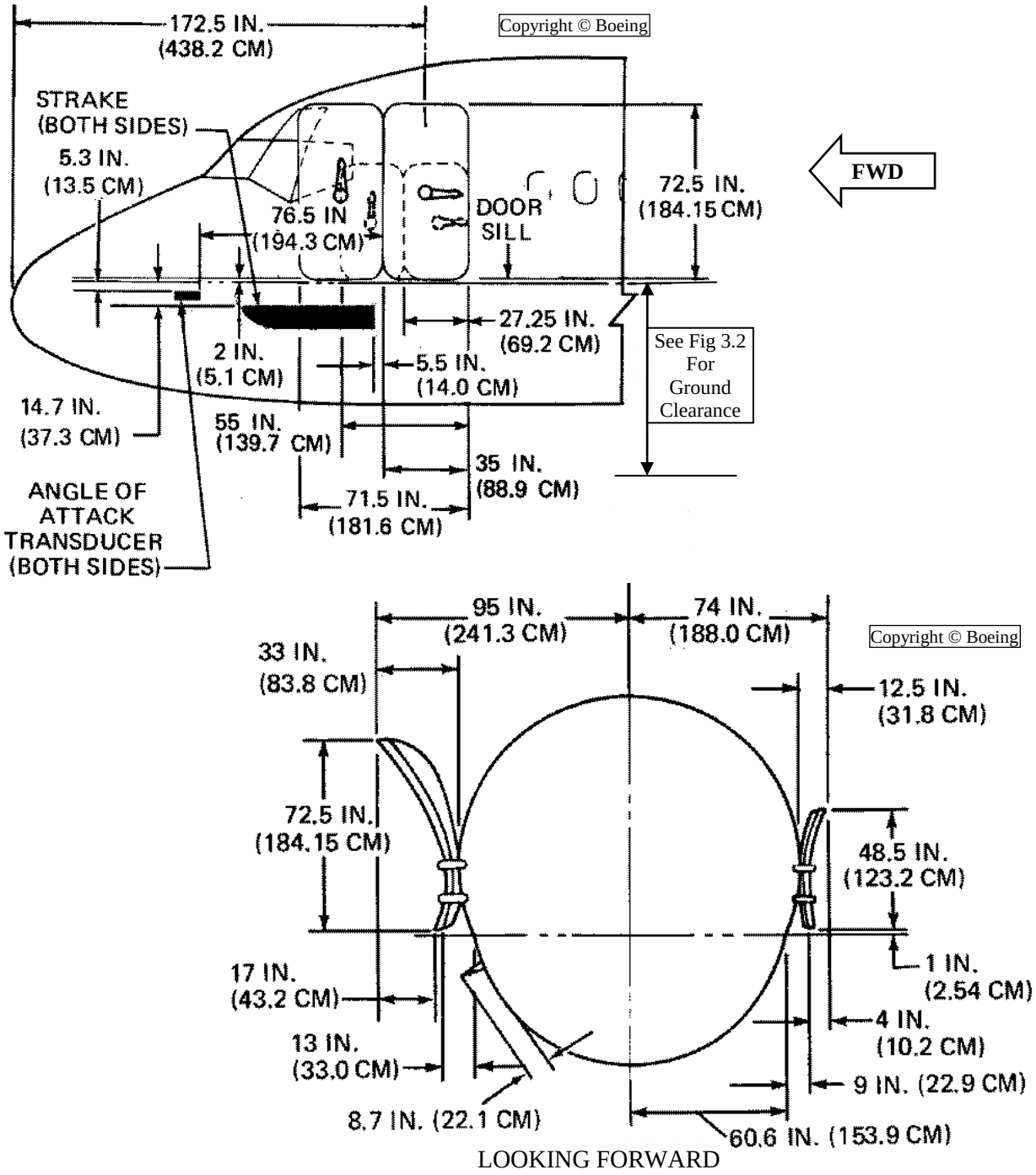
3.1.2. Ground Clearance.

Figure 3.2. Ground Clearance MD-82/MD-88.



Vertical Clearances				
DOOR		**Min**		**Max**
Pax/Crew	**A**	7' 3"		7' 10"
FWD	**C**	3' 7"		4' 3"
	D	9' 9"		10' 2"
	E	11' 5"		12' 1"
	F	29' 7"		30' 2"
	G	8' 7"		9' 1"
	H	26' 9"		27' 6"
	J	11' 2"		11' 8"
AFT	**K**	4' 9"		5' 5"
	L	7' 6"		8' 2"
	M	15' 1"		15' 7"
	N	8' 10"		9' 3"
	P	3' 0"		3' 7"
MID	**Q**	4' 0"		4' 8"
	R	16' 7"		17' 1"

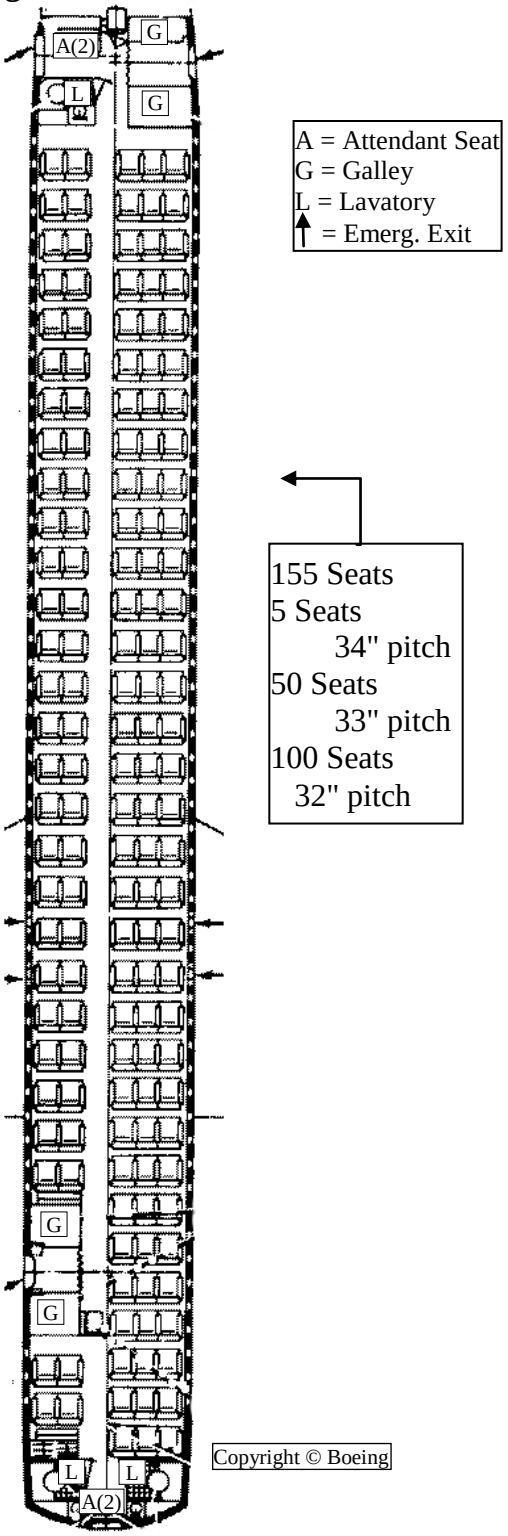
3.2. COMPARTMENT CONFIGURATIONS.
3.2.1. MAIN/PASSENGER COMPARTMENT.
3.2.1.1. Pax/Crew Door.
Figure 3.3. Pax/Crew Door MD-82/MD-88.



3.2.1.2. Main Door.
N/A this model

3.2.1.3. Compartment Dimensions.

Figure 3.4. Typical Passenger Configuration MD-82/MD-88.



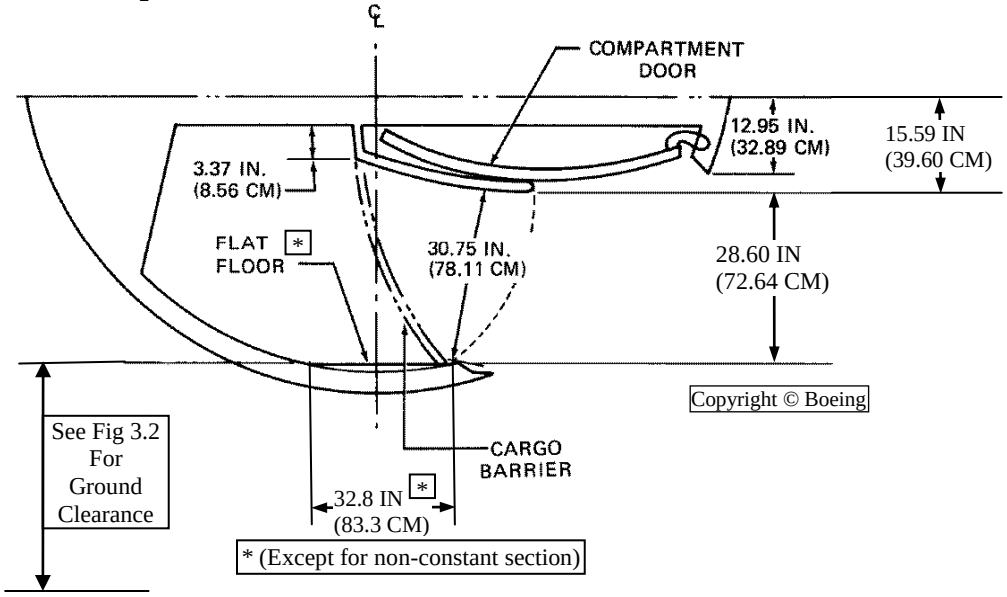
3.2.1.4. Pallets.

N/A this model

3.2.2. FORWARD COMPARTMENT.

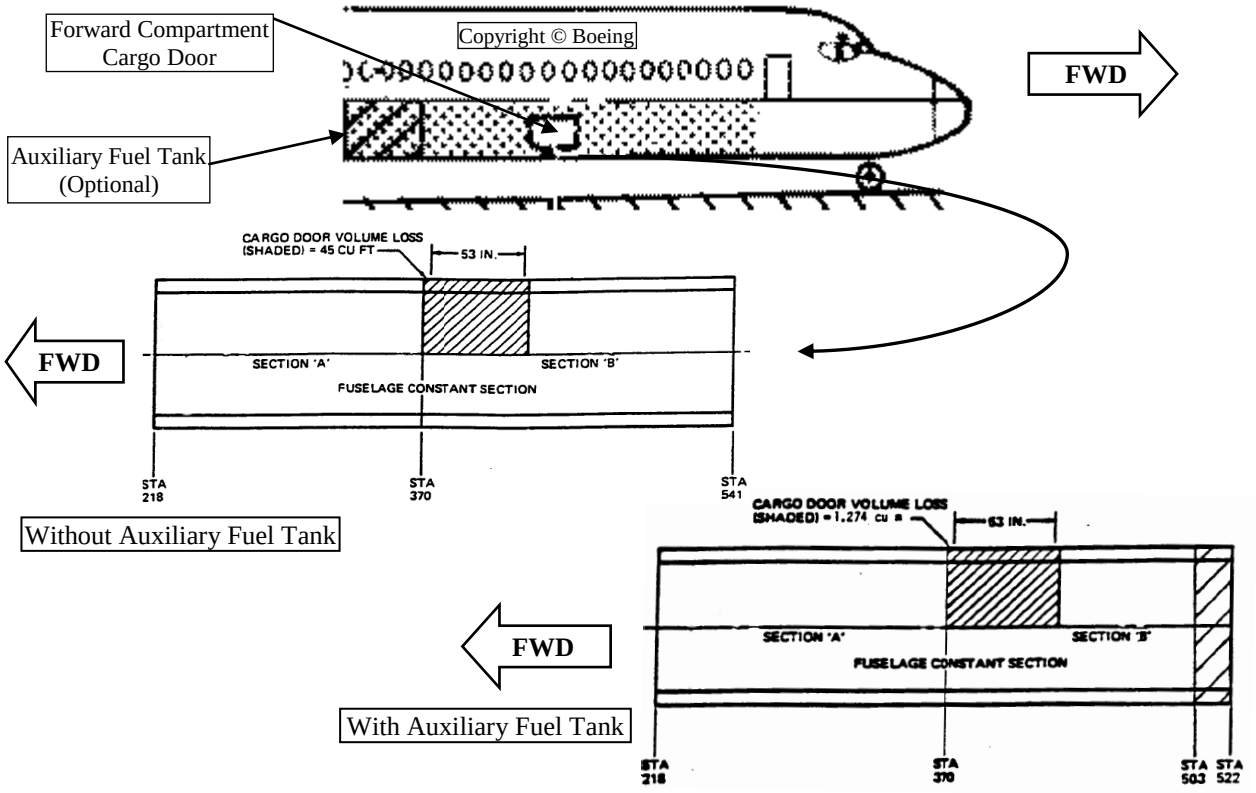
3.2.2.1. Door.

Figure 3.5. Forward Compartment Door MD-82/MD-88.



3.2.2.2. Compartment Dimensions.

Figure 3.6. Forward Compartment Dimensions MD-82/MD-88.



3.2.2.3. Pallets.

88" x 125" pallets cannot be loaded in this compartment.

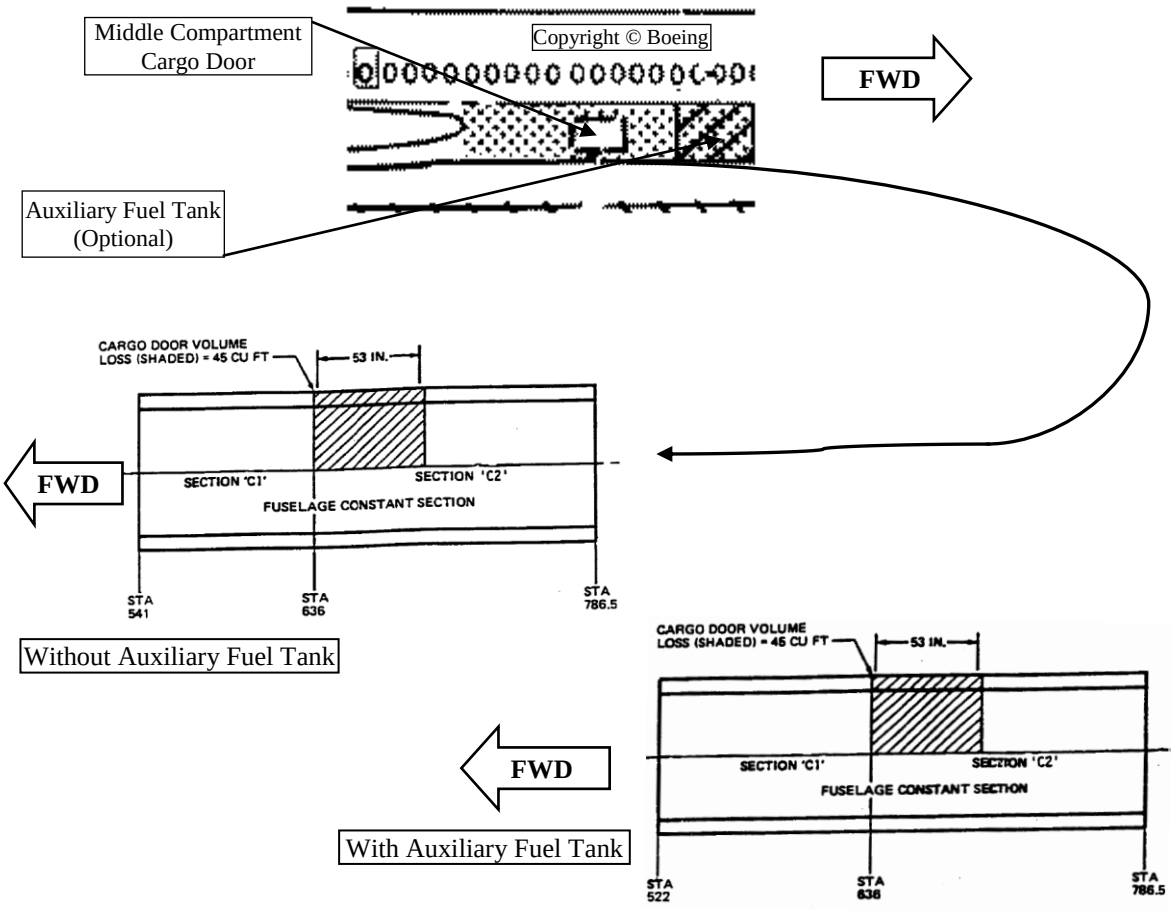
3.2.3. MIDDLE COMPARTMENT.

3.2.3.1. Door.

Same as for Forward Door. See: Fig 3.5. Forward Compt Door MD-82/MD-88.

3.2.3.2. Compartment Dimensions.

Figure 3.7. Middle Compartment Dimensions MD-82/MD-88.



3.2.3.3. Pallets.

88" x 125" pallets cannot be loaded in this compartment.

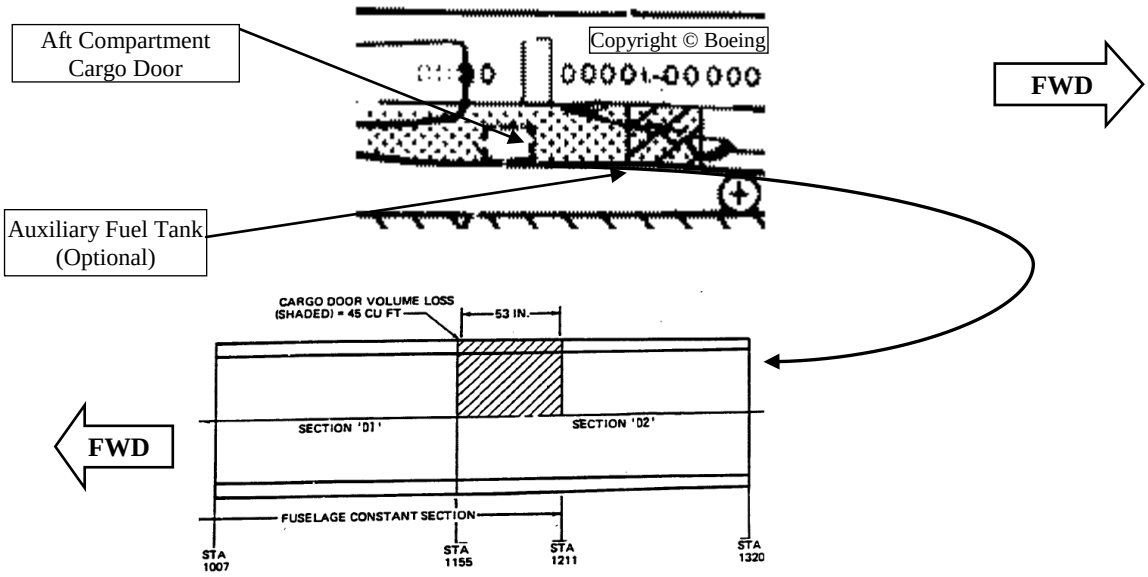
3.2.4. AFT COMPARTMENT.

3.2.4.1. Door.

Same as for MD-82/MD-88. See: Fig 3.5. Forward Compt Door MD-82/MD-88.

3.2.4.2. Compartment Dimensions.

Figure 3.8. Aft Compartment Dimensions MD-82/MD-88.



With/Without Auxiliary Fuel Tank

3.2.4.3. Pallets.

88" x 125" pallets cannot be loaded in this compartment.

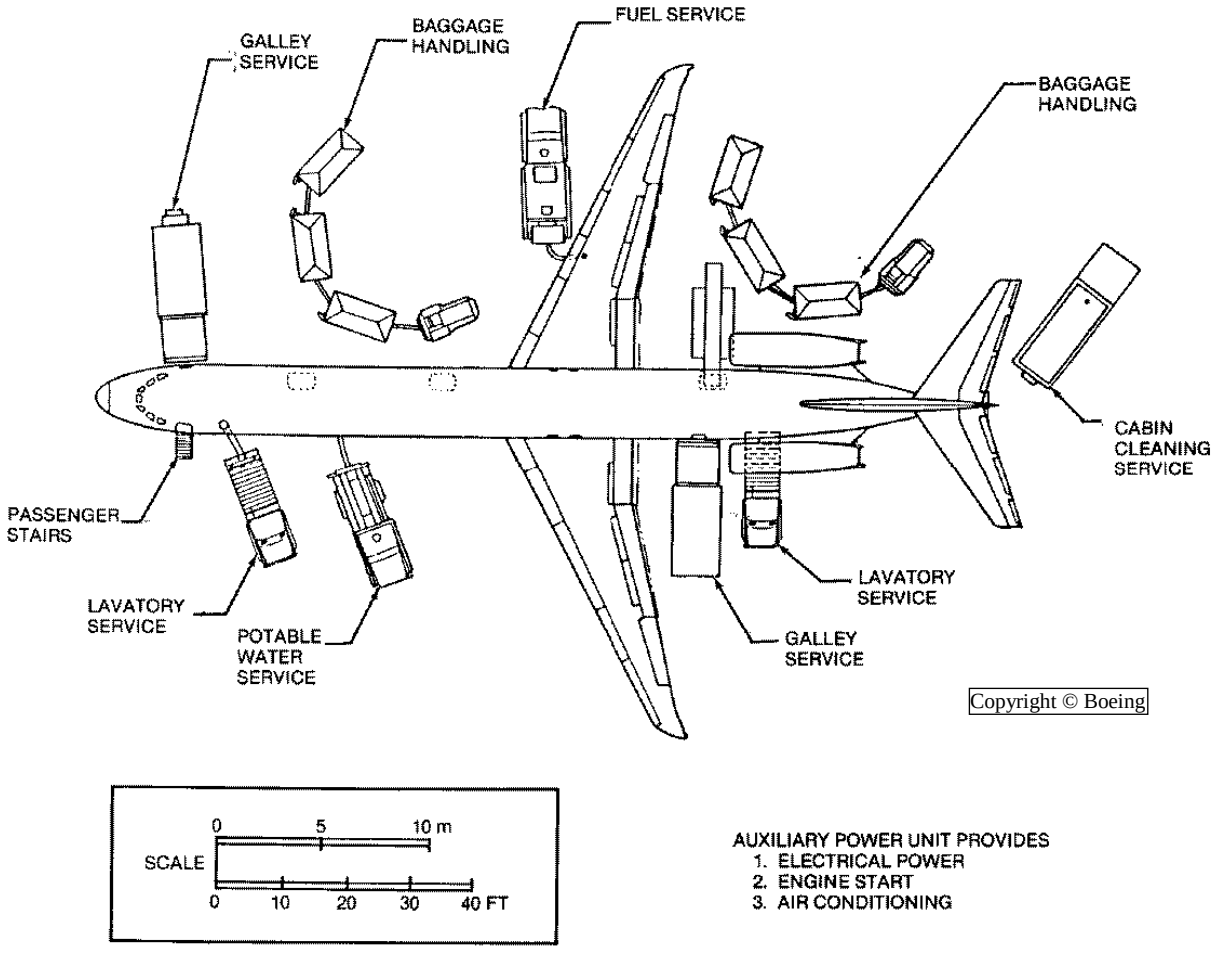
3.2.5. BULK COMPARTMENT.

N/A this model

3.3. SERVICING DIAGRAMS.

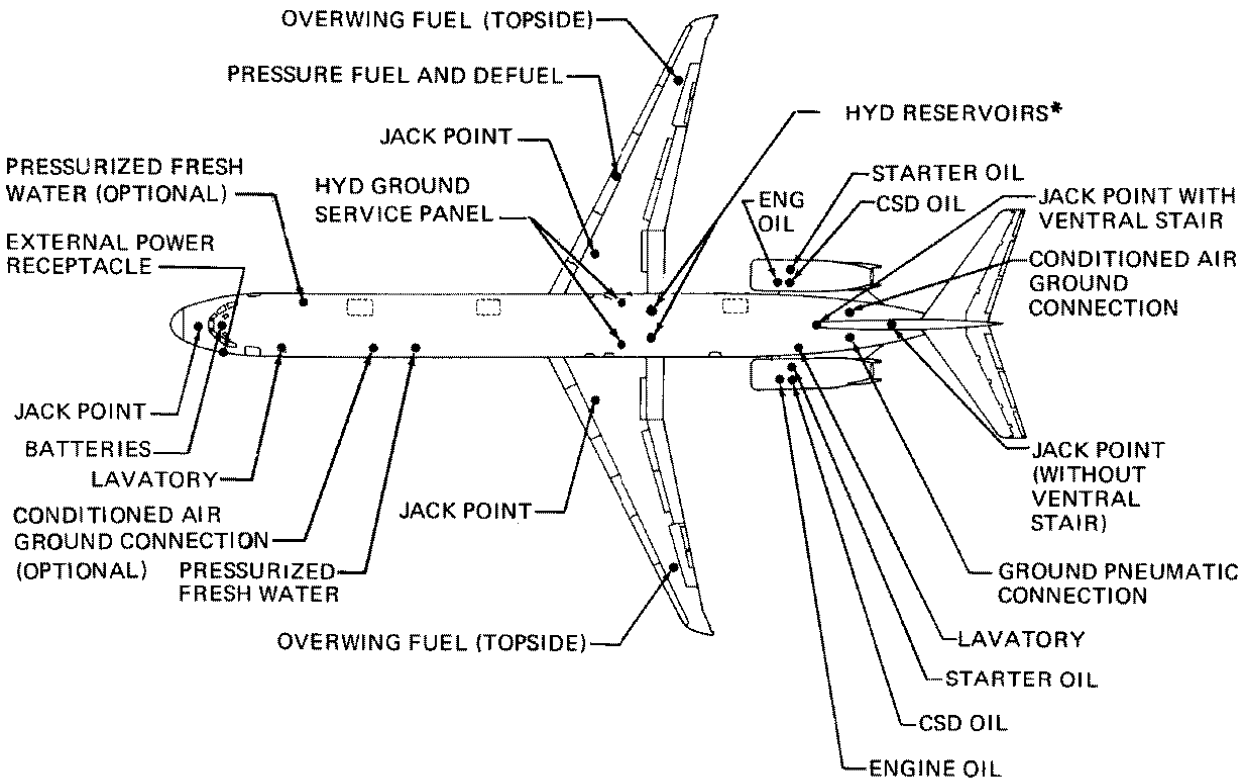
3.3.1. Servicing.

Figure 3.9. Typical Servicing Arrangement MD-82/MD-88.

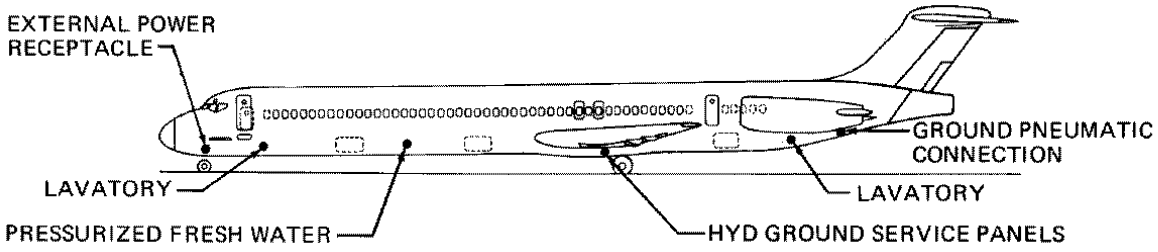


3.3.2. Ground Connections.

Figure 3.10. Ground Service Connections MD-82/MD-88.



TOP VIEW



SIDE VIEW

*(ACCESS THROUGH WHEEL WELLS)

3.3.3. Air Stairs.

Figure 3.11. Forward Stairs MD-82/MD-88.

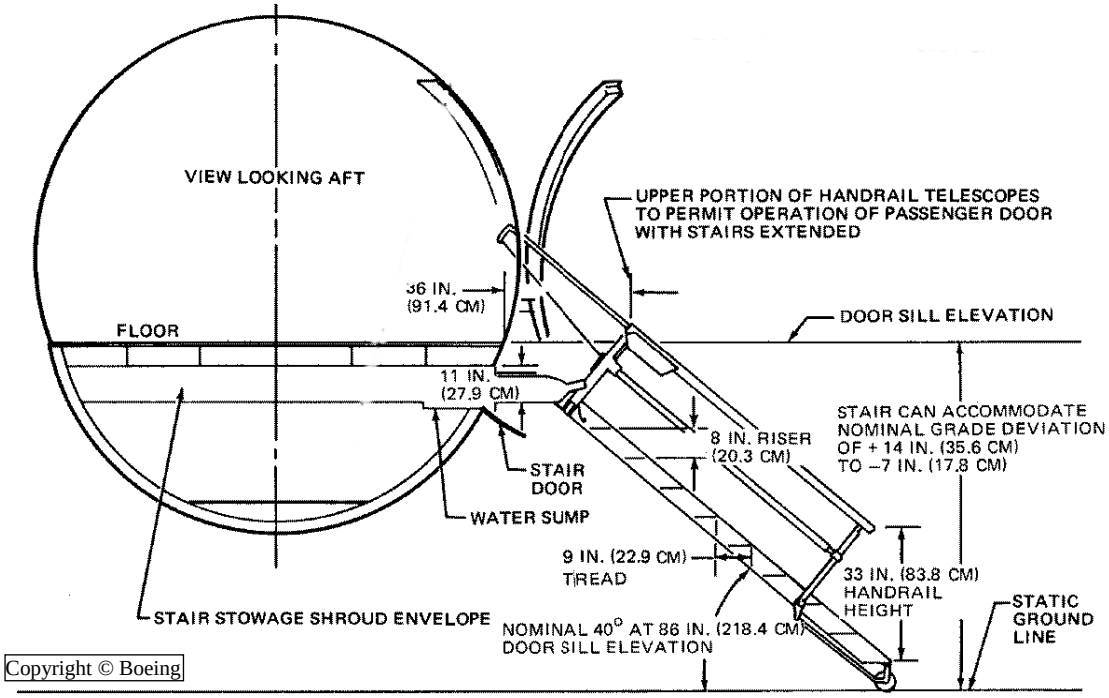
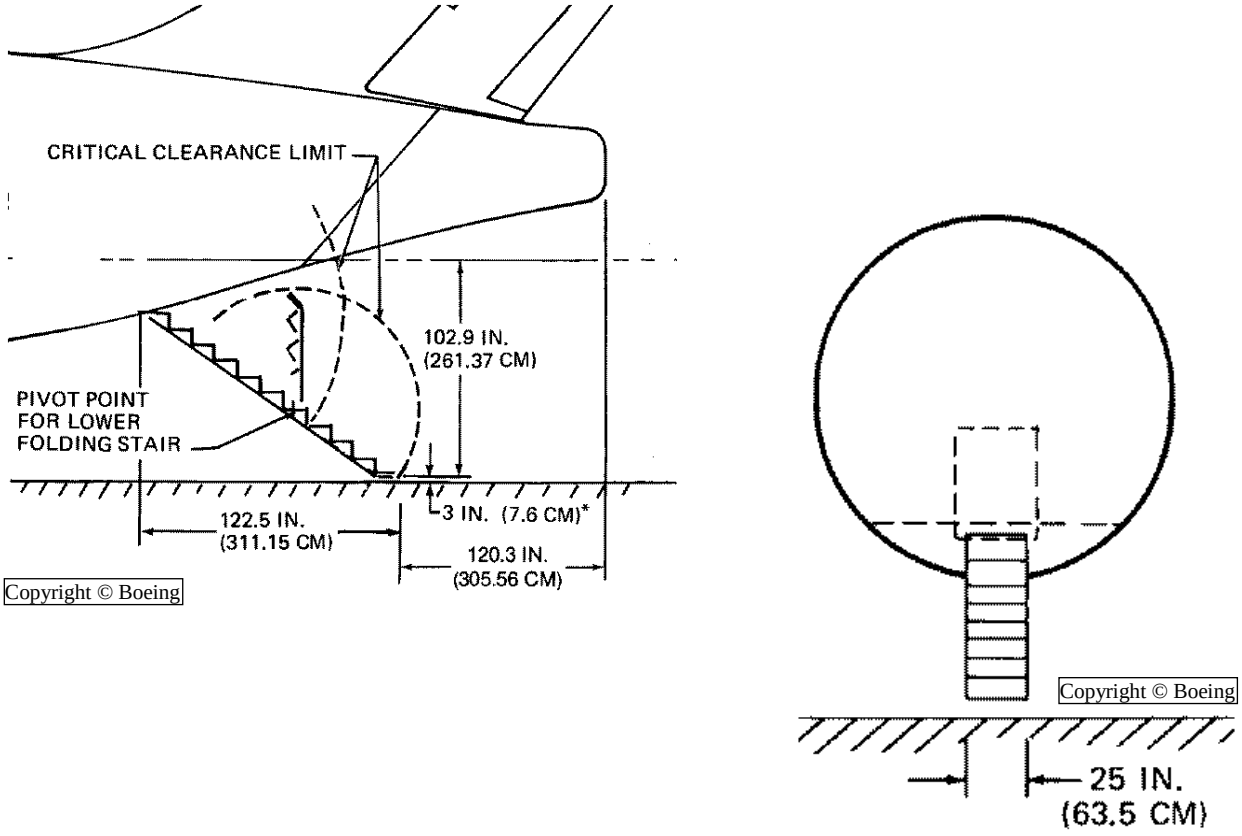


Figure 3.12. Aft Stairs MD-82/MD-88.

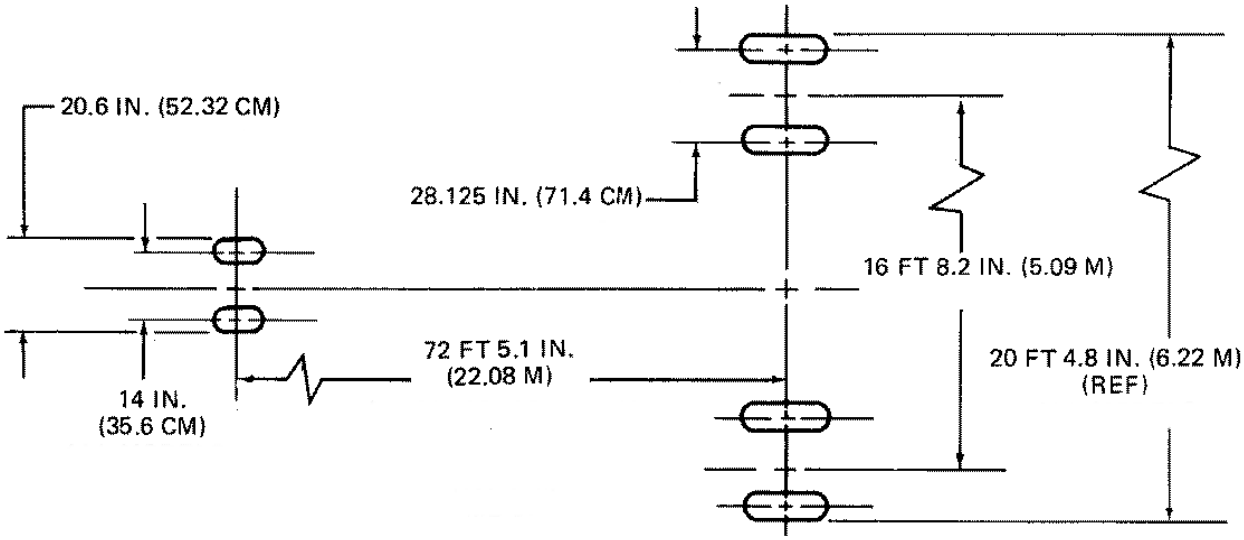


3.4. AIRFIELD SUITABILITY.

3.4.1. Landing Gear Footprint.

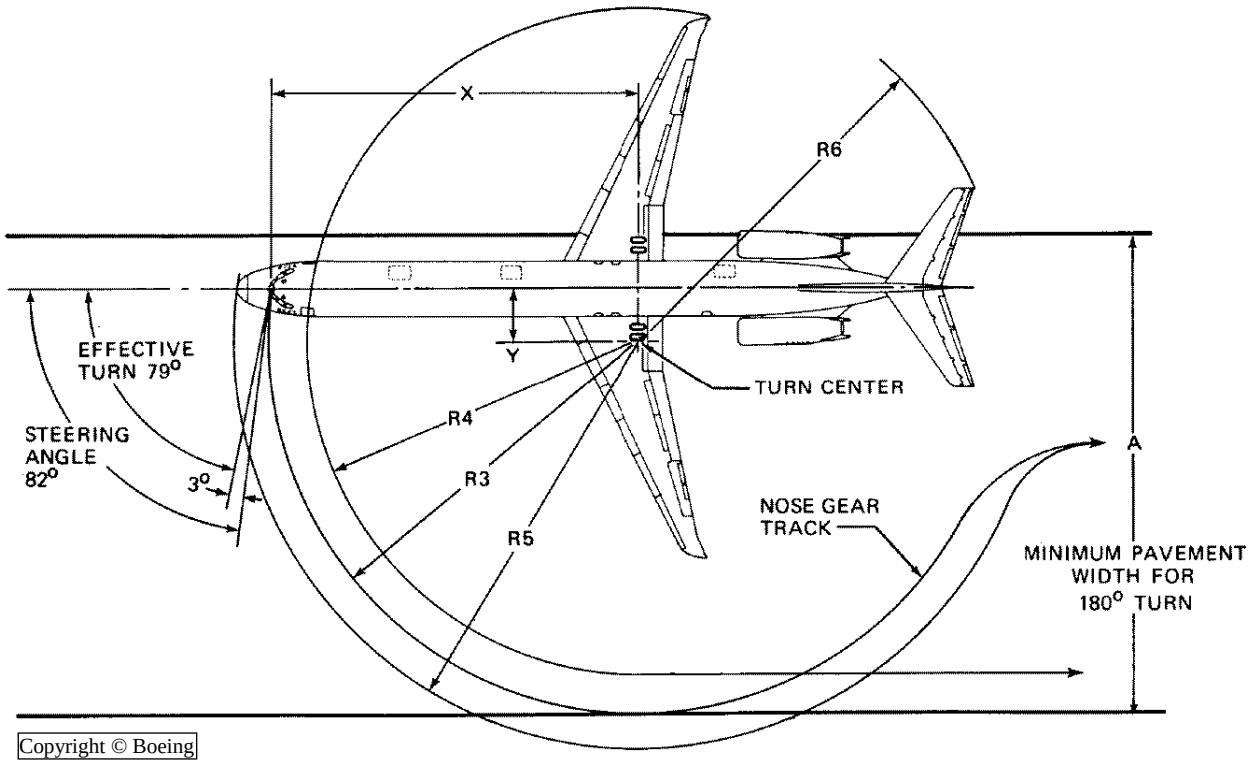
Figure 3.13. Landing Gear Footprint MD-82/MD-88.

	MD-82 / MD-88
Max Taxi Wt.	150,500 lb (68,254 kg)
Nose Gear Tire Size	26 x 6.6 Type VII
Nose Gear Tire Press.	155 psi (10.9 kg/cm^2)
Main Gear Tire Size	H44.5 x 16.5 - 20 26 PR
Main Gear Tire Press.	184 psi (12.9 kg/cm^2)



3.4.2. Minimum Turning Radii.

Figure 3.14. Minimum Turning Radii MD-82/MD-88.



NOTE:
- 3° Tire Slip Angle assumes 82° Nose Wheel deflection during very slow turning
- Consult Airline for actual operating data
- No differential braking or unsymmetrical thrust

Effective Turn Angle	X	Y	A	R3	R4	R5	R6
79°	72.4' (22.1m)	14.0' (4.3m)	98.8' (30.1m)	73.6' (22.4m)	69.6' (21.2m)	81.2' (24.7m)	75.9' (23.1m)

3.4.3. Parking Footprint.

No manufacturer diagrams available.

Chapter 4
MD-83

4.1. DIMENSIONS.

4.1.1. General Dimensions.

Same as for MD-82/MD-88. See: Figure 3.1. General Dim's MD-82/MD-88.

4.1.2. Ground Clearance.

Same as for MD-82/MD-88. See: Figure 3.2. Ground Clearance MD-82/MD-88.

4.2. COMPARTMENT CONFIGURATIONS.

4.2.1. MAIN/PASSENGER COMPARTMENT.

4.2.1.1. Pax/Crew Door.

Same as for MD-82/MD-88. See: Figure 3.3. Pax/Crew Door MD-82/MD-88.

4.2.1.2. Main Door. N/A this model

4.2.1.3. Compartment Dimensions.

Same as for MD-82/MD-88. See: Fig 3.4. Typ. Passenger Config MD-82/MD-88.

4.2.1.4. Pallets. N/A this model

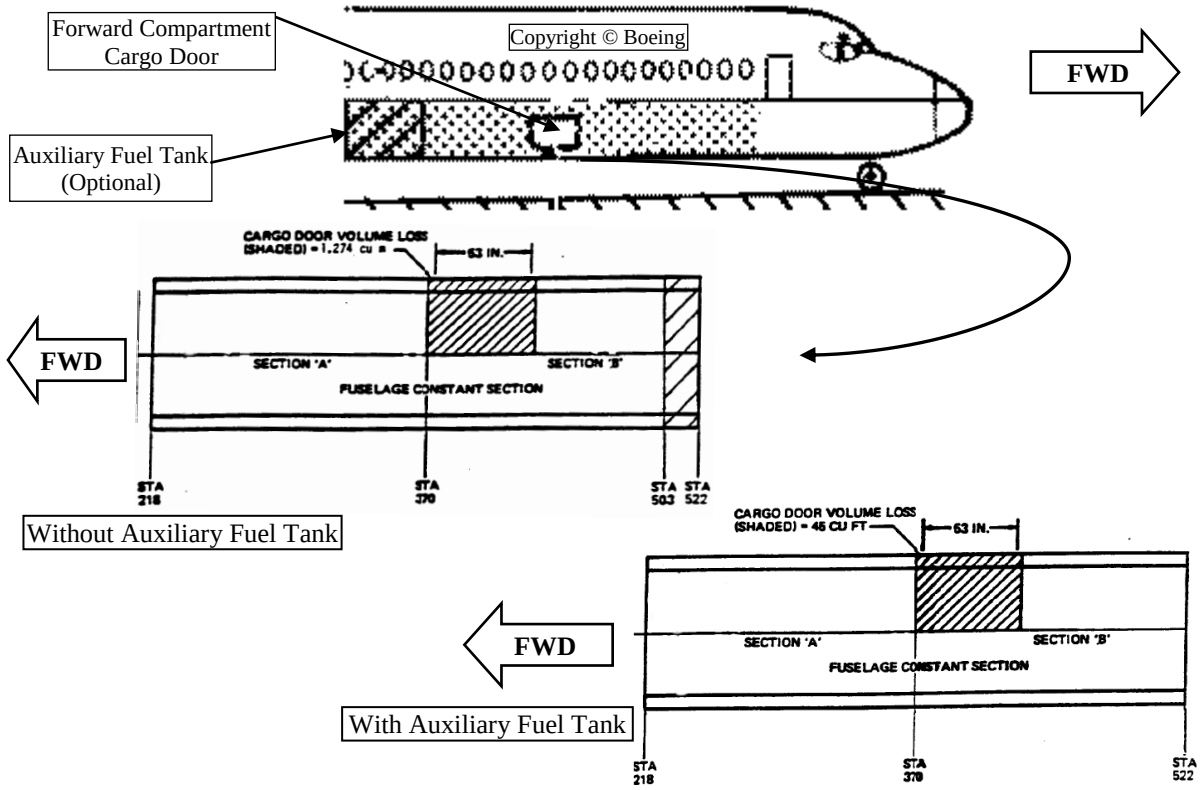
4.2.2. FORWARD COMPARTMENT.

4.2.2.1. Door.

Same as for MD-82/MD-88. See: Fig 3.5. Forward Compt Door MD-82/MD-88.

4.2.2.2. Compartment Dimensions.

Figure 4.1. Forward Compartment Dimensions MD-83.



4.2.2.3. Pallets.

88" x 125" pallets cannot be loaded in this compartment.

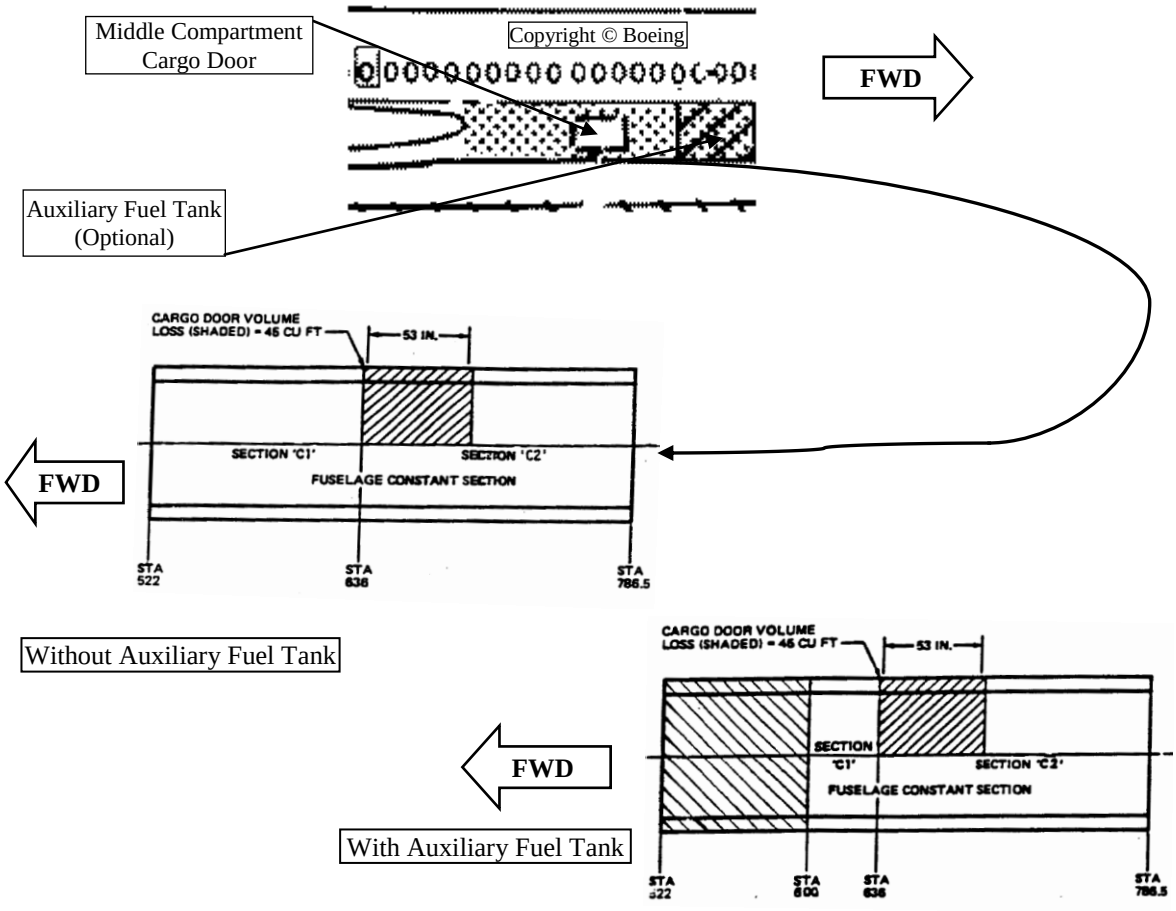
4.2.3. MIDDLE COMPARTMENT.

4.2.3.1. Door.

Same as for MD-82/MD-88. See: Fig 3.5. Forward Compt Door MD-82/MD-88.

4.2.3.2. Compartment Dimensions.

Figure 4.2. Middle Compartment Dimensions MD-83.



4.2.3.3. Pallets.

88" x 125" pallets cannot be loaded in this compartment.

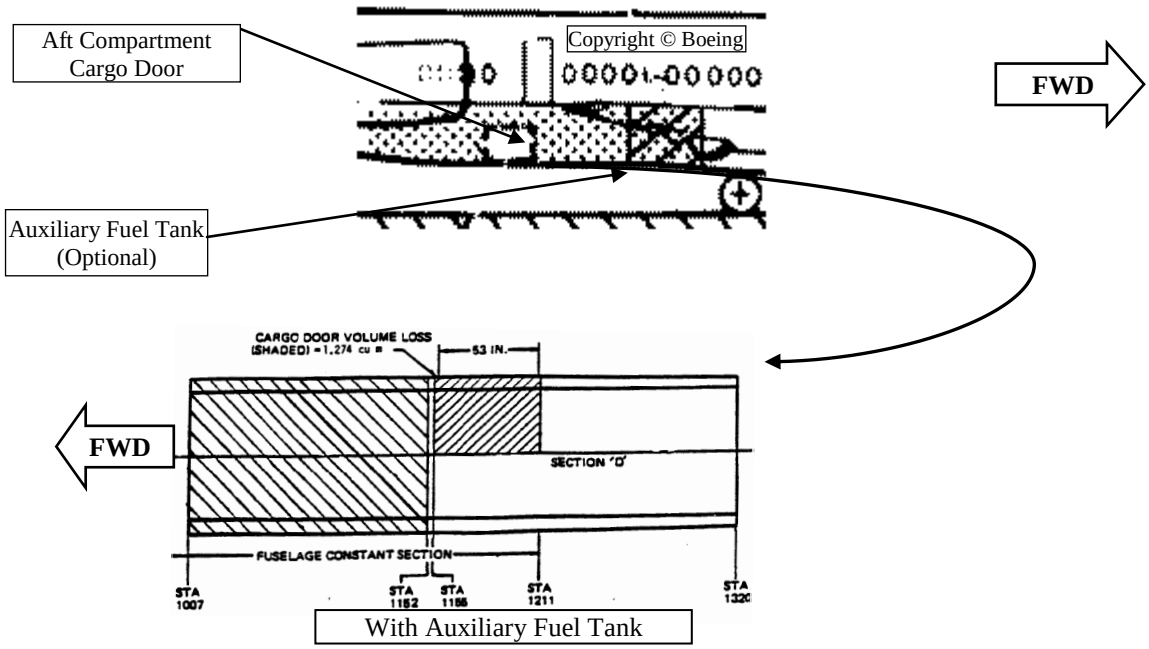
4.2.4. AFT COMPARTMENT.

4.2.4.1. Door.

Same as for MD-82/MD-88. See: Fig 3.5. Forward Compt Door MD-82/MD-88.

4.2.4.2. Compartment Dimensions.

Figure 4.3. Aft Compartment Dimensions MD-83.



4.2.4.3. Pallets.

88" x 125" pallets cannot be loaded in this compartment.

4.2.5. BULK COMPARTMENT.

N/A this model

4.3. SERVICING DIAGRAMS.

4.3.1. Servicing.

Same as for MD-82/MD-88. See: Fig 3.9. Typ Serv Arrangement MD-82/MD-88.

4.3.2. Ground Connections.

Same as for MD-82/MD-88. See: Fig 3.10. Grnd Serv Connect's MD-82/MD-88.

4.3.3. Air Stairs.

Same as for MD-82/MD-88.

See: Figure 3.11. Forward Stairs MD-82/MD-88.

AND

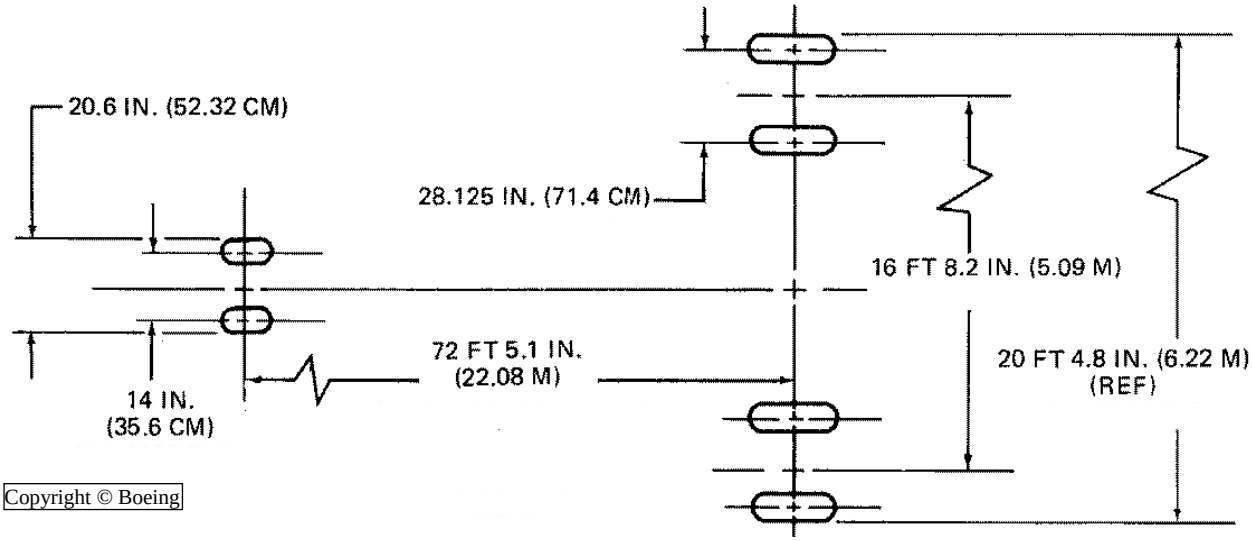
See: Figure 3.12. Aft Stairs MD-82/MD-88.

4.4. AIRFIELD SUITABILITY.

4.4.1. Landing Gear Footprint.

Figure 4.4. Landing Gear Footprint MD-83.

	MD-83
Max Taxi Wt.	161,000 lb (73,016 kg)
Nose Gear Tire Size	26 x 6.6 Type VII
Nose Gear Tire Press.	170 psi (12.0 kg/cm^2)
Main Gear Tire Size	H44.5 x 16.5 - 20 28 PR
Main Gear Tire Press.	195 psi (13.7 kg/cm^2)



4.4.2. Minimum Turning Radii.

Same as for MD-82/MD-88. See: Figure 3.14. Min Turning Radii MD-82/MD-88.

4.4.3. Parking Footprint.

No manufacturer diagrams available.

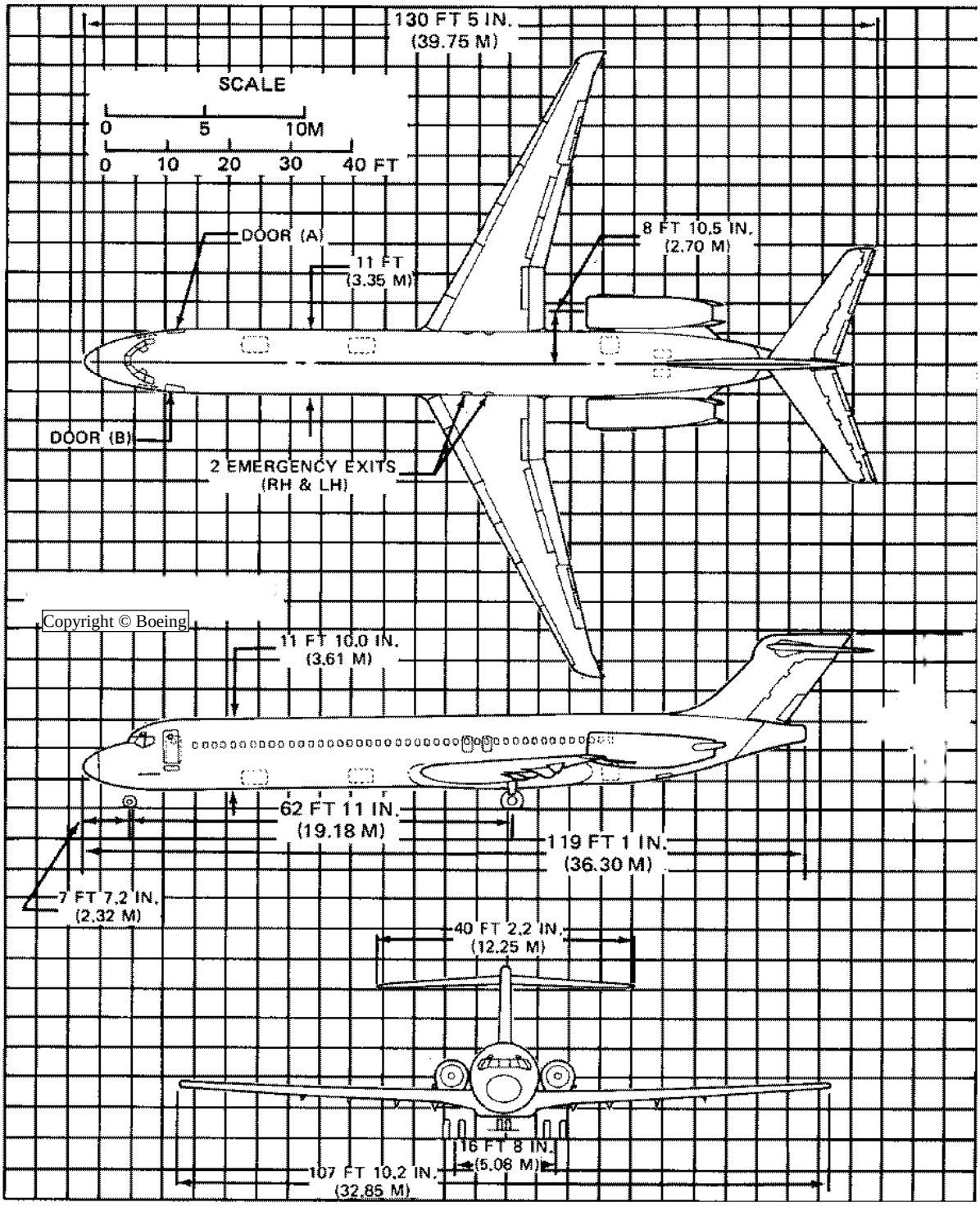
Chapter 5

MD-87

5.1. DIMENSIONS.

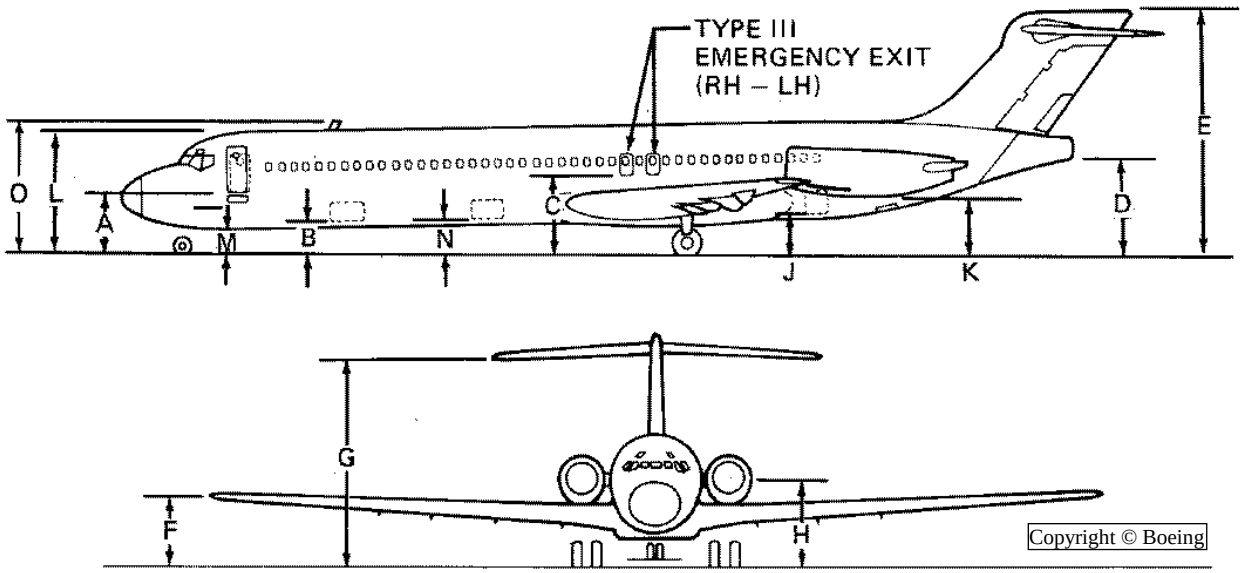
5.1.1. General Dimensions.

Figure 5.1. General Dimensions MD-87.



5.1.2. Ground Clearance.

Figure 5.2. Ground Clearance MD-87.



Vertical Clearances				
DOOR		**Min**		**Max**
Pax/Crew	**A**	7' 3"		7' 9"
FWD	**B**	3' 8"		4' 1"
	C	9' 10"		10' 3"
	D	11' 8"		12' 7"
	E	30' 4"		31' 2"
	F	8' 8"		9' 3"
	G	27' 2"		28' 1"
	H	11' 1"		11' 8"
AFT	**J**	4' 10"		5' 5"
	K	7' 6"		8' 1"
	L	15' 2"		15' 8"
	M	3' 0"		3' 6"
MID	**N**	4' 2"		4' 7"
	O	16' 8"		17' 1"

5.2. COMPARTMENT CONFIGURATIONS.

5.2.1. MAIN/PASSENGER COMPARTMENT.

5.2.1.1. Pax/Crew Door.

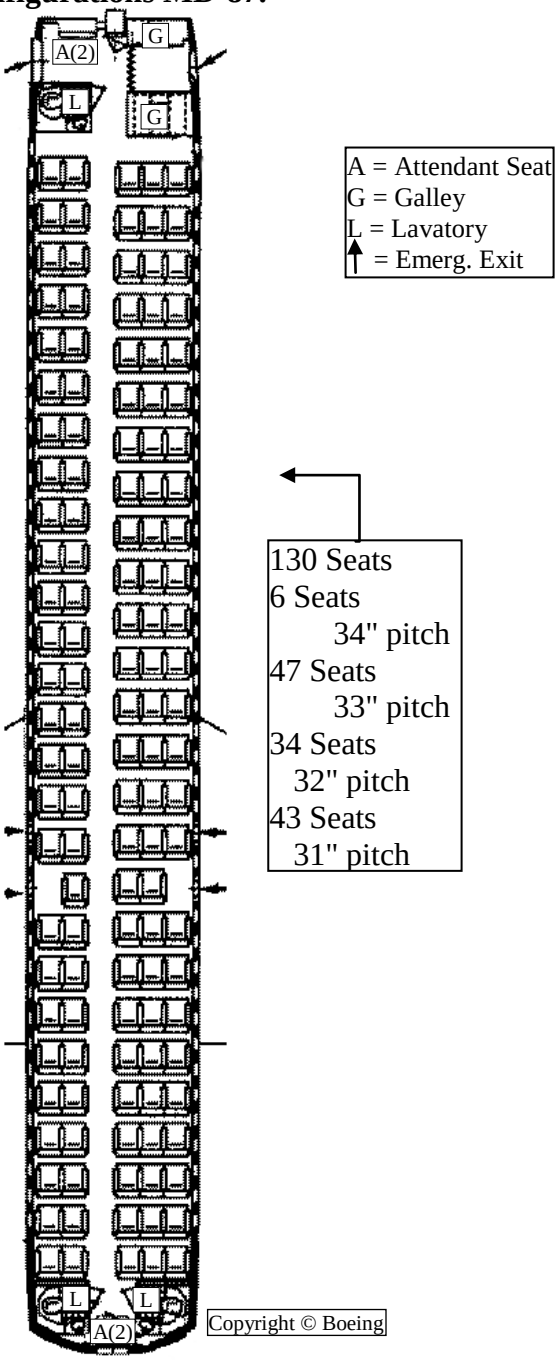
Same as for MD-82/MD-88. See: Figure 3.3. Pax/Crew Door MD-82/MD-88.

(Note: Refer to Figure 5.2 for Ground Clearance)

5.2.1.2. Main Door. N/A this model

5.2.1.3. Compartment Dimensions.

Figure 5.3. Typical Passenger Configurations MD-87.



5.2.1.4. Pallets. N/A this model

5.2.2. FORWARD COMPARTMENT.

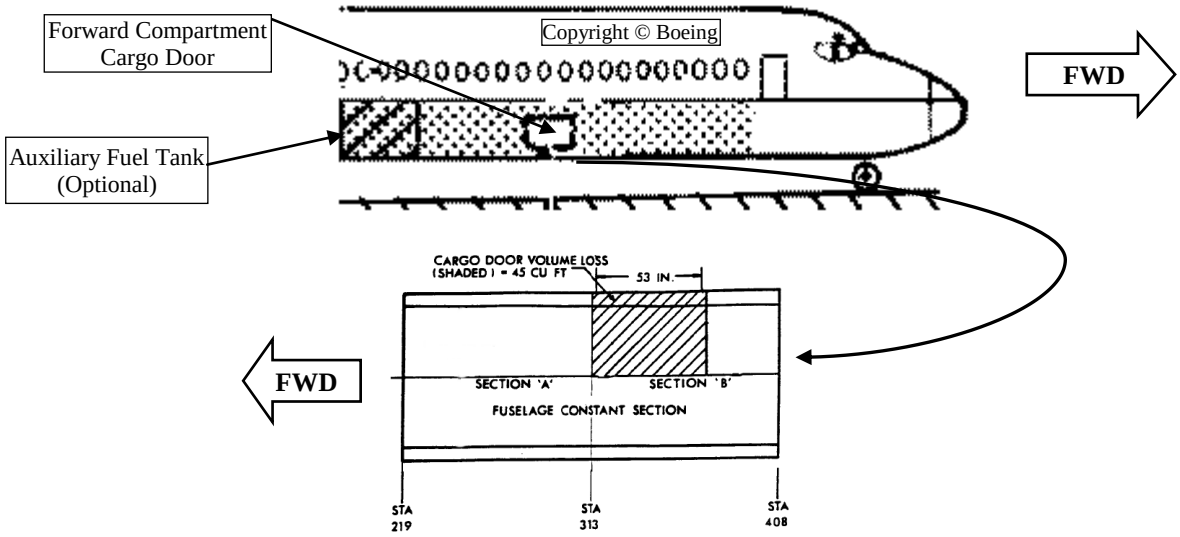
5.2.2.1. Door.

Same as for MD-82/MD-88. See: Fig 3.5. Forward Compt Door MD-82/MD-88.

(Note: Refer to Figure 5.2 for Ground Clearance)

5.2.2.2. Compartment Dimensions.

Figure 5.4. Forward Compartment Dimensions MD-87.



With/Without Auxiliary Fuel Tank

5.2.2.3. Pallets.

88" x 125" pallets cannot be loaded in this compartment.

5.2.3. MIDDLE COMPARTMENT.

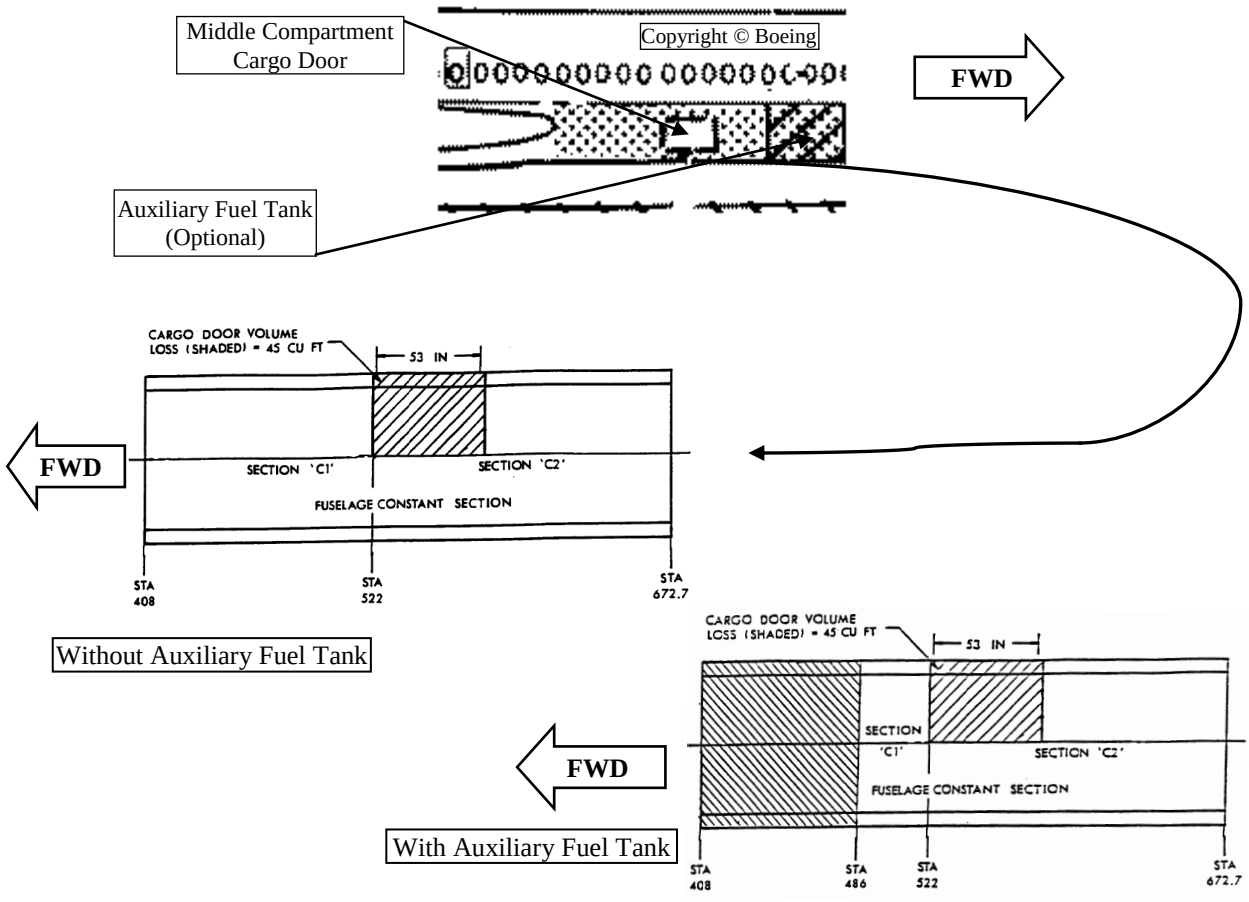
5.2.3.1. Door.

Same as for MD-82/MD-88. See: Fig 3.5. Forward Compt Door MD-82/MD-88.

(Note: Refer to Figure 5.2 for Ground Clearance)

5.2.3.2. Compartment Dimensions.

Figure 5.5. Middle Compartment Dimensions MD-87.



5.2.3.3. Pallets.

88" x 125" pallets cannot be loaded in this compartment.

5.2.4. AFT COMPARTMENT.

5.2.4.1. Door.

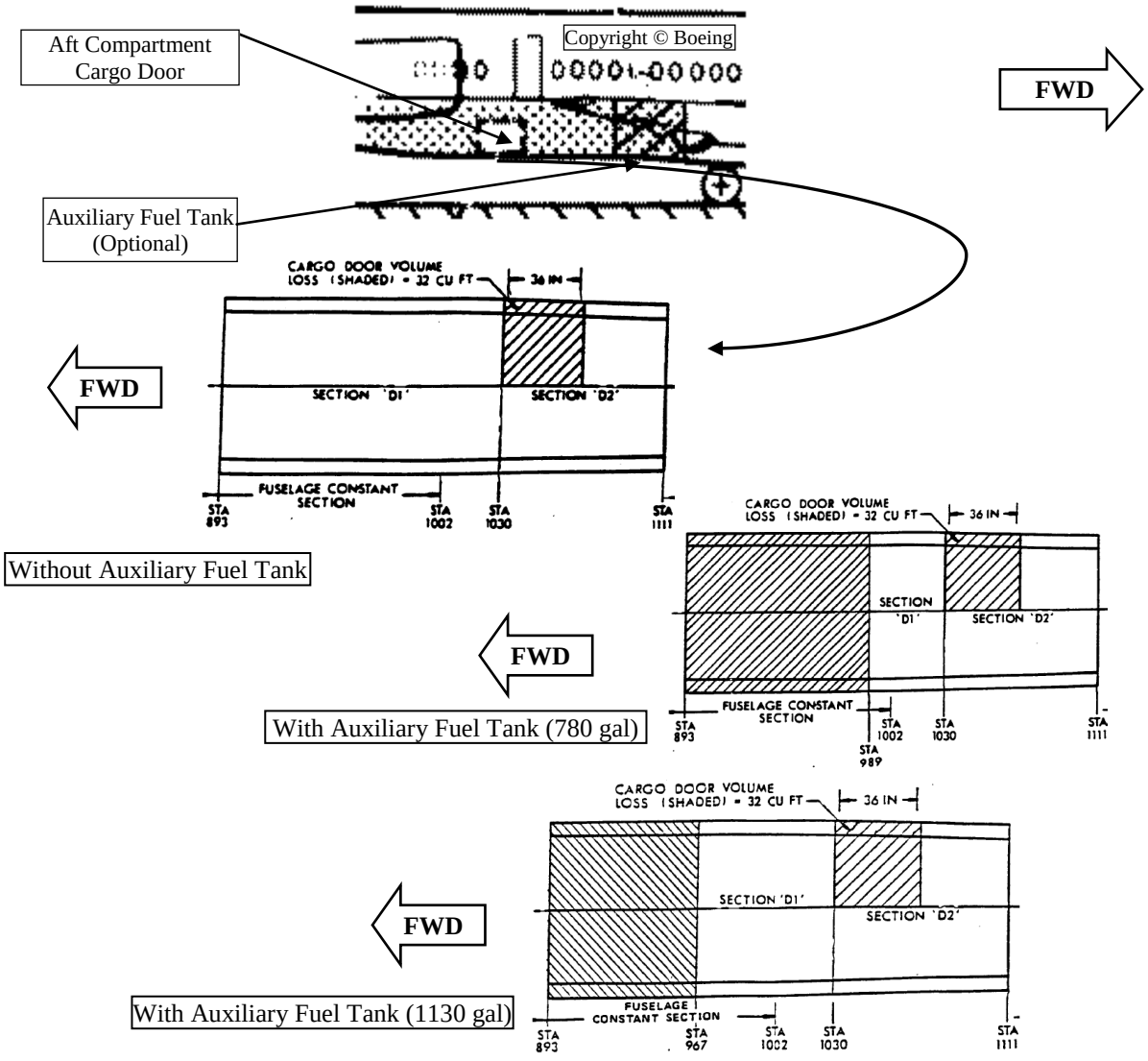
Same as for MD-82/MD-88. See: Fig 3.5. Forward Compt Door MD-82/MD-88.

(Note: Flat Floor dimensions inapplicable.)

(Note: Refer to Figure 5.2 for Ground Clearance)

5.2.4.2. Compartment Dimensions.

Figure 5.6. Aft Compartment Dimensions MD-87.



5.2.4.3. Pallets.

88" x 125" pallets cannot be loaded in this compartment.

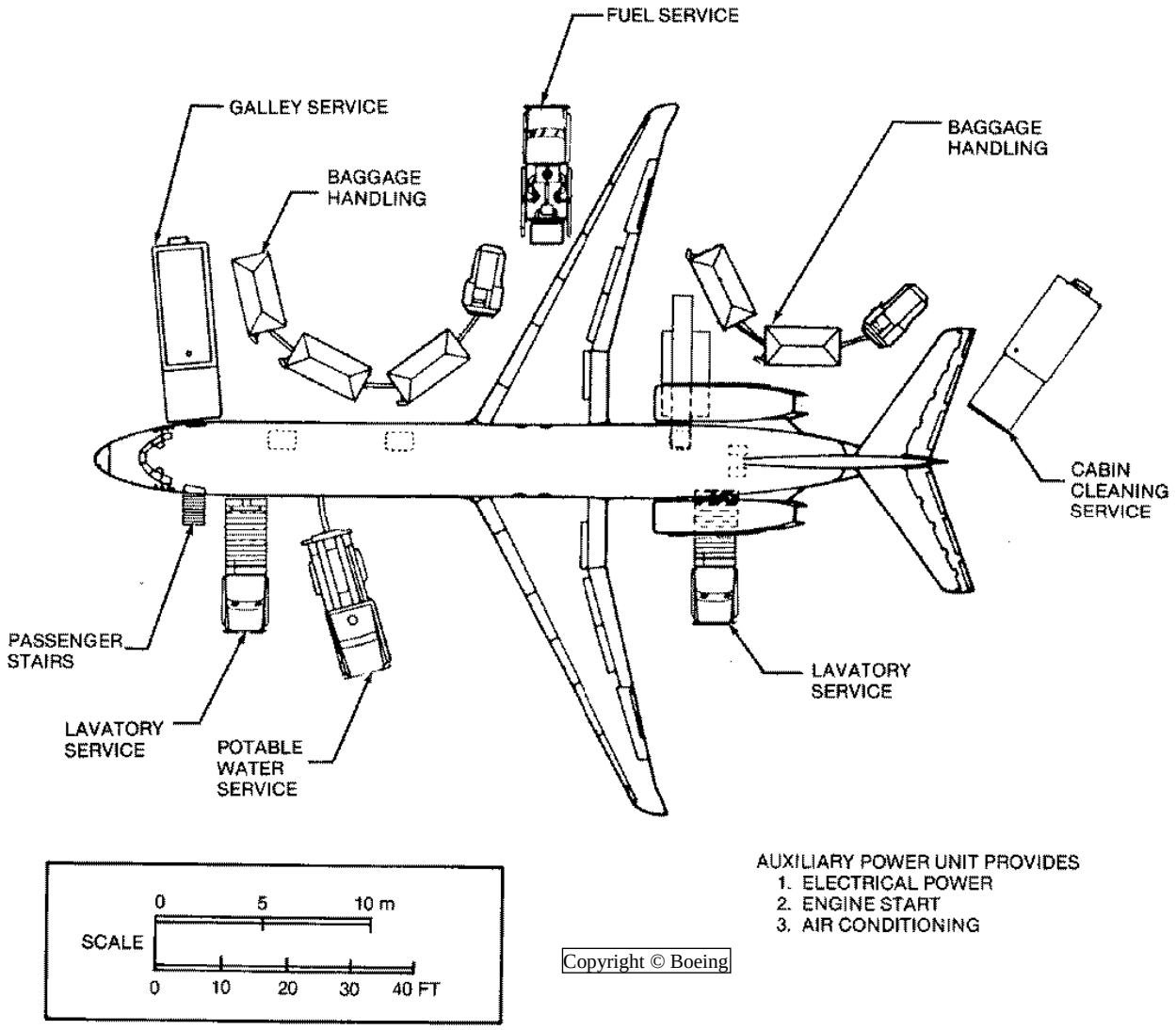
5.2.5. BULK COMPARTMENT.

N/A this model

5.3. SERVICING DIAGRAMS.

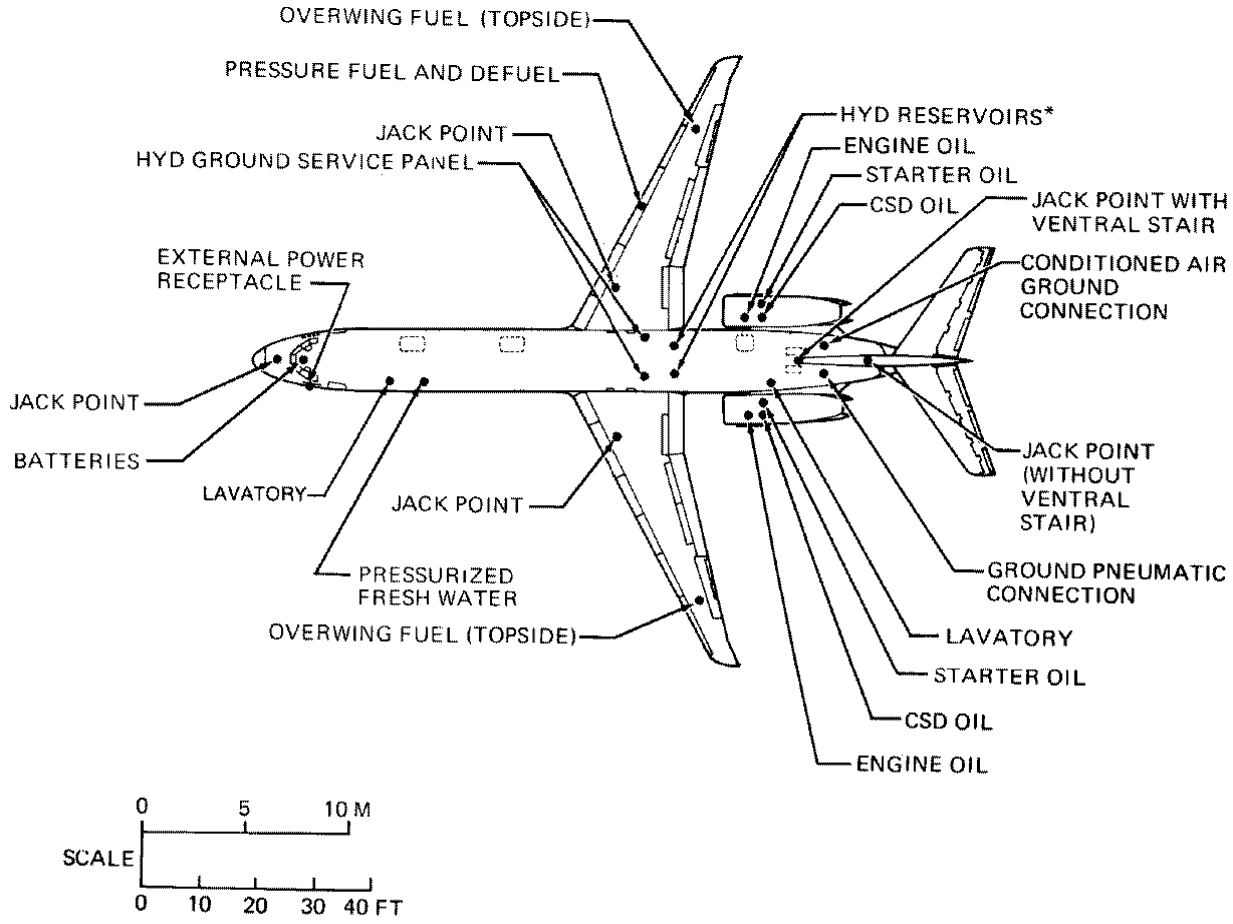
5.3.1. Servicing.

Figure 5.7. Typical Servicing Arrangement MD-87.



5.3.2. Ground Connections.

Figure 5.8. Ground Service Connections MD-87.



5.3.3. Air Stairs.

Same as for MD-82/MD-88.

See: Figure 3.11. Forward Stairs MD-82/MD-88.

AND

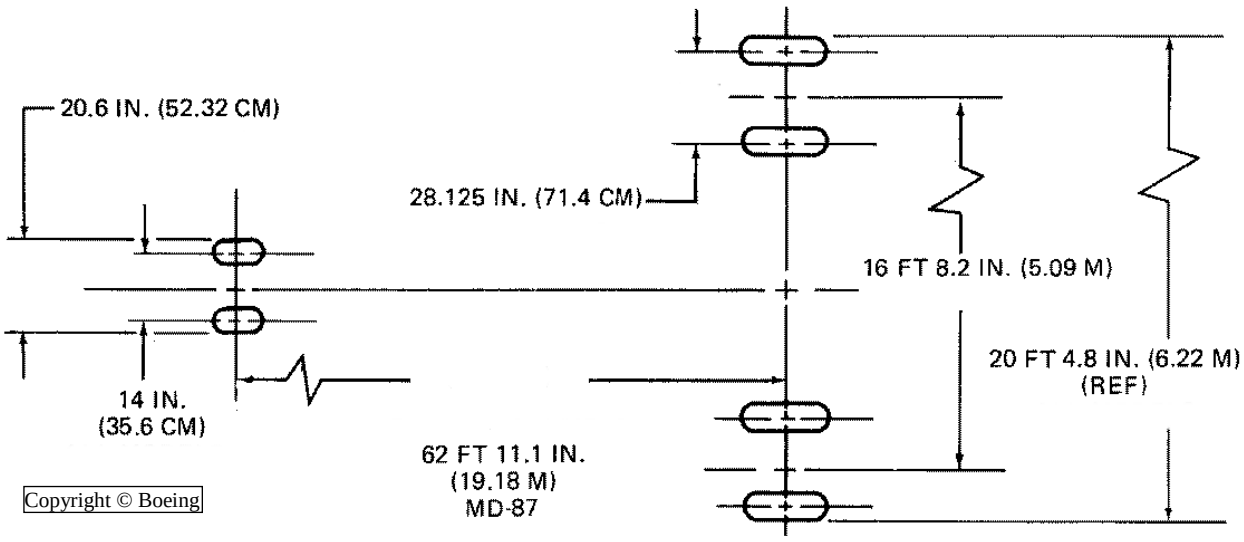
See: Figure 3.12. Aft Stairs MD-82/MD-88.

5.4. AIRFIELD SUITABILITY.

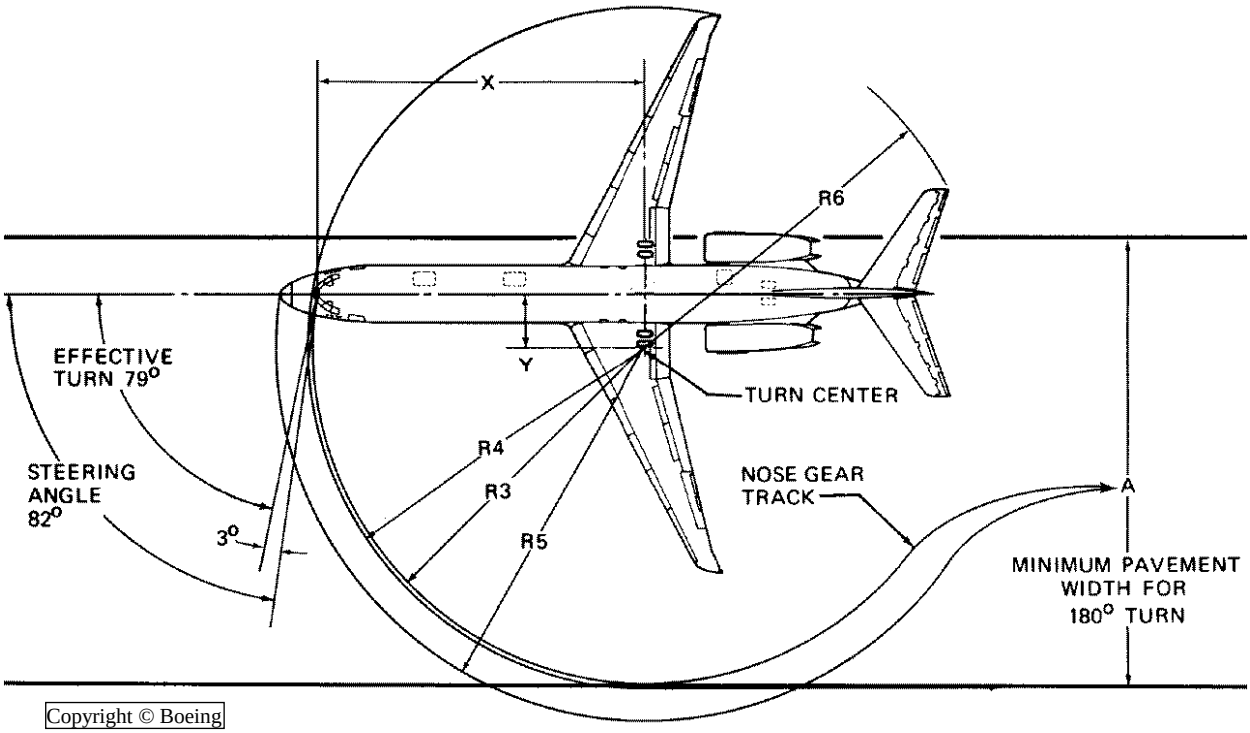
5.4.1. Landing Gear Footprint.

Figure 5.9. Landing Gear Footprint MD-87.

	MD-87	
Max Taxi Wt.	141,000 lb (63,946 kg)	150,500 lb (68,254 kg)
Nose Gear Tire Size	26 x 6.6 Type VII	26 x 6.6 Type VII
Nose Gear Tire Press.	192 psi (13.5 kg/cm^2)	192 psi (13.5 kg/cm^2)
Main Gear Tire Size	H44.5 x 16.5 - 20 24 PR	H44.5 x 16.5 - 20 26 PR
Main Gear Tire Press.	170 psi (12.0 kg/cm^2)	184 psi (12.9 kg/cm^2)



5.4.2. Minimum Turning Radii.
Figure 5.10. Minimum Turning Radii MD-87.



NOTE:
- 3° Tire Slip Angle assumes 82° Nose Wheel deflection during very slow turning
- Consult Airline for actual operating data
- No differential braking or unsymmetrical thrust

Effective Turn Angle	X	Y	A	R3	R4	R5	R6
79°	62.9' (19.2m)	12.2' (3.7m)	87.4' (26.6m)	64.1' (19.5m)	67.7' (20.6m)	71.6' (21.8m)	68.1' (20.8m)

5.4.3. Parking Footprint.
No manufacturer diagrams available.

FREDERICK H. MARTIN, Brig Gen, USAF
Director of Operations

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

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DTR 4500.9-R, Appendix J – *Hazardous Materials (HAZMAT) Certification and Mobility Procedures,* September 2007

DTR 4500.9-R, Appendix K – *Hazardous Materials (HAZMAT) Special Permits (SP),* April 2011

DTR 4500.9-R, Appendix V– *Aircraft Load Planning and Documentation,* April 2011

DTR 4500.9-R, Appendix BB– *Procedures for Transporting Weapons, Ammunition and Hazardous Materials (HAZMAT) Aboard Commercial Aircraft in Scheduled Service and Department of Defense (DOD) – Owned or Controlled Aircraft,* April 2011

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AMCI 10-402, *Civil Reserve Air Fleet (CRAF),* 27 April 2010

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ATTLA, MIL-HDBK-1791, *Designing for Internal Aerial Delivery in Fixed Wing Aircraft,* 14 February 1997

IATA, *ULD Technical Manual (ULD)*

Airbus, *198 Van Buren Street Suite 300 Herndon, VA 20170*

Boeing, *P. O. Box 3707 Seattle, Washington 98124*

Prescribed Forms

No Forms or IMT's prescribed by this publication

Adopted Forms

AF Form 847, Recommendation for Change of Publication

DD Form 2130-5, DC 10-10/*30CF Load Plan*

DD Form 2130-8, *DC 8-50 Series F/CF Load Plan*

DD Form 2130-9, *DC 8-61/71-63/73F/CF Load Plan*

DD Form 2130-10, *DC 8-62CF Load Plan*

DD Form 2130-11, *B707-300C Load Plan*

DD Form 2130-12, *B747-100F/200C/200F Load Plan*

DD Form 2130C, *Aircraft Load Plan Continuation*

JP 3-17, *Joint Doctrine and Joint Tactics, Techniques, and Procedures for Air Mobility Operations*