



Aircraft Characteristics for Airfield Pavement Design and Evaluation Selective Commercial Aircraft

Air force Civil Engineering Center and
USACE Transportation Systems Center

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US Army Corps
of Engineers
Transportation Systems Center

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SECTION I

INTRODUCTION

This report presents selected commercial aircraft characteristics required by civil engineers in the layout, design, or evaluation of airfield pavement systems. Additional aircraft data can be found in the ETL 1110-3-394 data 27 Sep 91 only available on web site XXXXXXXXXXXXXXXXXXXX. Military aircraft characteristics data can be found at XXXXXXXXXXXXXXXX.

Regardless of the type of landing surfaces under consideration—rigid, flexible, landing mat, or semi-prepared—certain essential data are needed for design and evaluation of these structures.

The characteristics include aircraft dimensions, gross weight, performance data, landing gear configurations, and data necessary for such design and analysis. These characteristics were obtained from various sources, and as such, should be used with caution. For specific planning, design, or evaluation, the values in this report should be confirmed with the appropriate aircraft technical order.

BOOKMARKS:

Bookmarks have been included with the pdf files for each aircraft. In Adobe Acrobat click on “View”, “Show/hide”, “Navigation Panes” and then “Bookmarks”.

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SECTION II

EXPLANATION OF DATA AND TERMS

The data are arranged in table format for various military and commercial aircraft. They are grouped by mission, and the group index in AFMAN 32-1121V1, *Airfield Pavement Evaluation* is also listed. Dimensions, weight, performance data, and configurations are based upon AFMAN 32-1121V1 categories. Gear configuration includes gear spacing, assembly, and tire data. The aircraft manufacturer, basic mission symbol (Attack, Bomber, Cargo, Fighter, etc.), modified mission symbol, design number, and series letter are shown for each aircraft. The Air Logistic Center (ALC) manager responsible for each aircraft is shown. Explanation of terms and measurement units are as follows:

1. WING SPAN (Feet) – The horizontal distance from wing tip to wing tip or between ends of accessory equipment extending laterally beyond wing tips.
2. LENGTH (Feet) – The horizontal distance from nose to tail including radomes and/or antennae.
3. HEIGHT (Feet) – The vertical distance from ground level to the top of the vertical stabilizer.
4. VERTICAL CLEARANCE (Inches) – The minimum vertical distance from ground level to the fuselage or to any accessory (antenna, propeller, etc) protruding lower than the fuselage.
5. TREAD (Inches) – The horizontal center-to-center distance between the main gear tires for single wheel assemblies or between the centroid of the main gear tires for multi-wheel assemblies.
6. WHEEL BASE (Inches) – The center-to-center distance between the centroids for the main and nose gear assemblies except for the bicycle configuration where the wheel base is the distance between main gear assemblies.
7. PIVOT POINT (Feet) – Approximate lateral distance from center of fuselage to center of rotation for the turning radii.
8. AIRCRAFT TURNING RADIUS (Feet) – A horizontal measurement from the pivot point to the gear that will produce the minimum circular ground turning area.
9. CONTROLLING GEAR – The gear that will produce the minimum design circular ground turning area.
10. 180⁰ TURN (Feet) – Minimum width of unobstructed circular area required for execution of an 180⁰ turn. This width is determined by measuring the horizontal distance from the pivot point to the farthest point of the aircraft as it executes the turn.
11. BASIC EMPTY GROSS WEIGHT (1000 lbs) – Basic weight for military aircraft is the empty weight plus trapped fuel and oil and all fixed armament and equipment for normal operation. Values shown for civil aircraft are the empty weights.

12. BASIC MISSION TAKE-OFF (T/O) GROSS WEIGHT (1000 lbs) – The maximum take-off gross weight for the basic or primary mission of the aircraft. The performance capabilities indicated are based on this gross weight. Values shown for civil aircraft are the normal operating weights.
13. MAXIMUM TAKE-OFF GROSS WEIGHT (1000 lbs) – Maximum take-off weights are established within the confines of (1) load and fuel space limitations and (2) minimum strength and performance requirements. The take-off weights include all useful load items required for the mission. Overload take-off gross weights are shown for military aircraft if appropriate. The normal condition represents the take-off weight limit suitable for frequent use with adequate safety. This weight should not be exceeded unless dictated by the requirements of the mission. The overload condition represents high-risk operation at minimum load factor and performance criteria during take-off. This condition is not recommended for everyday operation but rather for critical missions where major emphasis is on all-out range of load-carrying ability. The values shown for civil aircraft are the maximum take-off weights as recommended by the manufacturer.
14. BASIC MISSION LANDING GROSS WEIGHT (1000 lbs) – The maximum gross weight for the basic or primary mission for all types of military aircraft except cargo. The values shown for cargo aircraft are the first landing gross weights.
15. MAXIMUM LANDING GROSS WEIGHT (1000 lbs) – For military aircraft, the maximum gross weight established for landing by Technical Orders or design requirements. For civil aircraft the maximum landing gross weight is that weight recommended by the aircraft manufacturer.
16. TAKE-OFF DISTANCE, GROUND ROLL (Feet) – The ground roll required for the basic mission take-off gross weight using standard operation procedures, on a hard surface runway at standard sea level with no wind.
17. TAKE-OFF DISTANCE, TO CLEAR A 50-FOOT OBSTACLE (Feet) – The horizontal distance required from brake release to clearance of a 50-foot obstacle, for the basic mission take-off gross weight, on a hard surface runway at standard sea level with no wind using standard operating procedures. For estimated take-off data, the horizontal distance to clear a 50-foot obstacle is predicted on a lift-off speed of 120% of power-off stall. All values shown are based on the maximum take-off gross weight of the aircraft.
18. LANDING DISTANCE, GROUND ROLL (Feet) – The landing ground roll required, for either the basic mission landing gross weight for bombers and fighters or the first landing weight for the basic mission for cargo aircraft. The distance is predicted on a hard surface runway at standard sea level with no wind using standard operating procedures.
19. LANDING DISTANCE, TO CLEAR A 50 FOOT OBSTACLE (Feet) – The ground distance required to land after clearing a 50-foot obstacle, based on basic mission landing gross weight for bombers and fighters and the first landing weight for the basic mission for cargo aircraft. The distance is predicted on a hard surface runway at standard sea level with no wind using standard operating procedures.

20. ASSEMBLY CONFIGURATION – The gear configuration description using methods contained in FAA Order 5300.7, *Standard Naming Convention for Aircraft Landing Gear Configurations*.
21. PERCENT OF GROSS LOAD ON ASSEMBLY – The percentage of the maximum take-off weights on the assemblies. For tricycle gear configuration where the exact percentages are not known, a value of 90 percent and 10 percent has been assumed for the main gear and nose assemblies respectively, unless the percentages are known for a similar military/civilian aircraft.
22. MAXIMUM ASSEMBLY LOAD (1000 lbs) – The maximum take-off gross weight multiplied by the percent of gross load on the main or nose assemblies and divided by the number of main or nose assemblies.
23. MAXIMUM SINGLE WHEEL LOAD (1000 lbs) – The maximum assembly load divided by number of wheels on each assembly.
24. TIRE CONTACT PRESSURE (PSI) – The usual tire inflation pressure for the maximum take-off gross weight.
25. TIRE CONTACT AREA (Square Inches) – The area of tire that is in contact with the ground. Values shown are for a fixed percentage of tire deflection (generally 32 percent). For purposes of this report, tire contact area is equal to the maximum single wheel load divided by the tire contact pressure. The tire contact area is assumed to be an elliptical shape with the ratio of the minor axis to the major axis of 1 : 1.67. Values in parentheses for contact areas are those that are used in a computer design/evaluation program developed by the Army Waterways Experiment Station, Corps of Engineers.
26. FOOT PRINT WIDTH (Inches) – This value is equal to the length of the minor axis of an elliptical contact area, and is equal to 0.874 multiplied by the square root of the contact area.
27. AIRCRAFT CLASSIFICATION NUMBER (ACN) – The ACN is a method to express the effect of individual aircraft on different pavements by a single unique number which varies according to pavement type and subgrade strength, without specifying a particular pavement thickness. The system is structured so that a pavement with a particular pavement classification number (PCN) value can support, without weight restrictions, an aircraft which has an ACN value equal to or less than the pavement's PCN value. If different aircraft weights are shown for ACN than for the empty and maximum take-off weights, it is because different sources were used for the data. These differences apply primarily to commercial aircraft.

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SECTION III

AIRCRAFT CHARACTERISTICS

Aircraft: **A330-200**

ALC Mgr: Manuf: *Airbus* Group Index:
 Wing Span: 197.93' Length: 191.46' Height: 59.8' Vert. Clr: 28.3"
 Pivot Pt: 49.3' Turn Radius: 90.7' 180° Turn Diameter: 307.0' Controlling Gear: *Nose*

Basic Empty Wt:	275.458	Basic Mis, T/O Wt:		Max T/O Wt :	507.055
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	396.825	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

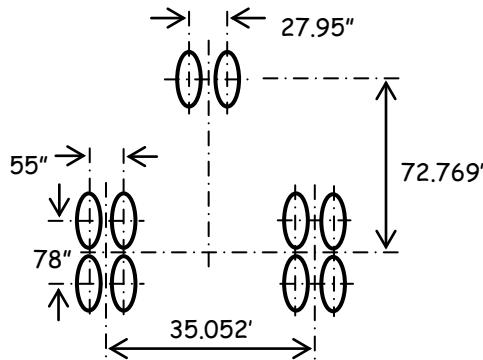
Gear: *FAA 2D Two Dual Wheels in Tandem Main Gear with Dual w/ Dual Wheel Nose Gear*
 Number of Assemblies/Tires per Assembly: Nose: 1-2 Main: 2-4

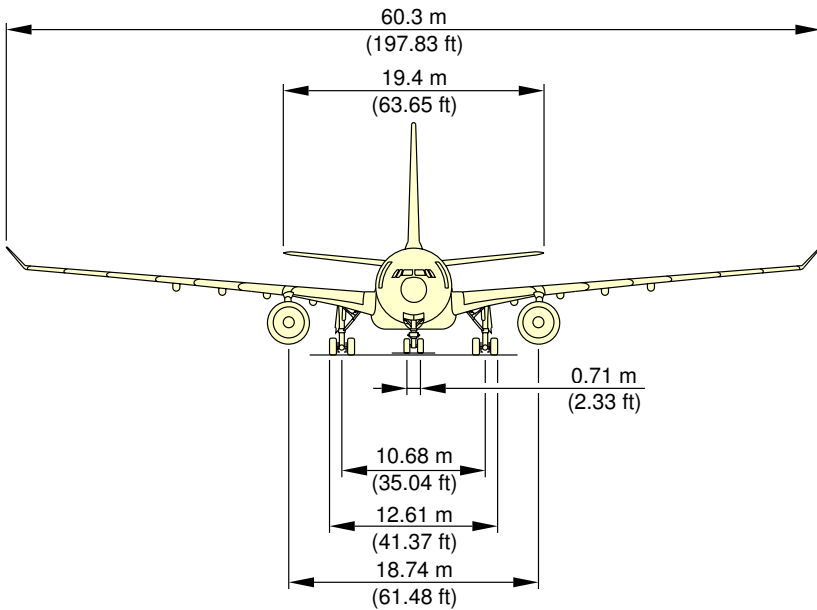
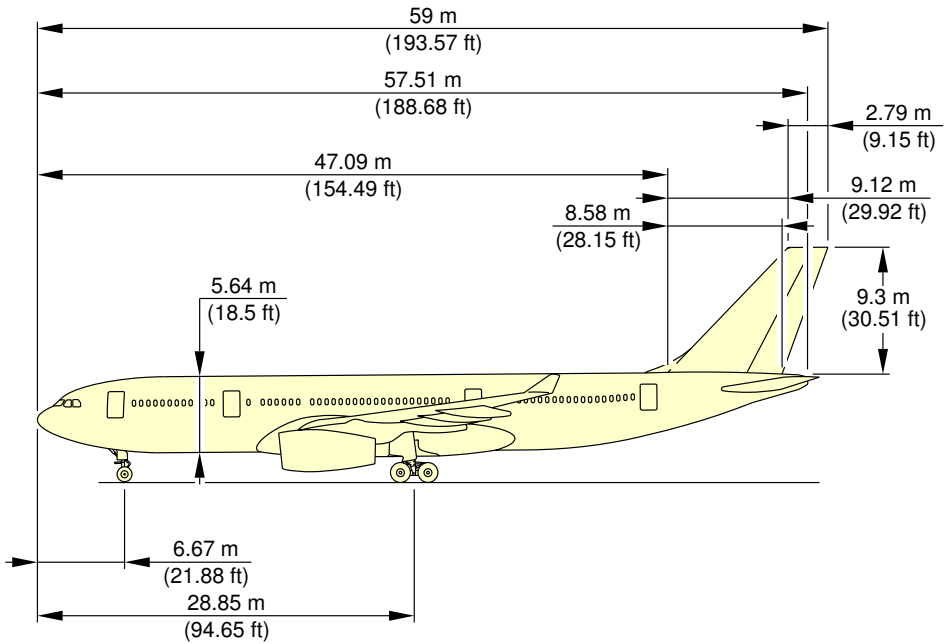
Main Gear:	% Gross Load on Assembly:	95.6	Max Assembly Load:	242.372
	Max Single Wheel Load:	60.593		
	Contact Pressure:	206	Contact Area:	294.14
	Footprint Width:	14.99"		

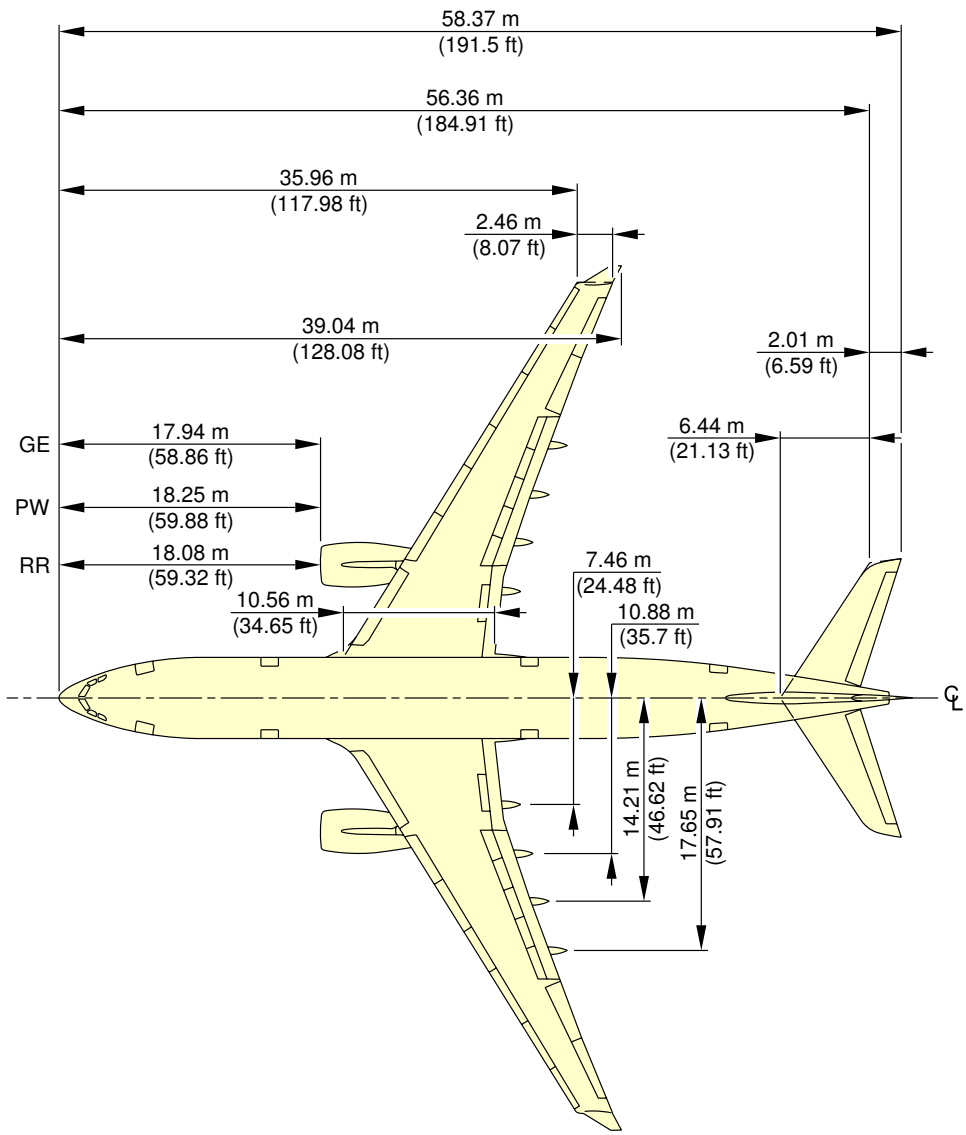
Nose Gear:	% Gross Load on Assembly:	4.4	Max Assembly Load:	22.310
	Max Single Wheel Load:	11.155		
	Contact Pressure:	165	Contact Area:	67.606
	Footprint Width:	7.186"		

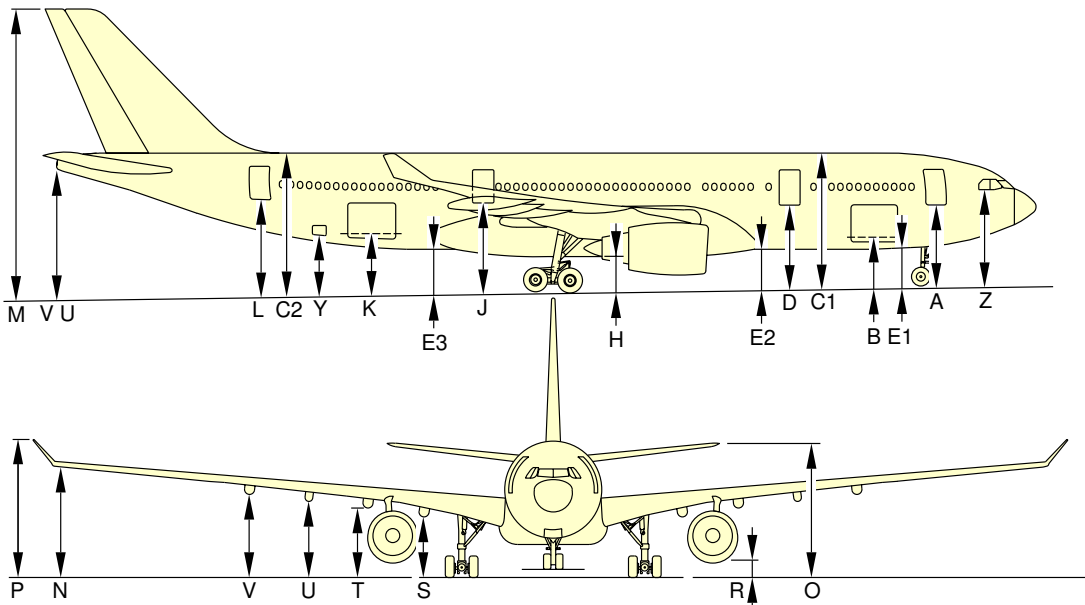
Aircraft Classification Numbers (ACNs)

Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt 275.5	28.7	28.8	32.6	37.4	29.8	31.2	34.2	43.0
Max Wgt 507.1	52.8	61.7	73.7	84.3	62.1	67.3	78.6	106.3





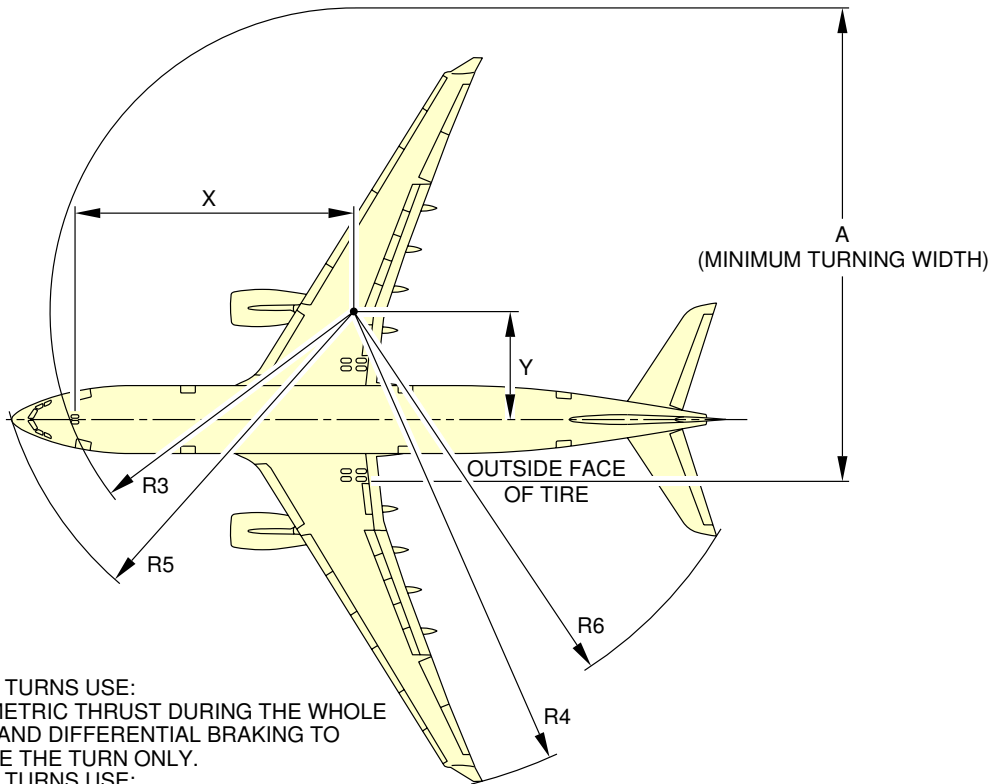




MRW 230 900 kg 509 042 lb	176 000 kg MID CG 27.9%		MAXIMUM RAMP WEIGHT CG 21%		MAXIMUM RAMP WEIGHT CG 37.5%		AIRCRAFT ON JACKS	
	m	ft	m	ft	m	ft	m	ft
A	4.63	15.19	4.44	14.56	4.63	15.19	6.32	20.7
B	2.78	9.12	2.58	8.46	2.74	8.99	4.14	13.5
C1	7.75	25.42	7.56	24.80	7.69	25.23	9.32	30.5
C2	8.54	28.02	8.31	27.26	8.16	26.77	9.32	30.5
D	4.86	15.9	4.66	15.3	4.78	15.7	6.36	20.7
E1	2.04	6.7	1.84	6.03	2.01	6.59	3.68	12
E2	2.23	7.31	2.03	6.66	2.12	6.95	3.68	12
E3	2.70	8.86	2.48	8.13	2.40	7.87	3.68	12
H	2.02	6.63	1.81	5.93	1.83	6	3.26	10.7
J	5.36	17.6	5.15	16.9	5.10	16.7	6.46	21.2
K	3.50	11.48	3.27	10.73	3.16	10.36	4.24	13.9
L	5.74	18.83	5.51	18.07	5.35	17.55	6.53	21.4
M	18.23	59.8	17.98	58.99	17.71	58.1	18.62	61.09
M1	17.73	58.17	17.48	57.35	17.21	56.46	18.12	59.45
N	6.48	21.26	6.14	20.14	6.05	19.85	7.55	24.7
O	8.30	27.23	8.05	26.41	7.77	25.49	9.23	30.2
P	8.08	26.51	7.71	25.29	7.61	24.96	8.96	29.4
GE = R	0.94	3.08	0.74	2.42	0.79	2.59	2.34	7.67
PW = R	0.90	2.95	0.70	2.29	0.75	2.46	2.29	7.51
RR = R	0.87	2.85	0.67	2.19	0.72	2.36	2.21	7.25
S	3.89	12.76	3.67	12.04	3.64	11.94	5.25	17.2
T	4.35	14.27	4.13	13.55	4.11	13.48	5.70	18.7
U	4.63	15.19	4.42	14.50	4.37	14.33	6	19.6
V	4.95	16.24	4.73	15.52	4.67	15.32	6.30	20.6
VU	7.47	24.51	7.23	23.72	6.97	22.86	8.10	25.5
Y	3.66	12.01	3.43	11.25	3.30	10.82	4.39	14.4
Z	5.41	17.75	5.22	17.12	5.43	17.81	7.10	23.30

M1 = POST MOD 48979 (SHORTER FIN INSTALLATION).

NOTE: PASSENGER AND CARGO DOOR CLEARANCES ARE MEASURED FROM THE CENTER OF THE DOOR SILL AND FROM FLOOR LEVEL.



NOTE:

TYPE 1 TURNS USE:
ASYMMETRIC THRUST DURING THE WHOLE
TURN; AND DIFFERENTIAL BRAKING TO
INITIATE THE TURN ONLY.

TYPE 2 TURNS USE:
SYMMETRIC THRUST DURING THE WHOLE
TURN; AND NO DIFFERENTIAL BRAKING AT ALL.

A330-200/-200F MINIMUM TURNING RADII

TYPE OF TURN	STEERING ANGLE (deg)	EFFECTIVE STEERING ANGLE (deg)			A	R3 NLG	R4 WING	R5 NOSE	R6 TAIL	
			X	Y						
1	72 (MAX)	68.1	m	22.2	8.9	39.7	24.1	40.4	30.2	34.9
			ft	73	29	130	79	133	99	115
2	72 (MAX)	62.0	m	22.2	11.8	43.8	25.4	43.2	31.2	36.5
			ft	73	39	144	83	142	102	120
1	65 (MAX)	62.2	m	22.2	11.7	43.6	25.3	43.1	31.1	36.5
			ft	73	38	143	83	141	102	120
2	65 (MAX)	59.6	m	22.2	13.0	45.6	26.0	44.4	31.6	37.2
			ft	73	43	150	85	146	104	122

NOTE:

IT IS POSSIBLE TO GET LOWER VALUES THAN THOSE FROM TYPE 1 BY APPLYING DIFFERENTIAL BRAKING DURING THE WHOLE TURN.

Aircraft: **A330-300**

ALC Mgr: Manuf: *Airbus* Group Index:
 Wing Span: *197.93'* Length: *208.96'* Height: *56.36'* Vert. Clr: *27.1''*
 Pivot Pt: *46.8'* Turn Radius: *97.3'* 180° Turn Diameter: *298.8'* Controlling Gear: *Nose*

Basic Empty Wt:	<i>267.20</i>	Basic Mis, T/O Wt:		Max T/O Wt :	<i>507.055</i>
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	<i>407.90</i>	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

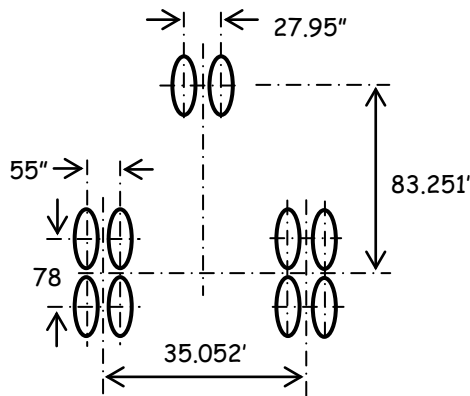
Gear: <i>FAA 2D Two Dual Wheels in Tandem Main Gear with Dual w/ Dual Wheel Nose Gear</i>		
Number of Assemblies/Tires per Assembly:	Nose: <i>1-2</i>	Main: <i>2-4</i>

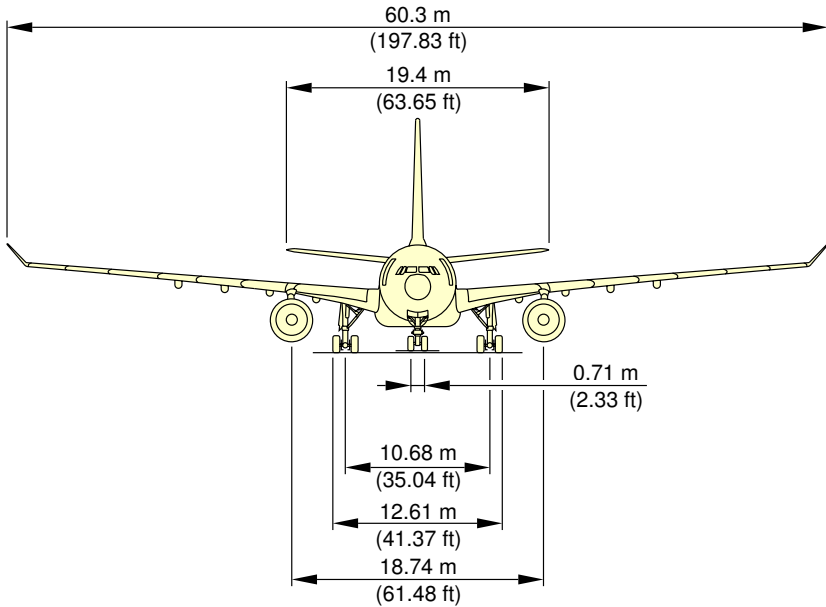
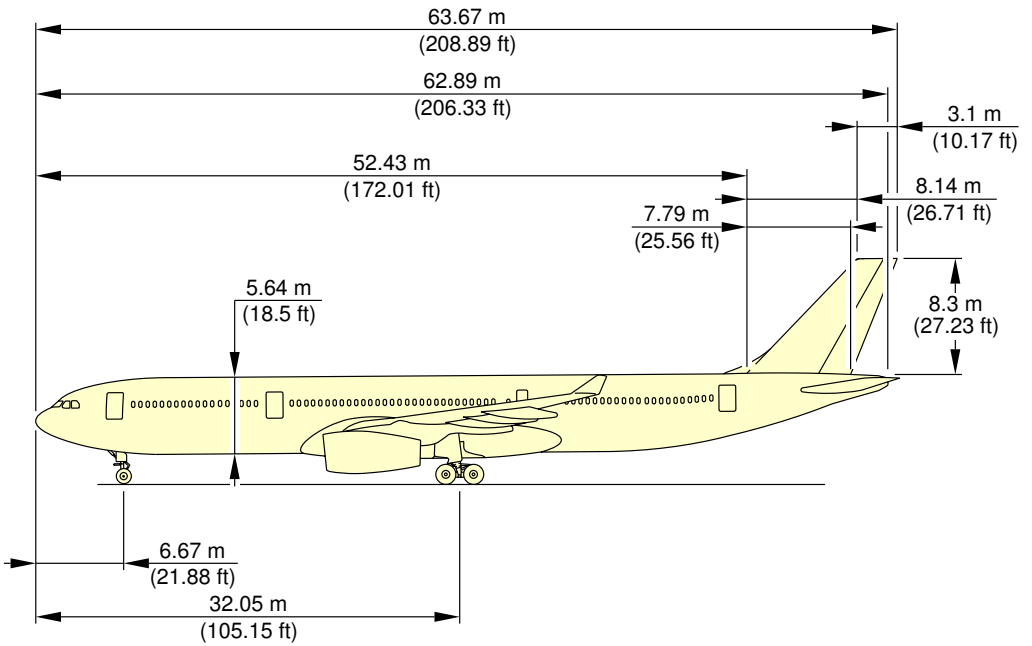
Main Gear:	% Gross Load on Assembly:	<i>95.7</i>	Max Assembly Load:	<i>242.626</i>
	Max Single Wheel Load:	<i>60.656</i>	Contact Area:	<i>312.66</i>
	Contact Pressure:	<i>194</i>	Footprint Width:	<i>15.45''</i>

Nose Gear:	% Gross Load on Assembly:	<i>4.3</i>	Max Assembly Load:	<i>21.803</i>
	Max Single Wheel Load:	<i>10.902</i>	Contact Area:	<i>69.0</i>
	Contact Pressure:	<i>158</i>	Footprint Width:	<i>7.26''</i>

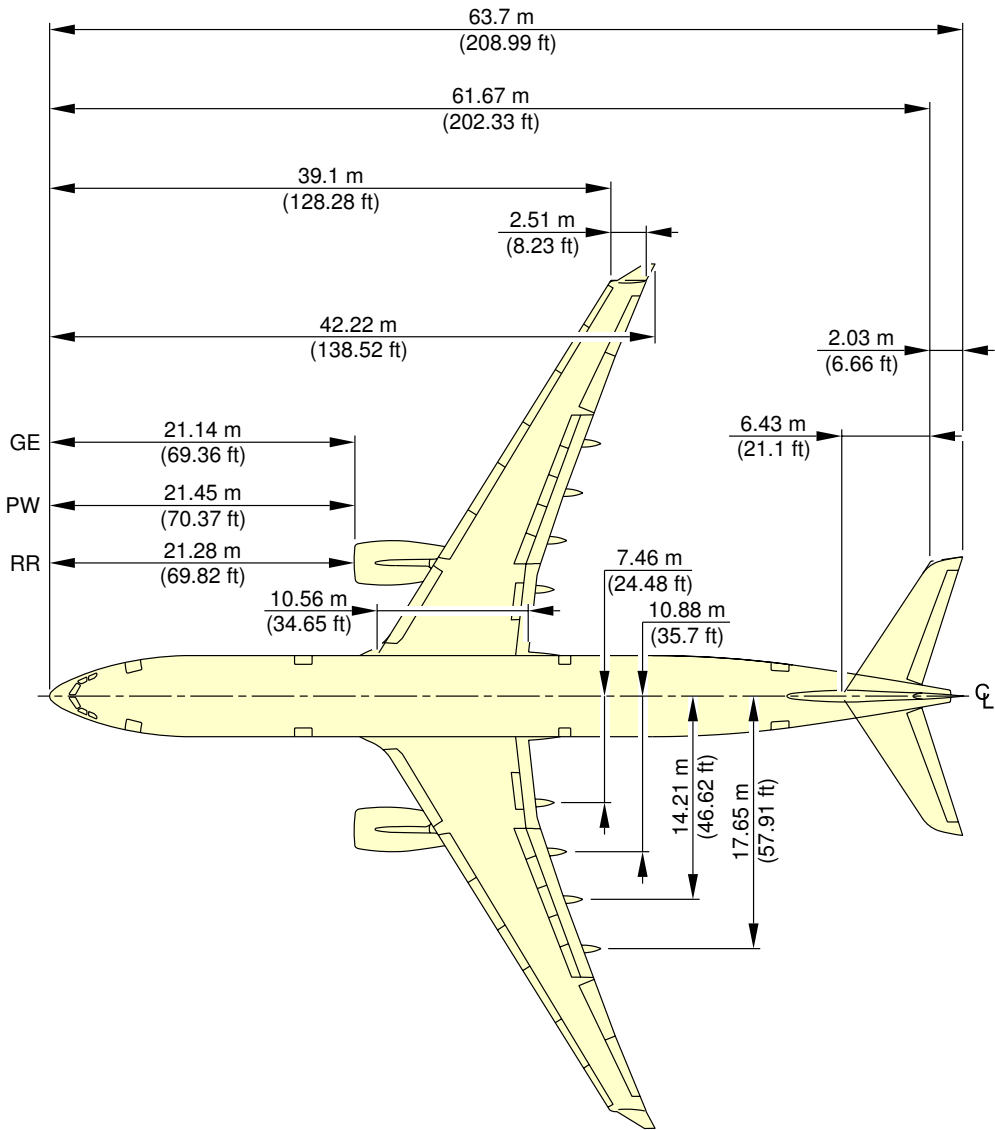
Aircraft Classification Numbers (ACNs)

Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt <i>267.2</i>	<i>27.5</i>	<i>27.2</i>	<i>31.0</i>	<i>35.3</i>	<i>28.4</i>	<i>29.7</i>	<i>32.9</i>	<i>41.2</i>
Max Wgt <i>507.1</i>	<i>51.3</i>	<i>60.5</i>	<i>72.4</i>	<i>83.6</i>	<i>61.9</i>	<i>67.2</i>	<i>78.6</i>	<i>106.3</i>

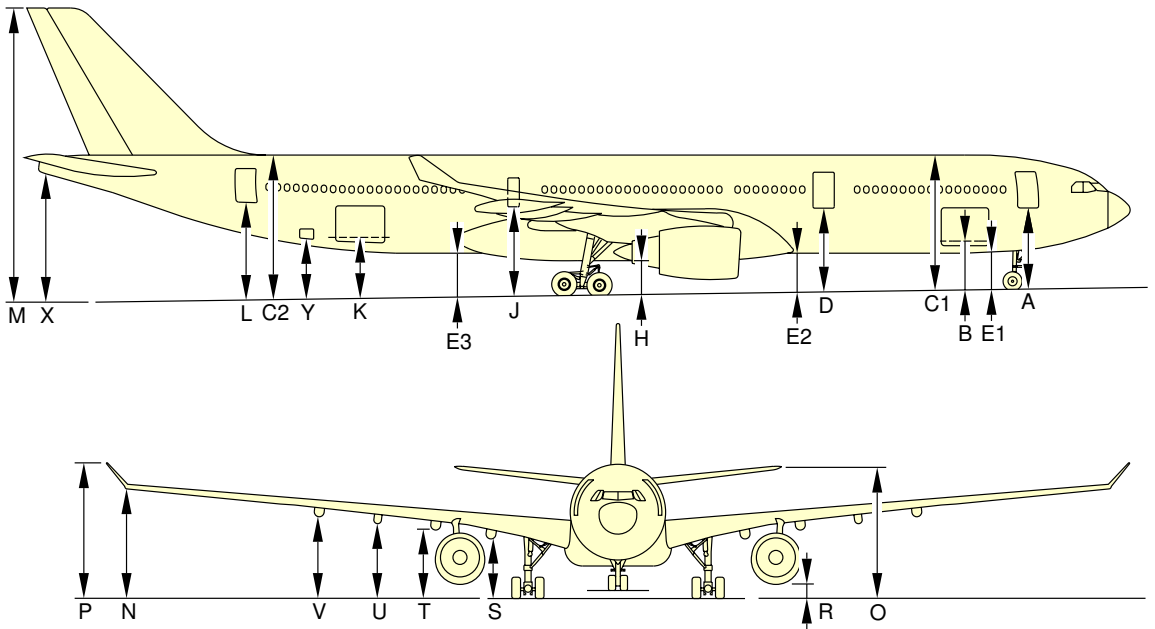




NOTE:
RELATED TO AIRCRAFT ATTITUDE AND WEIGHT.

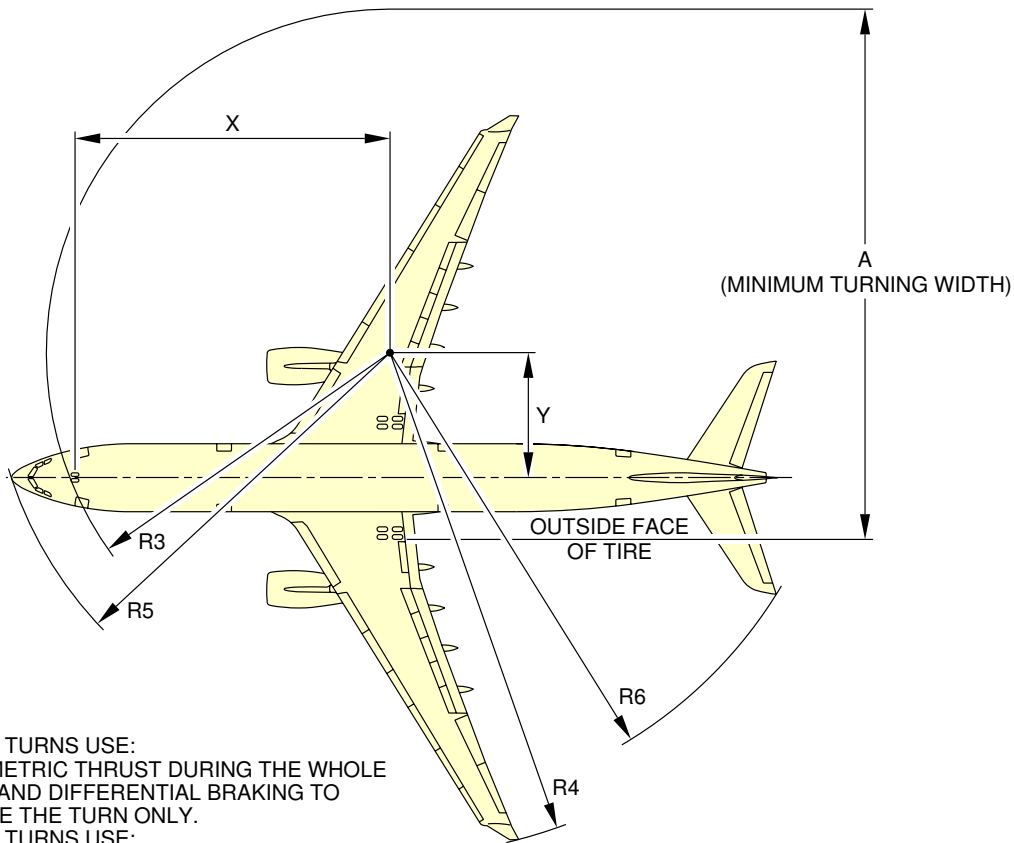


NOTE:
RELATED TO AIRCRAFT ATTITUDE AND WEIGHT.



MRW 212 900 kg 469 360 lb	119 000 kg CG 26.8%		MAXIMUM RAMP WEIGHT CG 15%		MAXIMUM RAMP WEIGHT CG 36.5%		AIRCRAFT ON JACKS	
	m	ft	m	ft	m	ft	m	ft
A	4.55	14.92	4.41	14.46	4.55	14.92	6.32	20.7
B	2.70	8.85	2.55	8.36	2.66	8.72	4.14	13.5
C1	7.74	25.4	7.58	24.86	7.67	25.16	9.32	30.5
C2	8.53	28	8.31	27.26	8.19	26.87	9.32	30.5
D	4.83	15.84	4.67	15.32	4.73	15.51	6.32	20.7
E1	2.10	6.89	1.95	6.39	2.03	6.66	3.68	12
E2	2.28	7.48	2.10	6.88	2.14	7.02	3.68	12
E3	2.74	8.99	2.54	8.33	2.45	8.03	3.68	12
H	2.04	6.7	1.86	6.10	1.85	6.07	3.26	10.7
J	5.34	17.5	5.31	17.4	5.20	17.06	6.43	21.1
K	3.43	11.25	3.22	10.56	3.13	10.27	4.24	13.9
L	5.77	18.93	5.55	18.20	5.41	17.75	6.53	21.4
M	17.18	56.36	16.94	55.58	16.72	54.85	17.62	57.8
N	6.46	21.20	6.13	20.11	6.06	19.88	7.55	24.7
O	8.33	27.32	8.09	26.54	7.88	25.85	9.23	30.2
P	8.05	26.41	7.70	25.26	7.61	24.96	8.96	29.4
GE = R	0.94	3.08	0.76	2.49	0.79	2.59	2.34	7.67
PW = R	0.90	2.95	0.72	2.36	0.75	2.46	2.29	7.51
RR = R	0.87	2.85	0.69	2.26	0.72	2.36	2.21	7.25
S	3.87	12.70	3.68	12.07	3.64	11.94	5.25	17.2
T	4.33	14.20	4.13	13.55	4.11	13.48	5.70	18.7
U	4.64	15.22	4.41	14.46	4.37	14.33	6	19.6
V	4.97	16.30	4.72	15.48	4.67	15.32	6.30	20.6
X	7.48	24.54	7.24	23.76	7.03	23.06	8.10	26.5
Y	3.68	12.07	3.46	11.35	3.35	11	4.39	14.4

NOTE: PASSENGER AND CARGO DOOR CLEARANCES ARE MEASURED FROM THE CENTER OF THE DOOR SILL AND FROM FLOOR LEVEL.



NOTE:

TYPE 1 TURNS USE:
 ASYMMETRIC THRUST DURING THE WHOLE
 TURN; AND DIFFERENTIAL BRAKING TO
 INITIATE THE TURN ONLY.
 TYPE 2 TURNS USE:
 SYMMETRIC THRUST DURING THE WHOLE
 TURN; AND NO DIFFERENTIAL BRAKING AT ALL.

A330-300 MINIMUM TURNING RADII										
TYPE OF TURN	STEERING ANGLE (deg)	EFFECTIVE STEERING ANGLE (deg)		X	Y	A	R3 NLG	R4 WING	R5 NOSE	R6 TAIL
1	72 (MAX)	67.8	m	25.4	10.4	44.6	27.6	41.6	33.7	33.1
			ft	83	34	146	91	136	111	109
2	72 (MAX)	63.8	m	25.4	12.5	47.6	28.5	43.7	34.4	34.4
			ft	83	41	156	94	143	113	113
1	65 (MAX)	62.1	m	25.4	13.4	49.0	29.0	44.6	34.7	35.1
			ft	83	44	161	95	146	114	115
2	65 (MAX)	60.1	m	25.4	14.6	50.7	29.6	45.8	35.2	35.8
			ft	83	48	166	97	150	115	117

NOTE:

IT IS POSSIBLE TO GET LOWER VALUES THAN THOSE FROM TYPE 1
 BY APPLYING DIFFERENTIAL BRAKING DURING THE WHOLE TURN.

Aircraft: **A340-200**

ALC Mgr: Manuf: *Airbus* Group Index:

Wing Span: *197.93'* Length: *194.95'* Height: *55.95'* Vert. Clr: *49.5"*

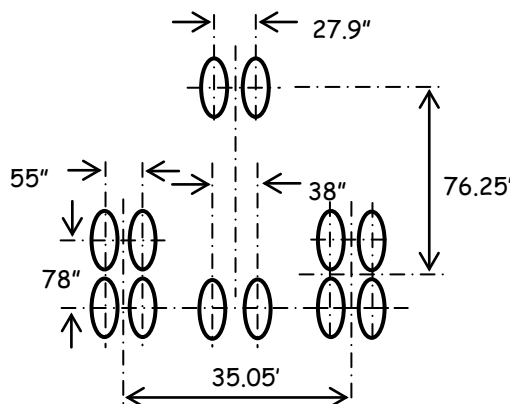
Pivot Pt: *45.1'* Turn Radius: *90.9'* 180° Turn Diameter: *295.2'* Controlling Gear: *Nose*

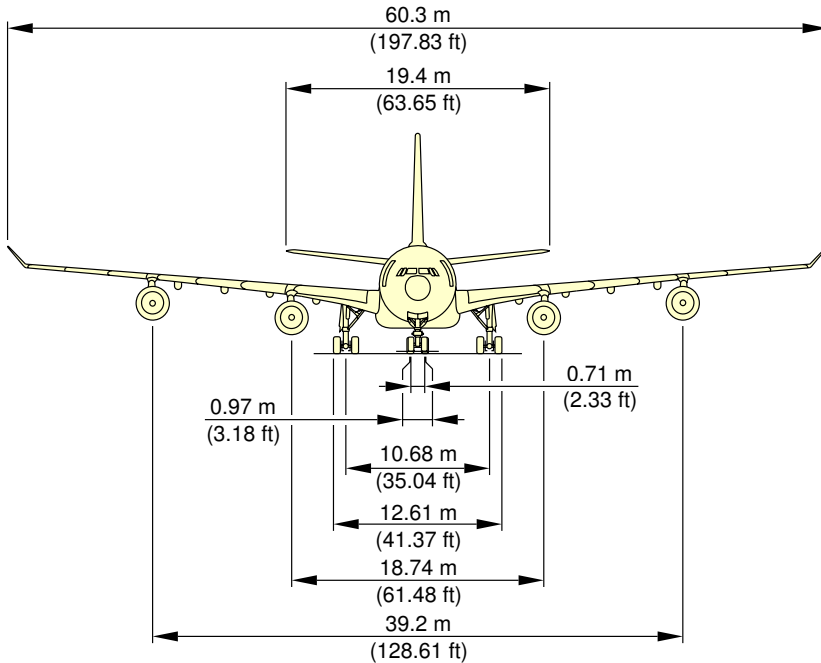
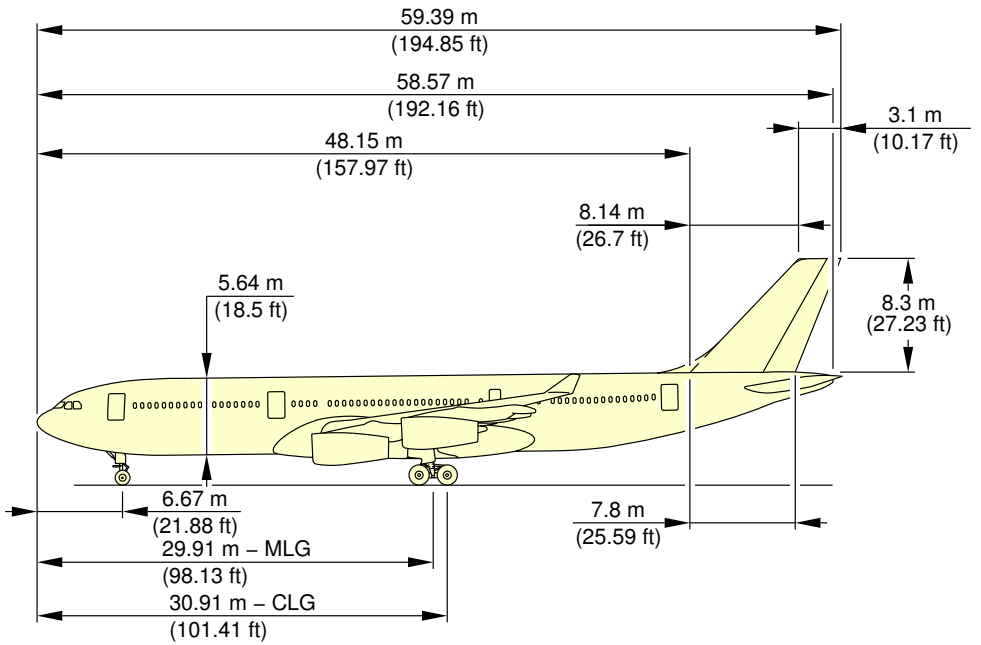
Basic Empty Wt:	<i>284.400</i>	Basic Mis, T/O Wt:	<i>545.638</i>	Max T/O Wt :	<i>606.265</i>
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	<i>407.851</i>	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

Gear: <i>FAA 2D/D1 Two Dual Wheels in Tandem Main Gear / Dual Wheel Body Gear with Dual Wheel Nose Gear</i>	
Number of Assemblies/Tires per Assembly:	Nose: <i>1-2</i> Main: <i>2-4</i> Body: <i>1-2</i>

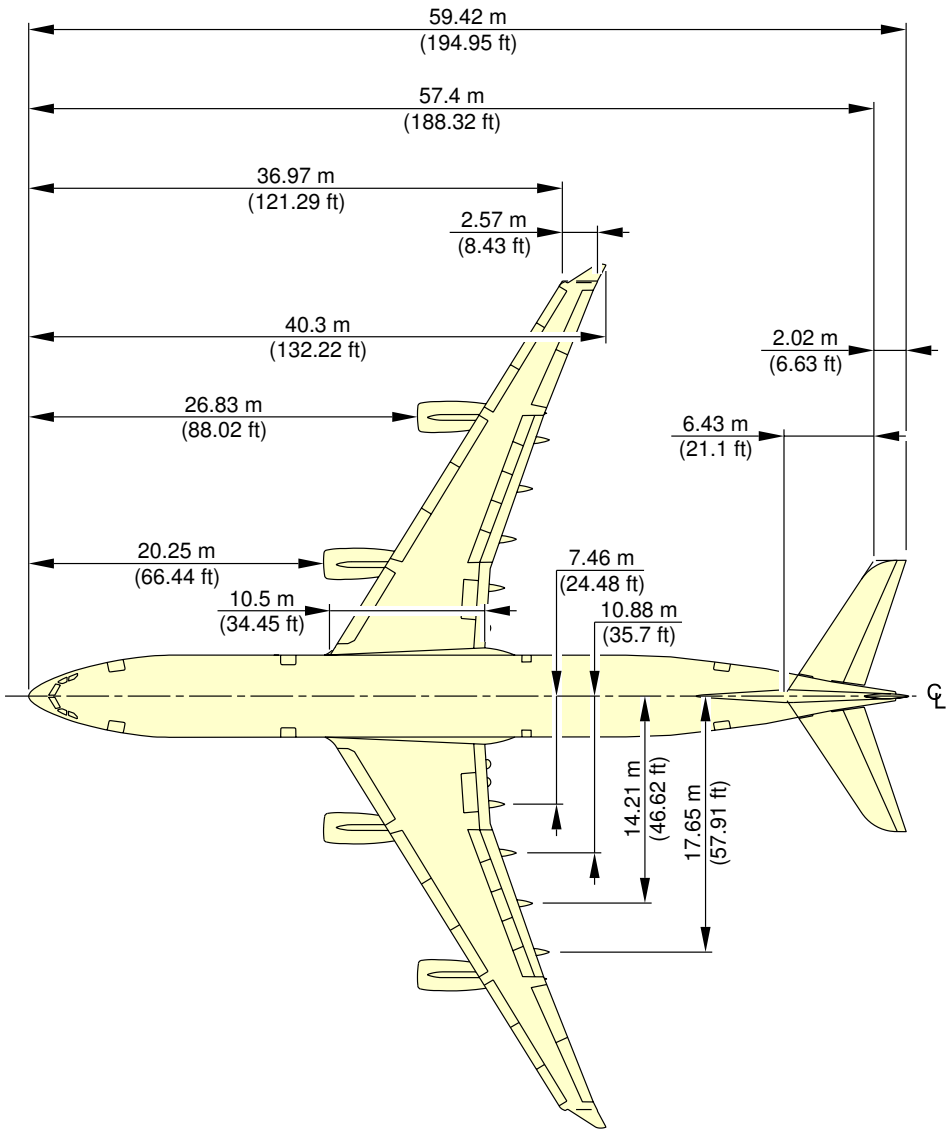
Main Gear:	% Gross Load on Assembly:	<i>79.46</i>	Max Assembly Load:	<i>240.869</i>
	Max Single Wheel Load:	<i>60.217</i>	Contact Area:	<i>292.32</i>
	Contact Pressure:	<i>206</i>	Footprint Width:	<i>14.94"</i>
	Footprint Width:	<i>14.94"</i>		
Body Gear:	% Gross Load on Assembly:	<i>14.54</i>	Max Assembly Load:	<i>88.150</i>
	Max Single Wheel Load:	<i>10.902</i>	Contact Area:	<i>278.96</i>
	Contact Pressure:	<i>158</i>	Footprint Width:	<i>14.60"</i>
	Footprint Width:	<i>14.60"</i>		
Nose Gear:	% Gross Load on Assembly:	<i>6.00</i>	Max Assembly Load:	<i>36.376</i>
	Max Single Wheel Load:	<i>18.188</i>	Contact Area:	<i>108.26</i>
	Contact Pressure:	<i>168</i>	Footprint Width:	<i>9.09"</i>
	Footprint Width:	<i>9.09"</i>		

Aircraft Classification Numbers (ACNs)								
Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt <i>284.4</i>	<i>25.7</i>	<i>24.4</i>	<i>27.0</i>	<i>30.5</i>	<i>24.8</i>	<i>25.9</i>	<i>28.2</i>	<i>34.5</i>
Max Wgt <i>606.3</i>	<i>52.2</i>	<i>61.1</i>	<i>73.0</i>	<i>83.6</i>	<i>61.6</i>	<i>66.8</i>	<i>77.9</i>	<i>105.3</i>

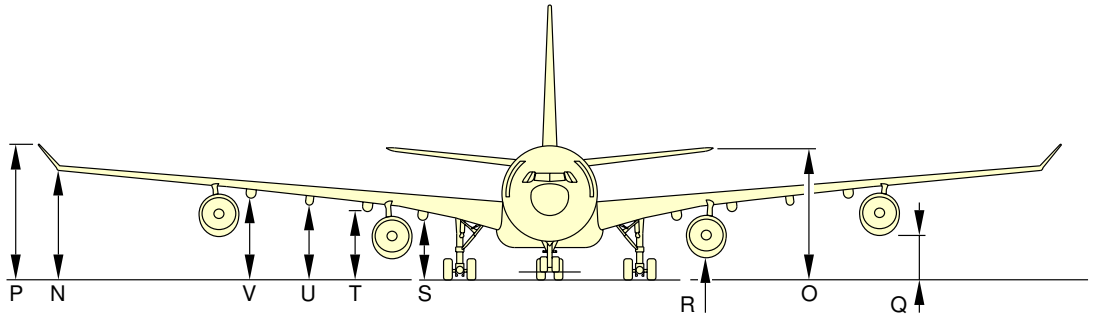
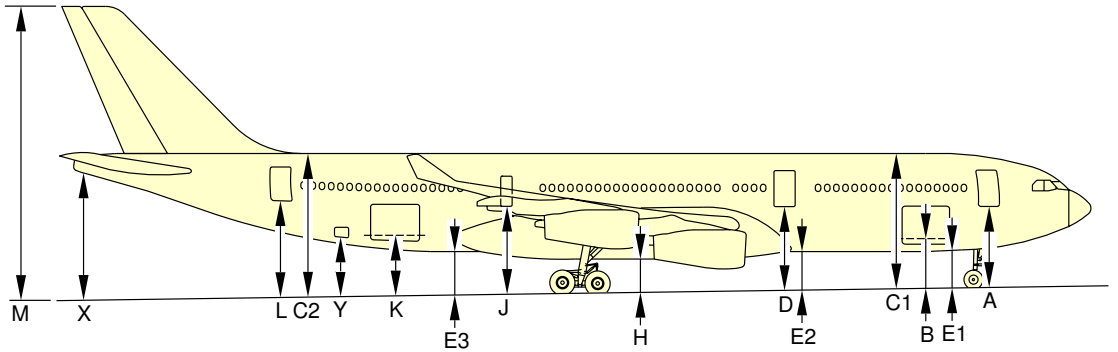




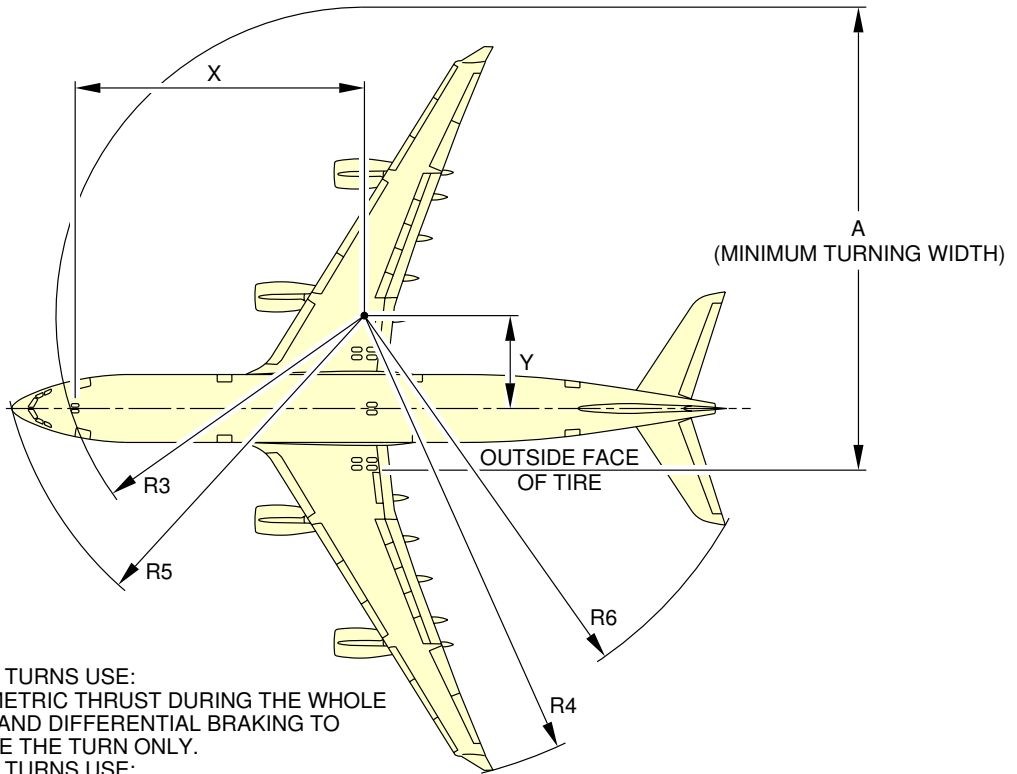
NOTE:
RELATED TO AIRCRAFT ATTITUDE AND WEIGHT.



NOTE:
RELATED TO AIRCRAFT ATTITUDE AND WEIGHT.



NOTE: PASSENGER AND CARGO DOOR CLEARANCES ARE MEASURED FROM THE CENTER OF THE DOOR SILL AND FROM FLOOR LEVEL.



NOTE:

TYPE 1 TURNS USE:
ASYMMETRIC THRUST DURING THE WHOLE
TURN; AND DIFFERENTIAL BRAKING TO
INITIATE THE TURN ONLY.

TYPE 2 TURNS USE:
SYMMETRIC THRUST DURING THE WHOLE
TURN; AND NO DIFFERENTIAL BRAKING AT ALL.

A340-200 MINIMUM TURNING RADII

TYPE OF TURN	STEERING ANGLE (deg)	EFFECTIVE STEERING ANGLE (deg)		X	Y	A	R3 NLG	R4 WING	R5 NOSE	R6 TAIL
1	72 (MAX)	71.6	m	23.2	7.7	39.1	24.7	39.1	30.9	34.3
			ft	76	25	128	81	128	101	113
2	72 (MAX)	60.8	m	23.2	13.0	46.5	26.9	44.2	32.6	37.2
			ft	76	43	153	88	145	107	122
1	65 (MAX)	65.3	m	23.2	10.7	43.2	25.8	42.0	31.8	35.9
			ft	76	35	142	85	138	104	118
2	65 (MAX)	58.0	m	23.2	14.5	48.8	27.7	45.7	33.2	38.2
			ft	76	48	160	91	150	109	125

NOTE:

IT IS POSSIBLE TO GET LOWER VALUES THAN THOSE FROM TYPE 1
BY APPLYING DIFFERENTIAL BRAKING DURING THE WHOLE TURN.

Aircraft: **A340-300**

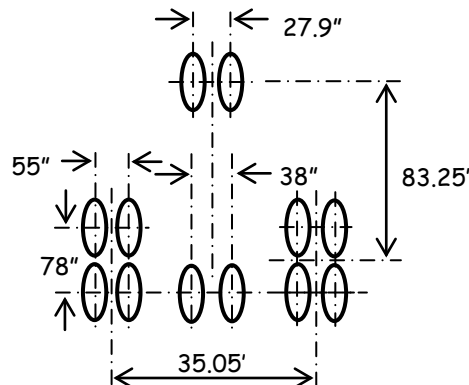
ALC Mgr: _____ Manuf: *Airbus* Group Index: _____
 Wing Span: **197.93'** Length: **208.96'** Height: **55.89'** Vert. Clr: **48.3"**
 Pivot Pt: **47.2'** Turn Radius: **98.0'** 180° Turn Diameter: **299.4'** Controlling Gear: *Nose*

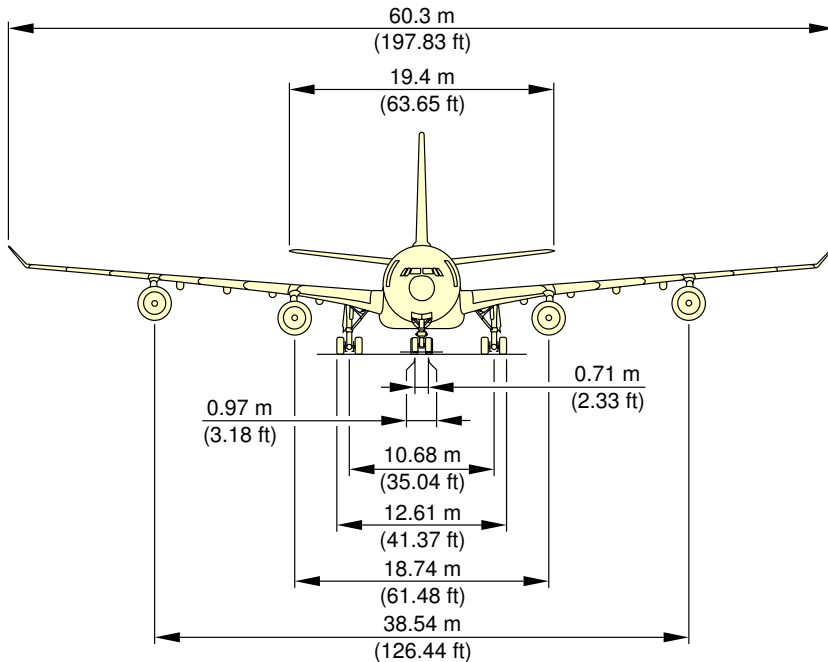
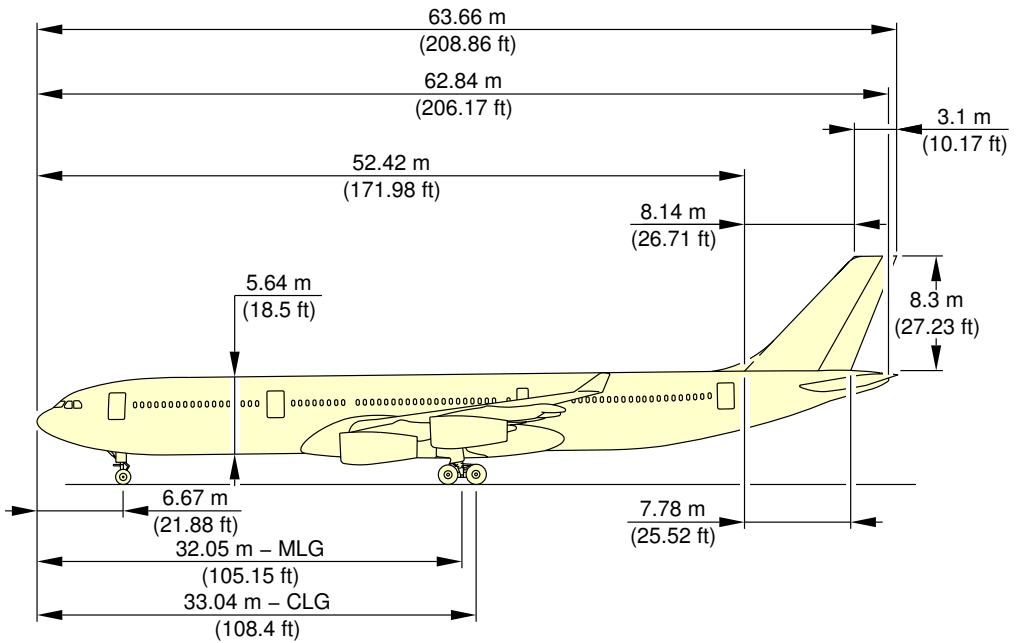
Basic Empty Wt:	285.0	Basic Mis, T/O Wt:	545.638	Max T/O Wt :	606.265
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	418.874	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

Gear: *FAA 2D/D1 Two Dual Wheels in Tandem Main Gear / Dual Wheel Body Gear with Dual Wheel Nose Gear*
 Number of Assemblies/Tires per Assembly: Nose: **1-2** Main: **2-4** | Body: | **1-2**

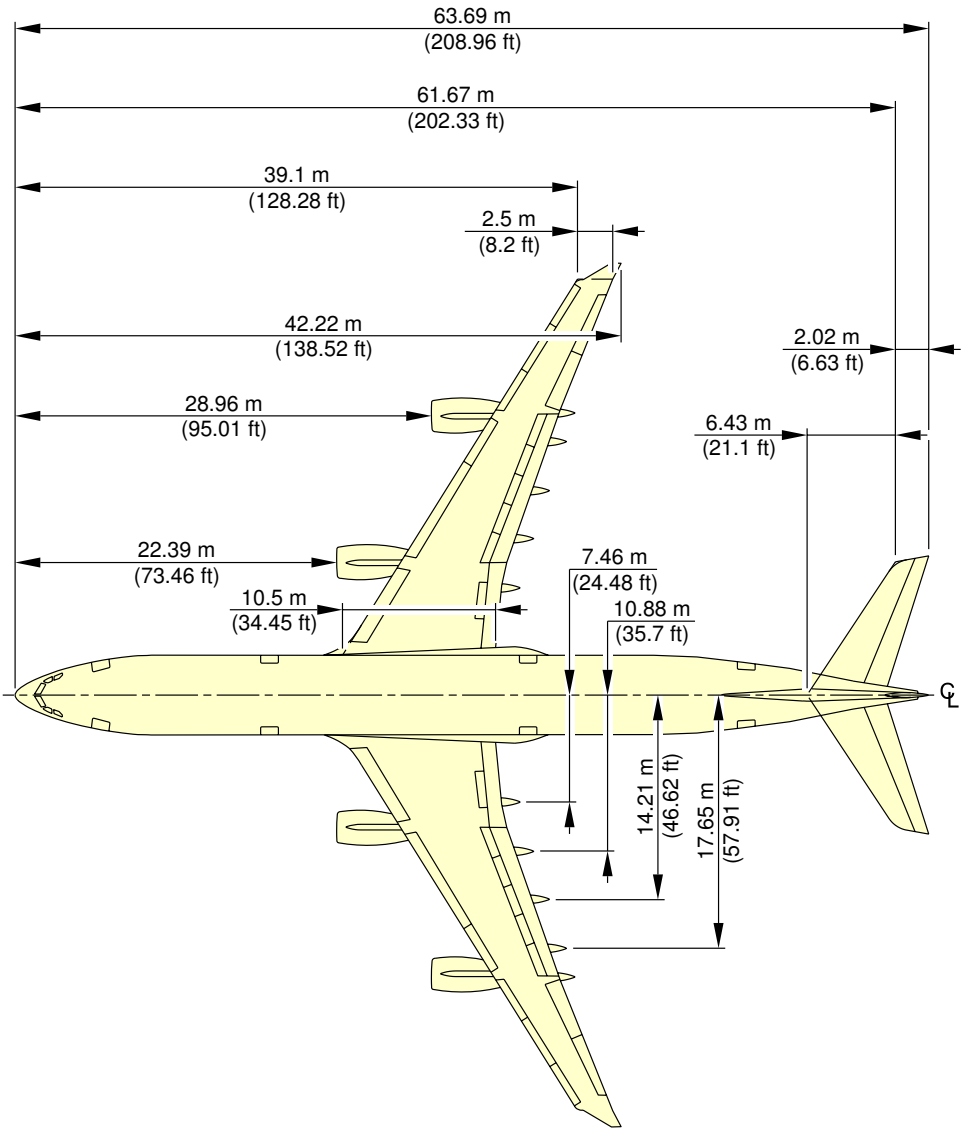
Main Gear:	% Gross Load on Assembly:	79.96	Max Assembly Load:	242.385
	Max Single Wheel Load:	60.596		
	Contact Pressure:	206	Contact Area:	294.16
	Footprint Width:	14.99"		
Body Gear:	% Gross Load on Assembly:	14.64	Max Assembly Load:	88.756
	Max Single Wheel Load:	44.378		
	Contact Pressure:	158	Contact Area:	280.87
	Footprint Width:	14.65"		
Nose Gear:	% Gross Load on Assembly:	5.40	Max Assembly Load:	32.738
	Max Single Wheel Load:	16.369		
	Contact Pressure:	175	Contact Area:	93.54
	Footprint Width:	8.45"		

Aircraft Classification Numbers (ACNs)									
Aircraft Weight		Rigid Pavement Subgrades				Flexible Pavement Subgrades			
		High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt	285.0	25.7	24.6	27.4	30.8	25.0	26.1	28.5	34.9
Max Wgt	606.3	52.8	61.7	73.7	84.3	62.1	67.3	78.6	106.3

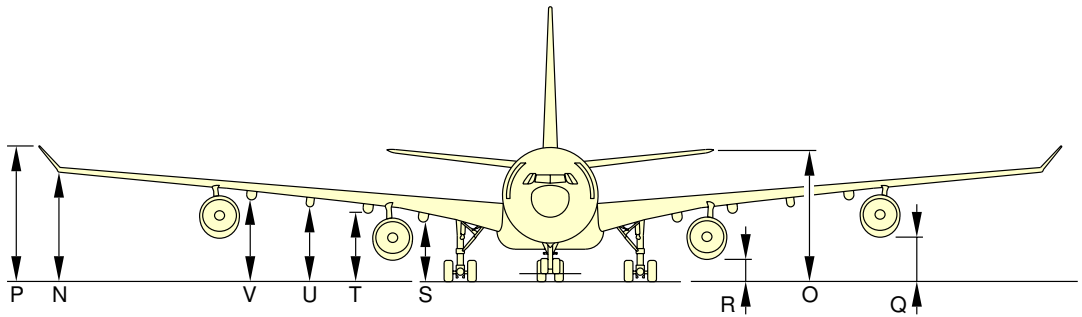
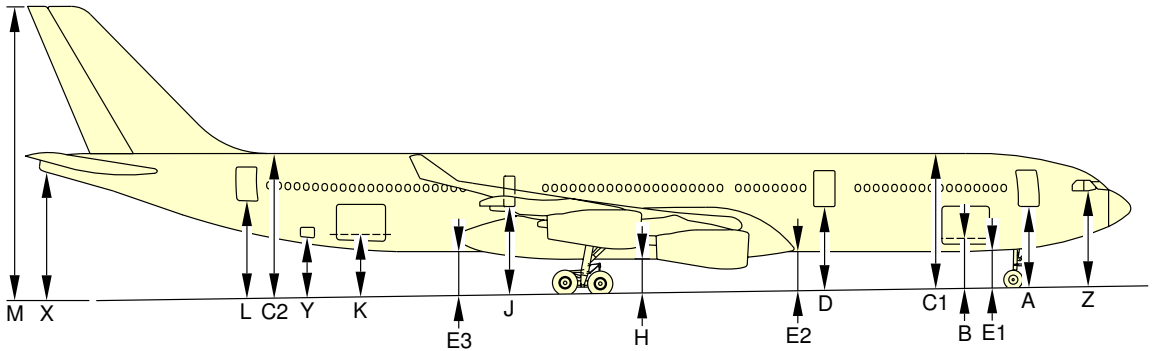




NOTE:
RELATED TO AIRCRAFT ATTITUDE AND WEIGHT.



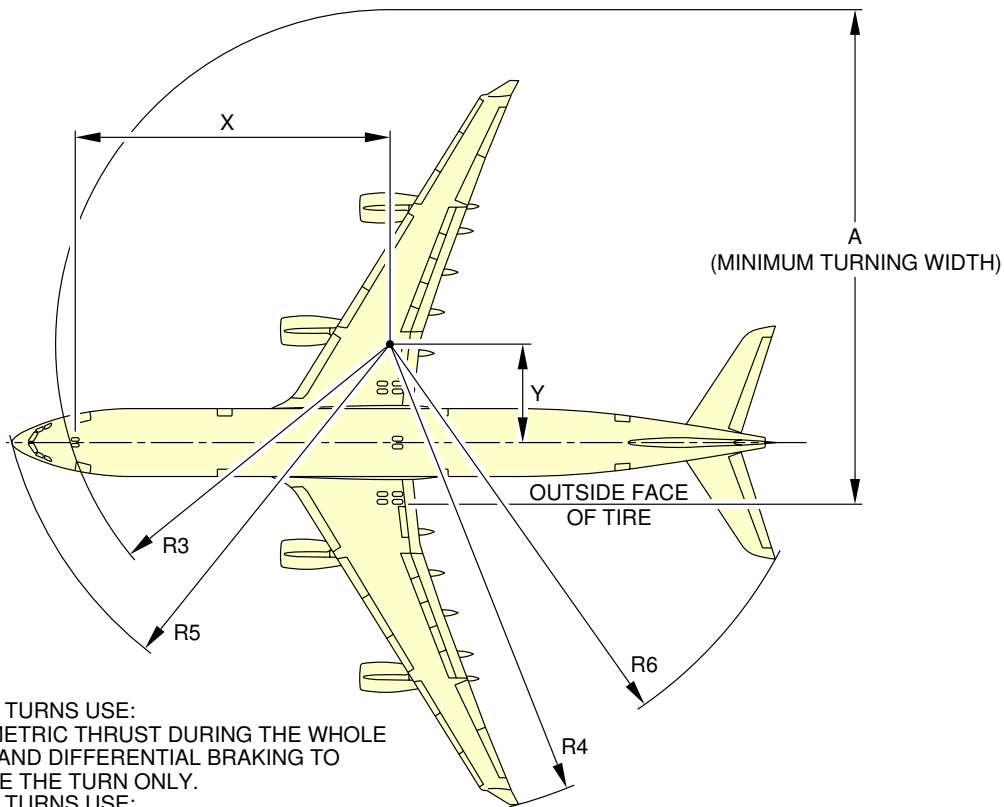
NOTE:
RELATED TO AIRCRAFT ATTITUDE AND WEIGHT.



NOTE: PASSENGER AND CARGO DOOR CLEARANCES ARE MEASURED FROM THE CENTER OF THE DOOR SILL AND FROM FLOOR LEVEL.

	125 000 kg CG 31.9%		MRW 254 400 kg CG 20.7%		MRW 254 400 kg CG 38.2%		MRW 271 900 kg CG 20.7%		MRW 271 900 kg CG 38.2%		AIRCRAFT ON JACKS	
	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft
A	4.59	15.05	4.45	14.59	4.52	14.8	4.45	14.59	4.60	15.09	6.32	20.7
B	2.73	8.95	2.54	8.33	2.58	8.62	2.58	8.46	2.71	8.88	4.14	13.5
C1	7.76	25.45	7.58	24.86	7.60	25.09	7.54	24.73	7.66	25.12	9.32	30.5
C2	8.42	27.62	8.25	27.06	8.20	26.73	8.30	27.23	8.18	26.83	9.32	30.5
D	4.84	15.87	4.65	15.25	4.67	15.41	4.72	15.5	4.79	15.71	6.32	20.7
E1	2.13	6.98	1.94	6.36	1.96	6.59	1.84	6.03	1.98	6.49	3.68	12
E2	2.27	7.44	2.09	6.85	2.10	6.95	2.06	6.75	2.13	6.98	3.68	12
E3	2.37	7.77	2.49	8.17	2.46	7.97	2.45	8.03	2.39	7.83	3.68	12
H	2.02	6.62	1.84	6.03	1.83	6	1.82	5.97	1.83	6	3.26	10.7
J	5.31	17.42	5.12	16.80	5.10	16.73	5.14	16.86	5.10	16.73	6.32	20.73
K	3.44	11.28	3.26	10.69	3.23	10.49	3.27	10.73	3.18	10.43	4.24	13.9
L	5.70	18.69	5.52	18.10	5.47	17.74	5.49	18.01	5.36	17.58	6.53	21.4
M	16.99	55.72	16.82	55.17	16.73	54.61	16.88	55.36	16.67	54.68	17.62	57.8
N	6.35	20.83	6.01	19.71	5.98	19.55	6	19.6	5.94	19.48	7.55	24.7
O	8.14	26.70	7.96	26.11	7.88	25.58	8.04	26.37	7.83	25.68	9.23	30.2
P	7.91	25.94	7.57	24.83	7.53	24.60	7.55	24.76	7.48	24.54	8.96	29.4
Q	2.59	8.49	2.35	7.71	2.34	7.67	2.35	7.70	2.35	7.70	3.98	13
R	1.42	4.65	1.23	4.03	1.24	4.10	1.25	4.10	1.28	4.20	2.79	9.1
S	3.85	12.63	3.67	12.04	3.65	11.94	3.66	12.01	3.64	11.94	5.25	17.2
T	4.31	14.14	4.12	13.51	4.10	13.45	4.12	13.51	4.10	13.45	5.70	18.7
U	4.59	15.05	4.38	14.37	4.36	14.23	4.37	14.33	4.33	14.20	6	19.6
V	4.90	16.07	4.66	15.28	4.64	15.15	4.66	15.28	4.61	15.12	6.30	20.6
X	7.30	23.94	7.12	23.35	7.05	22.83	7.19	23.58	6.98	22.89	8.10	26.5
Y	3.58	11.74	3.39	11.12	3.35	10.86	3.43	11.15	3.32	10.89	4.39	14.4
Z							5.23	17.15	5.41	17.74	7.10	23.3

NOTE: PASSENGER AND CARGO DOOR CLEARANCES ARE MEASURED FROM THE CENTER OF THE DOOR SILL AND FROM FLOOR LEVEL.



NOTE:

TYPE 1 TURNS USE:
 ASYMMETRIC THRUST DURING THE WHOLE
 TURN; AND DIFFERENTIAL BRAKING TO
 INITIATE THE TURN ONLY.
 TYPE 2 TURNS USE:
 SYMMETRIC THRUST DURING THE WHOLE
 TURN; AND NO DIFFERENTIAL BRAKING AT ALL.

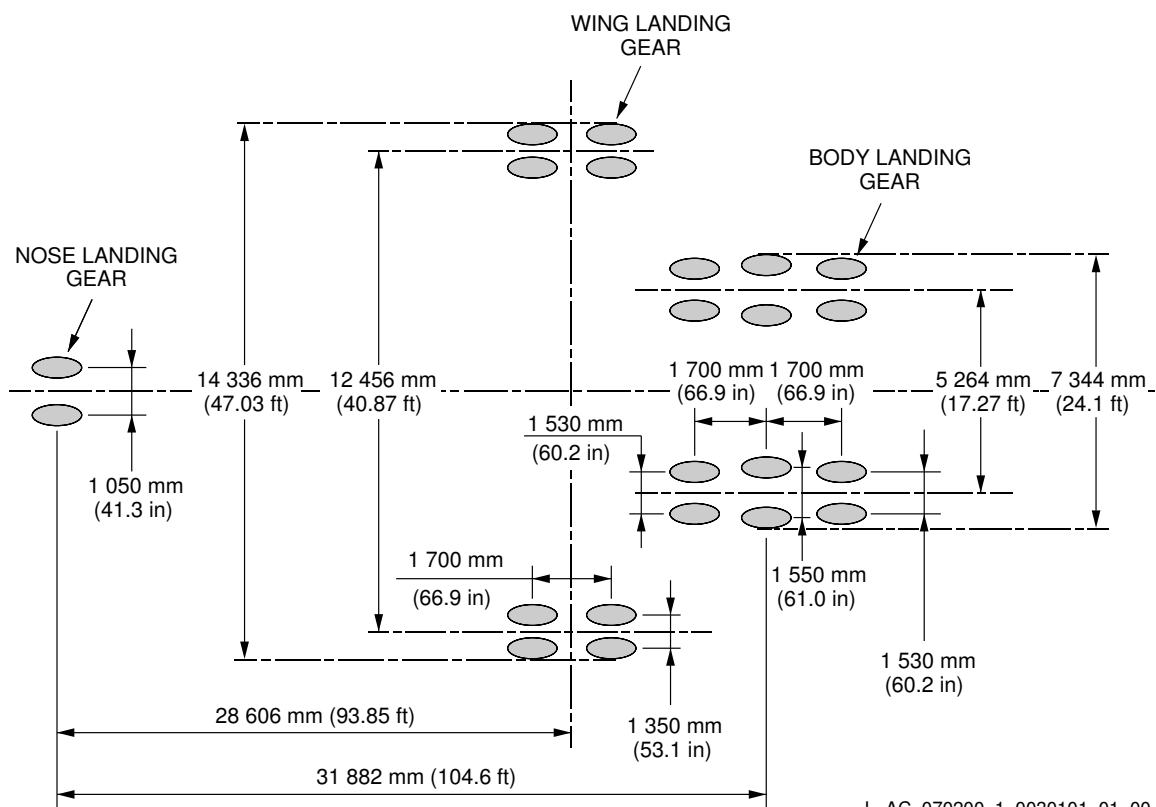
A340-300 MINIMUM TURNING RADII										
TYPE OF TURN	STEERING ANGLE (deg)	EFFECTIVE STEERING ANGLE (deg)		X	Y	A	R3 NLG	R4 WING	R5 NOSE	R6 TAIL
1	72 (MAX)	72.2	m	25.4	8.2	41.7	26.8	39.5	33.1	36.3
			ft	83	27	137	88	130	109	119
2	72 (MAX)	63.2	m	25.4	12.8	48.1	28.7	44.0	34.5	38.8
			ft	83	42	158	94	144	113	127
1	65 (MAX)	65.9	m	25.4	11.4	46.0	28.0	42.6	34.0	38.0
			ft	83	37	151	92	140	112	125
2	65 (MAX)	59.6	m	25.4	14.9	51.2	29.7	46.0	35.3	40.1
			ft	83	49	168	97	151	116	132

NOTE:

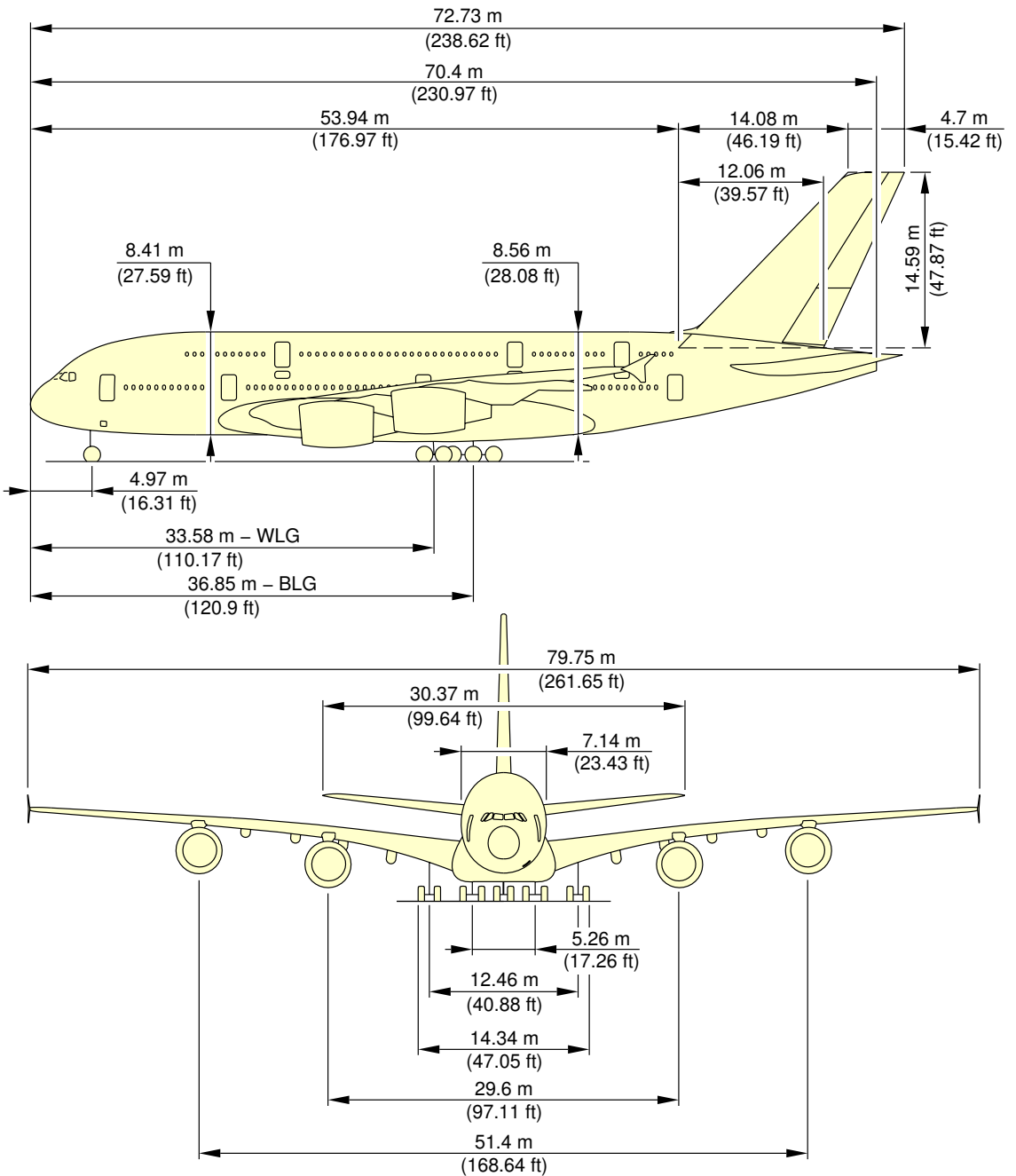
IT IS POSSIBLE TO GET LOWER VALUES THAN THOSE FROM TYPE 1
 BY APPLYING DIFFERENTIAL BRAKING DURING THE WHOLE TURN.

****ON A/C A380-800**

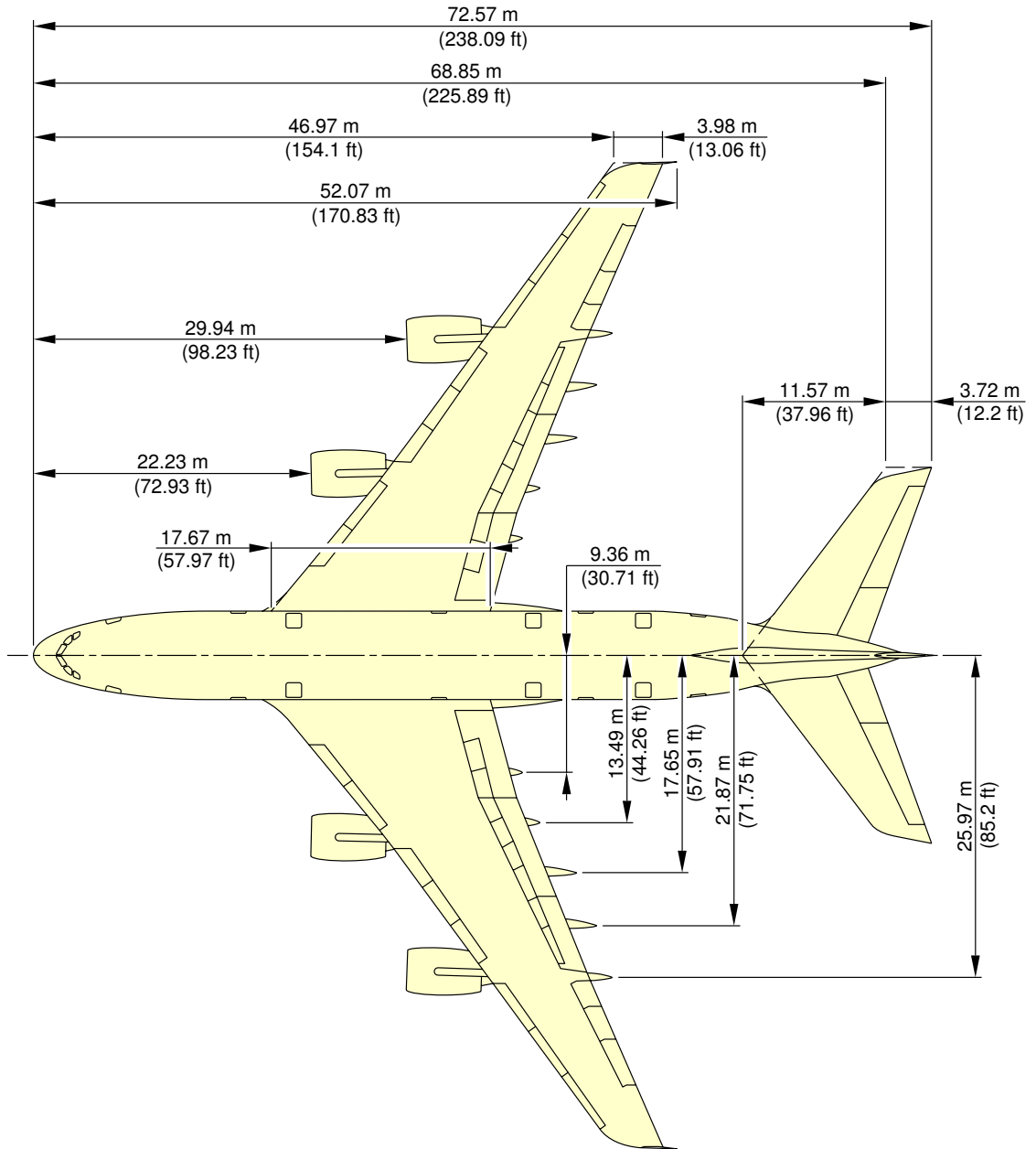
MAXIMUM RAMP WEIGHT	512 000 kg (1 128 775 lb)
PERCENTAGE OF WEIGHT ON MAIN GEAR GROUP	See Section 7-4-1 Figure: Landing Gear Loading on Pavement – MRW 512 000 kg – A380-800 Models
NOSE GEAR TIRE SIZE	1270 x 455R22 32PR or 50 x 20R22 34PR
NOSE GEAR TIRE PRESSURE	14.1 bar (205 psi)
WING GEAR TIRE SIZE	1400 x 530R23 40PR
WING GEAR TIRE PRESSURE	14 bar (203 psi)
BODY GEAR TIRE SIZE	1400 x 530R23 40PR
BODY GEAR TIRE PRESSURE	14 bar (203 psi)



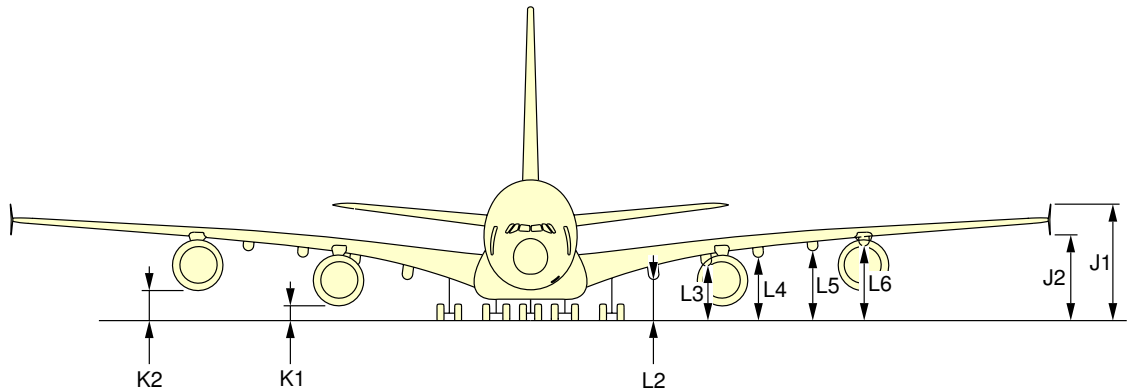
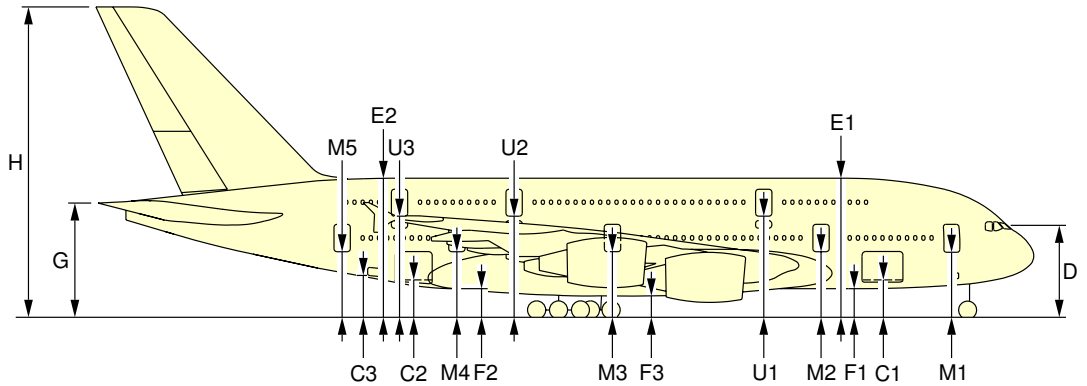
Landing Gear Footprint
 MRW 512 000 kg - A380-800 Models
 FIGURE-7-2-0-991-003-A01



NOTE: RELATED TO AIRCRAFT ATTITUDE AND WEIGHT.



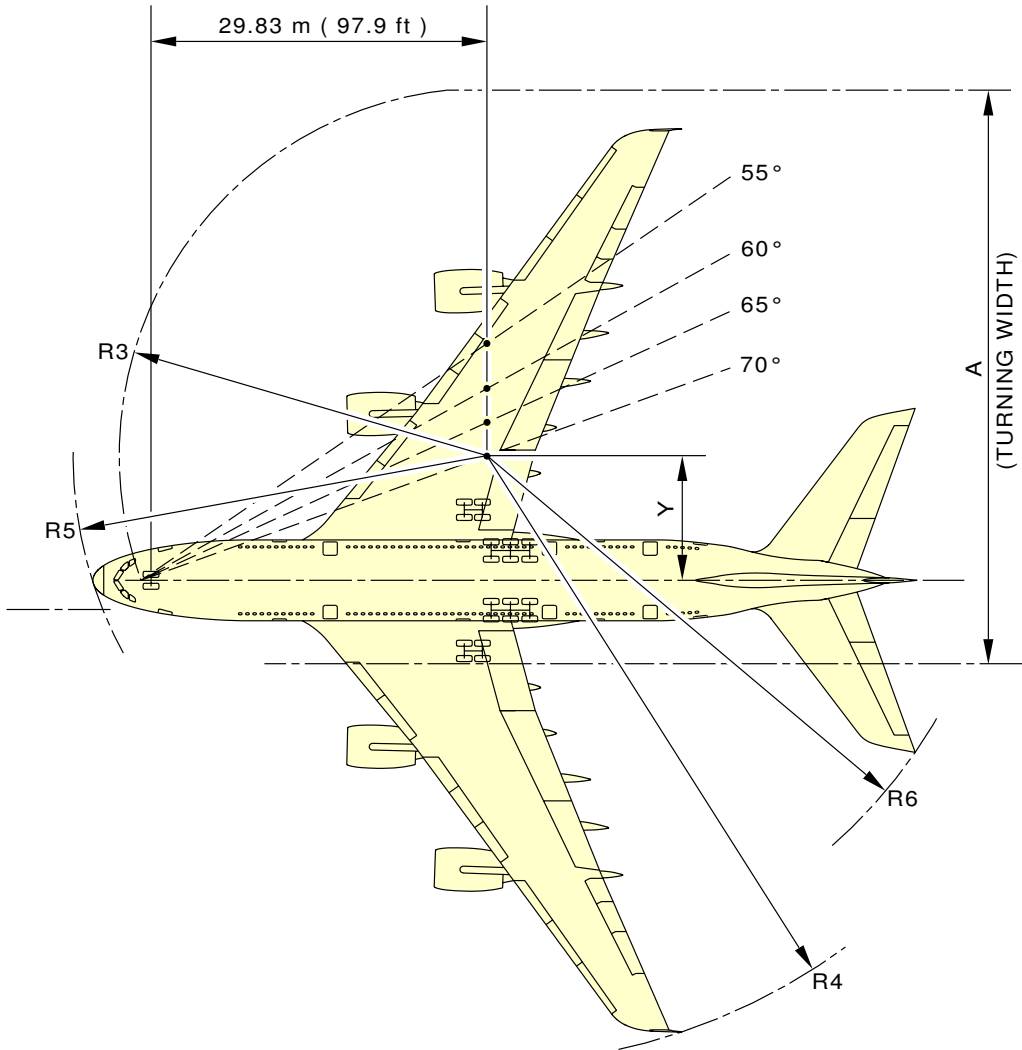
NOTE: RELATED TO AIRCRAFT ATTITUDE AND WEIGHT.



NOTE: FOR DIMENSIONS, SEE SHEET 2.
 PASSENGER AND CARGO DOOR GROUND CLEARANCES ARE MEASURED FROM THE CENTER OF THE DOOR SILL AND FROM FLOOR LEVEL.

A/C CONFIGURATION	MRW (562 t)				MRW (577 t)				300 t				AC JACKED FDL = 7.20 m (23.6 ft)	
	FWD CG (37.5%)		AFT CG (43%)		FWD CG (37.8%)		AFT CG (41%)		FWD CG (29%)		AFT CG (44%)			
	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft
C1	3.05	10.0	3.11	10.2	3.05	10.0	3.08	10.1	3.24	10.6	3.30	10.8	5.12	16.8
C2	3.14	10.3	3.10	10.2	3.11	10.2	3.10	10.2	3.27	10.7	3.23	10.6	5.12	16.8
C3	3.27	10.7	3.22	10.6	3.24	10.6	3.23	10.6	3.41	11.2	3.36	11.0	5.24	17.2
D	7.13	23.4	7.21	23.7	7.13	23.4	7.17	23.5	7.16	23.5	7.42	24.3	9.22	30.2
E1	10.76	35.3	10.81	35.5	10.75	35.3	10.79	35.4	10.84	35.6	11	36.1	12.82	42.1
E2	10.84	35.6	10.80	35.4	10.83	35.5	10.78	35.4	10.97	36.0	10.93	35.9	12.82	42.1
F1	2.35	7.7	2.40	7.9	2.34	7.7	2.38	7.8	2.45	8.0	2.59	8.5	4.41	14.5
F2	2.27	7.4	2.24	7.3	2.27	7.4	2.22	7.3	2.41	7.9	2.38	7.8	4.27	14.0
F3	1.66	5.4	1.66	5.4	1.66	5.4	1.66	5.4	1.82	6.0	1.82	6.0	3.68	12.1
G	9.21	30.2	9.11	29.9	9.20	30.2	9.15	30.0	9.30	30.5	9.20	30.2	11.14	36.5
H	24.18	79.3	24.08	79.0	24.17	79.3	24.12	79.1	24.27	79.6	24.17	79.3	26.11	85.7
J1	7.55	24.8	7.50	24.6	7.55	24.8	7.49	24.6	8.27	27.1	8.22	27.0	10.12	33.2
J2	5.27	17.3	5.22	17.1	5.27	17.3	5.21	17.1	5.97	19.6	5.94	19.5	7.84	25.7
K1	1.05	3.4	1.08	3.5	1.05	3.4	1.08	3.5	1.30	4.3	1.30	4.3	3.14	10.3
K2	1.90	6.2	1.90	6.2	1.90	6.2	1.90	6.2	2.27	7.4	2.27	7.4	4.13	13.5
L2	3.08	10.1	3.07	10.1	3.08	10.1	3.07	10.1	3.27	10.7	3.26	10.7	5.12	16.8
L3	4.10	13.5	4.08	13.4	4.09	13.4	4.08	13.4	4.33	14.2	4.31	14.1	6.18	20.3
L4	4.67	15.3	4.65	15.3	4.67	15.3	4.65	15.3	4.95	16.2	4.93	16.2	6.81	22.3
L5	5.01	16.4	4.99	16.4	5.01	16.4	4.98	16.3	5.36	17.6	5.34	17.5	7.22	23.7
L6	5.21	17.1	5.18	17.0	5.20	17.1	5.17	17.0	5.63	18.5	5.61	18.4	7.50	24.6
M1	5.10	16.7	5.17	17.0	5.10	16.7	5.13	16.8	5.14	16.9	5.36	17.6	7.15	23.5
M2	5.12	16.8	5.16	16.9	5.12	16.8	5.14	16.9	5.20	17.1	5.34	17.5	7.15	23.5
M3	5.15	16.9	5.15	16.9	5.15	16.9	5.15	16.9	5.30	17.4	5.31	17.4	7.15	23.5
M4	5.18	17.0	5.15	16.9	5.18	17.0	5.15	16.9	5.37	17.6	5.28	17.3	7.15	23.5
M5	5.20	17.1	5.14	16.9	5.20	17.1	5.16	16.9	5.42	17.8	5.27	17.3	7.15	23.5
U1	7.88	25.9	7.91	26.0	7.87	25.8	7.89	25.9	7.98	26.2	8.08	26.5	9.90	32.5
U2	7.91	26.0	7.90	25.9	7.91	26.0	7.90	25.9	8.10	26.6	8.04	26.4	9.90	32.5
U3	7.93	26.0	7.89	25.9	7.94	26.0	7.91	26.0	8.15	26.7	8.02	26.3	9.90	32.5

NOTE: MAXIMUM JACKING WEIGHT = 333 700 kg (735 682 lb).



A380-800/800F Minimum Turning Radius									
Type of Turn	Steering Angle	Effective Steering Angle		Y	A	R3	R4	R5	R6
1	70°	69.5°	m	11.08	50.91	32.66	53.76	36.52	46.01
			ft	36.3	167.0	107.2	176.4	119.8	150.9

NOTE: TURN PERFORMED WITH ASYMMETRIC THRUST AND DIFFERENTIAL BRAKING

Aircraft: **A380-843F, -863F**

ALC Mgr: Manuf: *Airbus* Group Index:
 Wing Span: 261.65' Length: 238.61' Height: 80.2' Vert. Clr: 40.8"
 Pivot Pt: 36.3' Turn Radius: 107.2' 180° Turn Diameter: 352.8' Controlling Gear: *Nose*

Basic Empty Wt:	552.390	Basic Mis, T/O Wt:		Max T/O Wt :	1,300.727
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	941.374	T/O Dist:	
T/O Dist. (50')		Ldg. Dist:		Ldg. Dist. (50')	

Gear: <i>FAA 2D/3D2 Two Dual Wheels in Tandem Main Gear /Three Dual Wheels in Tandem Body Gear with Dual Wheel Nose Gear</i>					
Number of Assemblies/Tires per Assembly:	Nose: 1-2	Main: 2-4	Body: 2-6		

Wing Gear:	% Gross Load on Assembly:	38.01	Max Assembly Load:	247.203
	Max Single Wheel Load:	61.801		
	Contact Pressure:	218	Contact Area:	283.49
	Footprint Width:	14.72"		
Body Gear:	% Gross Load on Assembly:	57.01	Max Assembly Load:	370.772
	Max Single Wheel Load:	61.795		
	Contact Pressure:	218	Contact Area:	283.47
	Footprint Width:	14.72"		
Nose Gear:	% Gross Load on Assembly:	4.98	Max Assembly Load:	64.776
	Max Single Wheel Load:	32.388		
	Contact Pressure:	213	Contact Area:	152.06
	Footprint Width:	10.78"		

Aircraft Classification Numbers (ACNs)								
Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt 552.4	22.8	24.7	26.4	31.8	24.5	26.6	30.9	42.7
Max Wgt 1300.7	58.2	73.8	95.4	127.4	79.9	90.6	115.8	163.8

Geometries are shown with A380-843F

Aircraft: **DC-8-43**

ALC Mgr: Manuf: *McDonnell Douglas* Group Index:
Wing Span: *142.4'* Length: *150.7'* Height: *43.43'* Vert. Clr: *38.7''*
Pivot Pt: *22.1'* Turn Radius: *59.7'* 180° Turn Diameter: *181.8'* Controlling Gear: *Nose*

Basic Empty Wt:	<i>136.509</i>	Basic Mis, T/O Wt:		Max T/O Wt :	<i>315.0</i>
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	<i>207.0</i>	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

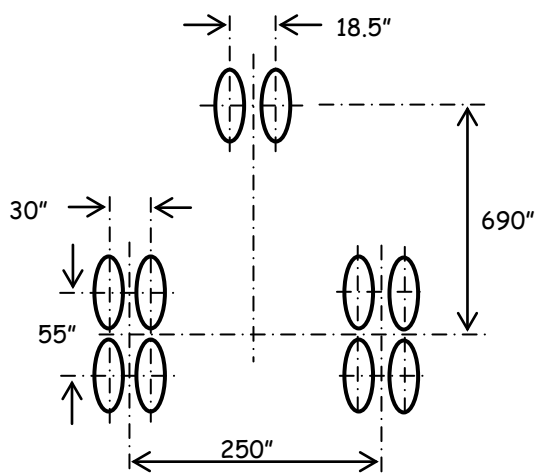
Gear: <i>FAA 2D, Two Dual Wheels in Tandem Main Gear with Dual Wheel Nose Gear</i>		
Number of Assemblies/Tires per Assembly:	Nose: <i>1-2</i>	Main: <i>2-4</i>

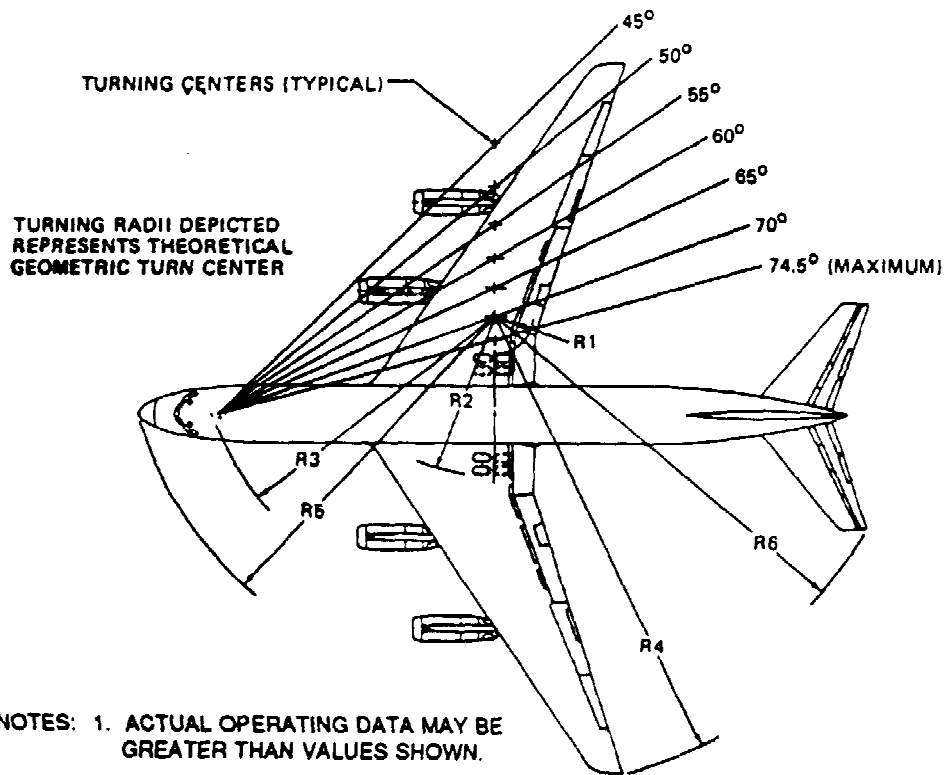
Main Gear:	% Gross Load on Assembly:	<i>93.1</i>	Max Assembly Load:	<i>146.632</i>
	Max Single Wheel Load:	<i>36.658</i>	Contact Area:	<i>207.11</i>
	Contact Pressure:	<i>177</i>	Footprint Width:	<i>12.58''</i>
	Footprint Width:	<i>12.58''</i>		

Nose Gear:	% Gross Load on Assembly:	<i>6.9</i>	Max Assembly Load:	<i>21.735</i>
	Max Single Wheel Load:	<i>10.868</i>	Contact Area:	<i>67.08</i>
	Contact Pressure:	<i>162</i>	Footprint Width:	<i>7.16''</i>
	Footprint Width:	<i>7.16''</i>		

Aircraft Classification Numbers (ACNs)

Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt <i>136.5</i>	<i>14.0</i>	<i>15.3</i>	<i>17.8</i>	<i>20.5</i>	<i>14.8</i>	<i>15.6</i>	<i>17.8</i>	<i>23.1</i>
Max Wgt <i>315.0</i>	<i>39.9</i>	<i>48.3</i>	<i>56.6</i>	<i>63.4</i>	<i>42.8</i>	<i>48.8</i>	<i>58.1</i>	<i>72.2</i>

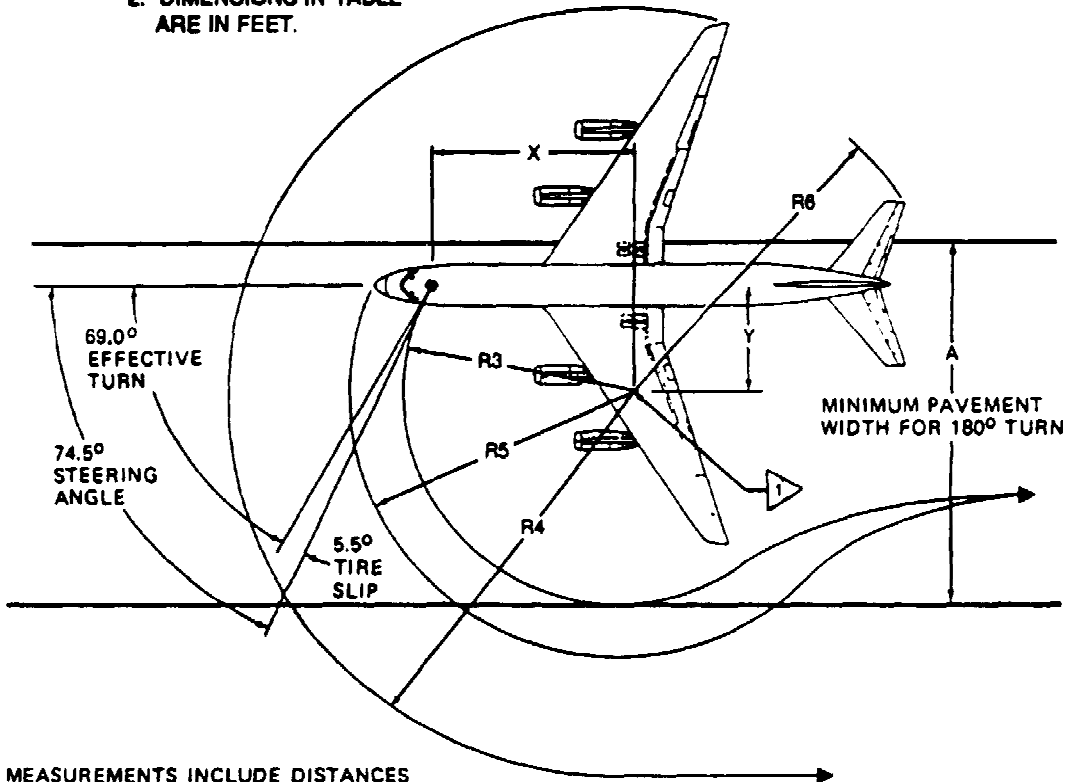




- NOTES: 1. ACTUAL OPERATING DATA MAY BE GREATER THAN VALUES SHOWN.
2. DIMENSIONS IN TABLE ARE IN FEET.

STEERING ANGLE (DEGREES)	R1	R2	R3	R4	R5	R6
30	87.3	111.9	115.0	172.7	123.7	145.5
35	69.8	84.4	100.2	155.5	110.1	131.1
40	56.2	69.9	88.5	142.1	100.4	120.4
45	45.2	59.8	81.3	131.3	93.2	112.1
50	35.9	50.6	75.0	122.2	87.6	105.6
55	27.9	42.6	70.2	114.4	83.7	100.3
60	20.9	35.5	66.4	107.6	80.6	95.0
65	14.5	29.1	63.4	101.4	78.2	92.4
70	8.6	23.3	61.2	95.7	76.3	89.3
74.5 (MAXIMUM)	3.6	20.3	59.7	90.9	75.1	86.9

- NOTES: 1. 5.5° SLIP ANGLE ASSUMED FOR
74.5° NOSE WHEEL DEFLECTION.
2. DIMENSIONS IN TABLE
ARE IN FEET.



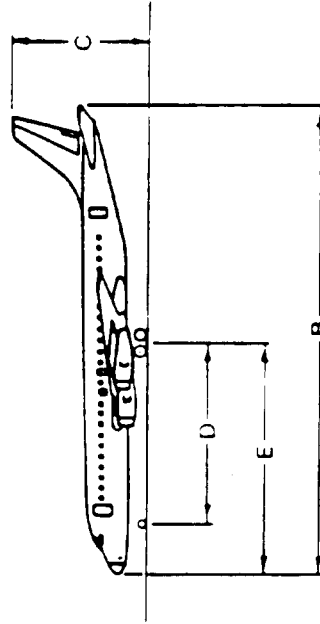
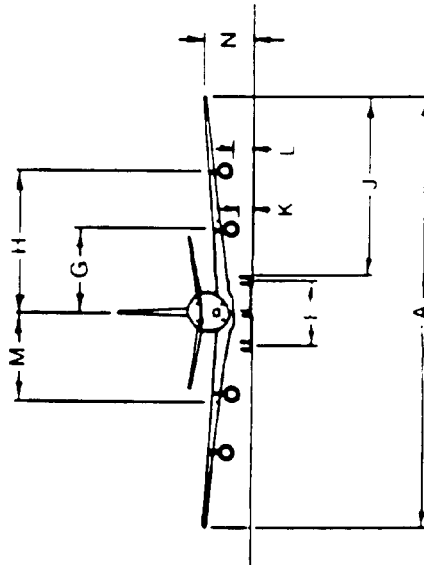
MEASUREMENTS INCLUDE DISTANCES
TO OUTSIDE FACE OF NOSE AND MAIN
LANDING GEAR TIRES.

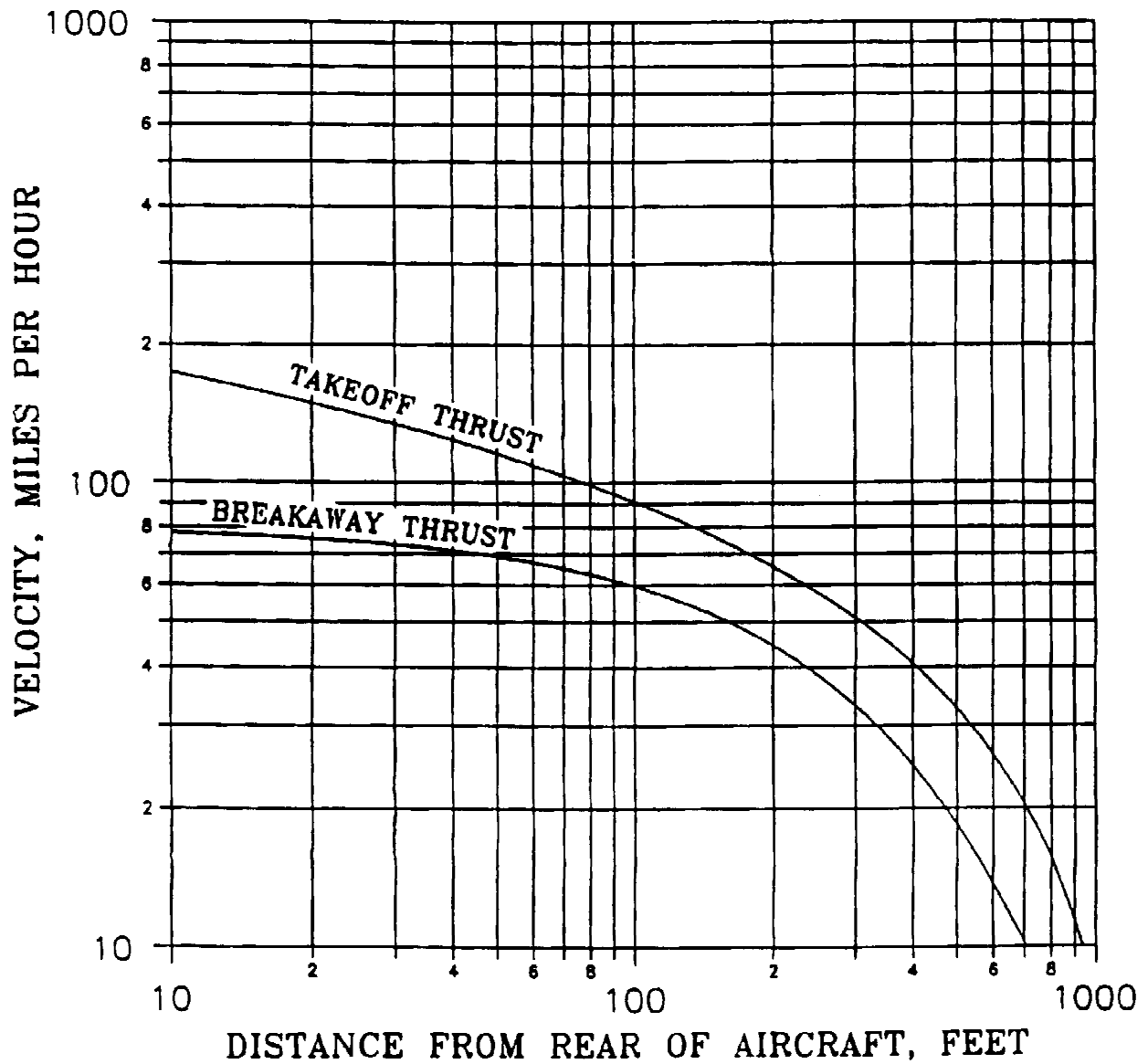
▷ THEORETICAL CENTER OF TURN FOR
MINIMUM TURNING RADIUS. TURN INITIATED
WITH AIRCRAFT IN MOTION, APPROXIMATELY IDLE
THRUST ON ALL ENGINES WITH NO DIFFERENTIAL BRAKING.

X	Y	A	R3	R4	R5	R6
57.5	22.1	97.2	62.8	96.8	76.6	89.9

MODEL	MAXIMUM TIRE PRESSURE, PSI			A	B	C	D	E	F	G	H	J	K	L	M	N
	MAIN GEAR	NOSE GEAR	NOSE GEAR													
43	177	162		142.4	150.7	43.4	57.5	73.4	20.8	25.8	44.6	58.8	3.3	4.7	22.1	15.0
55	186	171		142.4	150.7	43.6	57.5	73.4	20.8	25.8	44.6	58.8	3.1	4.6	22.1	15.0
55F	186	171		142.4	150.7	43.8	57.5	73.4	20.8	25.8	44.6	58.8	3.1	4.6	22.1	14.9
61/71	188	118		142.4	187.4	43.3	77.5	93.4	20.8	25.8	44.6	58.8	3.3	4.6	27.0	14.8
61F/71F	190	119		142.4	187.4	43.2	77.5	93.4	20.8	25.8	44.6	58.8	3.3	4.6	27.0	14.9
62/72	191	174		148.4	157.5	43.3	60.8	76.7	20.8	25.8	44.6	61.7	2.5	4.2	39.3	15.4
62F/72F	191	174		148.4	157.5	43.3	60.8	76.7	20.8	25.8	44.6	61.7	2.5	4.2	39.3	15.4
63/73	196	147		148.4	187.4	43.0	77.5	93.4	20.8	25.8	44.6	61.7	2.6	4.2	38.8	15.3
63F/73F	196	147		148.4	187.4	43.2	77.5	93.4	20.8	25.8	44.6	61.7	2.6	4.2	38.8	15.3

NOTE: REDUCE DIMENSION (K AND L) BY 0.8 FEET FOR DC-8-60 SERIES AIRCRAFT





McDonnell Douglas DC-8-43/-55/-55F/-61/-61F/
-62/-62F/-63/-63F, Velocity - Distance Curves

Aircraft: **DC-8-55**

ALC Mgr: Manuf: *McDonnell Douglas* Group Index:
Wing Span: 142.4' Length: 150.7' Height: 43.56' Vert. Clr: 37.3"
Pivot Pt: 22.1' Turn Radius: 59.7' 180° Turn Diameter: 181.8' Controlling Gear: *Nose*

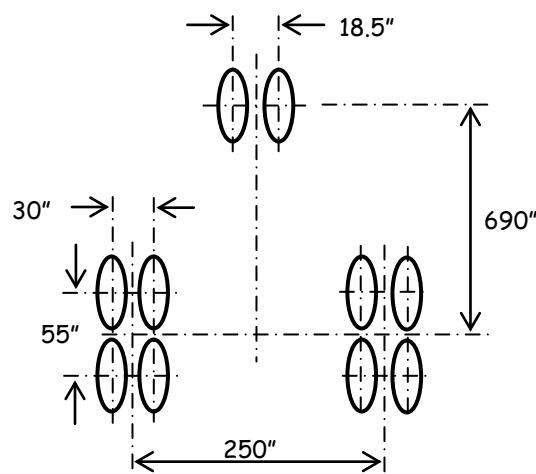
Basic Empty Wt:	138.266	Basic Mis, T/O Wt:	292.5	Max T/O Wt :	325.0
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	217.0	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

Gear: <i>FAA 2D, Two Dual Wheels in Tandem Main Gear with Dual Wheel Nose Gear</i>		
Number of Assemblies/Tires per Assembly:	Nose: 1-2	Main: 2-4

Main Gear:	% Gross Load on Assembly:	94.6	Max Assembly Load:	153.725
	Max Single Wheel Load:	38.431		
	Contact Pressure:	186	Contact Area:	206.62
	Footprint Width:	12.56"		

Nose Gear:	% Gross Load on Assembly:	5.4	Max Assembly Load:	17.550
	Max Single Wheel Load:	8.775		
	Contact Pressure:	171	Contact Area:	51.32
	Footprint Width:	6.26"		

Aircraft Classification Numbers (ACNs)									
Aircraft Weight		Rigid Pavement Subgrades				Flexible Pavement Subgrades			
		High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt	138.3	14.4	16.2	18.9	21.6	15.4	16.4	18.5	24.0
Max Wgt	325.0	43.5	52.4	61.0	67.9	45.9	52.5	62.1	76.7



Aircraft: **DC-8-55F**

ALC Mgr: Manuf: *McDonnell Douglas* Group Index:
 Wing Span: **142.4'** Length: **150.7'** Height: **43.74'** Vert. Clr: **37.2"**
 Pivot Pt: **22.1'** Turn Radius: **59.7'** 180° Turn Diameter: **181.8'** Controlling Gear: *Nose*

Basic Empty Wt: 131.230	Basic Mis, T/O Wt: 292.5	Max T/O Wt : 325.0
Basic Mis. Ldg. Wt:	Max Ldg. Wt: 240.0	T/O Dist:
T/O Dist. (50'):	Ldg. Dist:	Ldg. Dist. (50'):

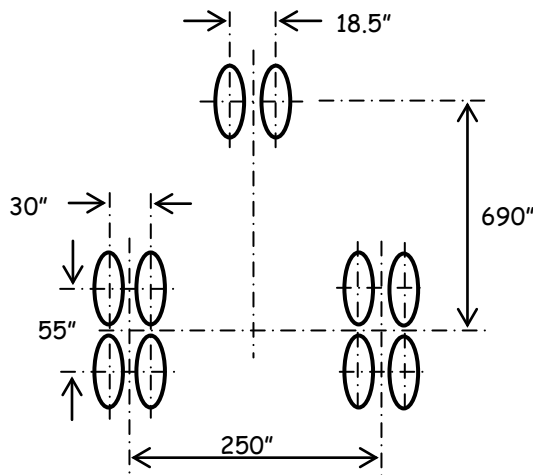
Gear: *FAA 2D, Two Dual Wheels in Tandem Main Gear with Dual Wheel Nose Gear*
 Number of Assemblies/Tires per Assembly: Nose: **1-2** Main: **2-4**

Main Gear:	% Gross Load on Assembly: 94.7	Max Assembly Load: 153.888
	Max Single Wheel Load: 38.472	
	Contact Pressure: 186	Contact Area: 206.84
	Footprint Width: 12.57"	

Nose Gear:	% Gross Load on Assembly: 5.3	Max Assembly Load: 17.225
	Max Single Wheel Load: 8.613	
	Contact Pressure: 171	Contact Area: 50.37
	Footprint Width: 6.20"	

Aircraft Classification Numbers (ACNs)

Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt 131.2	13.9	15.1	17.5	20.2	14.4	15.3	17.3	22.3
Max Wgt 325.0	43.5	52.4	61.0	67.9	46.0	52.6	62.2	76.8



Aircraft: **DC-8-61, -71**

ALC Mgr: Manuf: *McDonnell Douglas* Group Index:
 Wing Span: **148.4'** Length: **187.4'** Height: **43.23'** Vert. Clr: **38.7"**
 Pivot Pt: **27.0'** Turn Radius: **80.3'** 180° Turn Diameter: **208.6'** Controlling Gear: *Nose*

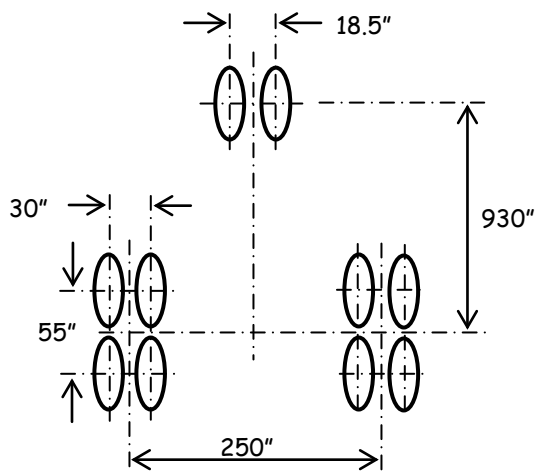
Basic Empty Wt:	152.101	Basic Mis, T/O Wt:	292.5	Max T/O Wt :	325.0
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	240.0	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

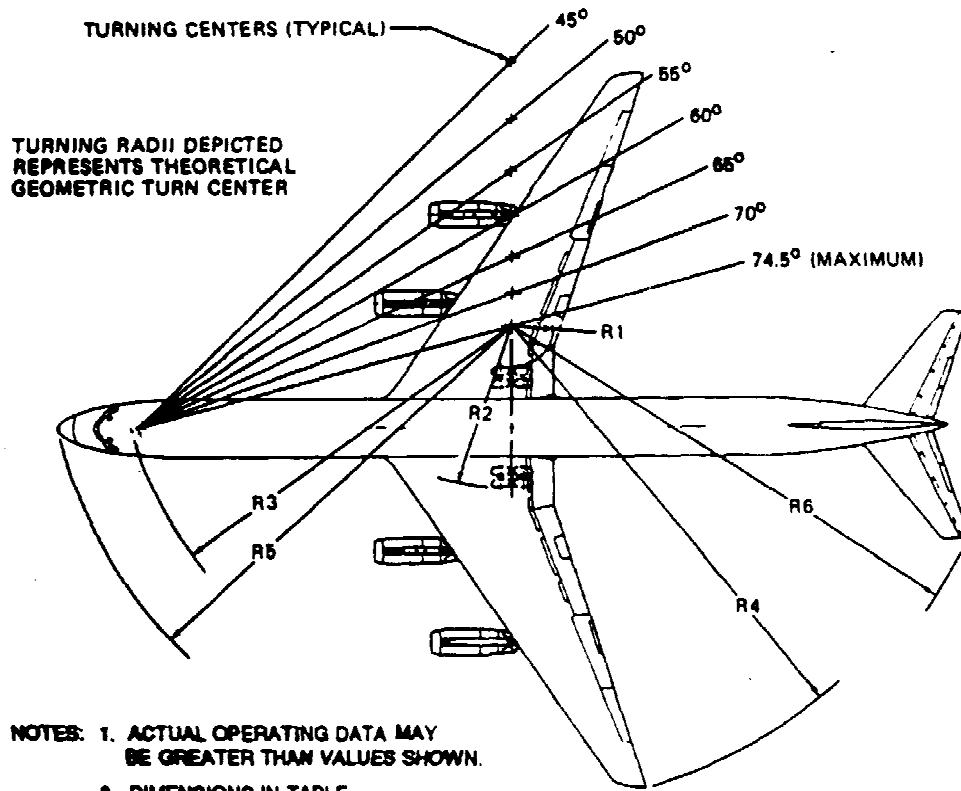
Gear: *FAA 2D, Two Dual Wheels in Tandem Main Gear with Dual Wheel Nose Gear*
 Number of Assemblies/Tires per Assembly: Nose: **1-2** Main: **2-4**

Main Gear:	% Gross Load on Assembly:	96.1	Max Assembly Load:	156.162
	Max Single Wheel Load:	39.041	Contact Area:	207.66
	Contact Pressure:	188	Footprint Width:	12.59"

Nose Gear:	% Gross Load on Assembly:	3.9	Max Assembly Load:	12.675
	Max Single Wheel Load:	6.338	Contact Area:	53.71
	Contact Pressure:	118	Footprint Width:	6.41"

Aircraft Classification Numbers (ACNs)									
Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades				
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D	
Min Wgt 152.1	16.2	18.7	21.9	25.1	17.6	18.9	21.6	28.0	
Max Wgt 325.0	44.6	53.8	62.8	69.7	47.0	53.7	63.5	78.3	

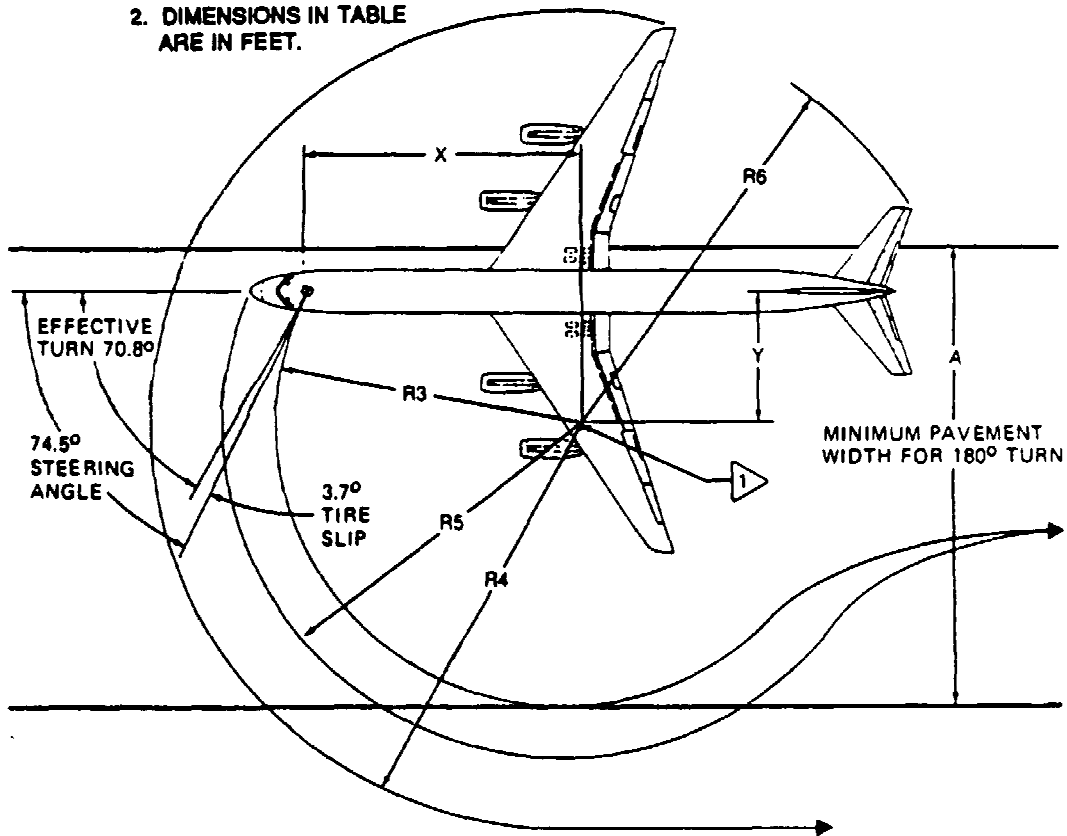




STEERING ANGLE (DEGREES)	R1	R2	R3	R4	R5	R6
30	121.8	146.6	186.0	207.0	163.5	183.8
35	88.3	123.0	136.1	183.7	144.8	163.9
40	80.0	104.7	120.4	165.6	131.4	149.3
45	66.2	88.8	108.5	151.0	121.4	138.0
50	57.7	77.4	101.0	138.8	113.7	129.2
55	41.9	66.6	94.5	128.3	107.9	122.1
60	32.4	57.1	88.4	118.8	103.6	116.2
65	23.8	48.5	85.4	110.5	100.0	111.4
70	18.9	40.5	82.4	102.9	97.5	107.4
74.5 (MAXIMUM)	9.2	33.8	80.3	96.5	95.9	104.3

NOTES: 1. 3.7° SLIP ANGLE ASSUMED FOR
74.5° NOSE WHEEL DEFLECTION.

2. DIMENSIONS IN TABLE
ARE IN FEET.

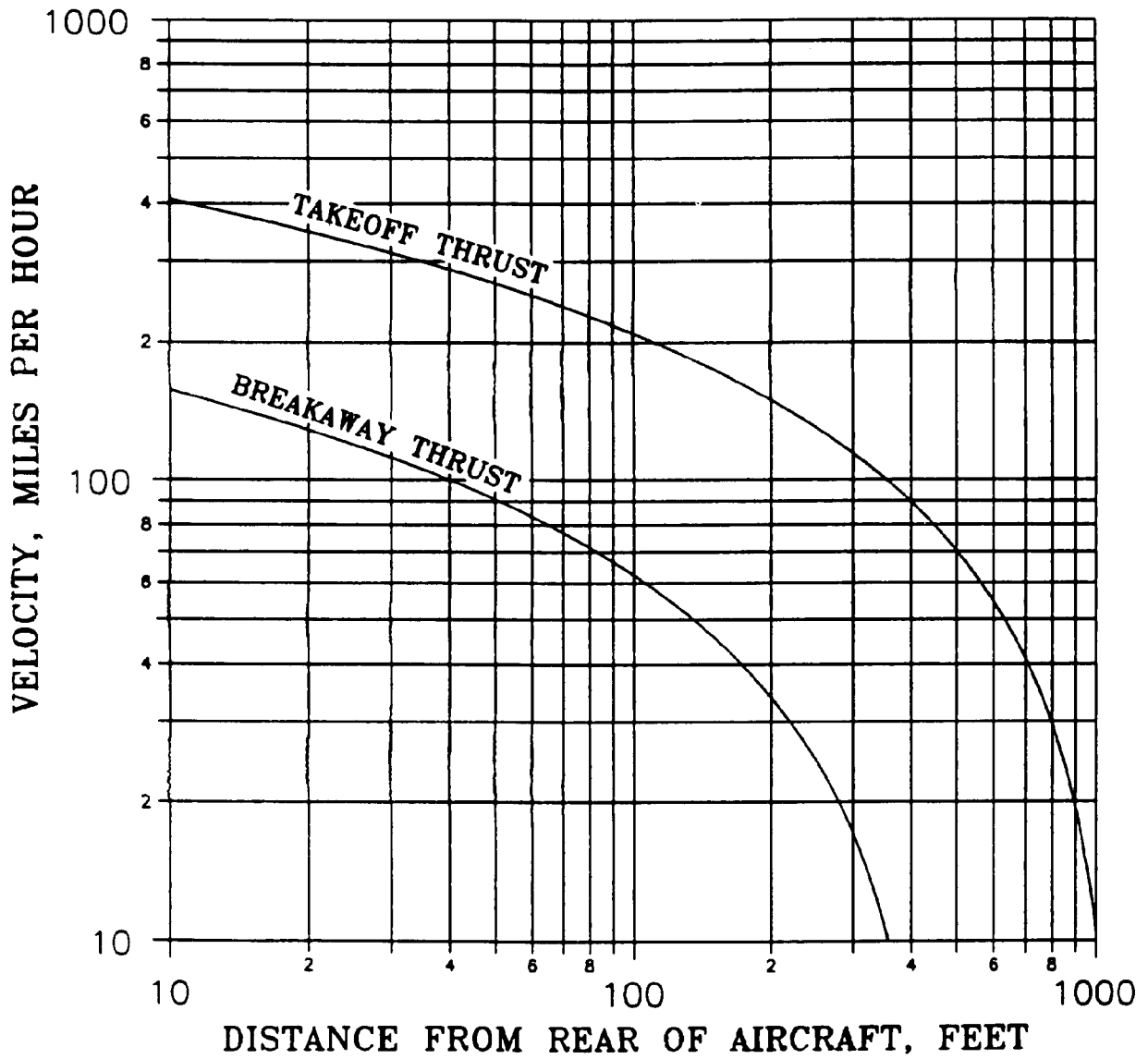


MEASUREMENTS INCLUDE DISTANCES TO
OUTSIDE FACE OF NOSE AND MAIN LANDING
GEAR TIRES.

① THEORETICAL CENTER OF TURN FOR
MINIMUM TURNING RADIUS. TURN INITIATED
WITH AIRCRAFT IN MOTION, APPROXIMATELY IDLE
THRUST ON ALL ENGINES WITH NO DIFFERENTIAL BRAKING.

X	Y	A	R3	R4	R5	R6
77.4	27.0	122.5	83.2	101.8	97.1	106.9

McDonnell Douglas DC-8-61/-61F/-71/-71F,
Minimum Turning Radii - 3.7° Slip Angle



McDonnell Douglas DC-8-71/-71F/-72/-72F/-73/-73F,
Velocity - Distance Curves

Aircraft: **DC-8-61F, -71F**

ALC Mgr: Manuf: *McDonnell Douglas* Group Index:
 Wing Span: 148.4' Length: 187.4' Height: 43.19' Vert. Clr: 38.7"
 Pivot Pt: 27.0' Turn Radius: 80.3' 180° Turn Diameter: 208.6' Controlling Gear: *Nose*

Basic Empty Wt:	145.506	Basic Mis, T/O Wt:	295.20	Max T/O Wt :	328.0
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	258.0	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

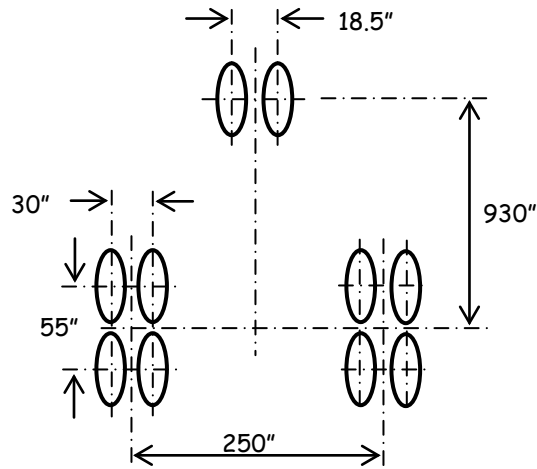
Gear: *FAA 2D, Two Dual Wheels in Tandem Main Gear with Dual Wheel Nose Gear*
 Number of Assemblies/Tires per Assembly: Nose: 1-2 Main: 2-4

Main Gear:	% Gross Load on Assembly:	96.0	Max Assembly Load:	157.440
	Max Single Wheel Load:	39.360	Contact Area:	207.16
	Contact Pressure:	190	Footprint Width:	12.58"

Nose Gear:	% Gross Load on Assembly:	4.0	Max Assembly Load:	13.120
	Max Single Wheel Load:	6.560	Contact Area:	55.13
	Contact Pressure:	119	Footprint Width:	6.49"

Aircraft Classification Numbers (ACNs)

Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt 145.5	15.5	17.7	20.8	23.6	16.7	17.9	20.3	26.3
Max Wgt 328.0	45.4	54.6	63.3	70.2	47.6	54.4	64.2	79.1



Aircraft: **DC-8-62, -72**

ALC Mgr: Manuf: *McDonnell Douglas* Group Index:
 Wing Span: 148.4' Length: 157.5' Height: 43.25' Vert. Clr: 30.1"
 Pivot Pt: 39.3' Turn Radius: 69.5' 180° Turn Diameter: 222.4' Controlling Gear: *Nose*

Basic Empty Wt:	143.255	Basic Mis, T/O Wt:	315.0	Max T/O Wt :	350.0
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	240.0	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

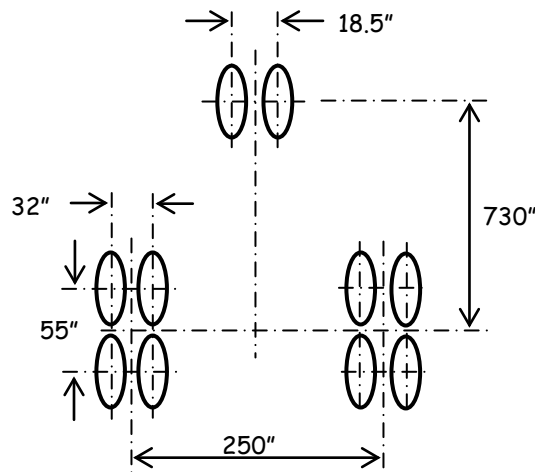
Gear: *FAA 2D, Two Dual Wheels in Tandem Main Gear with Dual Wheel Nose Gear*
 Number of Assemblies/Tires per Assembly: Nose: 1-2 Main: 2-4

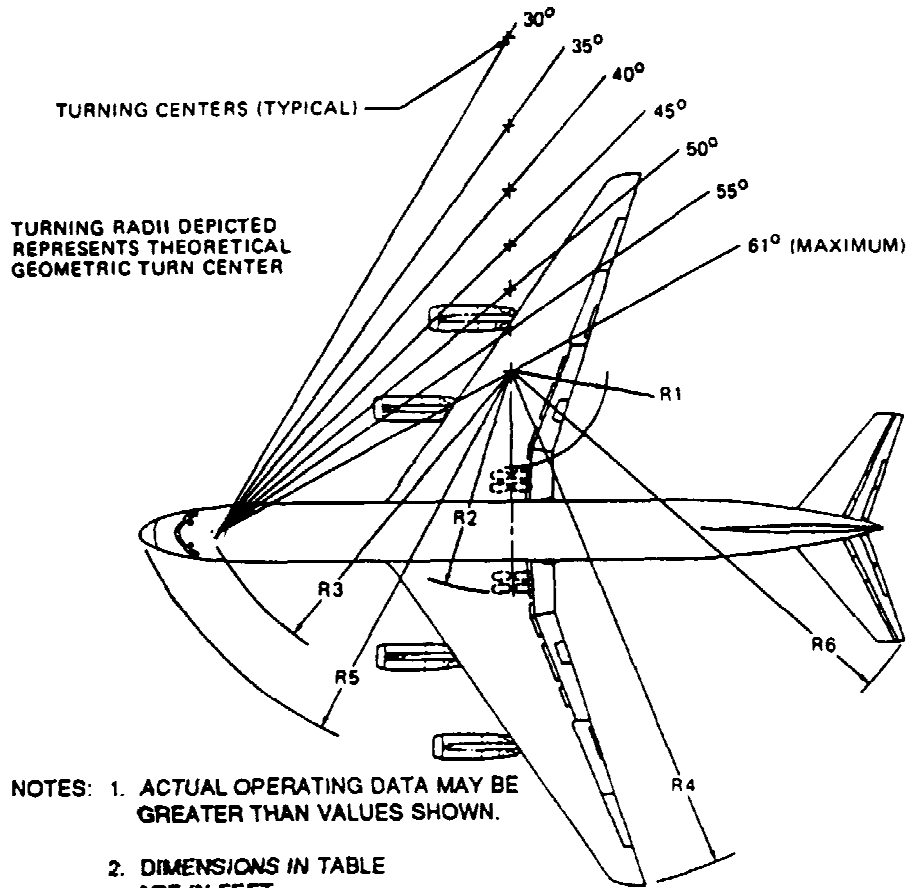
Main Gear:	% Gross Load on Assembly:	93.4	Max Assembly Load:	163.450
	Max Single Wheel Load:	40.863		
	Contact Pressure:	191	Contact Area:	213.94
	Footprint Width:	12.78"		

Nose Gear:	% Gross Load on Assembly:	6.6	Max Assembly Load:	23.100
	Max Single Wheel Load:	11.550		
	Contact Pressure:	174	Contact Area:	66.38
	Footprint Width:	7.12"		

Aircraft Classification Numbers (ACNs)

Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt 143.3	14.8	16.4	19.0	21.7	15.6	16.6	18.6	24.2
Max Wgt 350.0	46.0	55.8	65.1	72.0	48.8	55.5	66.4	82.2

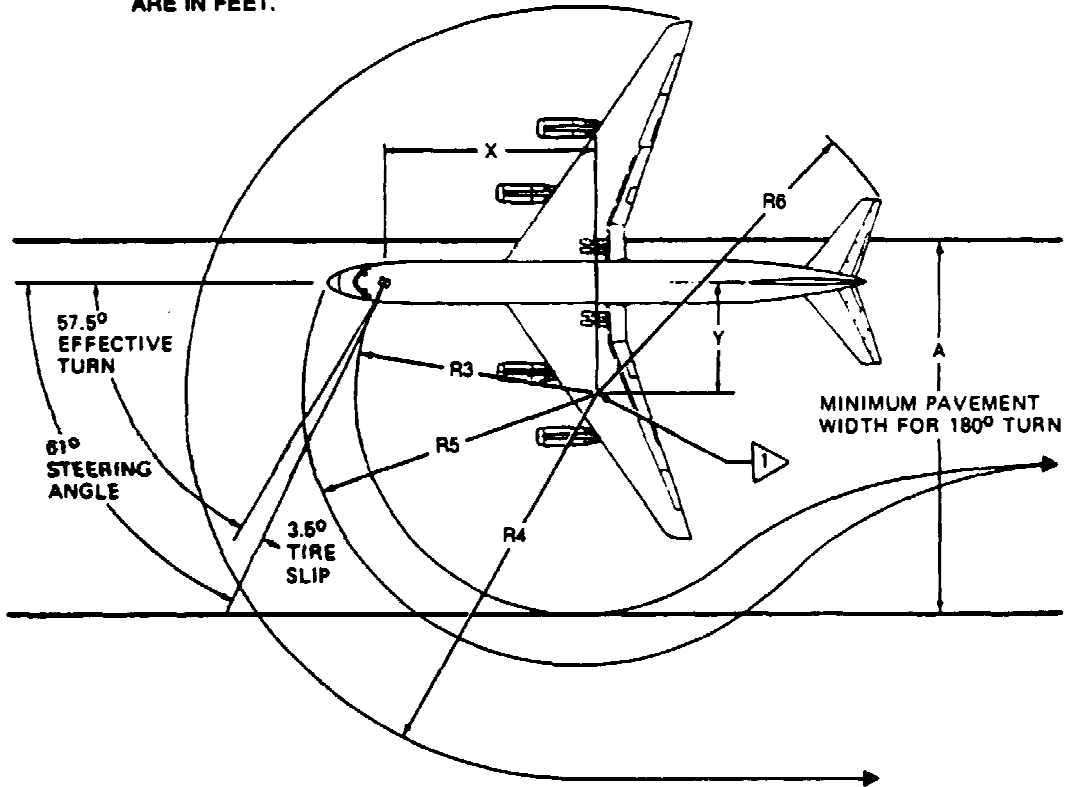




STEERING ANGLE (DEGREES)	R1	R2	R3	R4	R5	R6
20	164.7	179.6	177.8	242.6	183.9	207.2
25	118.0	142.9	143.9	208.4	151.3	174.0
30	92.9	117.8	121.6	181.5	130.3	152.2
35	74.4	98.3	106.0	163.3	115.9	136.9
40	60.1	84.9	94.6	148.1	105.6	125.6
45	48.4	73.3	86.0	137.7	97.9	116.9
50	38.8	63.5	78.4	128.1	92.2	110.0
55	30.2	55.0	74.2	119.8	87.8	104.4
61 (MAXIMUM)	21.3	46.2	69.5	111.2	83.8	99.0

McDonnell Douglas DC-8-62/-62F/-72/-72F,
 Turning Radii - No Slip Angle

- NOTES: 1. 3.5° SLIP ANGLE ASSUMED FOR 61.0° NOSE WHEEL DEFLECTION.
2. DIMENSIONS IN TABLE ARE IN FEET.



MEASUREMENTS INCLUDE DISTANCES TO OUTSIDE FACE OF NOSE AND MAIN LANDING GEAR TIRES.

△ THEORETICAL CENTER OF TURN FOR MINIMUM TURNING RADIUS. TURN INITIATED WITH AIRCRAFT IN MOTION, APPROXIMATELY IDLE THRUST ON ALL ENGINES WITH NO DIFFERENTIAL BRAKING.

X	Y	A	R3	R4	R5	R6
61.7	39.3	126.0	74.4	116.4	87.0	101.7

McDonnell Douglas DC-8-62/-62F/-72/-72F,
Minimum Turning Radii - 3.5° Slip Angle

Aircraft: **DC-8-62F, -72F**

ALC Mgr: Manuf: *McDonnell Douglas* Group Index:
 Wing Span: **148.4'** Length: **157.5'** Height: **43.38'** Vert. Clr: **30.1"**
 Pivot Pt: **39.3'** Turn Radius: **69.5'** 180° Turn Diameter: **222.4'** Controlling Gear: *Nose*

Basic Empty Wt:	138.560	Basic Mis, T/O Wt:	315.0	Max T/O Wt :	350.0
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	250.0	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

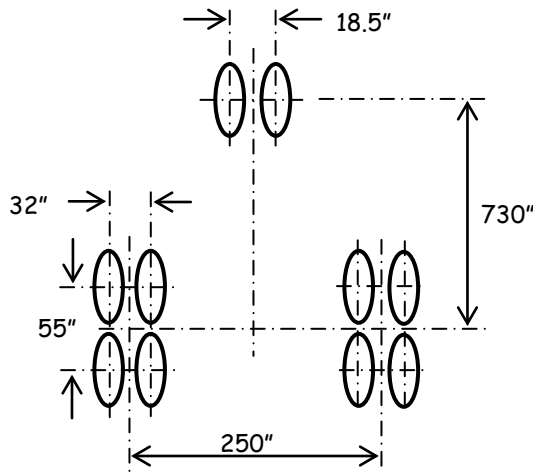
Gear: <i>FAA 2D, Two Dual Wheels in Tandem Main Gear with Dual Wheel Nose Gear</i>		
Number of Assemblies/Tires per Assembly:	Nose: 1-2	Main: 2-4

Main Gear:	% Gross Load on Assembly:	95.07	Max Assembly Load:	166.373
	Max Single Wheel Load:	41.593		
	Contact Pressure:	191	Contact Area:	217.77
	Footprint Width:	12.90"		

Nose Gear:	% Gross Load on Assembly:	4.93	Max Assembly Load:	17.255
	Max Single Wheel Load:	8.628		
	Contact Pressure:	174	Contact Area:	49.58
	Footprint Width:	6.15"		

Aircraft Classification Numbers (ACNs)

Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt 138.6	14.6	16.1	18.6	21.2	15.3	16.3	18.3	23.7
Max Wgt 350.0	47.3	56.9	66.6	73.8	50.0	57.0	68.1	84.1



Aircraft: **DC-8-63, -73**

ALC Mgr: Manuf: *McDonnell Douglas* Group Index:
 Wing Span: **148.4'** Length: **187.4'** Height: **43.0'** Vert. Clr: **30.7''**
 Pivot Pt: **38.8'** Turn Radius: **84.1'** 180° Turn Diameter: **220.8'** Controlling Gear: *Nose*

Basic Empty Wt:	158.738	Basic Mis, T/O Wt:	319.5	Max T/O Wt :	355.0
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	258.0	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

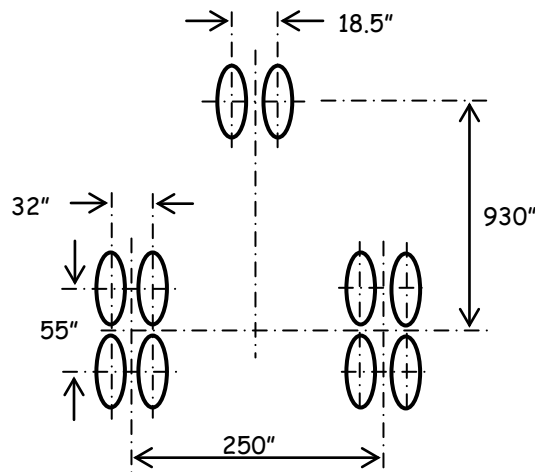
Gear: *FAA 2D, Two Dual Wheels in Tandem Main Gear with Dual Wheel Nose Gear*
 Number of Assemblies/Tires per Assembly: Nose: **1-2** Main: **2-4**

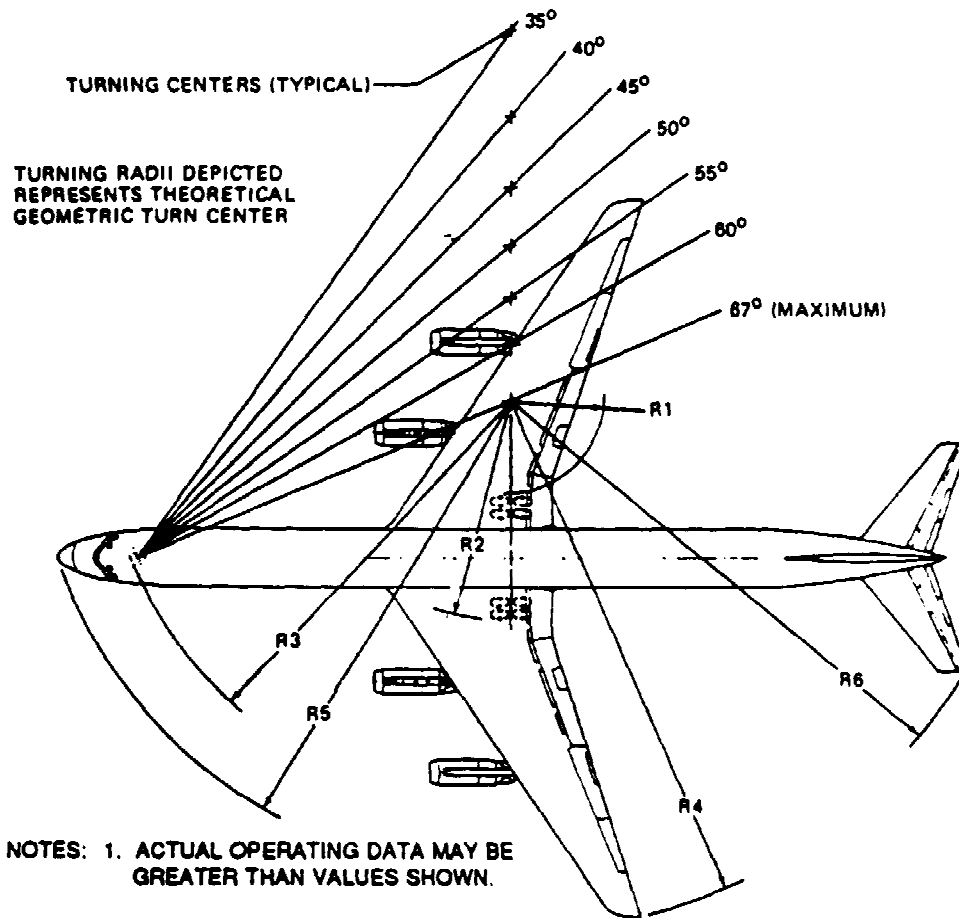
Main Gear:	% Gross Load on Assembly:	96.13	Max Assembly Load:	170.631
	Max Single Wheel Load:	42.658	Contact Area:	217.64
	Contact Pressure:	196	Footprint Width:	12.89''

Nose Gear:	% Gross Load on Assembly:	3.87	Max Assembly Load:	13.738
	Max Single Wheel Load:	6.869	Contact Area:	46.73
	Contact Pressure:	147	Footprint Width:	5.97''

Aircraft Classification Numbers (ACNs)

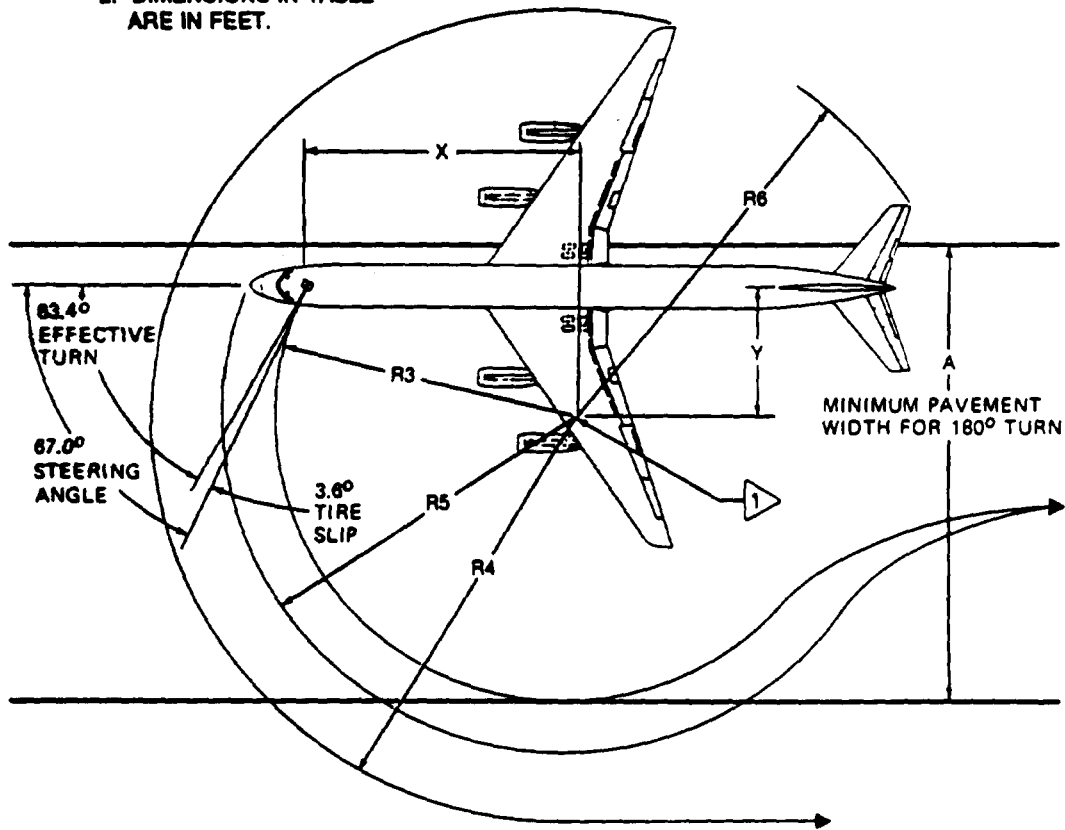
Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt 158.7	17.0	19.5	22.9	26.1	18.4	19.6	22.3	29.1
Max Wgt 355.0	49.6	59.6	69.3	76.8	51.9	59.3	70.6	86.9





STEERING ANGLE (DEGREES)	R1	R2	R3	R4	R5	R6
25	163.8	178.5	163.3	241.7	160.8	211.9
30	121.5	146.7	165.8	210.8	163.5	183.8
35	96.2	122.1	126.1	187.8	144.7	163.8
40	78.9	104.8	128.5	168.8	121.4	148.3
45	66.1	88.8	108.5	154.8	121.4	138.8
50	52.6	77.5	101.0	141.7	113.7	128.2
55	41.8	66.7	94.6	131.2	107.8	122.1
60	32.3	57.2	88.4	121.8	103.5	116.2
67 (MAXIMUM)	20.6	46.3	84.1	110.4	98.0	108.7

- NOTES: 1. 3.6° SLIP ANGLE ASSUMED FOR 67° NOSE WHEEL DEFLECTION.
2. DIMENSIONS IN TABLE ARE IN FEET.



MEASUREMENTS INCLUDE DISTANCES TO OUTSIDE FACE OF NOSE AND MAIN LANDING GEAR TIRES.

▷ THEORETICAL CENTER OF TURN FOR MINIMUM TURNING RADIUS. TURN INITIATED WITH AIRCRAFT IN MOTION, APPROXIMATELY IDLE THRUST ON ALL ENGINES WITH NO DIFFERENTIAL BRAKING.

X	Y	A	R3	R4	R5	R6
77.4	38.8	139.0	87.8	116.1	101.0	113.0

Aircraft: **DC-8-63F, -73F**

ALC Mgr: Manuf: *McDonnell Douglas* Group Index:
 Wing Span: *148.4'* Length: *187.4'* Height: *43.13'* Vert. Clr: *30.7''*
 Pivot Pt: *38.8'* Turn Radius: *84.1'* 180° Turn Diameter: *220.8'* Controlling Gear: *Nose*

Basic Empty Wt:	<i>141.330</i>	Basic Mis, T/O Wt:	<i>319.5</i>	Max T/O Wt :	<i>355.0</i>
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	<i>275.0</i>	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

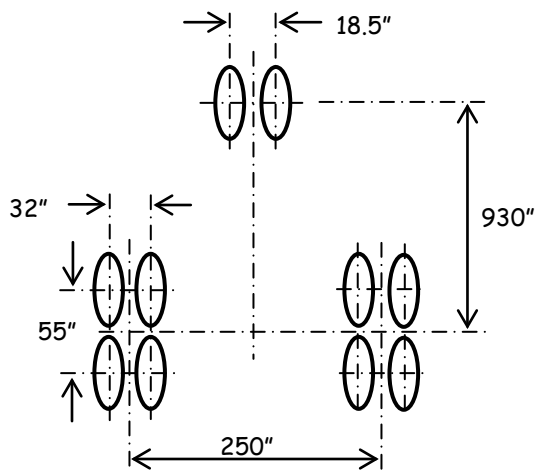
Gear: *FAA 2D, Two Dual Wheels in Tandem Main Gear with Dual Wheel Nose Gear*
 Number of Assemblies/Tires per Assembly: Nose: *1-2* Main: *2-4*

Main Gear:	% Gross Load on Assembly:	<i>96.13</i>	Max Assembly Load:	<i>170.631</i>
	Max Single Wheel Load:	<i>42.658</i>		
	Contact Pressure:	<i>196</i>	Contact Area:	<i>217.64</i>
	Footprint Width:	<i>12.89''</i>		

Nose Gear:	% Gross Load on Assembly:	<i>3.87</i>	Max Assembly Load:	<i>13.738</i>
	Max Single Wheel Load:	<i>6.869</i>		
	Contact Pressure:	<i>147</i>	Contact Area:	<i>46.73</i>
	Footprint Width:	<i>5.97''</i>		

Aircraft Classification Numbers (ACNs)

Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt <i>141.3</i>	<i>15.0</i>	<i>16.8</i>	<i>19.5</i>	<i>22.3</i>	<i>16.0</i>	<i>17.0</i>	<i>19.0</i>	<i>24.7</i>
Max Wgt <i>355.0</i>	<i>49.6</i>	<i>59.6</i>	<i>69.3</i>	<i>76.8</i>	<i>51.9</i>	<i>59.3</i>	<i>70.6</i>	<i>86.9</i>



Aircraft: ***DC-9-15, -15F***

ALC Mgr: Manuf: *McDonnell Douglas* Group Index:
 Wing Span: *116.4'* Length: *104.4'* Height: *27.58'* Vert. Clr: *36.0"*
 Pivot Pt: *8.5'* Turn Radius: *44.9'* 180° Turn Diameter: *117.0'* Controlling Gear: *Nose*

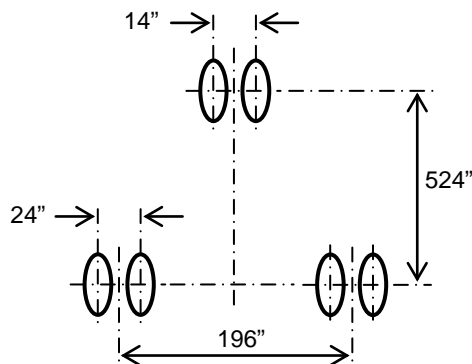
Basic Empty Wt:	<i>49.162</i>	Basic Mis, T/O Wt:	<i>81.630</i>	Max T/O Wt :	<i>90.70</i>
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	<i>81.70</i>	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

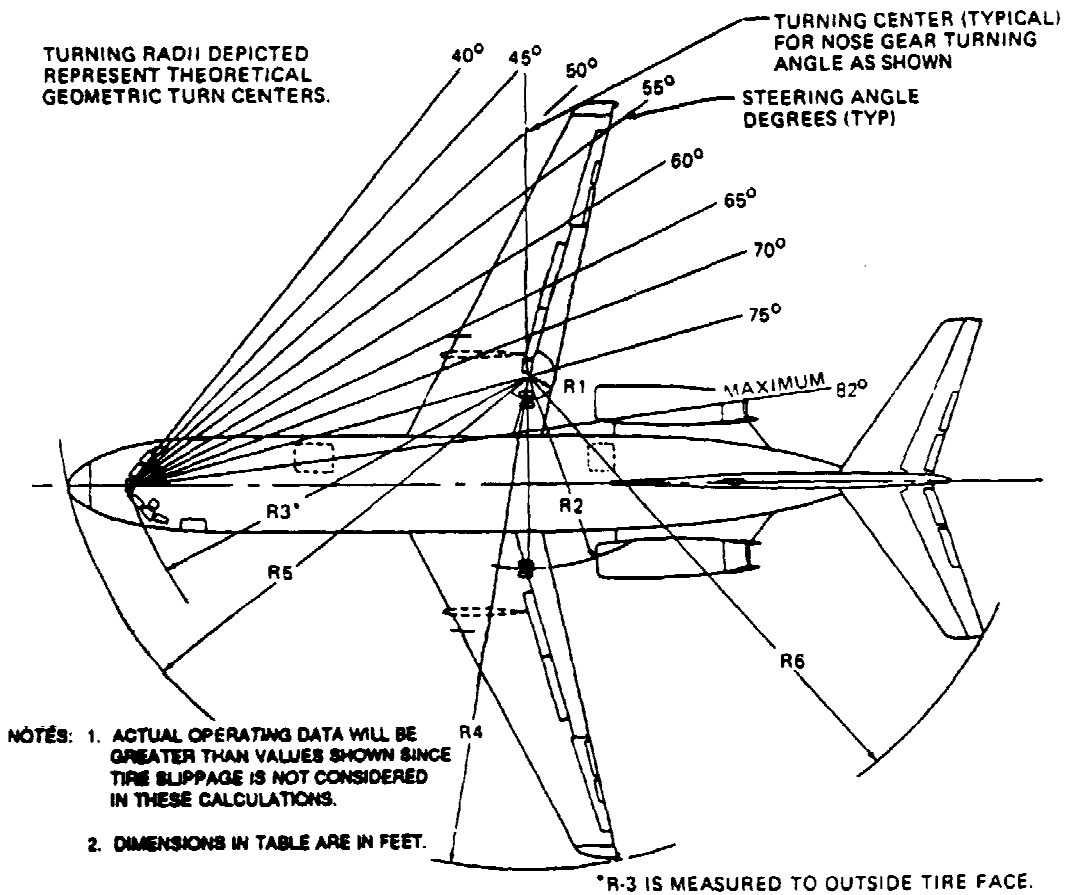
Gear: *FAA D Dual Wheel Main Gear with Dual Wheel Nose Gear*
 Number of Assemblies/Tires per Assembly: Nose: *1-2* Main: *2-2*

Main Gear:	% Gross Load on Assembly:	<i>92.76</i>	Max Assembly Load:	<i>42.067</i>
	Max Single Wheel Load:	<i>21.033</i>	Contact Area:	<i>161.79</i>
	Contact Pressure:	<i>130</i>	Footprint Width:	<i>11.12"</i>
	Footprint Width:	<i>11.12"</i>		

Nose Gear:	% Gross Load on Assembly:	<i>7.24</i>	Max Assembly Load:	<i>6.567</i>
	Max Single Wheel Load:	<i>3.283</i>	Contact Area:	<i>27.82</i>
	Contact Pressure:	<i>118</i>	Footprint Width:	<i>4.61"</i>
	Footprint Width:	<i>4.61"</i>		

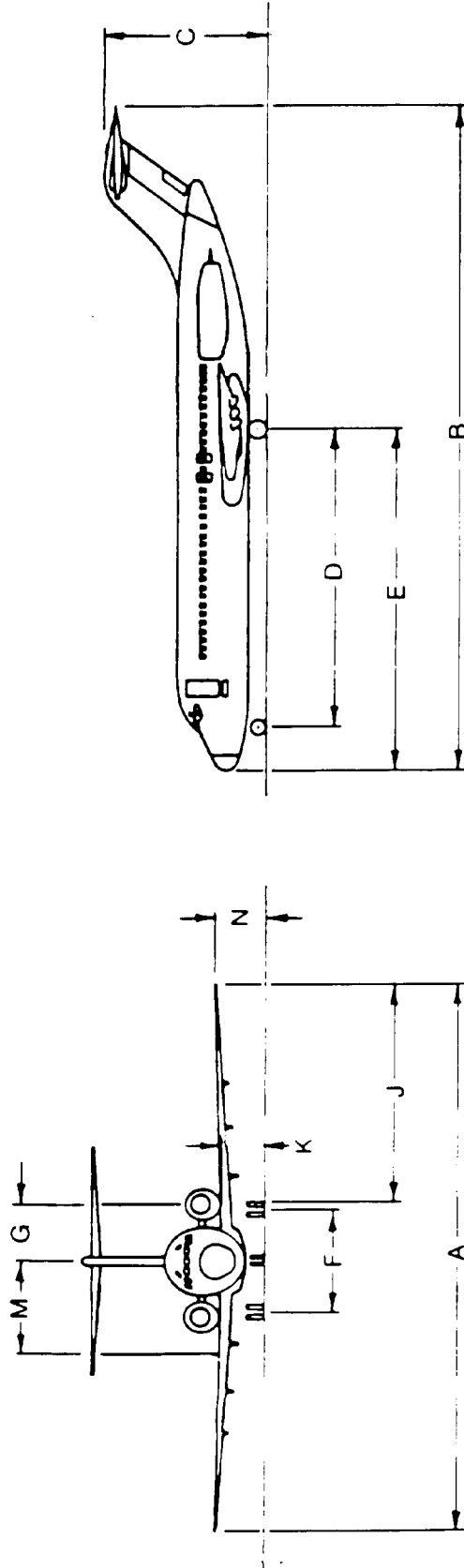
Aircraft Classification Numbers (ACNs)									
Aircraft Weight		Rigid Pavement Subgrades				Flexible Pavement Subgrades			
		High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt	<i>49.2</i>	<i>10.9</i>	<i>11.9</i>	<i>12.7</i>	<i>13.3</i>	<i>9.9</i>	<i>10.6</i>	<i>11.7</i>	<i>13.9</i>
Max Wgt	<i>90.7</i>	<i>22.9</i>	<i>24.7</i>	<i>26.3</i>	<i>27.0</i>	<i>20.7</i>	<i>22.2</i>	<i>25.5</i>	<i>28.2</i>

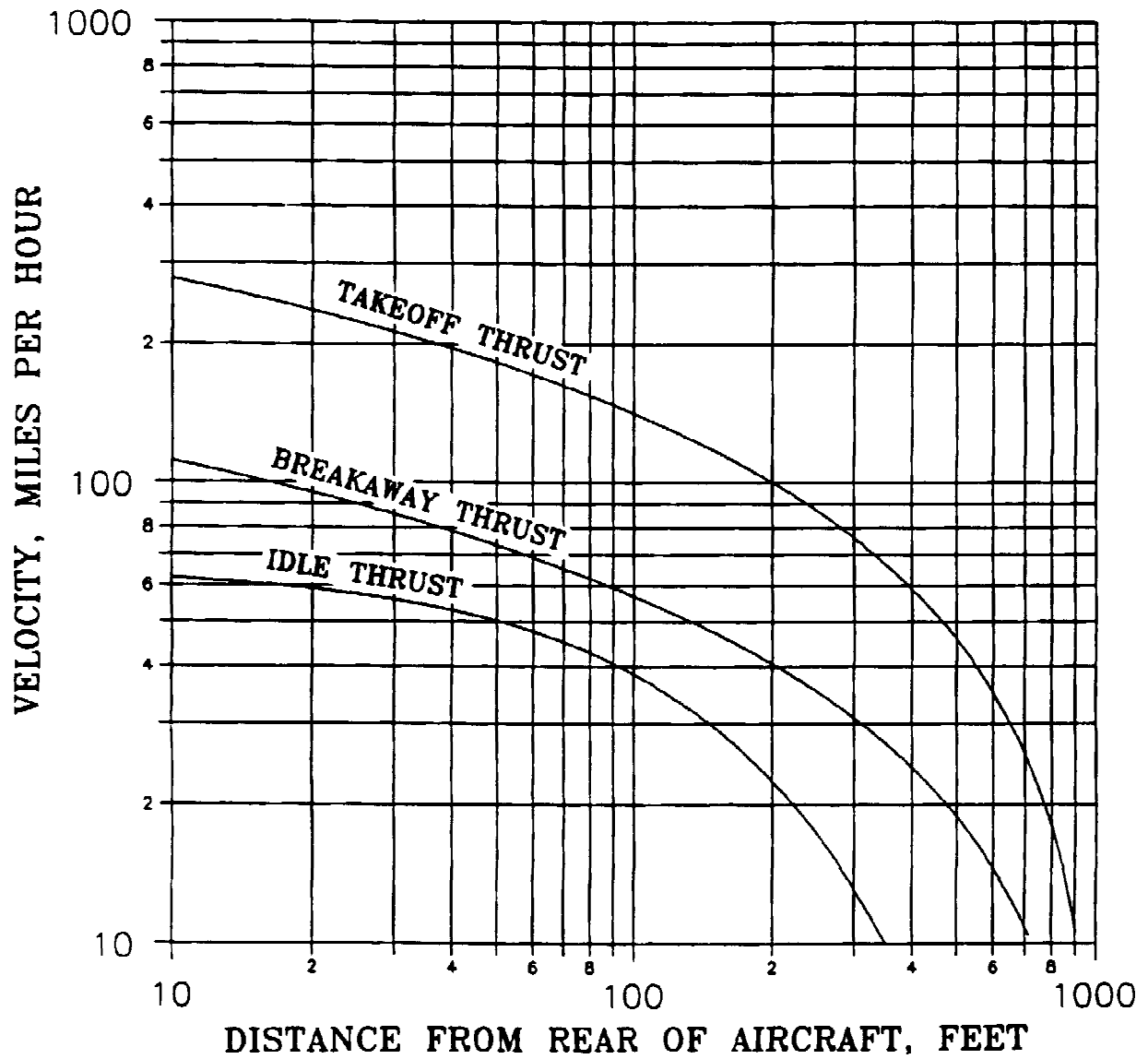




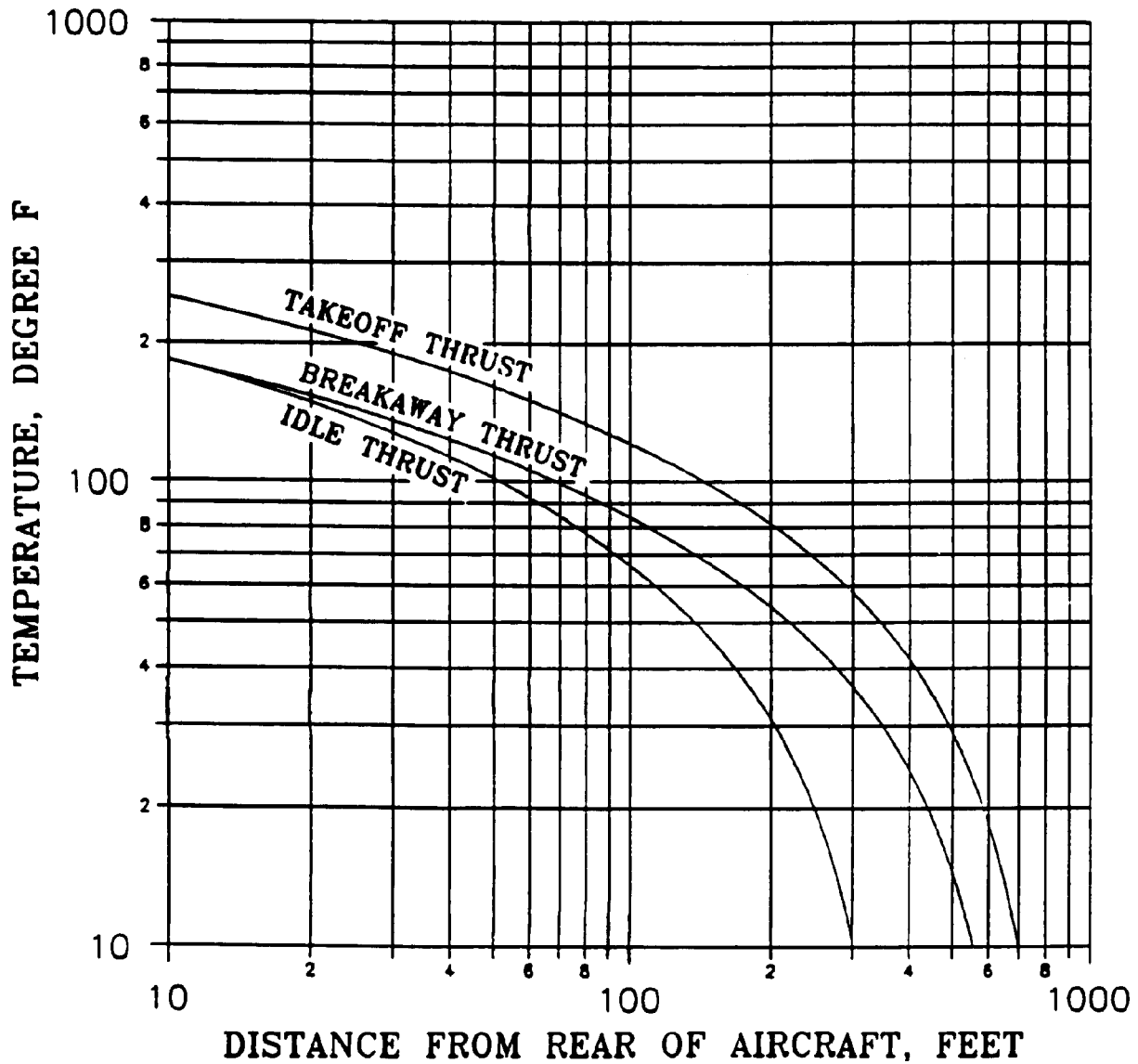
STEERING ANGLE (DEGREES)	R1	R2	R3°	R4	R5	R6
30	67.5	83.8	88.1	120.9	91.4	108.0
45	35.5	51.8	62.6	89.2	67.3	81.7
50	28.5	44.8	57.8	82.2	63.0	76.5
55	22.4	38.7	54.1	76.2	59.7	72.3
60	17.0	33.4	51.2	70.9	57.1	68.8
65	12.2	28.5	48.0	66.1	55.1	65.8
70	7.7	24.1	47.3	61.8	53.7	63.3
75	3.5	19.9	46.0	57.7	52.6	61.1
82 (MAXIMUM)	-2.0	14.3	44.9	52.2	51.6	58.6

MODEL	MAXIMUM TIRE PRESSURE, PSI		A	B	C	D	E	F	G	J	K	M	N
	MAIN GEAR	NOSE GEAR											
15	130	118	89.4	104.4	27.6	43.7	51.3	16.1	8.9	35.0	6.4	8.5	7.2
15F	130	118	89.4	104.4	27.6	43.7	51.3	16.4	8.9	35.0	6.4	8.5	7.2
21	143	131	93.3	104.4	27.4	43.7	51.3	16.4	8.9	36.9	6.4	8.5	7.3
32	155	140	93.3	119.3	27.8	53.2	60.8	16.4	8.9	36.9	6.4	10.3	7.3
33F	155	140	93.3	119.3	27.8	53.2	60.8	16.4	8.9	36.9	6.4	10.3	7.3
41	160	148	93.3	125.6	28.4	56.2	63.7	16.4	8.9	37.0	6.9	10.9	7.2
51	172	157	93.3	133.6	28.8	60.9	68.5	16.0	8.9	37.0	6.8	11.8	7.1
81	170	155	107.8	147.8	30.3	72.4	80.0	16.7	8.9	43.6	7.5	14.0	8.6
82, 88	184	170											
83	195	170											
87	184	192	107.8	130.4	31.3	62.9	70.5	16.7	8.9	43.6	7.5	12.2	8.7





McDonnell Douglas DC-9-15/-15F/-21/-32/-33F/
-41/-51, Velocity - Distance Curves



Aircraft: **DC-9-21**

ALC Mgr: Manuf: *McDonnell Douglas* Group Index:

Wing Span: **93.3'** Length: **104.4'** Height: **27.42'** Vert. Clr: **36.0"**

Pivot Pt: **8.5'** Turn Radius: **44.9'** 180° Turn Diameter: **117.0'** Controlling Gear: *Nose*

Basic Empty Wt:	52.644	Basic Mis, T/O Wt:	88.20	Max T/O Wt :	98.0
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	95.30	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

Gear: *FAA D Dual Wheel Main Gear with Dual Wheel Nose Gear*

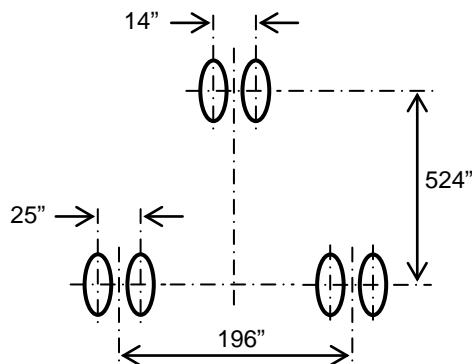
Number of Assemblies/Tires per Assembly: Nose: **1-2** Main: **2-2**

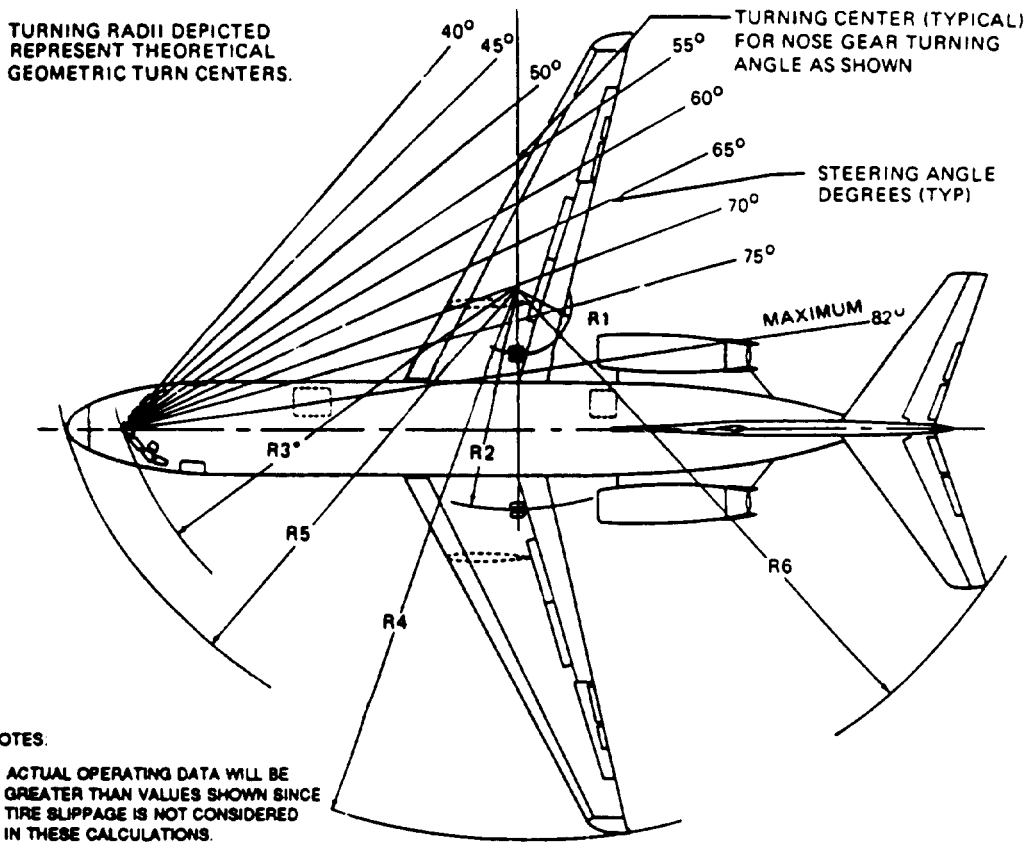
Main Gear:	% Gross Load on Assembly:	94.35	Max Assembly Load:	46.232
	Max Single Wheel Load:	23.116		
	Contact Pressure:	143	Contact Area:	161.65
	Footprint Width:	11.11"		

Nose Gear:	% Gross Load on Assembly:	5.65	Max Assembly Load:	5.537
	Max Single Wheel Load:	2.768		
	Contact Pressure:	131	Contact Area:	21.13
	Footprint Width:	4.02"		

Aircraft Classification Numbers (ACNs)

Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt 52.6	12.2	13.3	14.1	14.8	11.2	11.6	12.9	15.2
Max Wgt 98.0	25.8	27.8	29.3	30.3	23.3	24.7	28.3	31.1





STEERING ANGLE (DEGREES)	R1	R2	R3°	R4	R5	R6
30	67.5	63.8	88.1	122.9	91.4	106.0
45	35.5	51.8	62.6	91.2	67.3	81.7
60	28.5	44.8	57.8	84.2	63.0	76.5
65	22.4	38.8	54.1	78.2	59.7	72.3
70	17.0	33.4	51.2	72.8	57.1	68.7
75	12.2	28.5	48.0	68.2	55.1	65.8
82 (MAXIMUM)	7.7	24.1	47.3	63.8	53.7	63.2
	3.5	19.9	46.0	59.7	52.6	61.1
	-2.0	14.3	44.9	54.2	51.6	58.5

McDonnell Douglas DC-9-21, Turning Radii - No Slip Angle

Aircraft: **DC-9-32, -33F**

ALC Mgr: Manuf: *McDonnell Douglas* Group Index:
 Wing Span: **93.3'** Length: **119.3'** Height: **27.75'** Vert. Clr: **36.0"**
 Pivot Pt: **10.3'** Turn Radius: **54.5'** 180° Turn Diameter: **128.0'** Controlling Gear: *Nose*

Basic Empty Wt:	56.430	Basic Mis, T/O Wt:	97.2	Max T/O Wt :	108.0
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	99.0	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

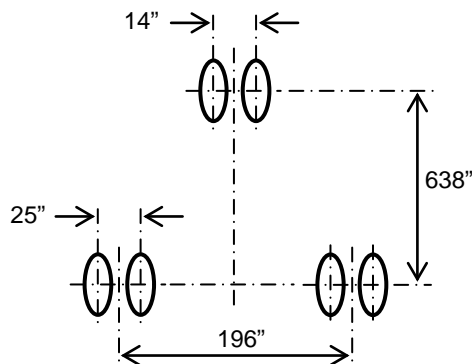
Gear: <i>FAA D Dual Wheel Main Gear with Dual Wheel Nose Gear</i>		
Number of Assemblies/Tires per Assembly:	Nose: 1-2	Main: 2-2

Main Gear:	% Gross Load on Assembly:	92.4	Max Assembly Load:	49.896
	Max Single Wheel Load:	24.948		
	Contact Pressure:	155	Contact Area:	160.95
	Footprint Width:	11.09"		

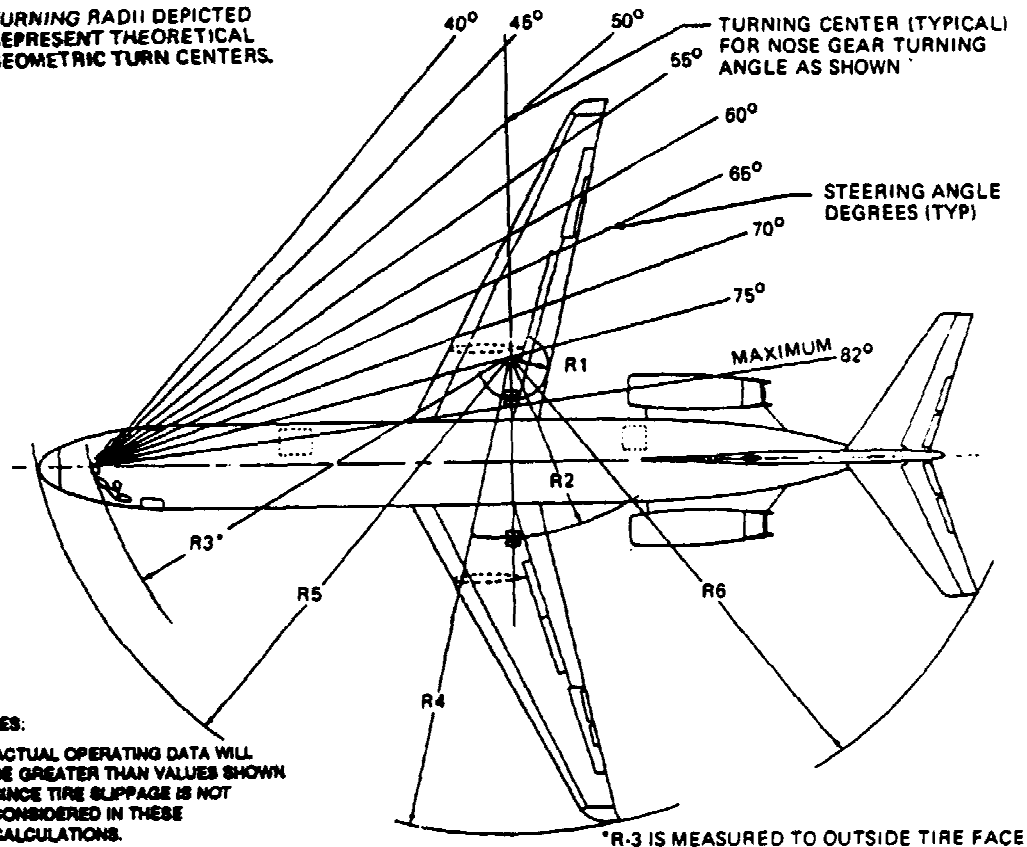
Nose Gear:	% Gross Load on Assembly:	7.60	Max Assembly Load:	8.208
	Max Single Wheel Load:	4.104		
	Contact Pressure:	140	Contact Area:	29.31
	Footprint Width:	4.73"		

Aircraft Classification Numbers (ACNs)

Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt 56.4	13.3	14.3	15.3	15.8	12.1	12.4	13.8	16.1
Max Wgt 108.0	28.9	31.1	32.6	33.5	26.1	27.5	31.2	33.9



TURNING RADII DEPICTED
REPRESENT THEORETICAL
GEOMETRIC TURN CENTERS.



NOTES:

1. ACTUAL OPERATING DATA WILL
BE GREATER THAN VALUES SHOWN
SINCE TIRE SLIPPAGE IS NOT
CONSIDERED IN THESE
CALCULATIONS.

2. DIMENSIONS IN TABLE
ARE IN FEET.

STEERING ANGLE (DEGREES)	R1	R2	R3°	R4	R5	R6
30	83.8	100.3	107.1	130.3	110.3	125.0
45	45.8	61.3	78.0	100.6	80.7	92.5
50	36.4	52.8	70.2	92.1	75.4	86.0
55	29.1	45.4	65.7	84.8	71.2	80.8
60	22.8	38.9	62.2	78.3	68.1	78.4
65	16.8	33.0	59.5	72.5	65.6	72.8
70	11.2	27.5	57.4	67.2	63.8	68.7
75	6.1	22.4	55.8	62.2	62.4	67.0
82 (MAXIMUM)	-0.7	15.6	54.5	56.5	61.2	64.0

Aircraft: DC-9-41

ALC Mgr:

Manuf: *McDonnell Douglas*

Group Index:

Wing Span: **93.3'**Length: **125.6'**Height: **28.42'**Vert. Clr: **36.0"**Pivot Pt: **10.9'**Turn Radius: **57.5'**180^o Turn Diameter: **134.4'**Controlling Gear: **Nose**

Basic Empty Wt: 61.335	Basic Mis, T/O Wt: 102.6	Max T/O Wt: 114.0
Basic Mis. Ldg. Wt:	Max Ldg. Wt: 102.0	T/O Dist:
T/O Dist. (50'):	Ldg. Dist:	Ldg. Dist. (50'):

Gear: *FAA D Dual Wheel Main Gear with Dual Wheel Nose Gear*

Number of Assemblies/Tires per Assembly:

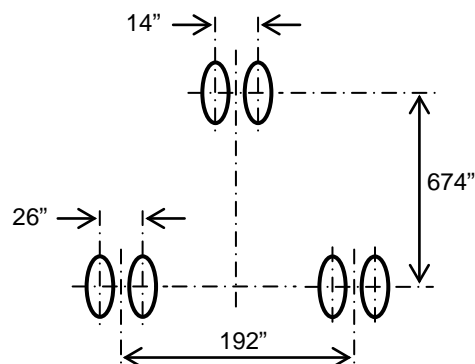
Nose: **1-2**Main: **2-2**

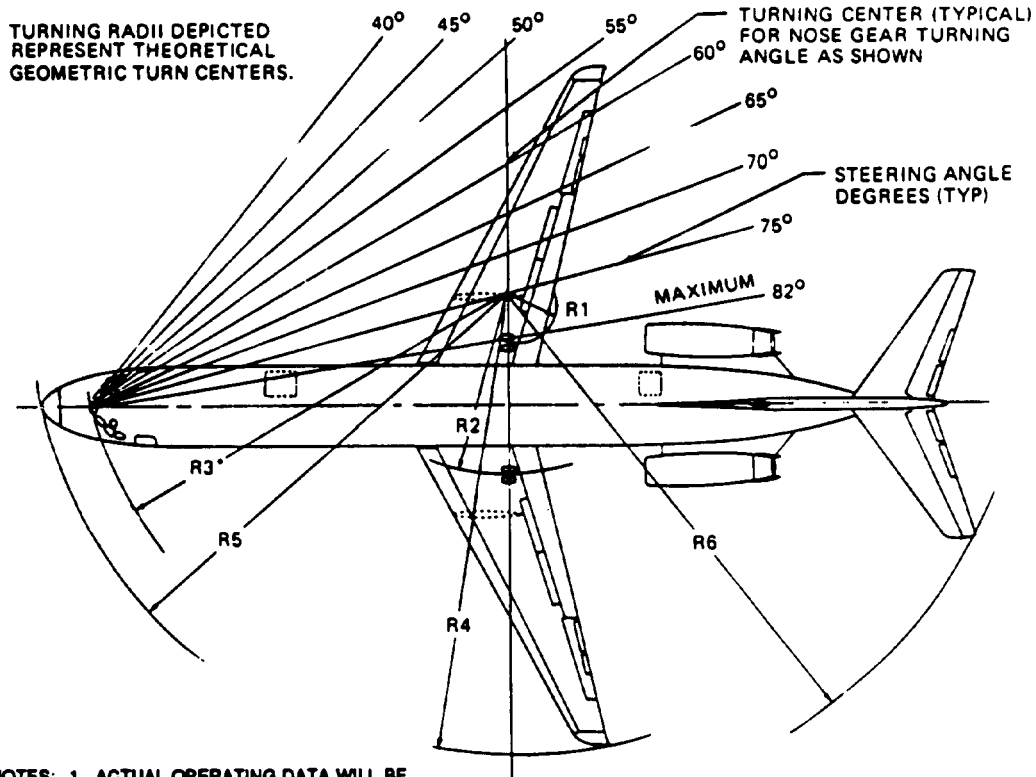
Main Gear:	% Gross Load on Assembly: 93.59	Max Assembly Load: 53.346
	Max Single Wheel Load: 26.673	
	Contact Pressure: 160	Contact Area: 166.71
	Footprint Width: 11.11"	

Nose Gear:	% Gross Load on Assembly: 6.41	Max Assembly Load: 7.307
	Max Single Wheel Load: 3.654	
	Contact Pressure: 148	Contact Area: 24.69
	Footprint Width: 4.34"	

Aircraft Classification Numbers (ACNs)

Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt 61.3	14.7	15.9	16.9	17.6	13.4	13.8	15.2	17.8
Max Wgt 114.0	31.1	33.2	34.9	35.7	28.0	29.4	33.3	31.1





NOTES: 1. ACTUAL OPERATING DATA WILL BE GREATER THAN VALUES SHOWN SINCE TIRE SLIPPAGE IS NOT CONSIDERED IN THESE CALCULATIONS.

*R-3 IS MEASURED TO OUTSIDE TIRE FACE

2. DIMENSIONS IN TABLE ARE IN FEET.

STEERING ANGLE (DEGREES)	R1	R2	R3*	R4	R5	R6
30	89.3	106.3	113.2	144.6	116.4	131.2
45	48.2	64.2	80.3	103.6	85.0	96.9
50	39.1	55.2	74.2	94.6	79.3	90.1
55	31.3	47.4	69.4	86.9	74.9	84.6
60	24.4	40.4	65.7	80.1	71.6	80.1
65	18.2	34.2	62.8	73.9	68.9	76.3
70	12.4	28.5	60.6	68.3	67.0	73.0
75	7.1	23.1	59.0	63.0	65.5	70.3
82 (MAXIMUM)	-0.1	15.9	57.5	56.0	64.3	67.2

Aircraft: **DC-9-51**

ALC Mgr: Manuf: *McDonnell Douglas* Group Index:

Wing Span: 93.35' Length: 133.58' Height: 28.75' Vert. Clr: 36.0"

Pivot Pt: 11.8' Turn Radius: 62.4' 180° Turn Diameter: 141.0' Controlling Gear: Nose

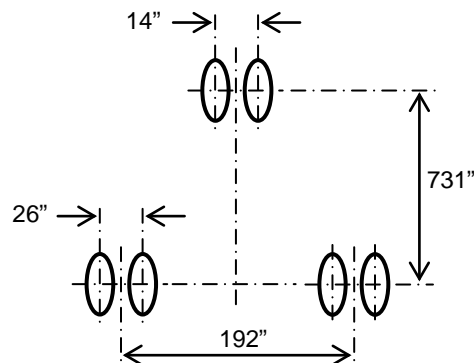
Basic Empty Wt:	64.675	Basic Mis, T/O Wt:	108.9	Max T/O Wt :	121.0
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	110.0	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

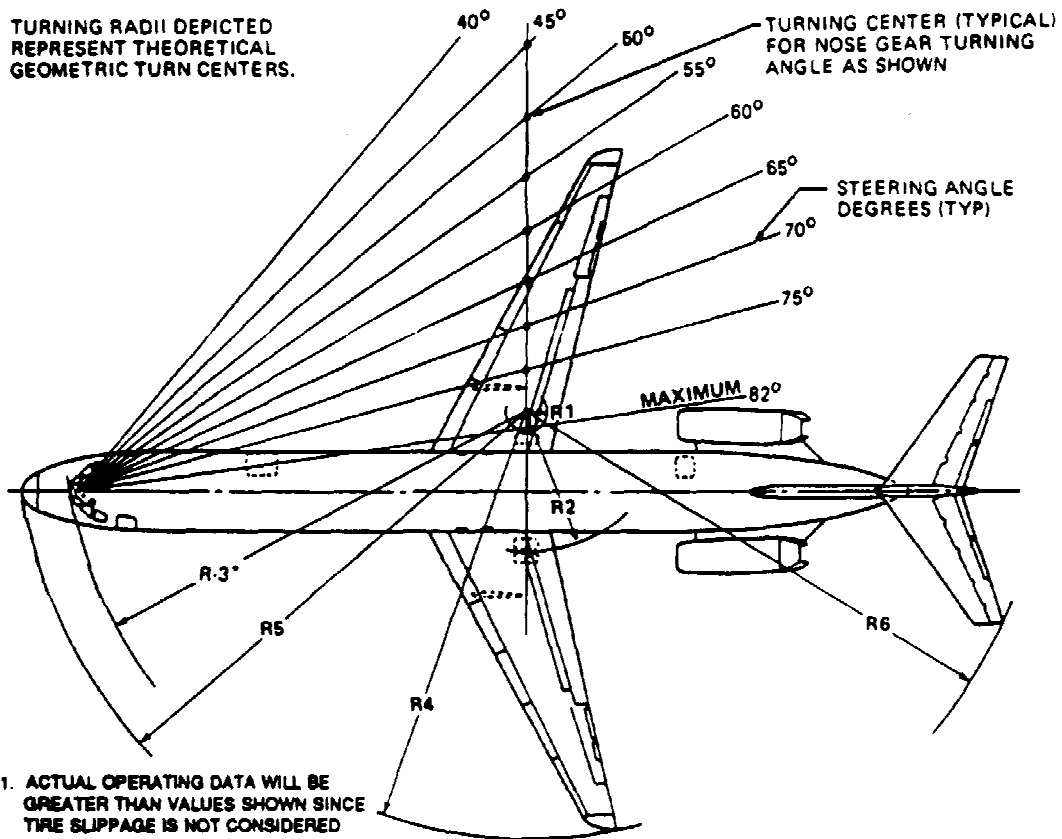
Gear: <i>FAA D Dual Wheel Main Gear with Dual Wheel Nose Gear</i>		
Number of Assemblies/Tires per Assembly:	Nose: 1-2	Main: 2-2

Main Gear:	% Gross Load on Assembly:	93.94	Max Assembly Load:	56.834
	Max Single Wheel Load:	28.417	Contact Area:	165.21
	Contact Pressure:	172	Footprint Width:	11.23"
	Footprint Width:	11.23"		

Nose Gear:	% Gross Load on Assembly:	6.06	Max Assembly Load:	7.333
	Max Single Wheel Load:	3.666	Contact Area:	23.35
	Contact Pressure:	157	Footprint Width:	4.22"
	Footprint Width:	4.22"		

Aircraft Classification Numbers (ACNs)									
Aircraft Weight		Rigid Pavement Subgrades				Flexible Pavement Subgrades			
		High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt	64.7	16.2	17.3	18.3	19.0	14.6	14.9	16.4	19.1
Max Wgt	121.0	34.3	36.6	38.2	39.0	30.3	32.0	36.1	38.9





NOTES: 1. ACTUAL OPERATING DATA WILL BE GREATER THAN VALUES SHOWN SINCE TIRE SLIPPAGE IS NOT CONSIDERED IN THESE CALCULATIONS.

2. DIMENSIONS IN TABLE ARE IN FEET.

*R-3 IS MEASURED TO OUTSIDE TIRE FACE

STEERING ANGLE (DEGREES)	R1	R2	R3*	R4	R5	R6
30	97.8	113.5	122.7	163.8	125.8	140.0
45	62.9	68.9	87.0	109.0	91.8	102.8
50	43.1	59.1	80.4	100.3	85.4	95.3
55	34.8	50.8	75.2	82.1	80.7	88.3
60	27.2	43.2	71.2	84.8	77.0	84.3
65	20.4	38.4	68.1	78.3	74.1	80.2
70	14.2	30.2	65.7	72.4	72.0	76.7
75	8.3	24.3	63.8	68.8	70.4	73.8
82 (MAXIMUM)	0.6	18.6	62.4	68.6	69.0	70.6

Aircraft: ***DC-10-10, -10CF***

ALC Mgr: Manuf: *McDonnell Douglas* Group Index:
Wing Span: 155.33' Length: 182.26' Height: 58.42' Vert. Clr: 33.0"
Pivot Pt: 27.0' Turn Radius: 78.2' 180° Turn Diameter: 224.8' Controlling Gear: *Nose*

Basic Empty Wt:	270.171	Basic Mis, T/O Wt:		Max T/O Wt:	440.0
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	363.50	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

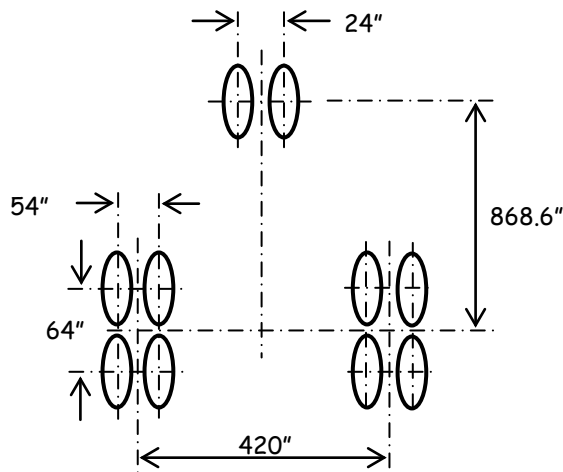
Gear: <i>FAA 2D Two Dual Wheels in Tandem Main Gear with Dual Wheel Nose Gear</i>		
Number of Assemblies/Tires per Assembly:	Nose: 1-2	Main: 2-4

Main Gear:	% Gross Load on Assembly:	93.31	Max Assembly Load:	205.282
	Max Single Wheel Load:	51.320		
	Contact Pressure:	195	Contact Area:	263.18
	Footprint Width:	14.18"		

Nose Gear:	% Gross Load on Assembly:	6.69	Max Assembly Load:	29.436
	Max Single Wheel Load:	14.718		
	Contact Pressure:	165	Contact Area:	89.2
	Footprint Width:	8.25"		

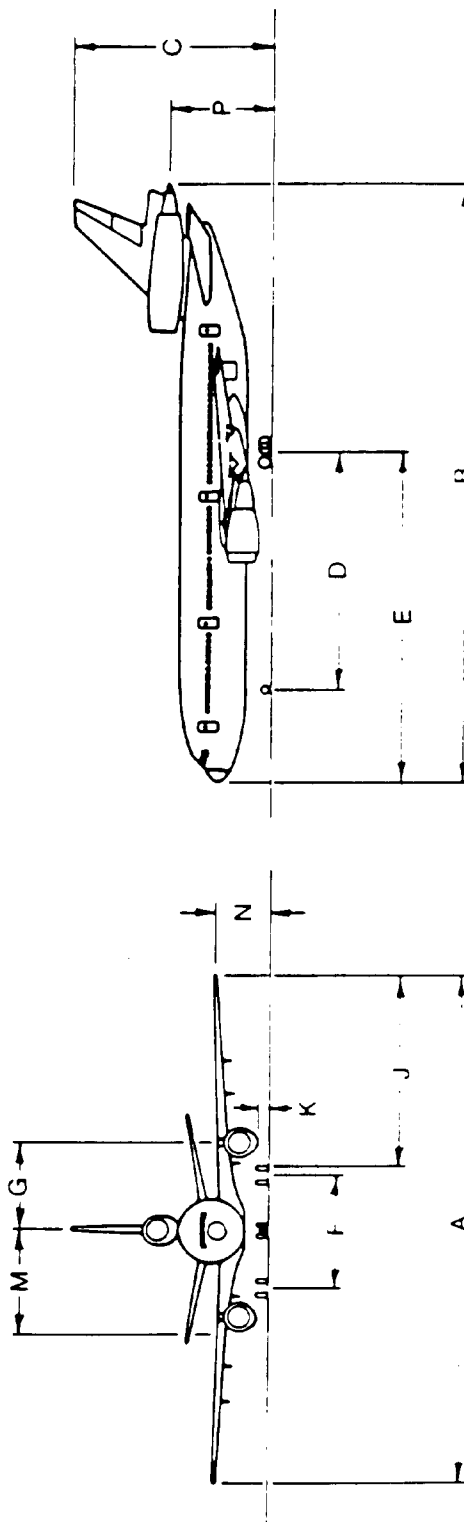
Aircraft Classification Numbers (ACNs)

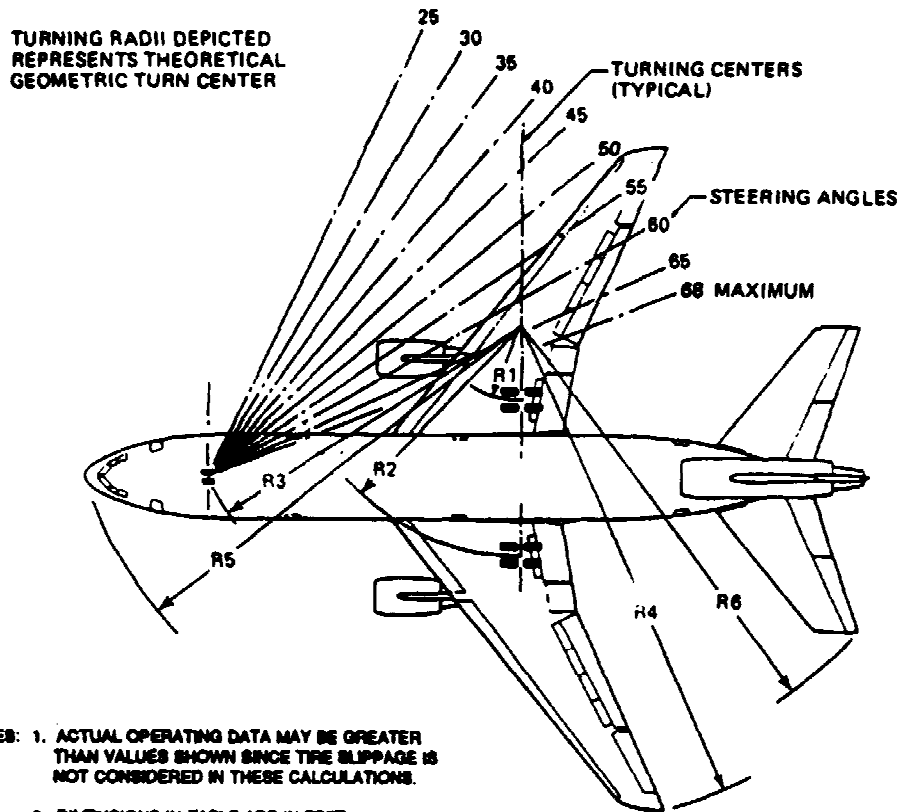
Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt 240.2	22.9	24.7	28.3	32.5	25.3	26.6	29.4	37.5
Max Wgt 440.0	45.4	53.5	63.9	73.8	52.9	57.6	67.8	93.4



MODEL	MAXIMUM TIRE PRESSURE, PSI		A	B	C	D	E	F	G	J	K	M	N	P
	MAIN GEAR	NOSE GEAR												
10	195	165	155.3	182.3	58.4	72.4	100.3	35.0	26.8	57.1	2.8	27.0	14.4	29.6
30	177	185	165.3	181.6	58.6	72.4	100.3	35.0	26.8	62.1	2.8	27.6	14.3	29.5
40	177	185	165.3	182.3	58.6	72.4	100.3	35.0	26.8	62.1	2.8	27.6	14.3	29.5

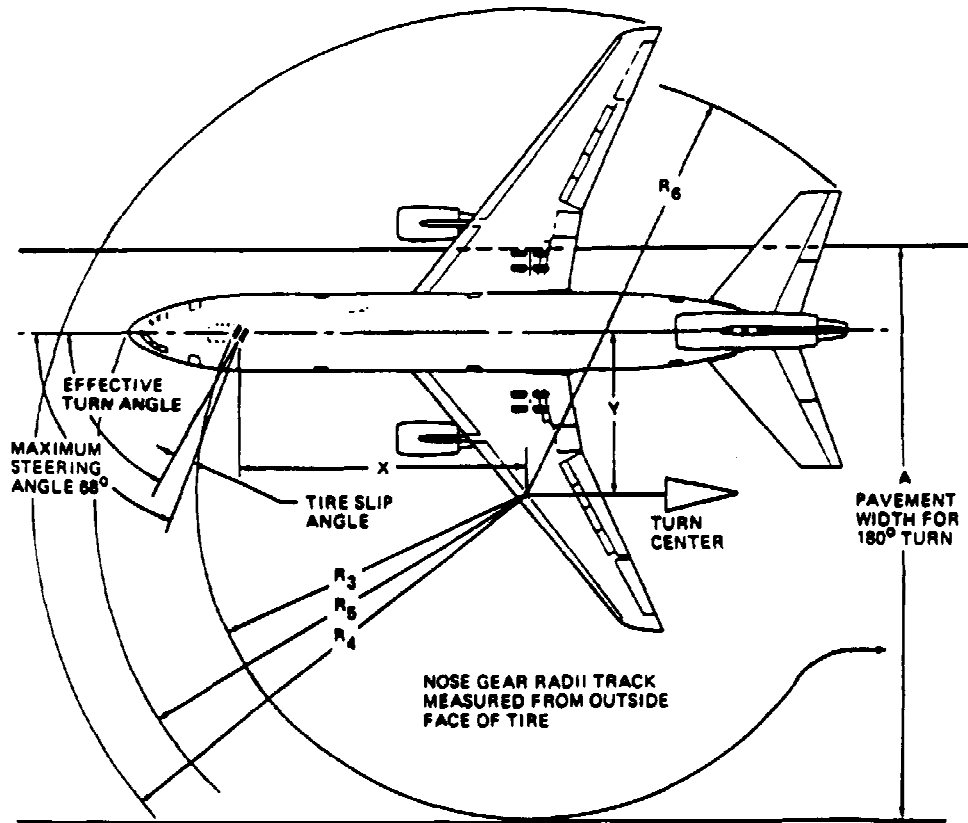
NOTE MODEL 30 AND 40 ARE EQUIPPED WITH CENTERLINE TWIN TIRES IN MAIN GEAR VICINITY THESE TWIN TIRES HAVE PRESSURES OF 153 PSI





STEERING ANGLE (DEGREES)	R1	R2	R3	R4	R5	R6
25	196.2	172.9	171.8	236.7	186.1	206.2
30	168.3	142.9	146.0	206.2	160.8	178.8
35	82.2	130.9	126.4	184.6	144.2	169.2
40	66.1	103.8	112.8	167.7	132.6	144.6
45	66.2	89.9	102.6	154.1	123.8	133.0
50	43.6	78.2	94.7	142.6	117.4	123.7
55	33.4	68.1	86.6	133.0	112.5	116.9
60	24.6	59.2	83.7	124.4	106.8	109.6
65	16.5	51.2	80.0	116.7	105.9	104.0
68 (MAXIMUM)	12.0	46.6	78.2	112.4	104.6	101.0

McDonnell Douglas DC-10-10,
Turning Radii - No Slip Angle

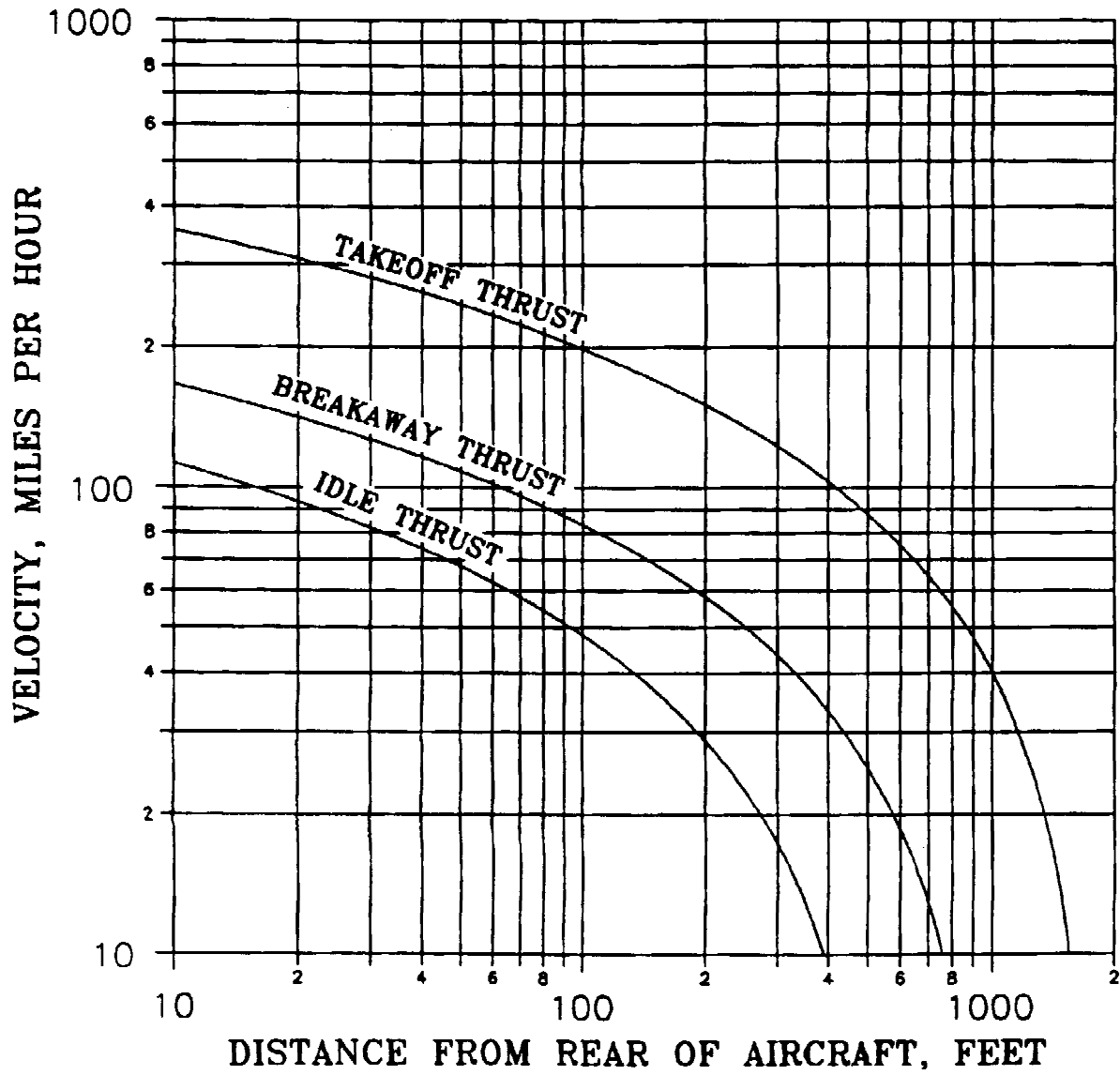


- 1** MAXIMUM STEERING:
SYMMETRICAL THRUST AND
NO DIFFERENTIAL BRAKING
SLOW CONTINUOUS TURN
AFT CENTER OF GRAVITY
MAX GROSS WEIGHT
- 2** MAXIMUM STEERING:
UNSYMMETRICAL THRUST AND
LIGHT DIFFERENTIAL BRAKING
SLOW CONTINUOUS TURN
AFT CENTER OF GRAVITY
MAX GROSS WEIGHT
- 3** MINIMUM RADIUS TURN RECOMMENDED
FOR NORMAL, ROUTINE OPERATIONS.
LIMITED TO AVOID EXCESSIVE TIRE
WEAR AND REDUCTION OF LANDING
GEAR FATIGUE LIFE.

TYPE OF TURN	EFFECTIVE TURN ANGLE	TIRE SLIP ANGLE	X	Y	A	R ₃	R ₄	R ₅	R ₆
1	81.7°	6.3°	72.5	39.0	143.5	83.9	121.7	107.6	107.5
2	89.6°	-1.5°	72.5	27.0	126.6	79.8	110.4	103.8	99.7
3	.	.	72.5	39.5	144.3	84.1	122.2	109.0	107.9

NOTE: DIMENSIONS ARE IN FEET.

McDonnell Douglas DC-10-10,
Minimum Turning Radii - With Slip Angle



McDonnell Douglas DC-10-10, Velocity - Distance Curves

Aircraft: **DC-10-30, -30CF**

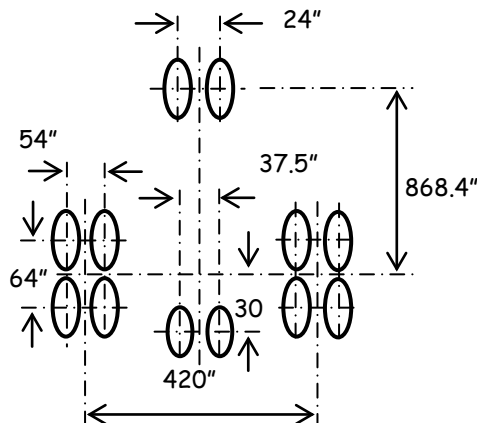
ALC Mgr: Manuf: *McDonnell Douglas* Group Index:
 Wing Span: **165.33'** Length: **181.6'** Height: **58.58'** Vert. Clr: **34.0"**
 Pivot Pt: **27.6'** Turn Radius: **78.7'** 180° Turn Diameter: **236.2'** Controlling Gear: *Nose*

Basic Empty Wt: 266.191	Basic Mis, T/O Wt:	Max T/O Wt : 555.0
Basic Mis. Ldg. Wt:	Max Ldg. Wt: 403.0	T/O Dist:
T/O Dist. (50'):	Ldg. Dist:	Ldg. Dist. (50'):

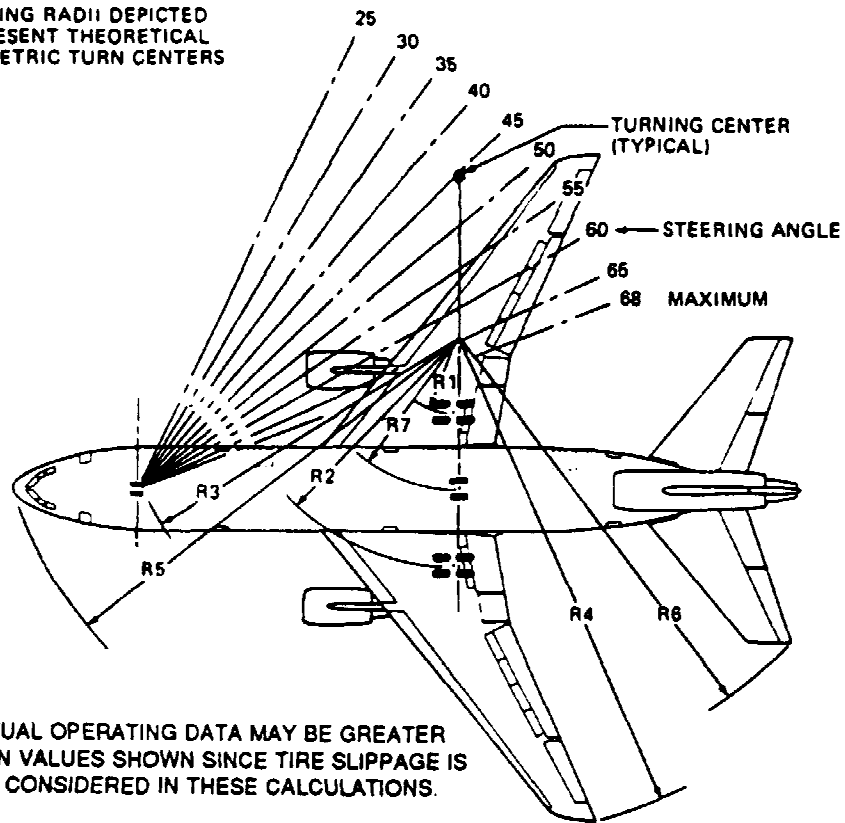
Gear: *FAA 2D/D1 Two Dual Wheels in Tandem Main Gear / Dual Wheel Body Gear with Dual Wheel Nose Gear*
 Number of Assemblies/Tires per Assembly: Nose: **1-2** Main: **2-4** | Body: | **1-2**

Main Gear:	% Gross Load on Assembly:	75.05	Max Assembly Load:	208.264
	Max Single Wheel Load:	52.066		
	Contact Pressure:	177	Contact Area:	294.16
	Footprint Width:	14.99"		
Body Gear:	% Gross Load on Assembly:	16.25	Max Assembly Load:	90.188
	Max Single Wheel Load:	45.094		
	Contact Pressure:	153	Contact Area:	294.73
	Footprint Width:	15.00"		
Nose Gear:	% Gross Load on Assembly:	8.7	Max Assembly Load:	48.285
	Max Single Wheel Load:	24.142		
	Contact Pressure:	185	Contact Area:	130.5
	Footprint Width:	9.98"		

Aircraft Classification Numbers (ACNs)									
Aircraft Weight		Rigid Pavement Subgrades				Flexible Pavement Subgrades			
		High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt	266.2	19.5	20.8	23.8	27.4	21.9	22.5	25.2	31.5
Max Wgt	555.0	44.1	52.9	63.9	73.8	53.2	58.2	69.1	95.2

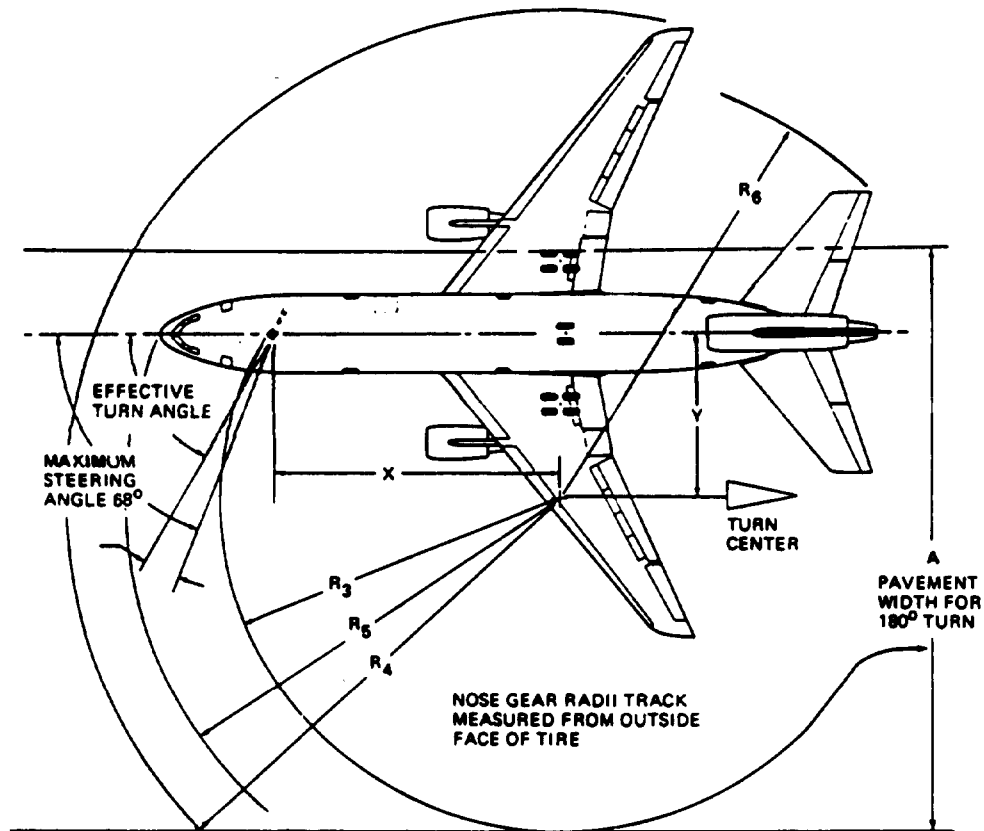


TURNING RADII DEPICTED
REPRESENT THEORETICAL
GEOMETRIC TURN CENTERS



- NOTES: 1. ACTUAL OPERATING DATA MAY BE GREATER THAN VALUES SHOWN SINCE TIRE SLIPPAGE IS NOT CONSIDERED IN THESE CALCULATIONS.
2. DIMENSIONS IN TABLE ARE IN FEET.

STEERING ANGLE (DEGREES)	R1	R2	R3	R4	R5	R6	R7
25	136.9	173.9	172.6	241.9	186.1	206.9	156.4
30	108.8	143.8	145.9	212.3	161.6	179.3	126.3
35	86.7	121.7	127.2	190.5	145.0	159.5	104.2
40	69.4	104.4	113.6	173.6	133.1	144.7	86.9
45	55.4	90.4	103.1	159.9	124.4	133.1	73.0
50	43.7	78.7	95.2	146.5	117.9	123.7	61.2
55	33.6	68.6	89.0	136.9	113.0	115.9	51.1
60	24.6	59.6	84.2	130.1	108.2	109.4	42.2
65	16.5	51.5	80.6	122.4	106.4	103.8	34.1
68 (MAXIMUM)	12.0	47.0	78.7	118.1	105.0	100.8	29.5

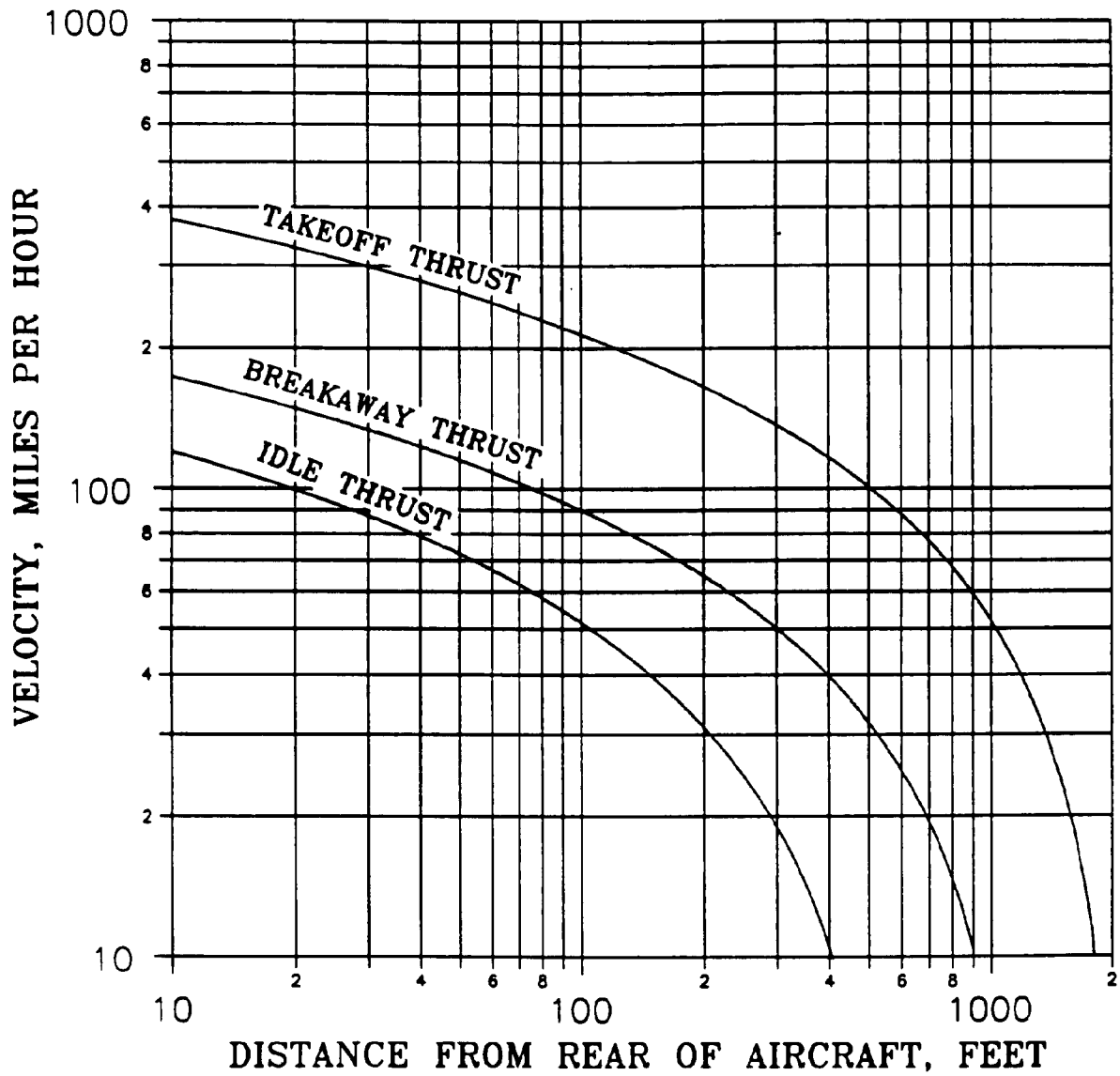


- 1 **MAXIMUM STEERING:**
 SYMMETRICAL THRUST AND
 NO DIFFERENTIAL BRAKING
 SLOW CONTINUOUS TURN
 AFT CENTER OF GRAVITY
 MAX GROSS WEIGHT
- 2 **MAXIMUM STEERING:**
 UNSYMMETRICAL THRUST AND
 LIGHT DIFFERENTIAL BRAKING
 SLOW CONTINUOUS TURN
 AFT CENTER OF GRAVITY
 MAX GROSS WEIGHT
- 3 **MINIMUM RADIUS TURN RECOMMENDED
 FOR NORMAL, ROUTINE OPERATIONS.
 LIMITED TO AVOID EXCESSIVE TIRE
 WEAR AND REDUCTION OF LANDING
 GEAR FATIGUE LIFE.**

TYPE OF TURN	EFFECTIVE TURN ANGLE	TIRE SLIP ANGLE	X	Y	A	R ₃	R ₄	R ₅	R ₆
1	62.9°	6.1°	72.9	37.2	141.4	83.5	125.3	107.5	105.9
2	68.3°	-1.3°	72.9	27.6	128.0	79.8	116.1	104.7	99.5
3	.	.	72.9	42.7	148.5	85.2	130.5	108.6	108.8

NOTE: DIMENSIONS ARE IN FEET.

McDonnell Douglas DC-10-30 and DC-10-40,
Minimum Turning Radii - With Slip Angle



McDonnell Douglas DC-10-30, Velocity - Distance Curves

Aircraft: **DC-10-40, -40CF**

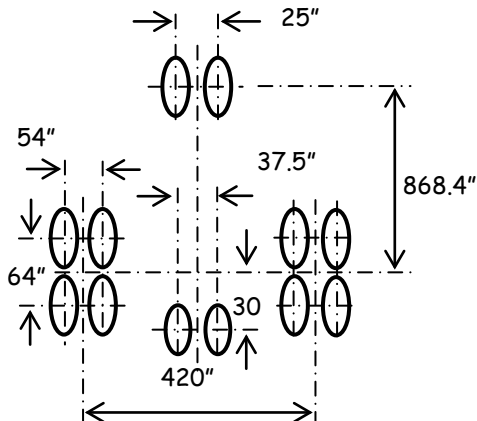
ALC Mgr: Manuf: *McDonnell Douglas* Group Index:
Wing Span: 165.33' Length: 182.22' Height: 58.58' Vert. Clr: 34.0"
Pivot Pt: 27.6' Turn Radius: 78.7' 180° Turn Diameter: 236.2' Controlling Gear: *Nose*

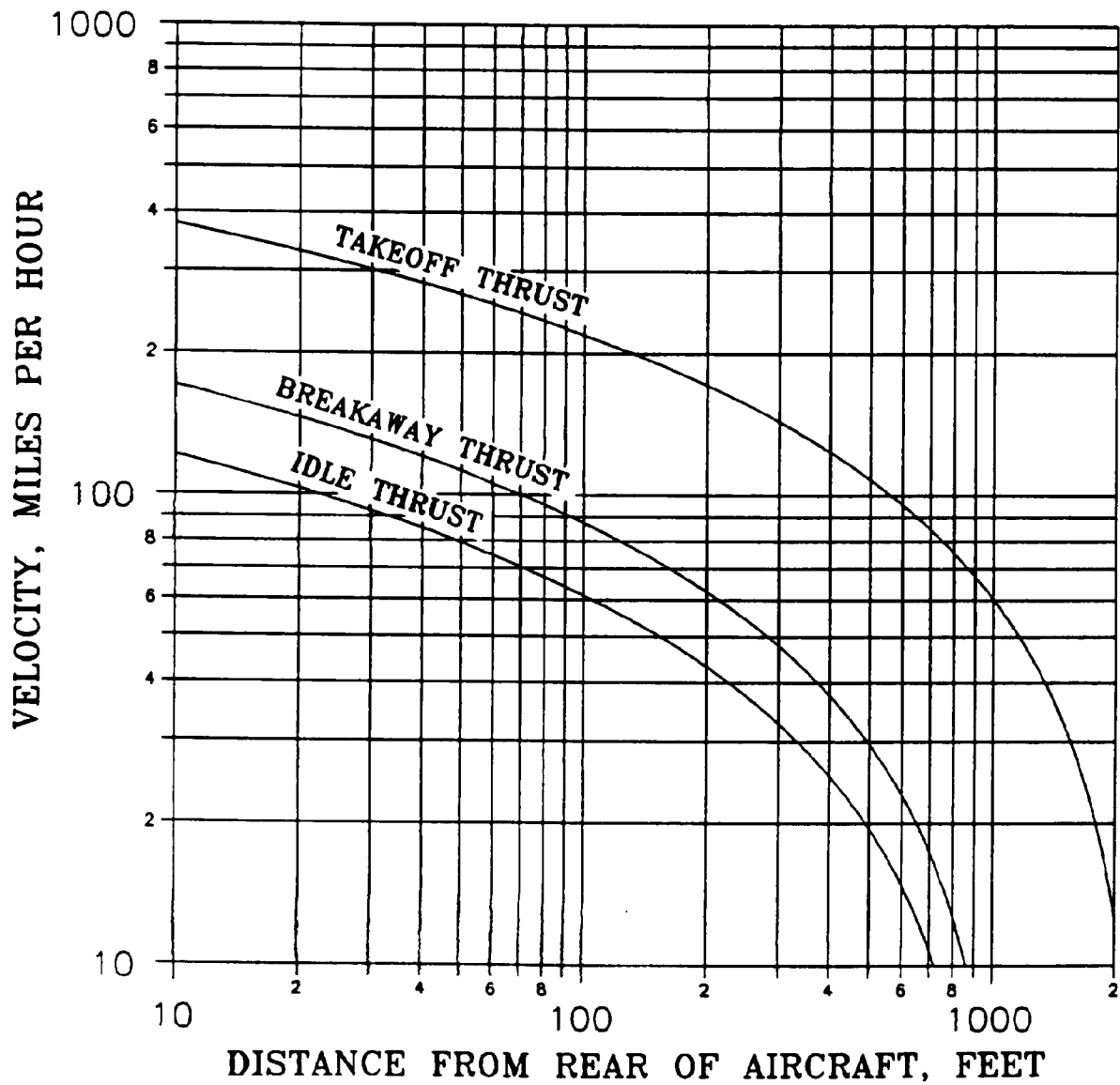
Basic Empty Wt:	270.213	Basic Mis, T/O Wt:		Max T/O Wt :	555.0
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	403.0	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

Gear: *FAA 2D/D1 Two Dual Wheels in Tandem Main Gear / Dual Wheel Body Gear with Dual Wheel Nose Gear*
Number of Assemblies/Tires per Assembly: Nose: 1-2 Main: 2-4 | Body: | 1-2

Main Gear:	% Gross Load on Assembly:	75.05	Max Assembly Load:	208.264
	Max Single Wheel Load:	52.066		
	Contact Pressure:	177	Contact Area:	294.16
	Footprint Width:	14.99"		
Body Gear:	% Gross Load on Assembly:	16.25	Max Assembly Load:	90.188
	Max Single Wheel Load:	45.094		
	Contact Pressure:	153	Contact Area:	294.73
	Footprint Width:	15.00"		
Nose Gear:	% Gross Load on Assembly:	8.7	Max Assembly Load:	48.285
	Max Single Wheel Load:	24.142		
	Contact Pressure:	185	Contact Area:	130.5
	Footprint Width:	9.98"		

Aircraft Classification Numbers (ACNs)								
Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt 270.2	19.9	21.2	24.3	27.9	22.2	23.0	25.7	32.2
Max Wgt 555.0	44.1	52.9	63.9	73.8	53.2	58.2	69.1	95.2





McDonnell Douglas DC-10-40, Velocity - Distance Curves

Aircraft: **MD 90-30**

ALC Mgr: Manuf: *McDonnell Douglas* Group Index:
 Wing Span: *107.83'* Length: *152.58'* Height: *31.17'* Vert. Clr: *44.0"*
 Pivot Pt: *15.0'* Turn Radius: *79.80'* 180^o Turn Diameter: *142.6'* Controlling Gear: *Nose*

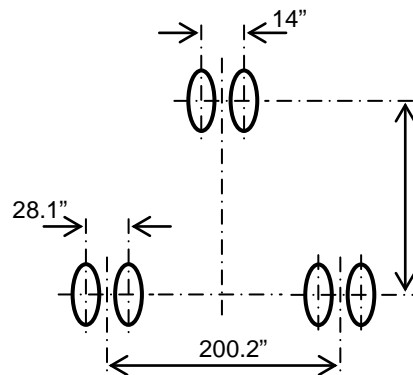
Basic Empty Wt:	<i>88.171</i>	Basic Mis, T/O Wt:	<i>140.40</i>	Max T/O Wt :	<i>156.0</i>
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	<i>142.0</i>	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

Gear: *FAA D Dual Wheel Main Gear with Dual Wheel Nose Gear*
 Number of Assemblies/Tires per Assembly: Nose: *1-2* Main: *2-2*

Main Gear:	% Gross Load on Assembly:	<i>96.48</i>	Max Assembly Load:	<i>75.254</i>
	Max Single Wheel Load:	<i>37.627</i>		
	Contact Pressure:	<i>190</i>	Contact Area:	<i>198.04</i>
	Footprint Width:	<i>12.30"</i>		

Nose Gear:	% Gross Load on Assembly:	<i>3.52</i>	Max Assembly Load:	<i>5.491</i>
	Max Single Wheel Load:	<i>2.746</i>		
	Contact Pressure:	<i>160</i>	Contact Area:	<i>17.16</i>
	Footprint Width:	<i>3.62"</i>		

		Aircraft Classification Numbers (ACNs)							
		Rigid Pavement Subgrades				Flexible Pavement Subgrades			
Aircraft Weight		High	Medium	Low	Ultra Low	High	Medium	Low	Ultra Low
		A	B	C	D	A	B	C	D
Min Wgt	<i>88.2</i>	<i>23.7</i>	<i>25.3</i>	<i>26.6</i>	<i>27.4</i>	<i>20.9</i>	<i>21.5</i>	<i>23.9</i>	<i>27.4</i>
Max Wgt	<i>156.0</i>	<i>47.1</i>	<i>49.9</i>	<i>52.0</i>	<i>52.9</i>	<i>41.2</i>	<i>44.4</i>	<i>48.7</i>	<i>52.0</i>



Aircraft: **MD 90-30ER**

ALC Mgr: Manuf: *McDonnell Douglas* Group Index:
 Wing Span: *107.83'* Length: *152.58'* Height: *31.17'* Vert. Clr: *44.0"*
 Pivot Pt: *15.0'* Turn Radius: *79.80'* 180⁰ Turn Diameter: *142.6'* Controlling Gear: *Nose*

Basic Empty Wt:	<i>89.059</i>	Basic Mis, T/O Wt:	<i>151.200</i>	Max T/O Wt :	<i>168.0</i>
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	<i>142.0</i>	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

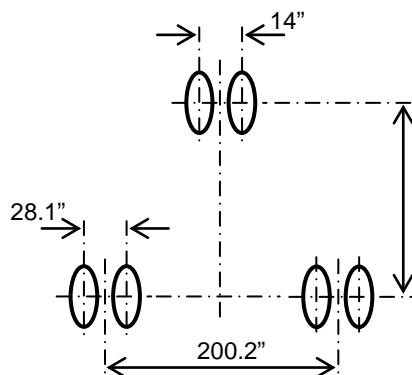
Gear: <i>FAA D Dual Wheel Main Gear with Dual Wheel Nose Gear</i>		
Number of Assemblies/Tires per Assembly:	Nose: <i>1-2</i>	Main: <i>2-2</i>

Main Gear:	% Gross Load on Assembly:	<i>93.97</i>	Max Assembly Load:	<i>78.935</i>
	Max Single Wheel Load:	<i>39.467</i>		
	Contact Pressure:	<i>193</i>	Contact Area:	<i>204.49</i>
	Footprint Width:	<i>12.50"</i>		

Nose Gear:	% Gross Load on Assembly:	<i>6.03</i>	Max Assembly Load:	<i>10.130</i>
	Max Single Wheel Load:	<i>5.065</i>		
	Contact Pressure:	<i>170</i>	Contact Area:	<i>29.80</i>
	Footprint Width:	<i>4.77"</i>		

Aircraft Classification Numbers (ACNs)

Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt <i>89.1</i>	<i>23.3</i>	<i>24.9</i>	<i>26.3</i>	<i>27.0</i>	<i>20.5</i>	<i>21.2</i>	<i>23.4</i>	<i>26.9</i>
Max Wgt <i>168.0</i>	<i>50.1</i>	<i>52.9</i>	<i>54.9</i>	<i>56.0</i>	<i>43.8</i>	<i>47.3</i>	<i>51.6</i>	<i>54.8</i>



Aircraft: **MD-10-10F**

ALC Mgr: Manuf: *McDonnell Douglas* Group Index:
 Wing Span: **155.33'** Length: **182.26'** Height: **58.42'** Vert. Clr: **33.0"**
 Pivot Pt: **27.0'** Turn Radius: **78.2'** 180° Turn Diameter: **224.8'** Controlling Gear: **Nose**

Basic Empty Wt: 270.171	Basic Mis, T/O Wt:	Max T/O Wt : 440.0
Basic Mis. Ldg. Wt:	Max Ldg. Wt: 363.50	T/O Dist:
T/O Dist. (50'):	Ldg. Dist:	Ldg. Dist. (50'):

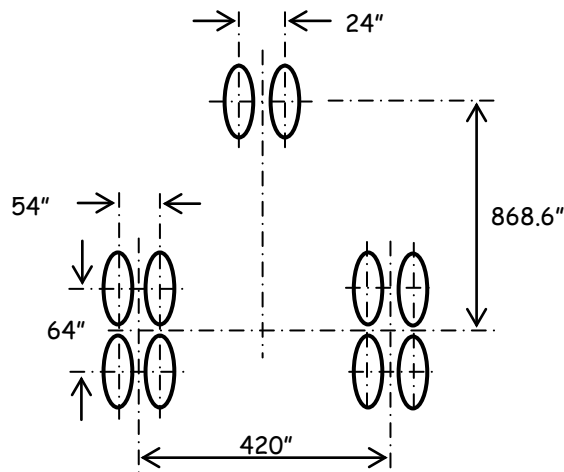
Gear: **FAA 2D Two Dual Wheels in Tandem Main Gear with Dual Wheel Nose Gear**
 Number of Assemblies/Tires per Assembly: Nose: **1-2** Main: **2-4**

Main Gear:	% Gross Load on Assembly: 93.31	Max Assembly Load: 205.282
	Max Single Wheel Load: 51.320	
	Contact Pressure: 195	Contact Area: 263.18
	Footprint Width: 14.18"	

Nose Gear:	% Gross Load on Assembly: 6.69	Max Assembly Load: 29.436
	Max Single Wheel Load: 14.718	
	Contact Pressure: 165	Contact Area: 89.2
	Footprint Width: 8.25"	

Aircraft Classification Numbers (ACNs)

Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt 270.2	25.8	28.6	33.0	38.2	29.1	30.8	34.3	45.1
Max Wgt 440.0	45.4	53.5	63.9	73.8	52.9	57.6	67.8	93.4



Aircraft: **MD-11ER**

ALC Mgr: Manuf: *McDonnell Douglas* Group Index:

Wing Span: *170.5'* Length: *202.17'* Height: *58.83'* Vert. Clr: *38.0''*

Pivot Pt: *26.5'* Turn Radius: *88.2'* 180° Turn Diameter: *243.0'* Controlling Gear: *Nose*

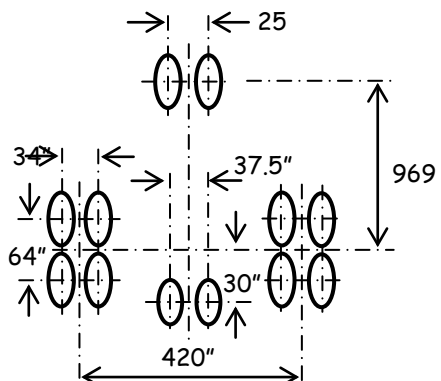
Basic Empty Wt:	<i>291.120</i>	Basic Mis, T/O Wt:	<i>567.450</i>	Max T/O Wt :	<i>630.50</i>
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	<i>430.0</i>	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

Gear: *FAA 2D/D1 Two Dual Wheels in Tandem Main Gear / Dual Wheel Body Gear with Dual Wheel Nose Gear*

Number of Assemblies/Tires per Assembly: Nose: *1-2* Main: *2-4* | Body: *1-2*

Main Gear:	% Gross Load on Assembly:	<i>77.54</i>	Max Assembly Load:	<i>244.444</i>
	Max Single Wheel Load:	<i>61.111</i>	Contact Area:	<i>296.66</i>
	Contact Pressure:	<i>206</i>	Footprint Width:	<i>15.05''</i>
	Footprint Width:	<i>15.05''</i>		
Body Gear:	% Gross Load on Assembly:	<i>16.79</i>	Max Assembly Load:	<i>105.861</i>
	Max Single Wheel Load:	<i>52.930</i>	Contact Area:	<i>294.06</i>
	Contact Pressure:	<i>180</i>	Footprint Width:	<i>14.99''</i>
	Footprint Width:	<i>14.99''</i>		
Nose Gear:	% Gross Load on Assembly:	<i>5.67</i>	Max Assembly Load:	<i>35.749</i>
	Max Single Wheel Load:	<i>17.875</i>	Contact Area:	<i>99.30</i>
	Contact Pressure:	<i>180</i>	Footprint Width:	<i>8.71''</i>
	Footprint Width:	<i>8.71''</i>		

Aircraft Classification Numbers (ACNs)									
Aircraft Weight		Rigid Pavement Subgrades				Flexible Pavement Subgrades			
		High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt	<i>291.1</i>	<i>23.6</i>	<i>25.5</i>	<i>29.1</i>	<i>33.3</i>	<i>25.7</i>	<i>27.0</i>	<i>29.8</i>	<i>37.9</i>
Max Wgt	<i>630.5</i>	<i>58.2</i>	<i>69.2</i>	<i>82.8</i>	<i>94.2</i>	<i>66.4</i>	<i>73.2</i>	<i>89.0</i>	<i>118.2</i>



Aircraft: **MD 81**

ALC Mgr: Manuf: *McDonnell Douglas* Group Index:
 Wing Span: *107.85'* Length: *147.83'* Height: *30.17'* Vert. Clr: *36.0"*
 Pivot Pt: *14.0'* Turn Radius: *74.0'* 180° Turn Diameter: *161.4'* Controlling Gear: *Nose*

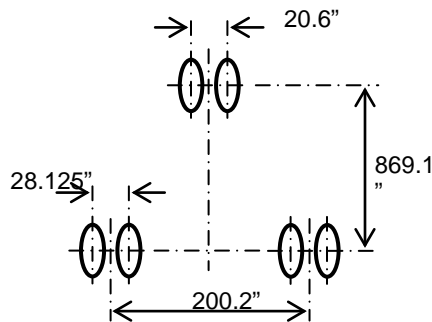
Basic Empty Wt:	<i>77.888</i>	Basic Mis, T/O Wt:	<i>126.0</i>	Max T/O Wt :	<i>140.0</i>
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	<i>128.0</i>	T/O Dist:	<i>7,200</i>
T/O Dist. (50'):		Ldg. Dist:	<i>4,700</i>	Ldg. Dist. (50'):	

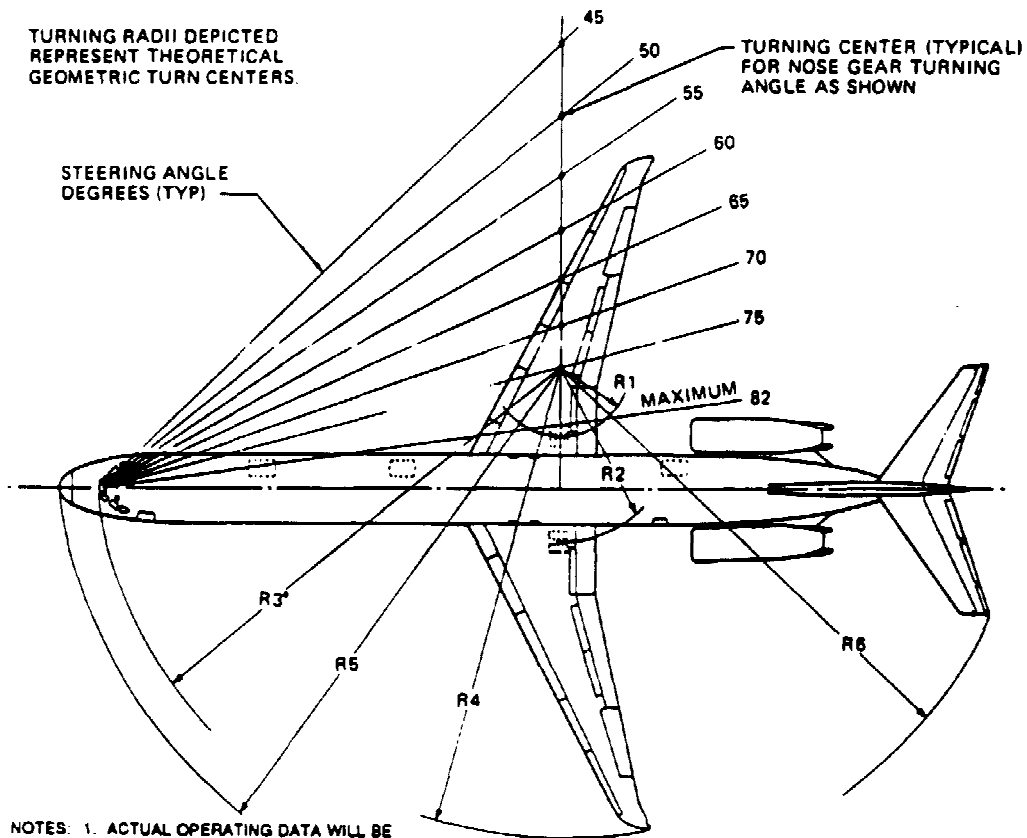
Gear: <i>FAA D Dual Wheel Main Gear with Dual Wheel Nose Gear</i>		
Number of Assemblies/Tires per Assembly:	Nose: <i>1-2</i>	Main: <i>2-2</i>

Main Gear:	% Gross Load on Assembly:	<i>95.6</i>	Max Assembly Load:	<i>66.920</i>
	Max Single Wheel Load:	<i>33.460</i>		
	Contact Pressure:	<i>170</i>	Contact Area:	<i>196.82</i>
	Footprint Width:	<i>12.26"</i>		

Nose Gear:	% Gross Load on Assembly:	<i>4.40</i>	Max Assembly Load:	<i>6.160</i>
	Max Single Wheel Load:	<i>3.080</i>		
	Contact Pressure:	<i>155</i>	Contact Area:	<i>19.87</i>
	Footprint Width:	<i>3.90"</i>		

Aircraft Classification Numbers (ACNs)									
Aircraft Weight		Rigid Pavement Subgrades				Flexible Pavement Subgrades			
		High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt	<i>77.9</i>	<i>19.6</i>	<i>21.2</i>	<i>22.8</i>	<i>23.1</i>	<i>17.9</i>	<i>18.3</i>	<i>20.2</i>	<i>23.5</i>
Max Wgt	<i>140.0</i>	<i>39.6</i>	<i>42.3</i>	<i>44.4</i>	<i>45.5</i>	<i>35.4</i>	<i>37.2</i>	<i>42.2</i>	<i>45.7</i>



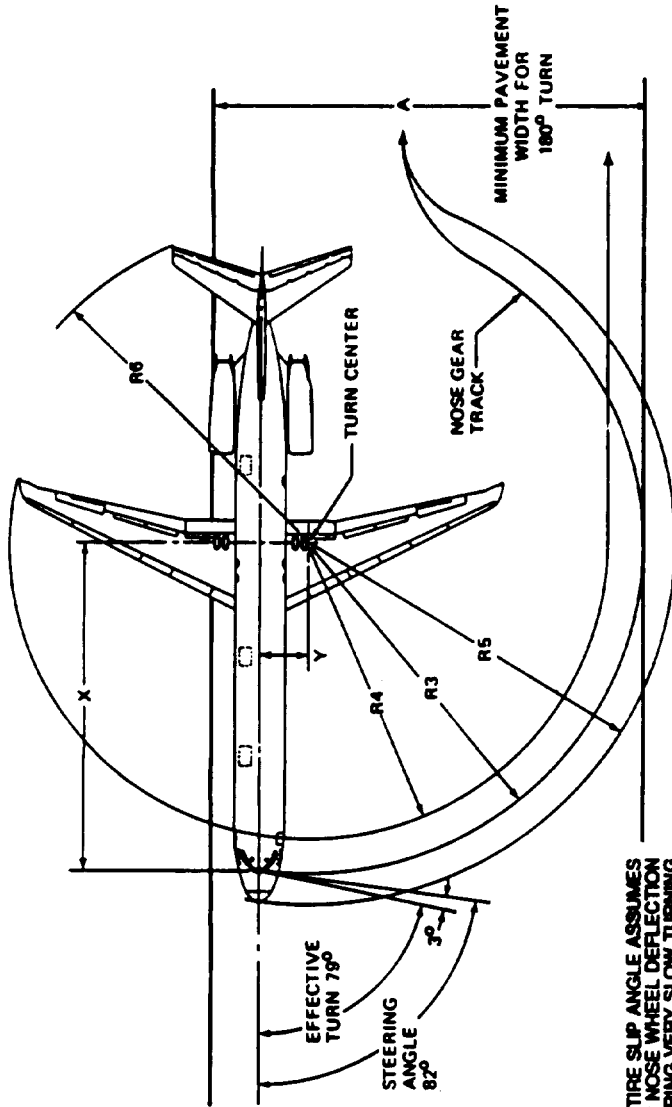


NOTES: 1. ACTUAL OPERATING DATA WILL BE GREATER THAN VALUES SHOWN SINCE TIRE SLIPPAGE IS NOT CONSIDERED IN THESE CALCULATIONS

2. DIMENSIONS IN TABLE ARE IN FEET.

*R-3 IS MEASURED TO OUTSIDE TIRE FACE.

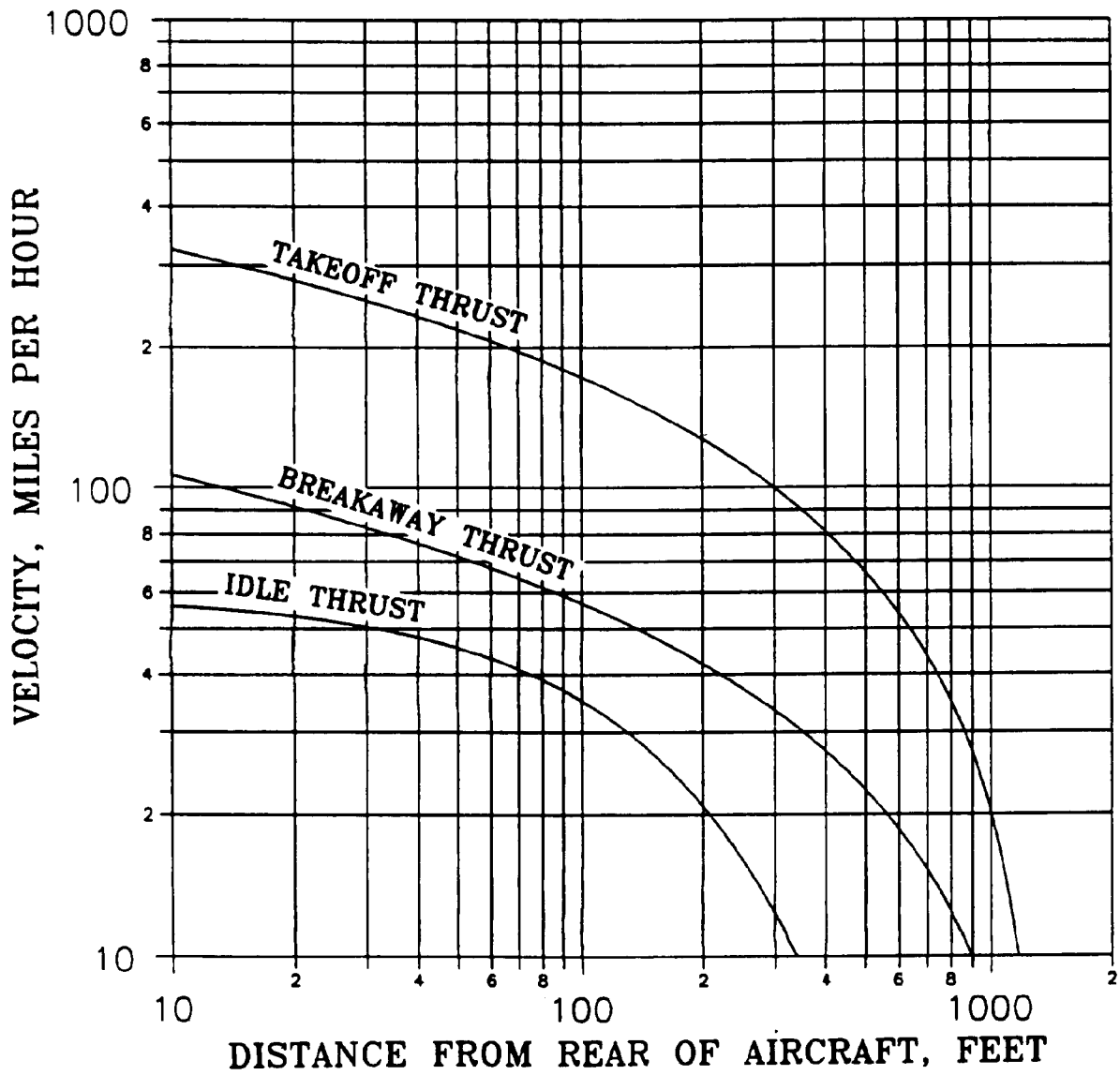
STEERING ANGLE (DEGREES)	R1	R2	R3*	R4	R5	R6
30	117.1	133.8	145.7	180.0	148.8	180.8
45	64.1	80.8	103.3	127.3	107.9	114.7
50	52.4	69.1	85.4	115.7	100.8	106.8
55	42.4	60.0	80.3	108.7	94.7	98.1
60	33.5	50.1	84.5	97.0	90.3	91.8
65	25.4	42.1	80.8	89.0	86.8	86.6
70	18.0	34.7	78.0	81.7	84.2	82.2
75	11.1	27.7	75.9	74.9	82.3	78.5
82 (MAXIMUM)	1.9	18.5	74.0	65.9	80.7	74.3



- NOTES:
1. 3° TIRE SLIP ANGLE ASSUMES 82° NOSE WHEEL DEFLECTION DURING VERY SLOW TURNING.
 2. NO DIFFERENTIAL BRAKING OR UNSYMMETRICAL THRUST.
 3. DIMENSIONS IN TABLE ARE IN FEET.

EFFECTIVE TURNING ANGLE	X	Y	A	R3	R4	R5	R6
79°	72.4	14.0	98.8	73.6	69.6	81.2	75.9

McDonnell Douglas MD-81/-82/-83/-88,
Minimum Turning Radii - 3° Slip Angle



McDonnell Douglas MD-81/-82/-83/-87/-88,
Velocity - Distance Curves

Aircraft: **MD-82, -88**

ALC Mgr: Manuf: *McDonnell Douglas* Group Index:
 Wing Span: 107.85' Length: 147.83' Height: 30.17' Vert. Clr: 36.0"
 Pivot Pt: 14.0' Turn Radius: 74.0' 180° Turn Diameter: 161.4' Controlling Gear: *Nose*

Basic Empty Wt: 77.976	Basic Mis, T/O Wt: 134.55	Max T/O Wt : 149.50
Basic Mis. Ldg. Wt:	Max Ldg. Wt: 130.0	T/O Dist: 7,400
T/O Dist. (50'):	Ldg. Dist: 4,750	Ldg. Dist. (50')

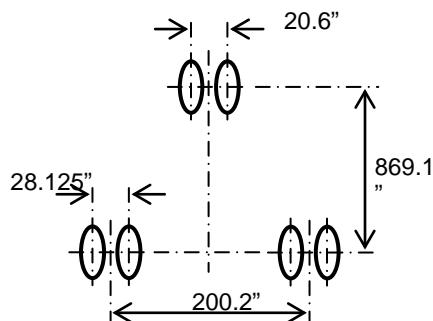
Gear: <i>FAA D Dual Wheel Main Gear with Dual Wheel Nose Gear</i>		
Number of Assemblies/Tires per Assembly:	Nose: 1-2	Main: 2-2

Main Gear:	% Gross Load on Assembly: 95.07	Max Assembly Load: 71.065
	Max Single Wheel Load: 35.532	
	Contact Pressure: 184	Contact Area: 193.11
	Footprint Width: 12.15"	

Nose Gear:	% Gross Load on Assembly: 4.93	Max Assembly Load: 7.370
	Max Single Wheel Load: 3.685	
	Contact Pressure: 155	Contact Area: 23.78
	Footprint Width: 4.26"	

Aircraft Classification Numbers (ACNs)

Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt 78.0	20.0	21.4	22.6	23.3	17.9	18.3	20.1	23.4
Max Wgt 149.5	43.5	46.4	48.4	49.5	38.5	40.9	45.5	48.9



Aircraft: **MD-83**

ALC Mgr: Manuf: *McDonnell Douglas* Group Index:
 Wing Span: *107.85'* Length: *147.83'* Height: *30.17'* Vert. Clr: *36.0"*
 Pivot Pt: *14.0'* Turn Radius: *74.0'* 180° Turn Diameter: *161.4'* Controlling Gear: *Nose*

Basic Empty Wt:	<i>79.686</i>	Basic Mis, T/O Wt:	<i>144.0</i>	Max T/O Wt :	<i>160.0</i>
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	<i>139.50</i>	T/O Dist:	<i>8,000</i>
T/O Dist. (50'):		Ldg. Dist:	<i>5,000</i>	Ldg. Dist. (50'):	

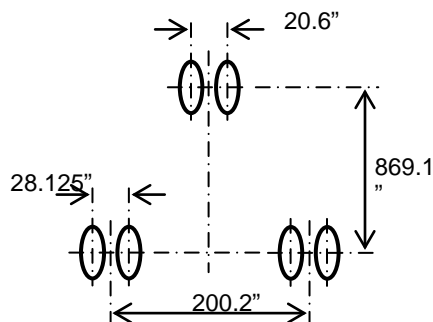
Gear: <i>FAA D Dual Wheel Main Gear with Dual Wheel Nose Gear</i>		
Number of Assemblies/Tires per Assembly:	Nose: <i>1-2</i>	Main: <i>2-2</i>

Main Gear:	% Gross Load on Assembly:	<i>94.76</i>	Max Assembly Load:	<i>75.808</i>
	Max Single Wheel Load:	<i>37.904</i>		
	Contact Pressure:	<i>195</i>	Contact Area:	<i>194.38</i>
	Footprint Width:	<i>12.19"</i>		

Nose Gear:	% Gross Load on Assembly:	<i>5.24</i>	Max Assembly Load:	<i>8.384</i>
	Max Single Wheel Load:	<i>4.192</i>		
	Contact Pressure:	<i>170</i>	Contact Area:	<i>24.66</i>
	Footprint Width:	<i>4.34"</i>		

Aircraft Classification Numbers (ACNs)

Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt <i>79.7</i>	<i>20.7</i>	<i>22.2</i>	<i>23.4</i>	<i>24.1</i>	<i>18.3</i>	<i>18.8</i>	<i>20.6</i>	<i>23.9</i>
Max Wgt <i>160.0</i>	<i>47.9</i>	<i>50.7</i>	<i>52.8</i>	<i>53.7</i>	<i>41.8</i>	<i>45.1</i>	<i>49.3</i>	<i>52.5</i>



Aircraft: **MD-87**

ALC Mgr: Manuf: *McDonnell Douglas* Group Index:
 Wing Span: 107.85' Length: 130.42' Height: 31.17' Vert. Clr: 36.0"
 Pivot Pt: 12.2' Turn Radius: 64.4' 180° Turn Diameter: 142.2' Controlling Gear: *Nose*

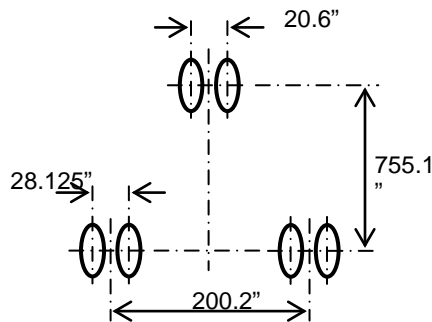
Basic Empty Wt:	73.274	Basic Mis, T/O Wt:	134.550	Max T/O Wt :	149.50
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	130.0	T/O Dist:	7,400
T/O Dist. (50'):		Ldg. Dist:	4,800	Ldg. Dist. (50'):	

Gear: <i>FAA D Dual Wheel Main Gear with Dual Wheel Nose Gear</i>		
Number of Assemblies/Tires per Assembly:	Nose: 1-2	Main: 2-2

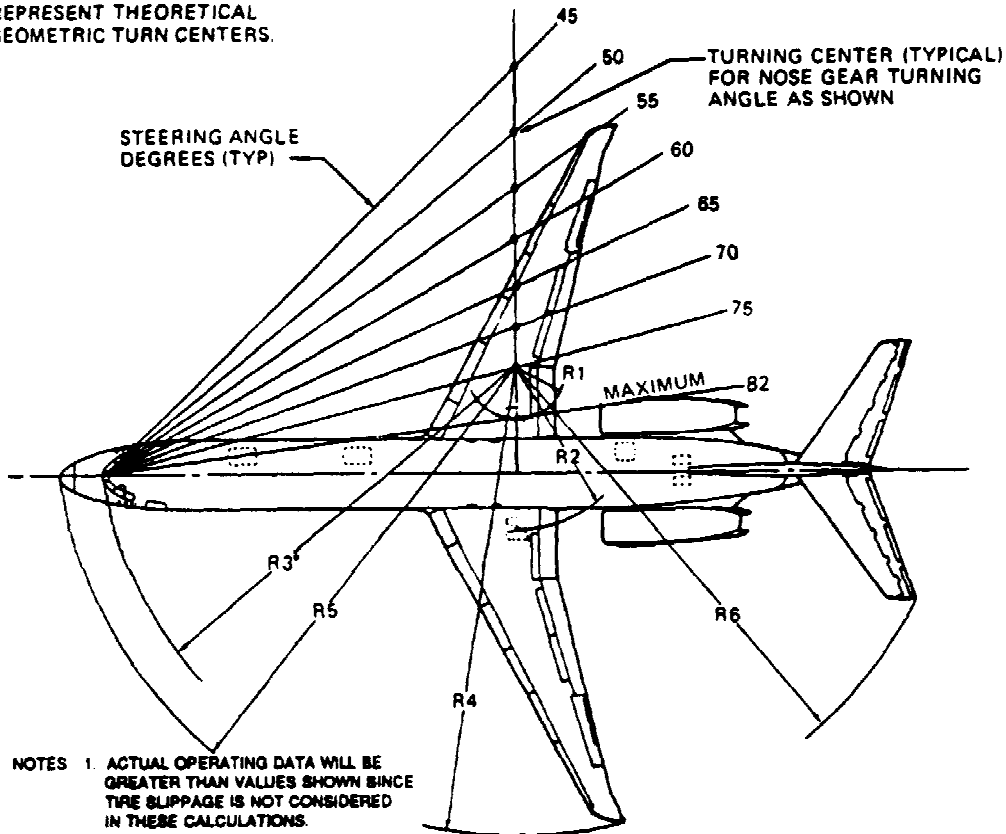
Main Gear:	% Gross Load on Assembly:	94.76	Max Assembly Load:	70.833
	Max Single Wheel Load:	35.417		
	Contact Pressure:	184	Contact Area:	192.48
	Footprint Width:	12.13"		

Nose Gear:	% Gross Load on Assembly:	5.24	Max Assembly Load:	7.834
	Max Single Wheel Load:	3.917		
	Contact Pressure:	192	Contact Area:	20.40
	Footprint Width:	3.95"		

Aircraft Classification Numbers (ACNs)									
Aircraft Weight		Rigid Pavement Subgrades				Flexible Pavement Subgrades			
		High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt	73.3	18.7	20.0	21.1	21.7	16.7	17.1	18.7	21.8
Max Wgt	149.5	43.8	46.4	48.4	49.5	38.6	41.2	45.7	48.8



TURNING RADII DEPICTED
REPRESENT THEORETICAL
GEOMETRIC TURN CENTERS.

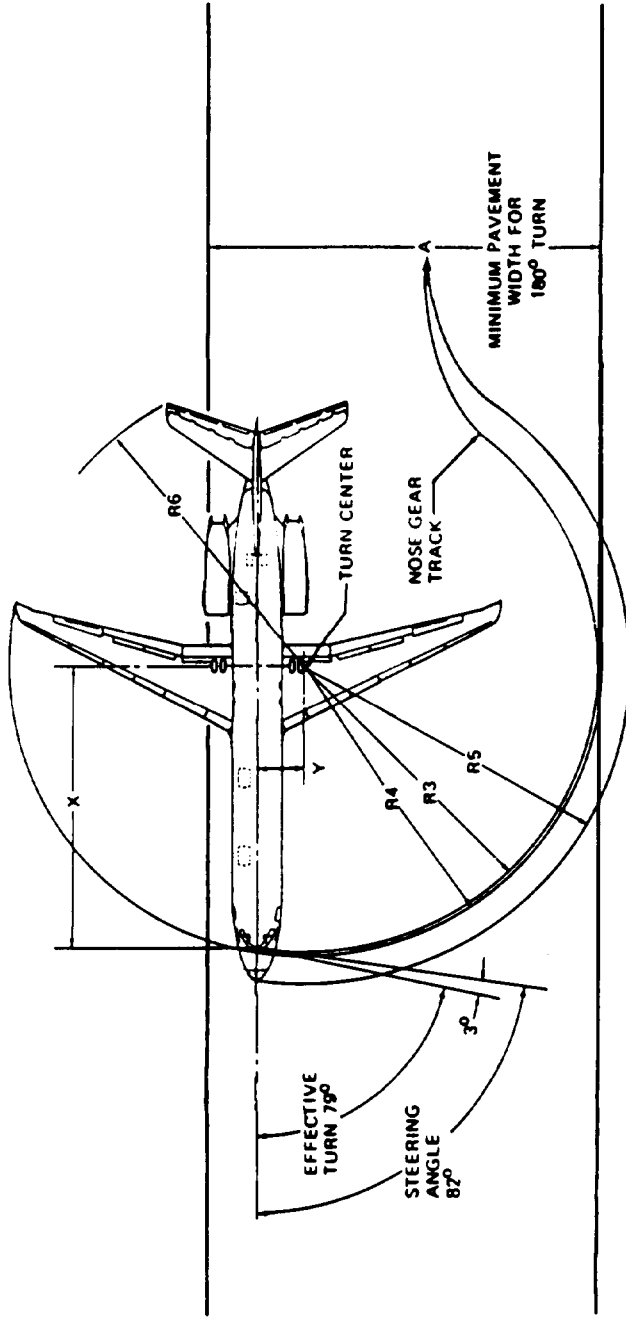


NOTES 1. ACTUAL OPERATING DATA WILL BE GREATER THAN VALUES SHOWN SINCE TIRE SLIPPAGE IS NOT CONSIDERED IN THESE CALCULATIONS.

2. DIMENSIONS IN TABLE ARE IN FEET.

*R-3 IS MEASURED TO OUTSIDE TIRE FACE.

STEERING ANGLE (DEGREES)	R1	R2	R3*	R4	R5	R6
30	100.6	117.3	126.7	163.6	129.8	142.3
45	54.6	71.3	89.8	117.8	94.5	102.4
50	44.5	61.1	83.0	107.7	88.1	94.4
55	35.7	52.4	77.7	99.1	83.1	87.8
60	28.0	44.7	73.5	91.4	79.3	82.3
65	21.0	37.7	70.3	84.6	76.4	77.7
70	14.6	31.3	67.8	78.2	74.2	73.8
75	8.5	25.3	66.0	72.2	72.5	70.4
82 (MAXIMUM)	0.5	17.2	64.4	64.5	71.1	66.6

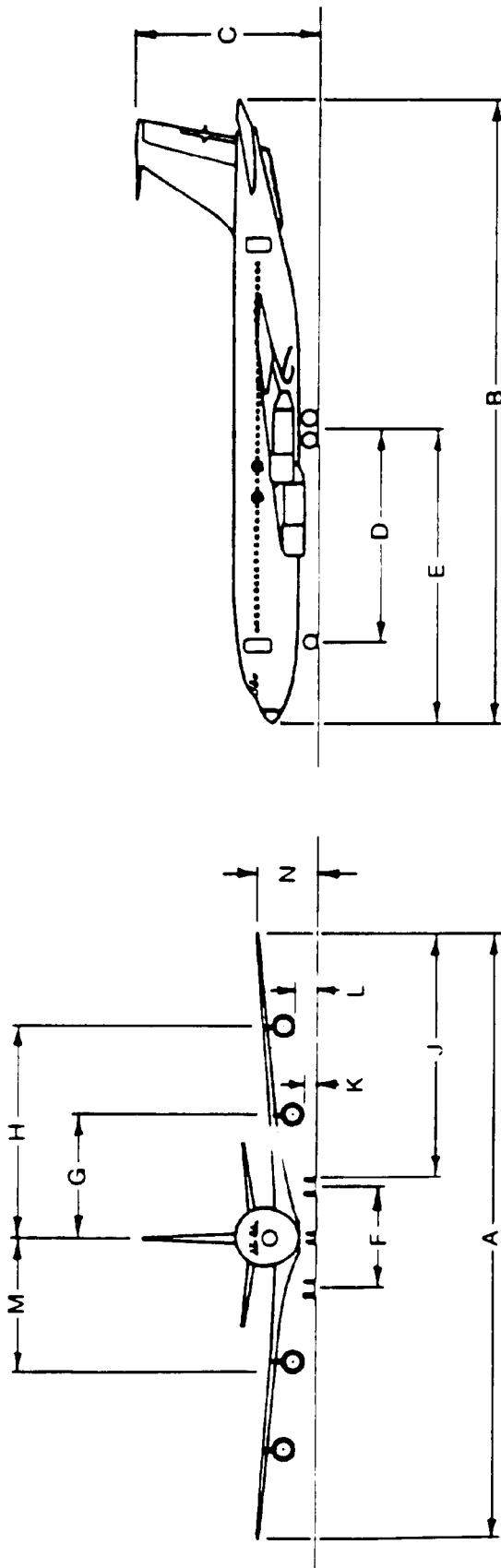


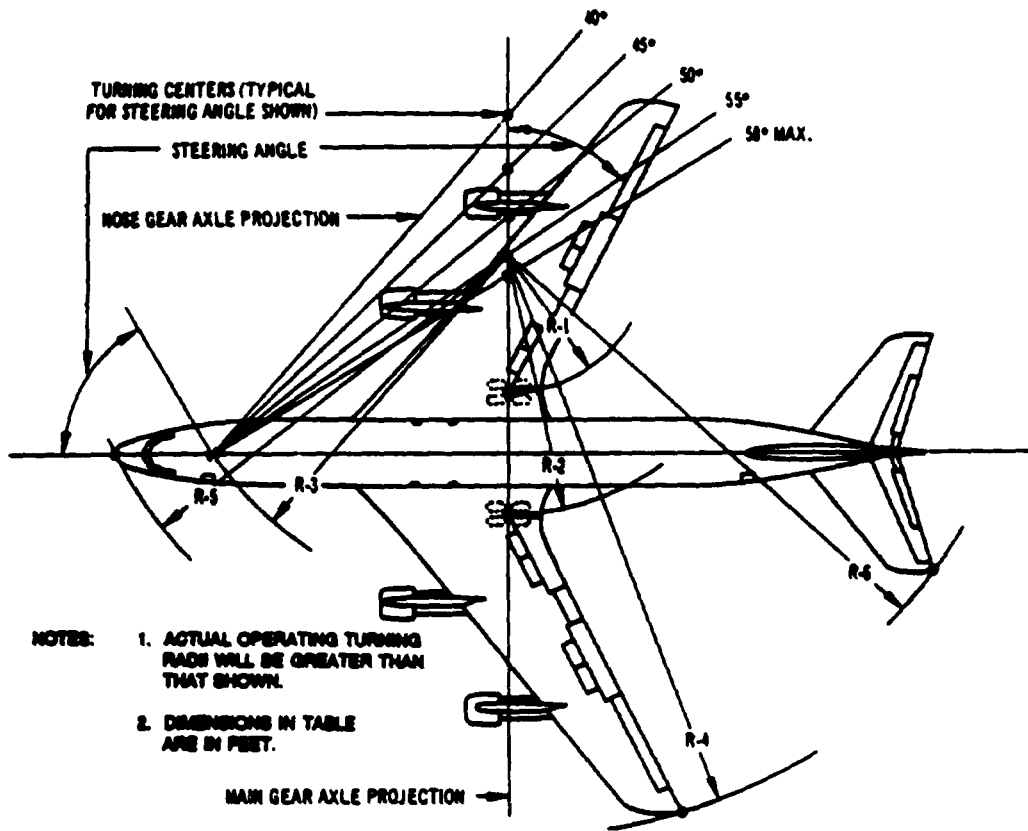
- NOTES: 1. 3° TIRE SLIP ANGLE ASSUMES 82° NOSE WHEEL DEFLECTION DURING VERY SLOW TURNING.
2. NO DIFFERENTIAL BRAKING OR UNSYMMETRICAL THRUST.
3. DIMENSIONS IN TABLE ARE IN FEET.

EFFECTIVE TURNING ANGLE	X	Y	A	R3	R4	R5	R6
79°	62.9	12.2	87.4	64.1	67.7	71.6	68.1

McDonnell Douglas MD-87, Minimum Turning Radii - 3° Slip Angle

MODEL	MAXIMUM TIRE PRESSURE, PSI		A	B	C	D	E	F	G	H	J	K	L	M	N
	MAIN GEAR	NOSE GEAR													
707-120B	170	90	130.8	145.1	41.7	52.3	69.8	22.1	27.2	46.1	52.3	2.3	4.2	36.6	11.6
707-320/420	180	115	142.4	152.9	42.2	59.0	76.4	22.1	32.5	51.4	58.1	2.8	4.6	38.3	12.1
707-320B,C	180	115	145.8	152.9	42.1	59.0	76.4	22.1	32.5	51.4	59.8	2.8	4.6	38.3	12.1
720	145	100	130.8	136.2	41.4	50.7	68.1	21.9	27.2	46.1	52.5	2.6	4.3	32.8	10.8
720B	145	115	130.8	136.8	41.2	50.7	68.1	21.9	27.2	46.1	52.5	2.1	3.8	32.8	10.8

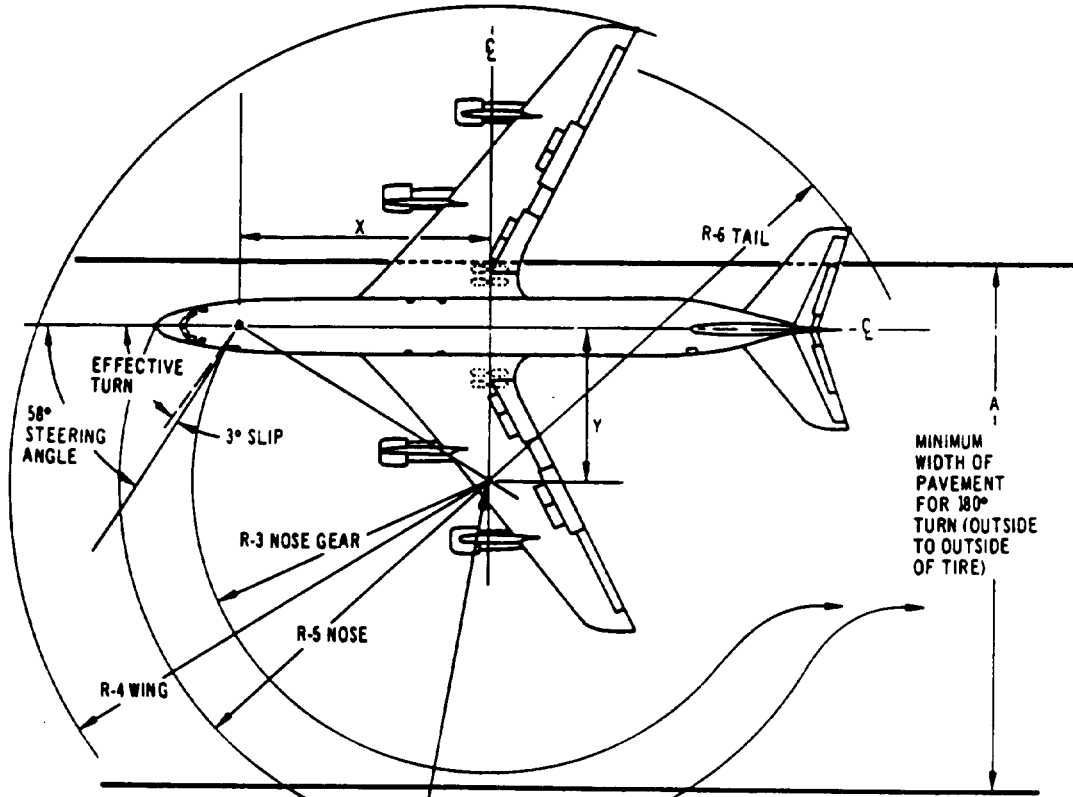




- NOTES:
1. ACTUAL OPERATING TURNING RADI WILL BE GREATER THAN THAT SHOWN.
 2. DIMENSIONS IN TABLE ARE IN FEET.

STEERING ANGLE (DEGREES)	R-1	R-2	R-3	R-4	R-5	R-6
	INNER GEAR	OUTER GEAR	NOSE GEAR	WING TIP	NOSE	TAIL
30	80	102	105	180	114	136
35	64	88	91	149	102	123
40	51	75	82	122	84	113
45	41	63	74	122	67	105
50	30	55	66	113	52	100
55	25	46	65	107	79	95
58 (MAXIMUM)	22	44	63	108	77	90

Boeing 707-1203, Turning Radii - No Slip Angle

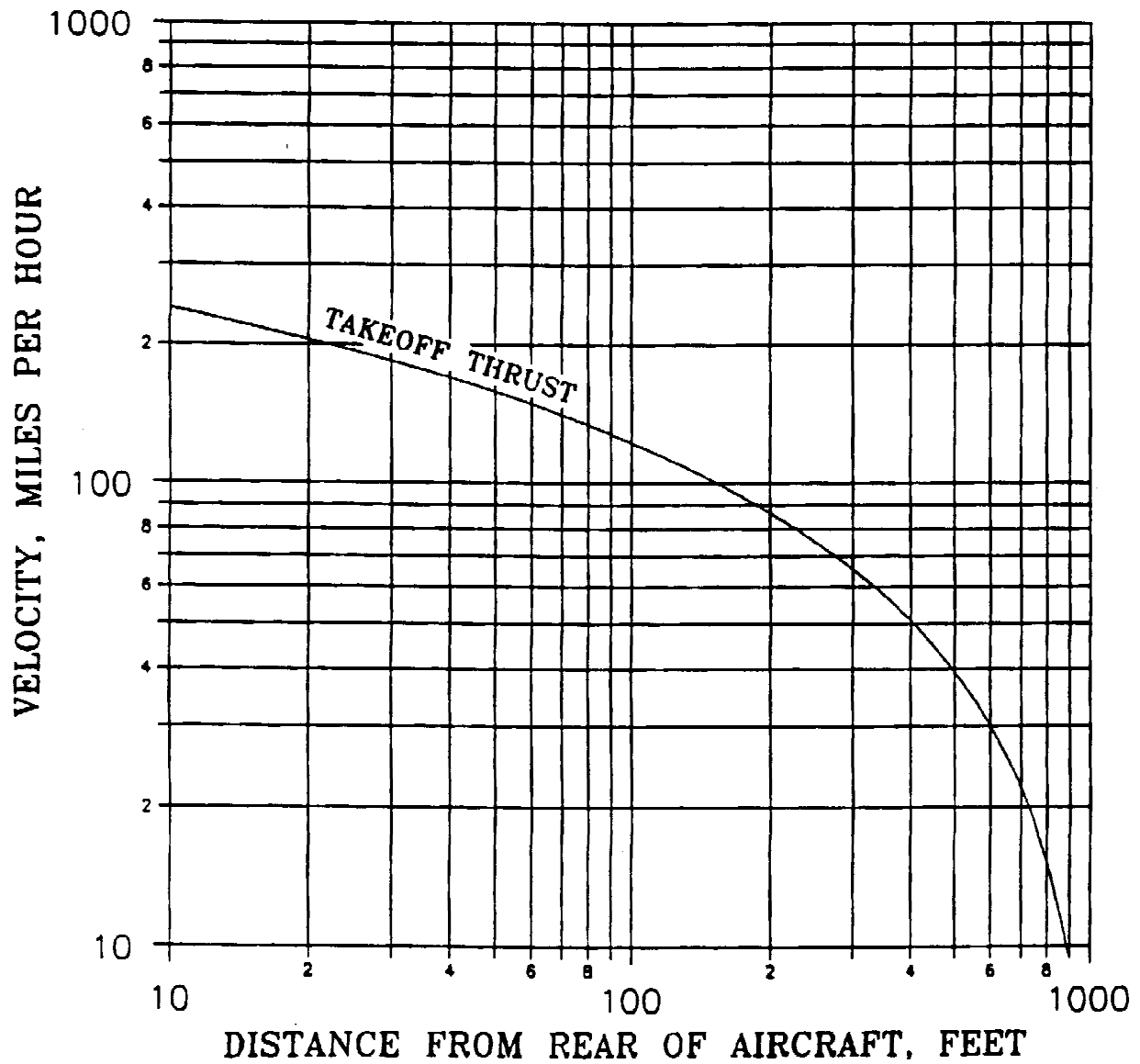


- NOTES: 1. 3° TIRE SLIP ANGLE APPROXIMATE FOR 58° TURN ANGLE.
2. DIMENSIONS IN TABLE ARE IN FEET.

THEORETICAL CENTER OF TURN FOR MINIMUM TURNING RADIUS. SLOW CONTINUOUS TURNING WITH APPROXIMATELY IDLE THRUST ON ALL ENGINES. NO DIFFERENTIAL BRAKING

FOR EFFECTIVE TURN ANGLE OF 55°						
X	Y	A	R-3	R-4	R-5	R-6
52.3	36.6	116.2	65.0	107.0	79.0	95.0

Boeing 707-120B, Minimum Turning Radii - 3° Slip Angle



Boeing 707-120B/-320B/-320C,
Velocity - Distance Curve

Aircraft: **707-320/420**

ALC Mgr: Manuf: *Boeing* Group Index:
 Wing Span: 142.42' Length: 152.92' Height: 42.96' Vert. Clr: 35.0"
 Pivot Pt: 34.0' Turn Radius: 68.0' 180° Turn Diameter: 220.0' Controlling Gear: *Nose*

Basic Empty Wt:	142.6	Basic Mis, T/O Wt:		Max T/O Wt :	312.0
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	207.0	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

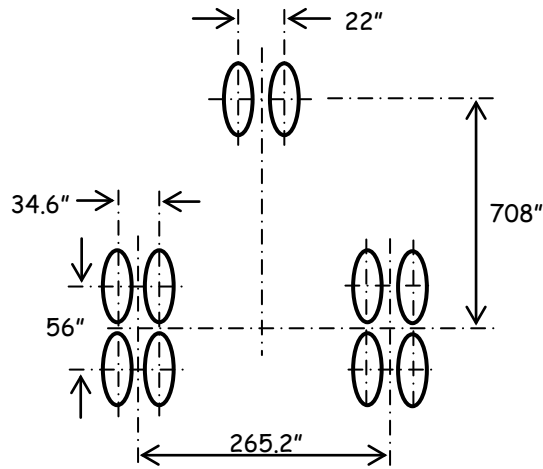
Gear: *FAA 2D, Two Dual Wheels in Tandem Main Gear with Dual Wheel Nose Gear*
 Number of Assemblies/Tires per Assembly: Nose: 1-2 Main: 2-4

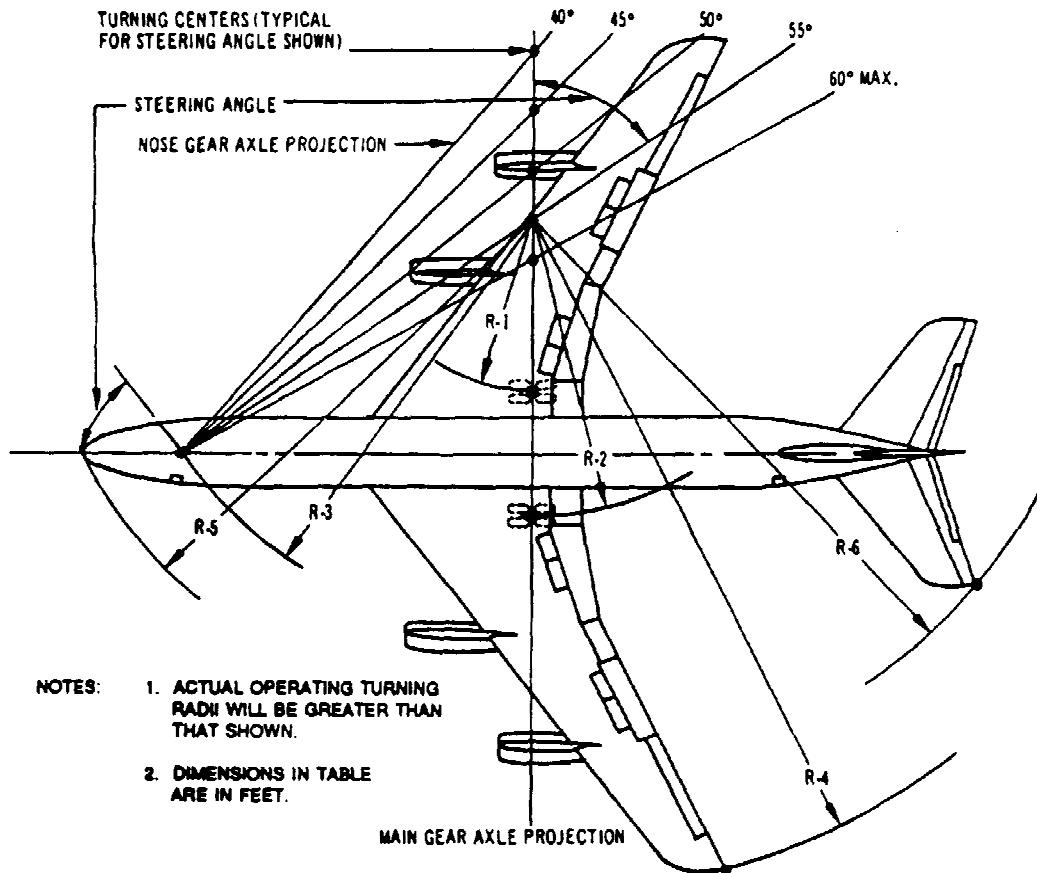
Main Gear:	% Gross Load on Assembly:	92.09	Max Assembly Load:	143.660
	Max Single Wheel Load:	35.915		
	Contact Pressure:	180	Contact Area:	199.53
	Footprint Width:	12.35"		

Nose Gear:	% Gross Load on Assembly:	7.91	Max Assembly Load:	24.679
	Max Single Wheel Load:	12.340		
	Contact Pressure:	115	Contact Area:	107.30
	Footprint Width:	9.05"		

Aircraft Classification Numbers (ACNs)

Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt 142.6	13.9	15.0	17.5	20.2	14.9	15.7	17.5	22.6
Max Wgt 312.0	35.7	43.1	51.2	58.1	40.6	44.5	53.5	68.5

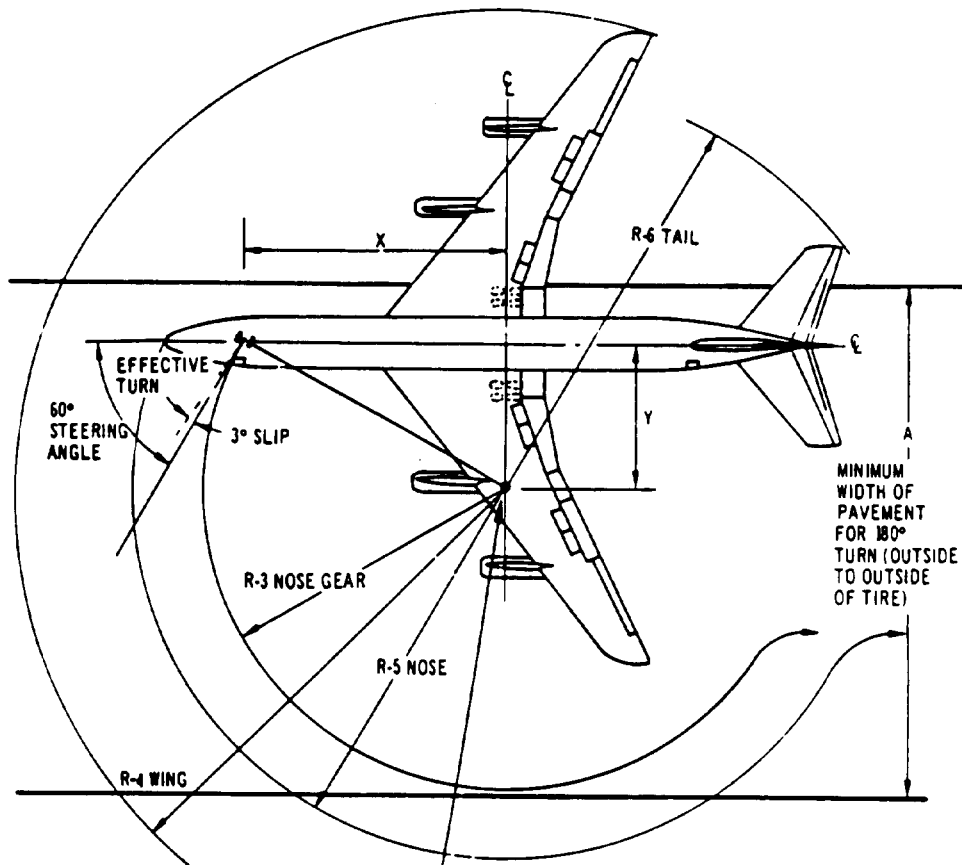




- NOTES:
1. ACTUAL OPERATING TURNING RADIi WILL BE GREATER THAN THAT SHOWN.
 2. DIMENSIONS IN TABLE ARE IN FEET.

STEERING ANGLE (DEGREES)	R-1	R-2	R-3	R-4	R-5	R-6
	INNER GEAR	OUTER GEAR	NOSE GEAR	WING TIP*	NOSE	TAIL
30	91	113	118	177	127	147
35	74	96	103	150	114	132
40	60	82	92	145	104	121
45	48	70	84	134	97	112
50	39	61	77	125	91	106
55	30	52	71	117	87	100
60 (MAXIMUM)	23	45	68	110	84	96

*ADD 2 FEET FOR -320B AND -320C



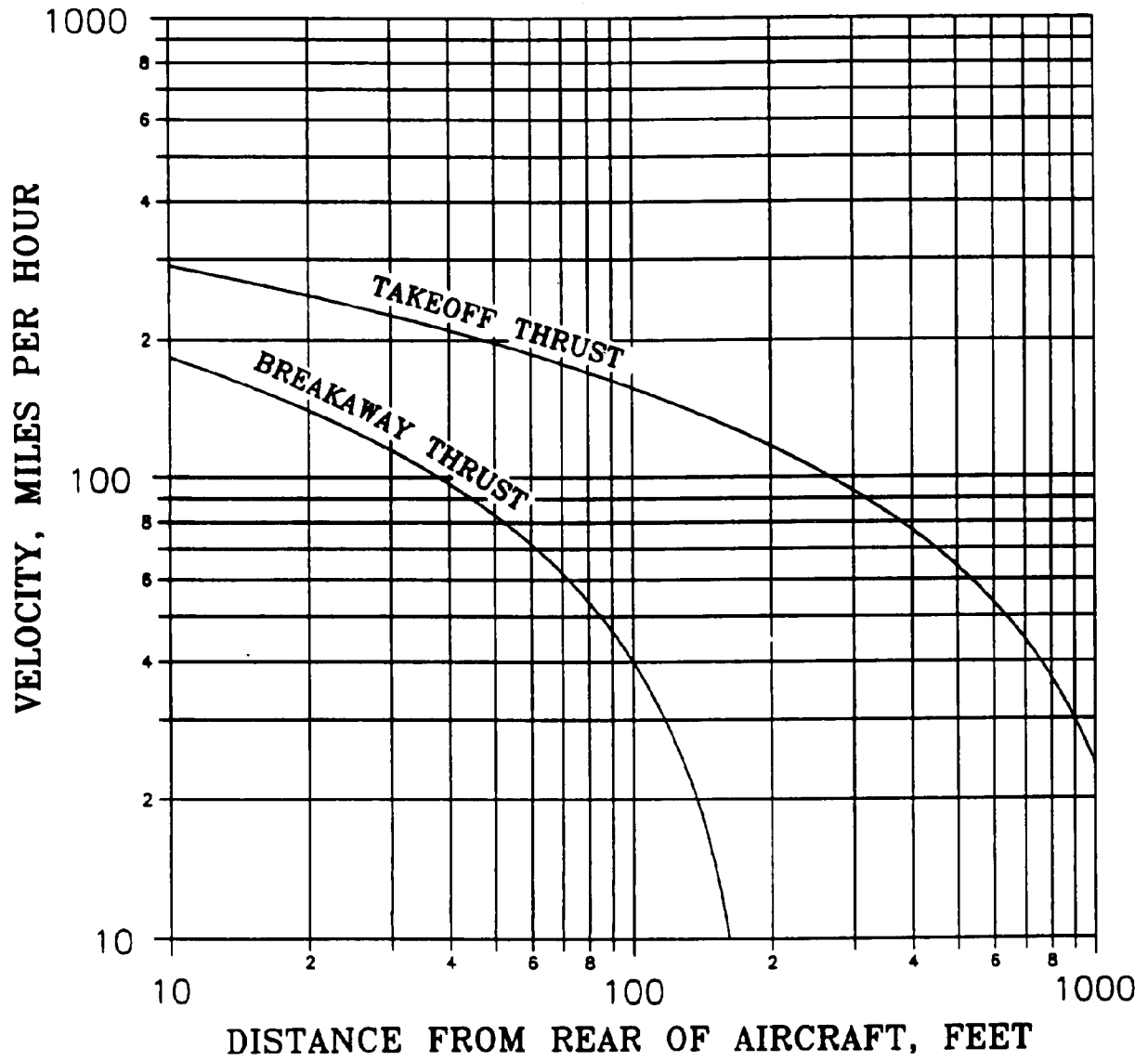
- NOTES: 1. 3° TIRE SLIP ANGLE APPROXIMATE FOR 60° TURN ANGLE.
2. DIMENSIONS IN TABLE ARE IN FEET.

THEORETICAL CENTER OF TURN FOR MINIMUM TURNING RADIUS. SLOW CONTINUOUS TURNING WITH APPROXIMATELY IDLE THRUST ON ALL ENGINES. NO DIFFERENTIAL BRAKING

FOR EFFECTIVE TURN ANGLE OF 57°						
X	Y	A	R-3	R-4°	R-5	R-6
59.0	38.3	123.4	70.5	114.0	85.5	98.0

*ADD 2 FEET FOR -320B AND -320C

Boeing 707-302/-320B/-320C/-420,
Minimum Turning Radii - 3° Slip Angle



Boeing 707-320/-420, Velocity - Distance Curves

Aircraft: **707-320B**

ALC Mgr: Manuf: *Boeing* Group Index:
 Wing Span: *142.67'* Length: *152.92'* Height: *42.08'* Vert. Clr: *35.0''*
 Pivot Pt: *34.0'* Turn Radius: *68.0'* 180° Turn Diameter: *220.0'* Controlling Gear: *Nose*

Basic Empty Wt: <i>142.78</i>	Basic Mis, T/O Wt:	Max T/O Wt : <i>327.0</i>
Basic Mis. Ldg. Wt:	Max Ldg. Wt: <i>207.0</i>	T/O Dist:
T/O Dist. (50'):	Ldg. Dist:	Ldg. Dist. (50'):

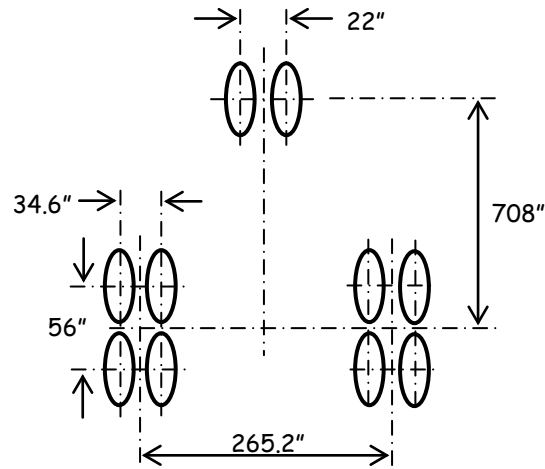
Gear: *FAA 2D, Two Dual Wheels in Tandem Main Gear with Dual Wheel Nose Gear*
 Number of Assemblies/Tires per Assembly: Nose: *1-2* Main: *2-4*

Main Gear: % Gross Load on Assembly: <i>92.07</i>	Max Assembly Load: <i>150.534</i>
Max Single Wheel Load: <i>37.634</i>	
Contact Pressure: <i>180</i>	Contact Area: <i>209.08</i>
Footprint Width: <i>12.64''</i>	

Nose Gear: % Gross Load on Assembly: <i>7.93</i>	Max Assembly Load: <i>25.931</i>
Max Single Wheel Load: <i>12.966</i>	
Contact Pressure: <i>115</i>	Contact Area: <i>112.75</i>
Footprint Width: <i>9.28''</i>	

Aircraft Classification Numbers (ACNs)

Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt <i>142.8</i>	<i>13.9</i>	<i>15.0</i>	<i>17.5</i>	<i>20.2</i>	<i>14.9</i>	<i>15.7</i>	<i>17.6</i>	<i>22.6</i>
Max Wgt <i>327.0</i>	<i>37.9</i>	<i>45.9</i>	<i>54.6</i>	<i>61.8</i>	<i>41.9</i>	<i>46.9</i>	<i>56.9</i>	<i>72.5</i>



Aircraft: **707-320C**

ALC Mgr: _____ Manuf: *Boeing* Group Index: _____
 Wing Span: 142.67' Length: 152.92' Height: 42.0' Vert. Clr: 35.0"
 Pivot Pt: 34.0' Turn Radius: 68.0' 180° Turn Diameter: 220.0' Controlling Gear: *Nose*

Basic Empty Wt:	135.30	Basic Mis, T/O Wt:		Max T/O Wt :	333.60
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	247.0	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

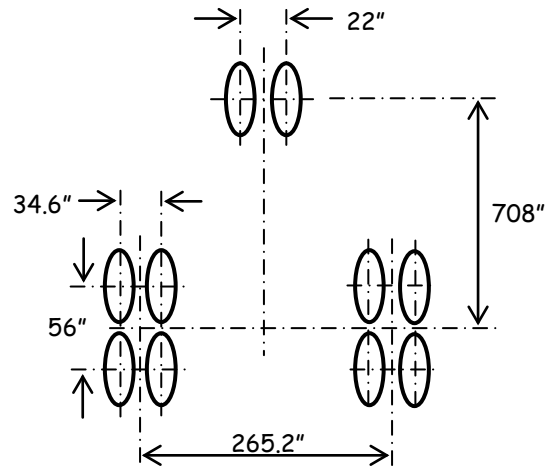
Gear: <i>FAA 2D, Two Dual Wheels in Tandem Main Gear with Dual Wheel Nose Gear</i>		
Number of Assemblies/Tires per Assembly:	Nose: 1-2	Main: 2-4

Main Gear:	% Gross Load on Assembly:	93.45	Max Assembly Load:	155.875
	Max Single Wheel Load:	38.969		
	Contact Pressure:	180	Contact Area:	216.49
	Footprint Width:	12.86"		

Nose Gear:	% Gross Load on Assembly:	6.55	Max Assembly Load:	21.851
	Max Single Wheel Load:	10.925		
	Contact Pressure:	115	Contact Area:	95.0
	Footprint Width:	8.52"		

Aircraft Classification Numbers (ACNs)

Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt 135.3	13.4	14.3	16.7	19.1	14.2	15.0	16.7	21.3
Max Wgt 333.6	39.9	48.5	57.4	64.5	45.9	50.1	60.3	76.2



Aircraft: **717-200**

ALC Mgr: Manuf: *Boeing* Group Index:
Wing Span: **93.33'** Length: **124.0'** Height: **29.67'** Vert. Clr: **36.0''**
Pivot Pt: **9.80'** Turn Radius: **59.1'** 180° Turn Diameter: **112.4'** Controlling Gear: *Nose*

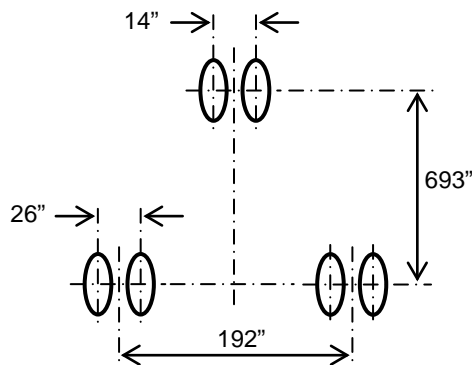
Basic Empty Wt:	68.5	Basic Mis, T/O Wt:		Max T/O Wt :	121.0
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	110.0	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

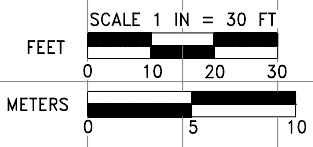
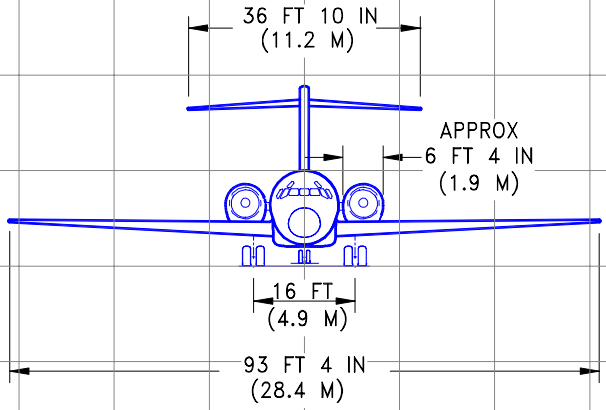
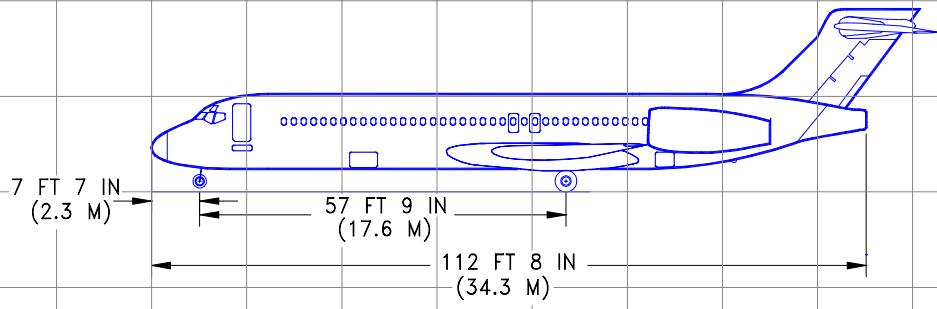
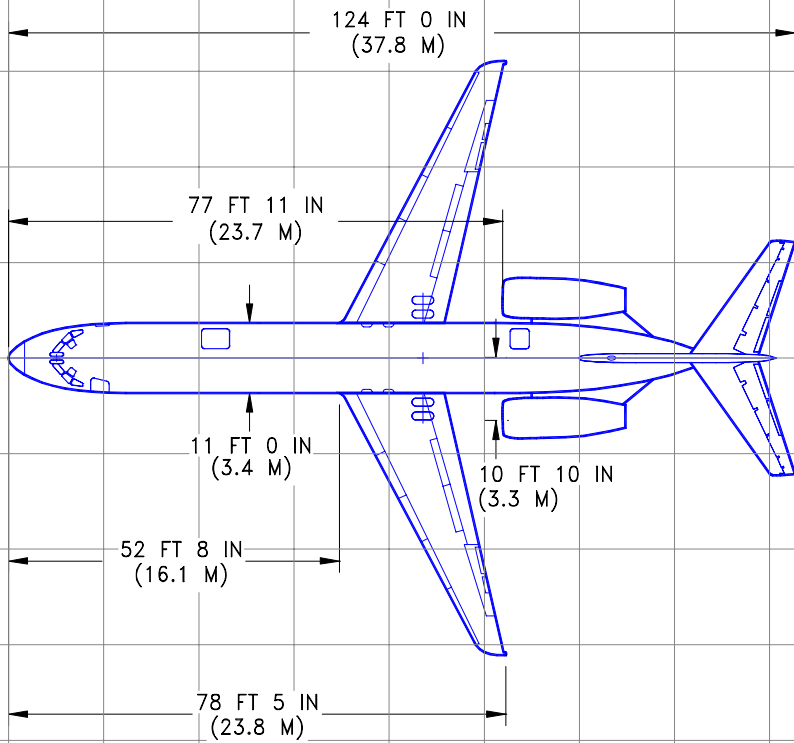
Gear: *FAA D, Dual Wheel Main Gear with Dual Wheel Nose Gear*
Number of Assemblies/Tires per Assembly: Nose: **1-2** Main: **2-2**

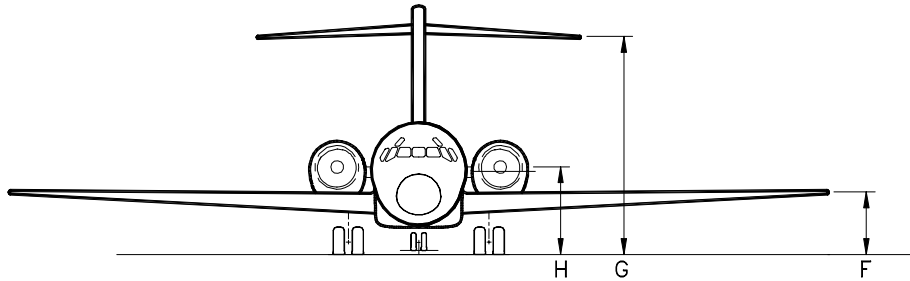
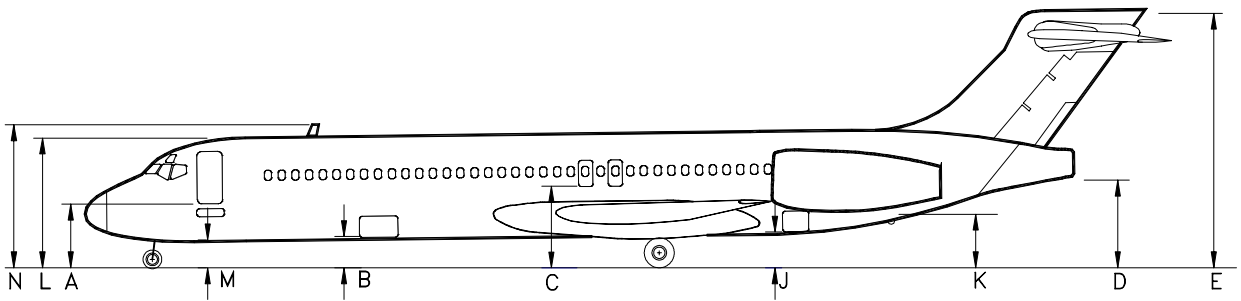
Main Gear:	% Gross Load on Assembly:	95.20	Max Assembly Load:	57.596
	Max Single Wheel Load:	28.798	Contact Area:	175.60
	Contact Pressure:	164	Footprint Width:	11.58''

Nose Gear:	% Gross Load on Assembly:	4.80	Max Assembly Load:	5.808
	Max Single Wheel Load:	2.904	Contact Area:	22.34
	Contact Pressure:	130	Footprint Width:	4.13''

Aircraft Classification Numbers (ACNs)									
Aircraft Weight		Rigid Pavement Subgrades				Flexible Pavement Subgrades			
		High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt	68.5	17.4	18.7	19.7	20.3	15.8	16.1	17.9	20.7
Max Wgt	121.0	34.3	36.6	38.4	39.2	30.7	32.4	36.5	39.4

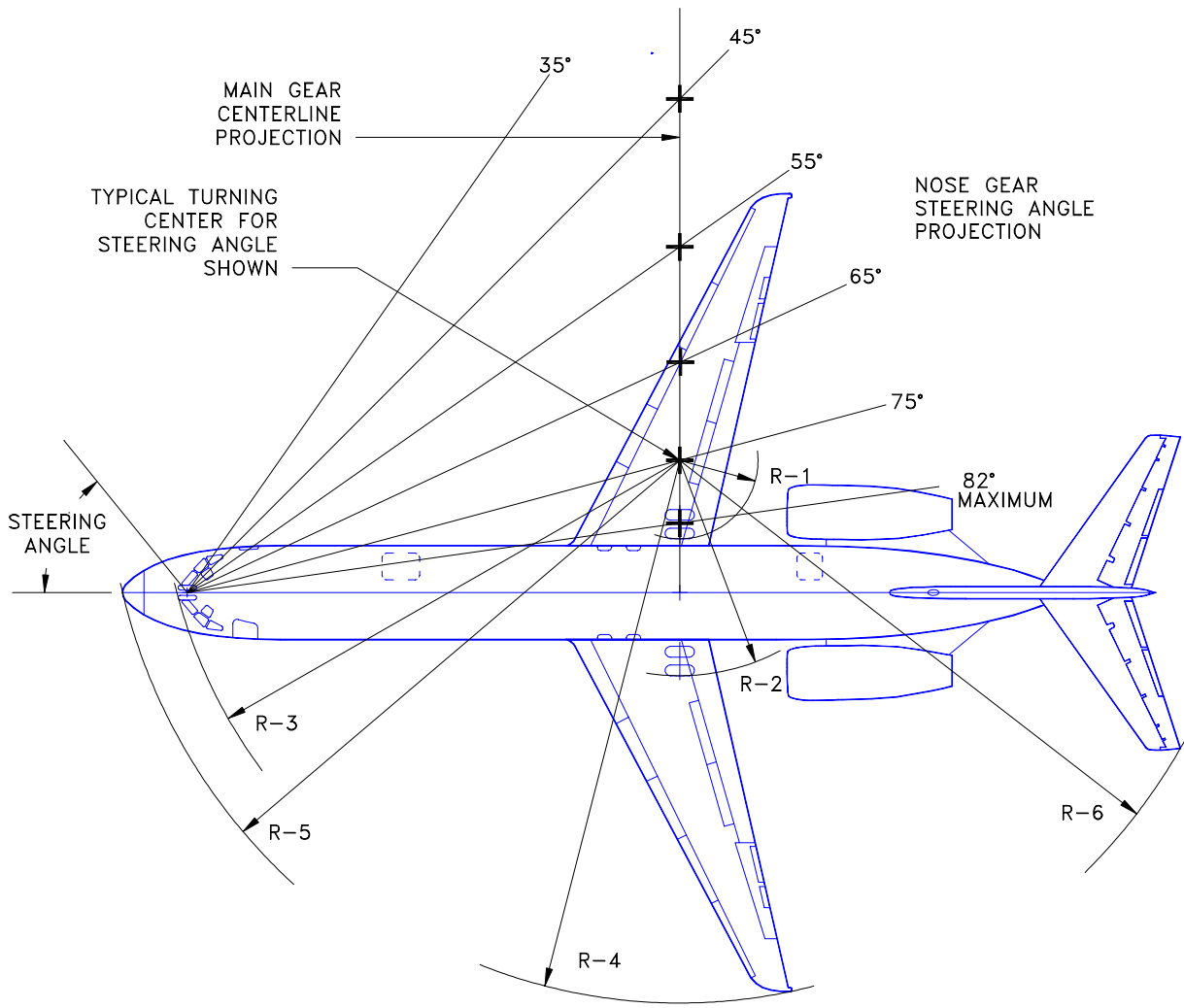






	MINIMUM		MAXIMUM	
	FEET - INCHES	METERS	FEET - INCHES	METERS
A	7-3	2.2	8-1	2.5
B	3-7	1.1	4-3	1.3
C	9-1	2.8	9-5	2.9
D	9-9	3.0	10-7	3.2
E	28-9	8.8	29-8	9.0
F	7-2	2.2	7-8	2.3
G	25-2	7.7	26-1	7.9
H	9-8	2.9	10-3	3.1
J	3-10	1.2	4-5	1.3
K	6-0	1.8	6-7	2.0
L	14-10	4.5	15-7	4.8
M	3-0	0.9	3-9	1.1
N	16-4	5.0	17-1	5.2

NOTES: VERTICAL CLEARANCES SHOWN OCCUR DURING MAXIMUM VARIATIONS OF AIRPLANE ATTITUDE. COMBINATIONS OF AIRPLANE LOADING AND UNLOADING ACTIVITIES THAT PRODUCE THE GREATEST POSSIBLE VARIATIONS IN ATTITUDE WERE USED TO ESTABLISH THE VARIATIONS SHOWN. DURING ROUTINE SERVICING, THE AIRPLANE REMAINS RELATIVELY STABLE, PITCH AND ELEVATION CHANGES OCCURRING SLOWLY.



NOTES: * ACTUAL OPERATING TURNING RADII MAY BE GREATER THAN SHOWN.
 * CONSULT WITH AIRLINE FOR SPECIFIC OPERATING PROCEDURE
 * R - 3 IS MEASURED TO OUTSIDE TIRE FACE

STEERING ANGLE (DEG)	R1		R2		R3		R4		R5		R6	
	INNER GEAR		OUTER GEAR		NOSE GEAR		WING TIP		NOSE		TAIL	
	FT	M	FT	M	FT	M	FT	M	FT	M	FT	M
30	93.7	28.6	109.7	33.4	115.5	35.2	147.2	44.9	119.5	36.4	132.0	40.2
35	76.2	23.2	92.2	28.1	101.5	30.9	129.8	39.6	105.2	32.1	116.5	35.5
40	62.5	19.1	78.5	23.9	89.8	27.4	116.2	35.4	94.9	28.9	104.9	32.0
45	51.5	15.7	67.5	20.5	82.5	25.2	105.2	32.1	87.1	26.6	96.0	29.3
50	42.2	12.8	58.2	17.7	76.2	23.2	96.0	29.3	81.3	24.8	88.8	27.1
55	34.1	10.4	50.1	15.3	71.3	21.7	88.0	26.8	76.8	23.4	82.9	25.3
60	27.0	8.2	43.1	13.1	67.5	20.6	81.0	24.7	73.3	22.3	78.1	23.8
65	20.6	6.3	36.6	11.2	64.5	19.7	74.7	22.8	70.6	21.5	74.0	22.6
70	14.7	4.5	30.7	9.4	62.3	19.0	68.9	21.0	68.6	20.9	70.6	21.5
75	9.2	2.8	25.2	7.7	60.6	18.5	63.4	19.3	67.1	20.5	67.6	20.6
82 (MAX)	1.8	0.5	17.8	5.4	59.1	18.0	56.2	17.1	65.8	20.1	64.3	19.6

Aircraft: **720**

ALC Mgr: Manuf: *Boeing* Group Index:
 Wing Span: 130.83' Length: 136.75' Height: 41.42' Vert. Clr: 31.0"
 Pivot Pt: 29.0' Turn Radius: 59.0' 180° Turn Diameter: 198.0' Controlling Gear: *Nose*

Basic Empty Wt:	110.80	Basic Mis, T/O Wt:		Max T/O Wt :	229.30
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	175.0	T/O Dist:	
T/O Dist. (50')		Ldg. Dist:		Ldg. Dist. (50')	

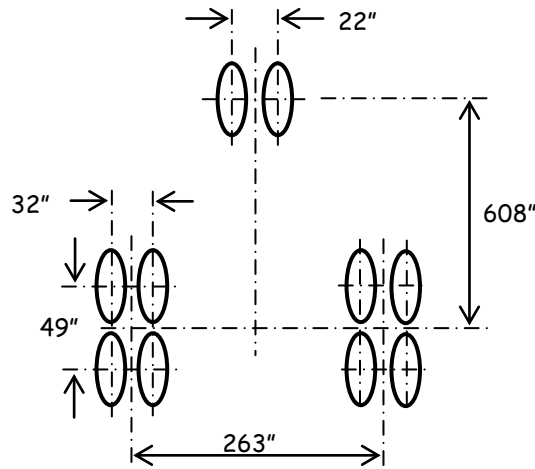
Gear: *FAA 2D, Two Dual Wheels in Tandem Main Gear with Dual Wheel Nose Gear*
 Number of Assemblies/Tires per Assembly: Nose: 1-2 Main: 2-4

Main Gear:	% Gross Load on Assembly:	95.07	Max Assembly Load:	108.998
	Max Single Wheel Load:	27.250		
	Contact Pressure:	145	Contact Area:	187.93
	Footprint Width:	11.98"		

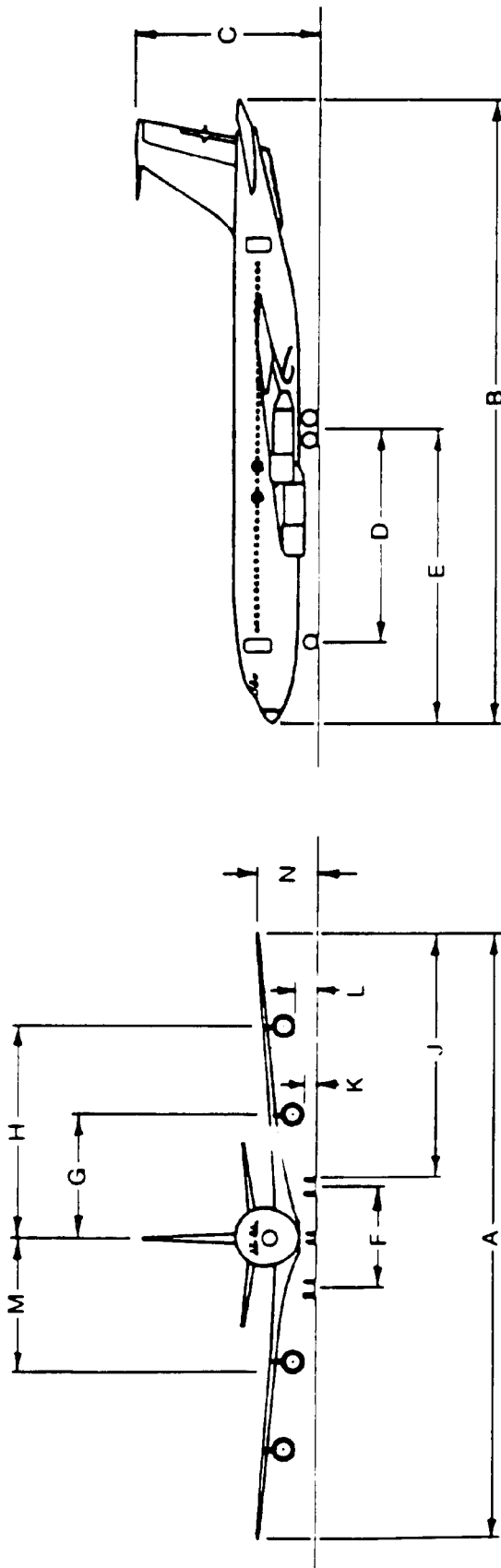
Nose Gear:	% Gross Load on Assembly:	4.93	Max Assembly Load:	11.304
	Max Single Wheel Load:	5.652		
	Contact Pressure:	100	Contact Area:	56.52
	Footprint Width:	6.57"		

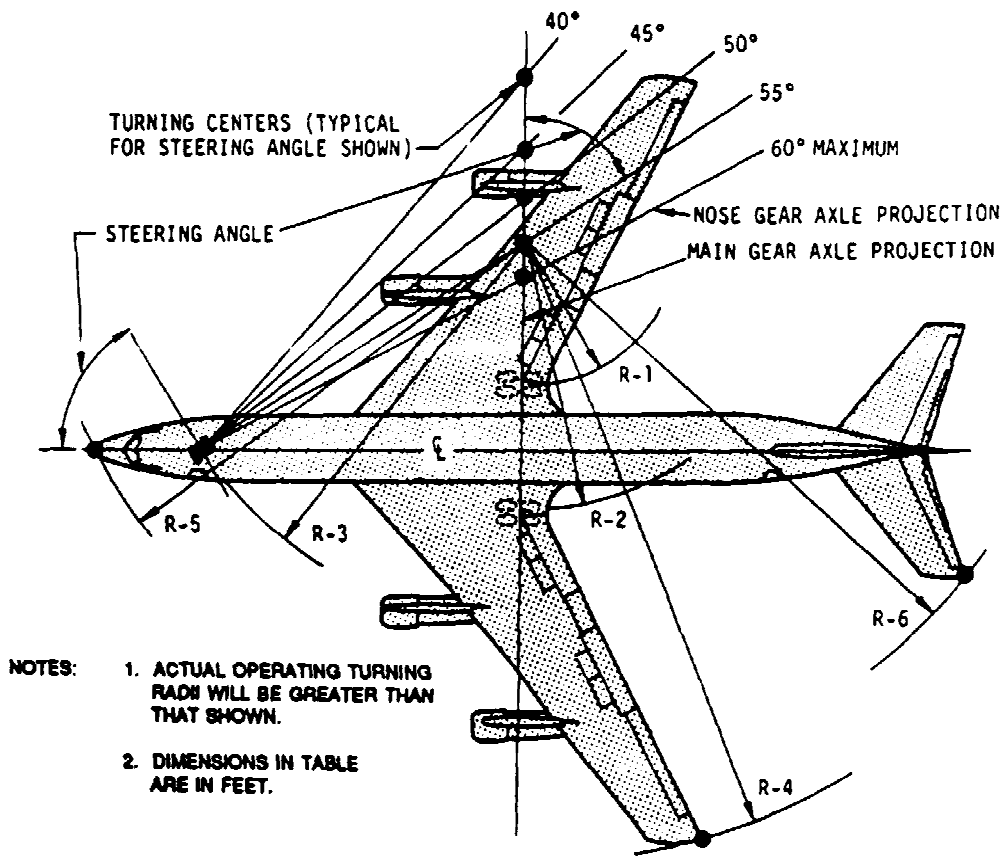
Aircraft Classification Numbers (ACNs)

Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt 110.8	10.0	11.3	13.4	15.7	11.7	12.2	13.8	18.0
Max Wgt 229.3	24.9	30.7	36.9	42.3	29.3	32.5	39.2	51.1



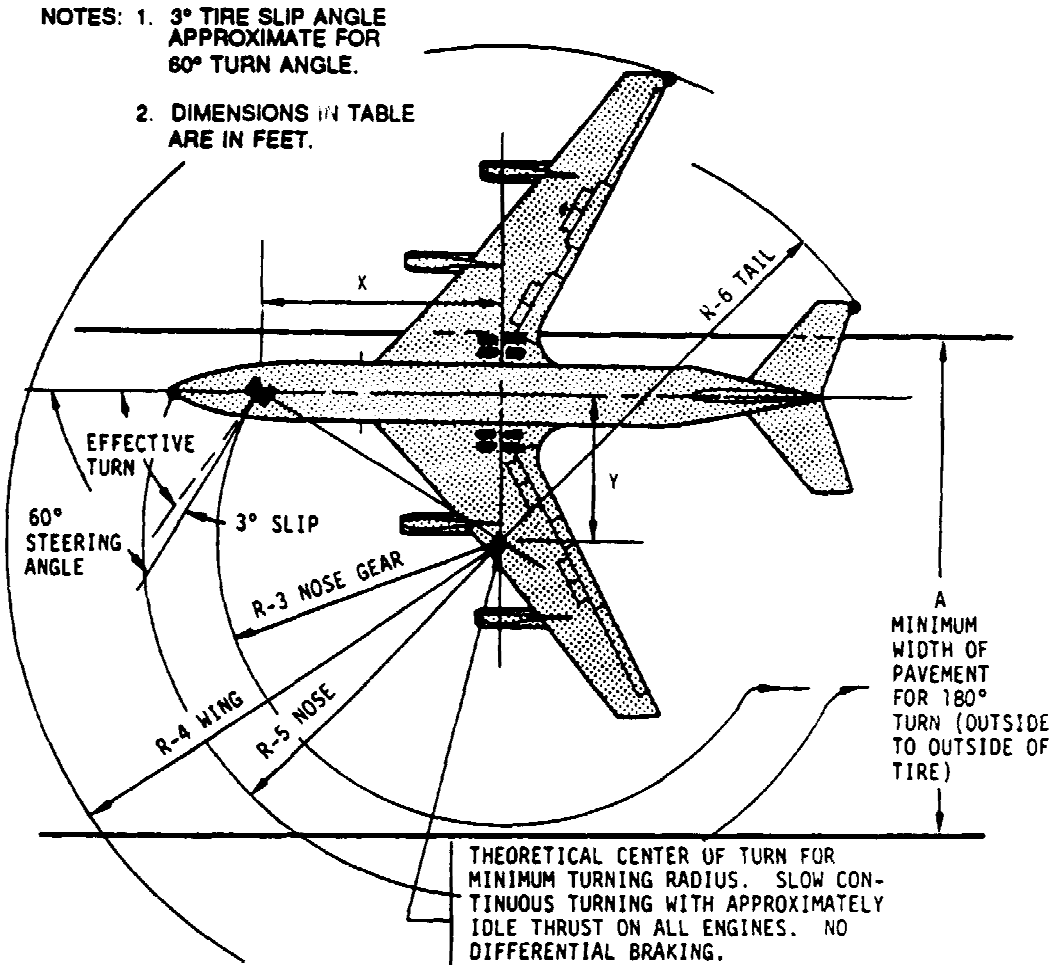
MODEL	MAXIMUM TIRE PRESSURE, PSI		A	B	C	D	E	F	G	H	J	K	L	M	N
	MAIN GEAR	NOSE GEAR													
707-120B	170	90	130.8	145.1	41.7	52.3	69.8	22.1	27.2	46.1	52.3	2.3	4.2	36.6	11.6
707-320/420	180	115	142.4	152.9	42.2	59.0	76.4	22.1	32.5	51.4	58.1	2.8	4.6	38.3	12.1
707-320B,C	180	115	145.8	152.9	42.1	59.0	76.4	22.1	32.5	51.4	59.8	2.8	4.6	38.3	12.1
720	145	100	130.8	136.2	41.4	50.7	68.1	21.9	27.2	46.1	52.5	2.6	4.3	32.8	10.8
720B	145	115	130.8	136.8	41.2	50.7	68.1	21.9	27.2	46.1	52.5	2.1	3.8	32.8	10.8





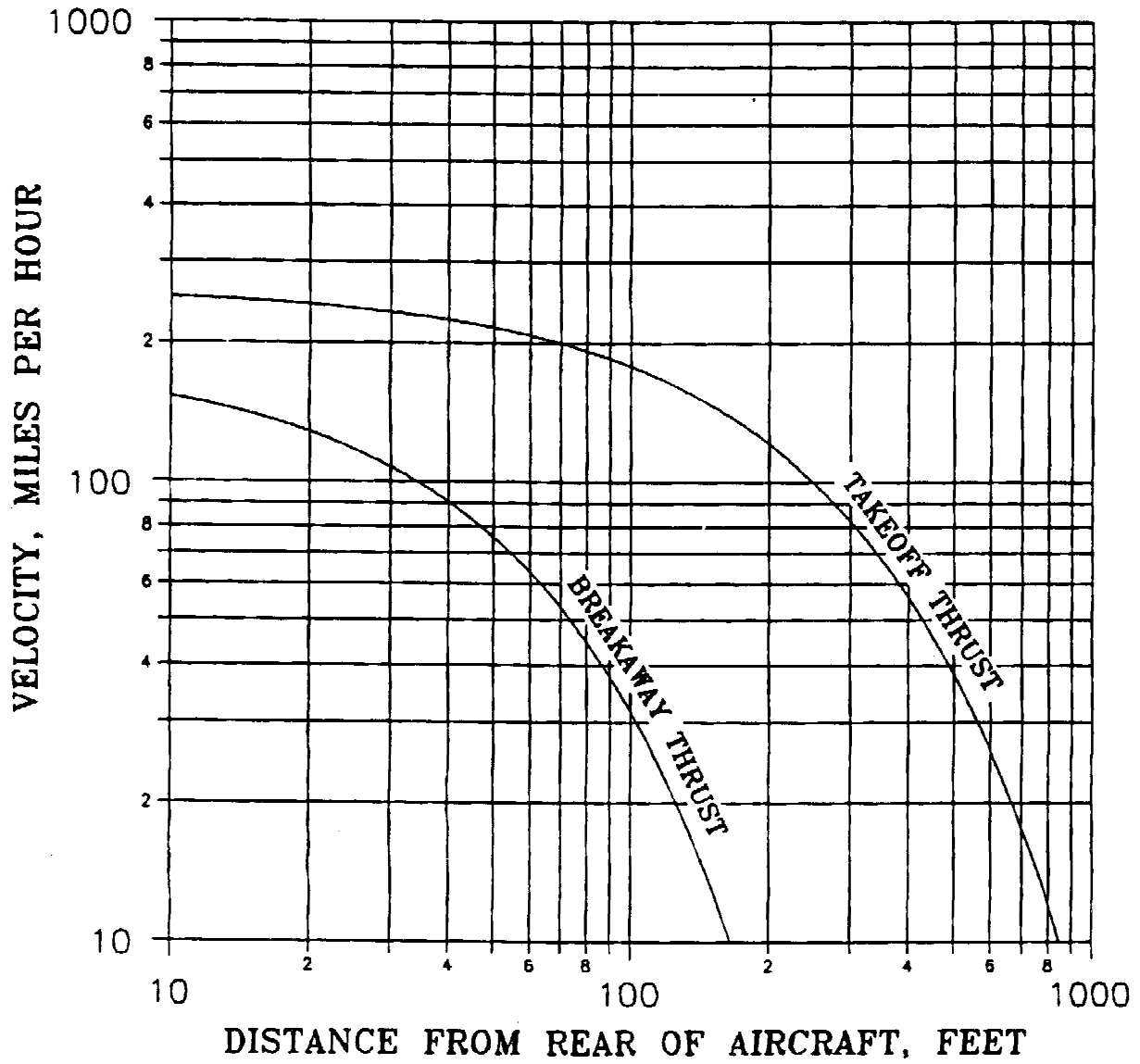
STEERING ANGLE (DEGREES)	R-1	R-2	R-3	R-4	R-5	R-6
	INNER GEAR	OUTER GEAR	NOSE GEAR	WING TIP	NOSE	TAIL
30	77	99	102	167	112	130
35	62	84	89	142	100	117
40	50	72	79	129	91	107
45	40	62	72	120	85	100
50	32	54	66	112	80	94
55	25	47	62	105	77	90
60 (MAXIMUM)	18	40	59	99	74	86

Boeing 720 and 720B,
Turning Radii - No Slip Angle



FOR EFFECTIVE TURN ANGLE OF 57°						
X	Y	A	R-3	R-4	R-5	R-6
50.6	32.8	107.7	60.4	102.4	75.4	88.0

Boeing 720 and 720B, Minimum Turning Radii - 3° Slip Angle



Boeing 720, Velocity - Distance Curves

Aircraft: **720B**

ALC Mgr: Manuf: *Boeing* Group Index:
 Wing Span: 130.83' Length: 136.75' Height: 41.16' Vert. Clr: 25.0"
 Pivot Pt: 29.0' Turn Radius: 59.0' 180° Turn Diameter: 198.0' Controlling Gear: *Nose*

Basic Empty Wt:	115.0	Basic Mis, T/O Wt:		Max T/O Wt :	234.30
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	175.0	T/O Dist:	
T/O Dist. (50')		Ldg. Dist:		Ldg. Dist. (50')	

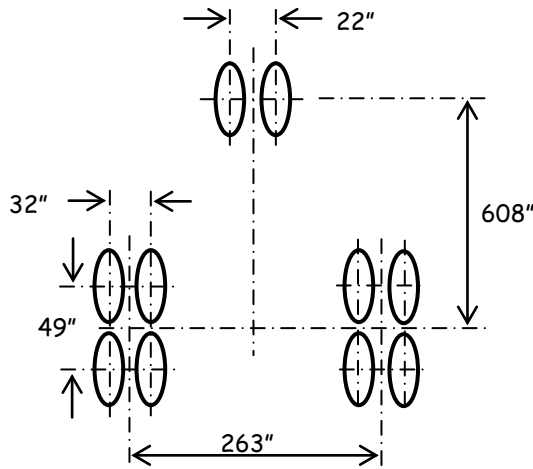
Gear: *FAA 2D, Two Dual Wheels in Tandem Main Gear with Dual Wheel Nose Gear*
 Number of Assemblies/Tires per Assembly: Nose: 1-2 Main: 2-4

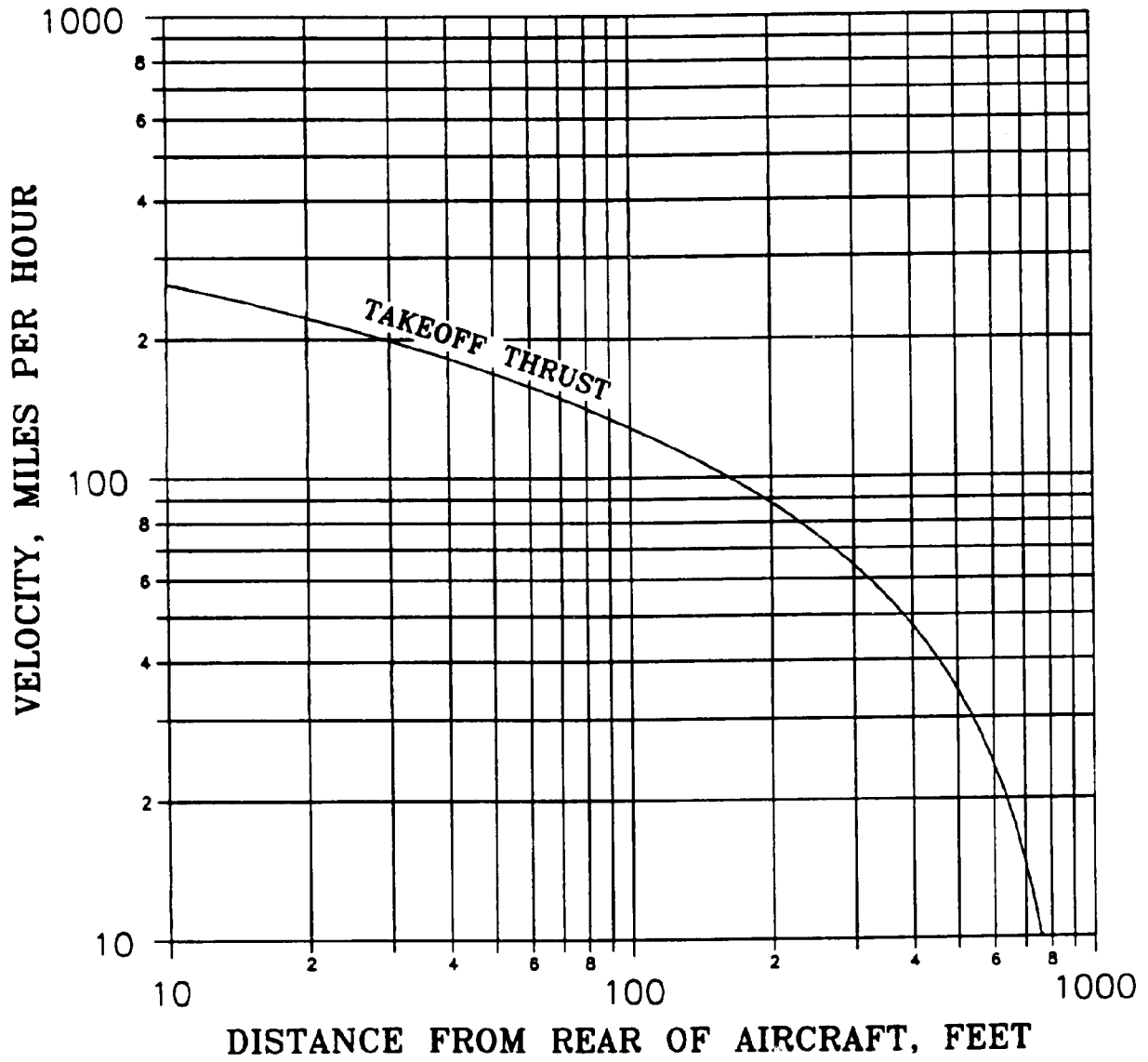
Main Gear:	% Gross Load on Assembly:	93.04	Max Assembly Load:	108.996
	Max Single Wheel Load:	27.249		
	Contact Pressure:	145	Contact Area:	187.92
	Footprint Width:	11.98"		

Nose Gear:	% Gross Load on Assembly:	6.96	Max Assembly Load:	16.307
	Max Single Wheel Load:	8.154		
	Contact Pressure:	115	Contact Area:	70.90
	Footprint Width:	7.36"		

Aircraft Classification Numbers (ACNs)

Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt 115.0	10.2	11.6	13.8	16.1	11.9	12.4	14.1	18.4
Max Wgt 234.3	24.9	30.7	36.9	42.3	28.6	31.5	38.9	50.9





Boeing 720B, Velocity - Distance Curve

Aircraft: **727-100/-100C**

ALC Mgr: Manuf: *Boeing* Group Index:
Wing Span: 108.0' Length: 133.17' Height: 34.25' Vert. Clr: 39.0"
Pivot Pt: 11.5' Turn Radius: 54.0' 180° Turn Diameter: 138.0' Controlling Gear: *Nose*

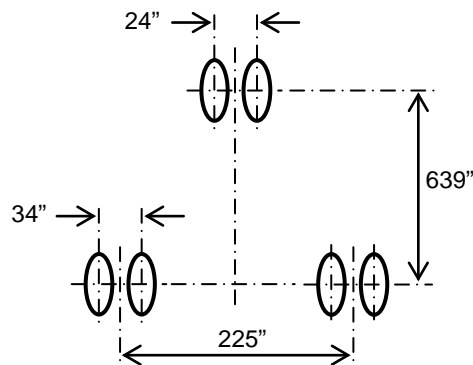
Basic Empty Wt:	87.696	Basic Mis, T/O Wt:		Max T/O Wt :	169.0
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	142.5	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

Gear: <i>FAA D, Two Dual Wheels in Tandem Main Gear with Dual Wheel Nose Gear</i>		
Number of Assemblies/Tires per Assembly:	Nose: 1-2	Main: 2-2

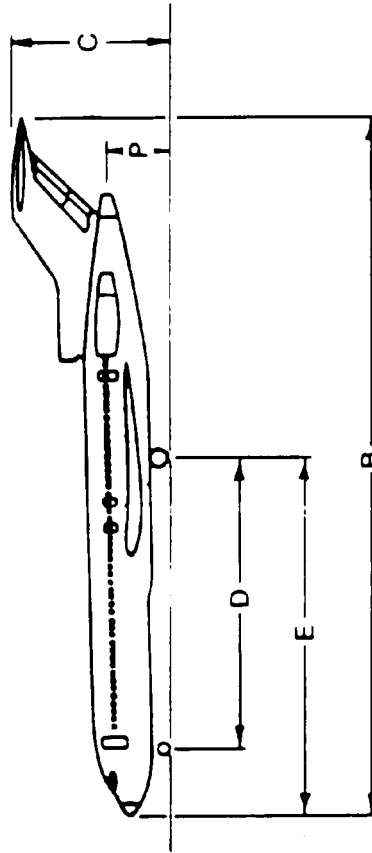
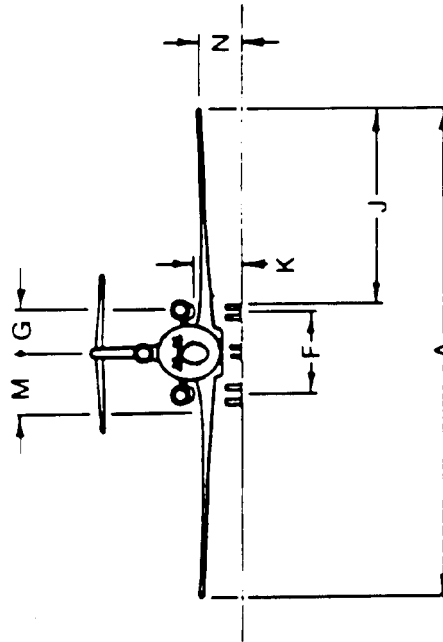
Main Gear:	% Gross Load on Assembly:	95.29	Max Assembly Load:	80.520
	Max Single Wheel Load:	40.260		
	Contact Pressure:	165	Contact Area:	244
	Footprint Width:	13.65"		

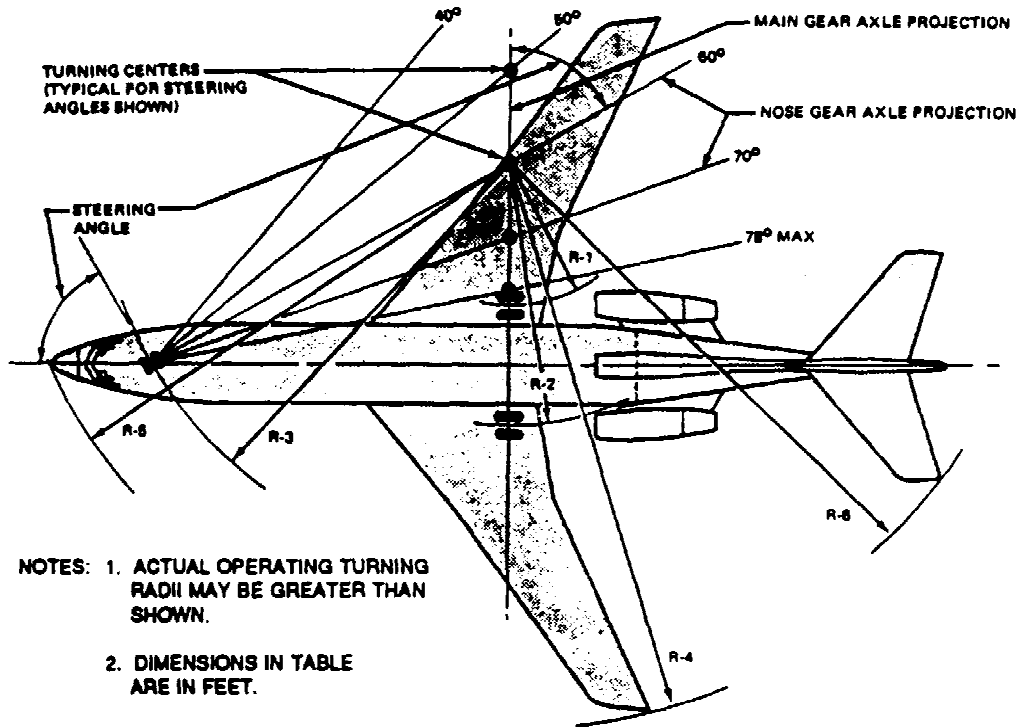
Nose Gear:	% Gross Load on Assembly:	4.71	Max Assembly Load:	7.960
	Max Single Wheel Load:	3980		
	Contact Pressure:	100	Contact Area:	39.8
	Footprint Width:	5.51"		

Aircraft Classification Numbers (ACNs)									
Aircraft Weight		Rigid Pavement Subgrades				Flexible Pavement Subgrades			
		High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt	87.7	20.6	22.2	23.6	24.6	19.4	19.7	21.5	25.0
Max Wgt	169.0	44.9	48.5	51.2	52.4	41.3	43.1	48.8	54.0



MODEL	MAXIMUM TIRE PRESSURE, PSI		A	B	C	D	E	F	G	J	K	M	N	P
	MAIN GEAR	NOSE GEAR												
100	158	100	108.0	133.2	34.3	53.3	68.3	18.8	9.3	42.5	10.3	14.3	5.7	12.0
100-C	165	100	108.0	133.2	34.3	53.3	68.3	18.8	9.3	42.5	10.3	14.3	5.7	12.0
200	173	100	108.0	153.2	34.9	63.3	78.3	18.8	9.3	42.3	10.3	16.9	4.8	12.0

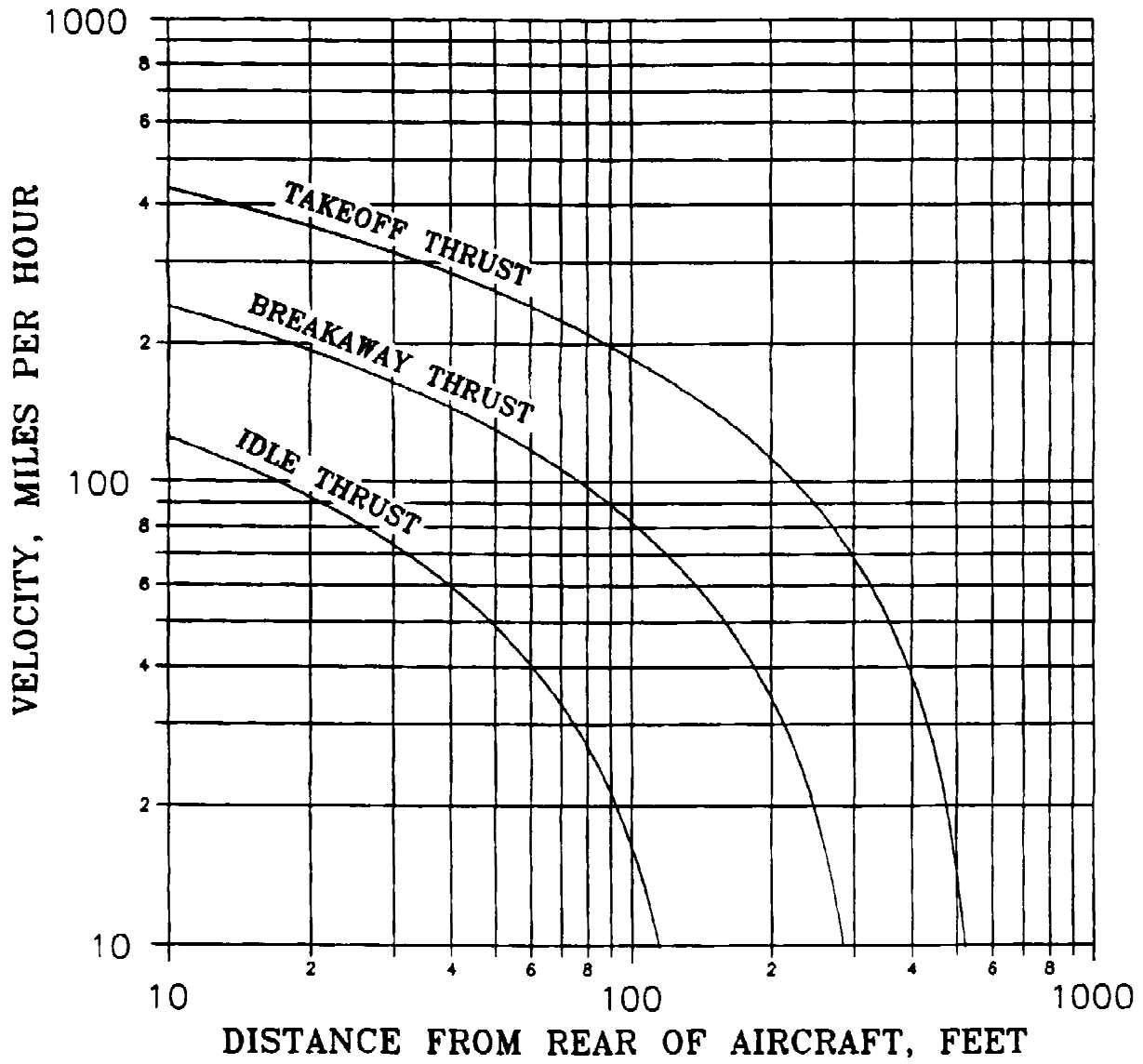




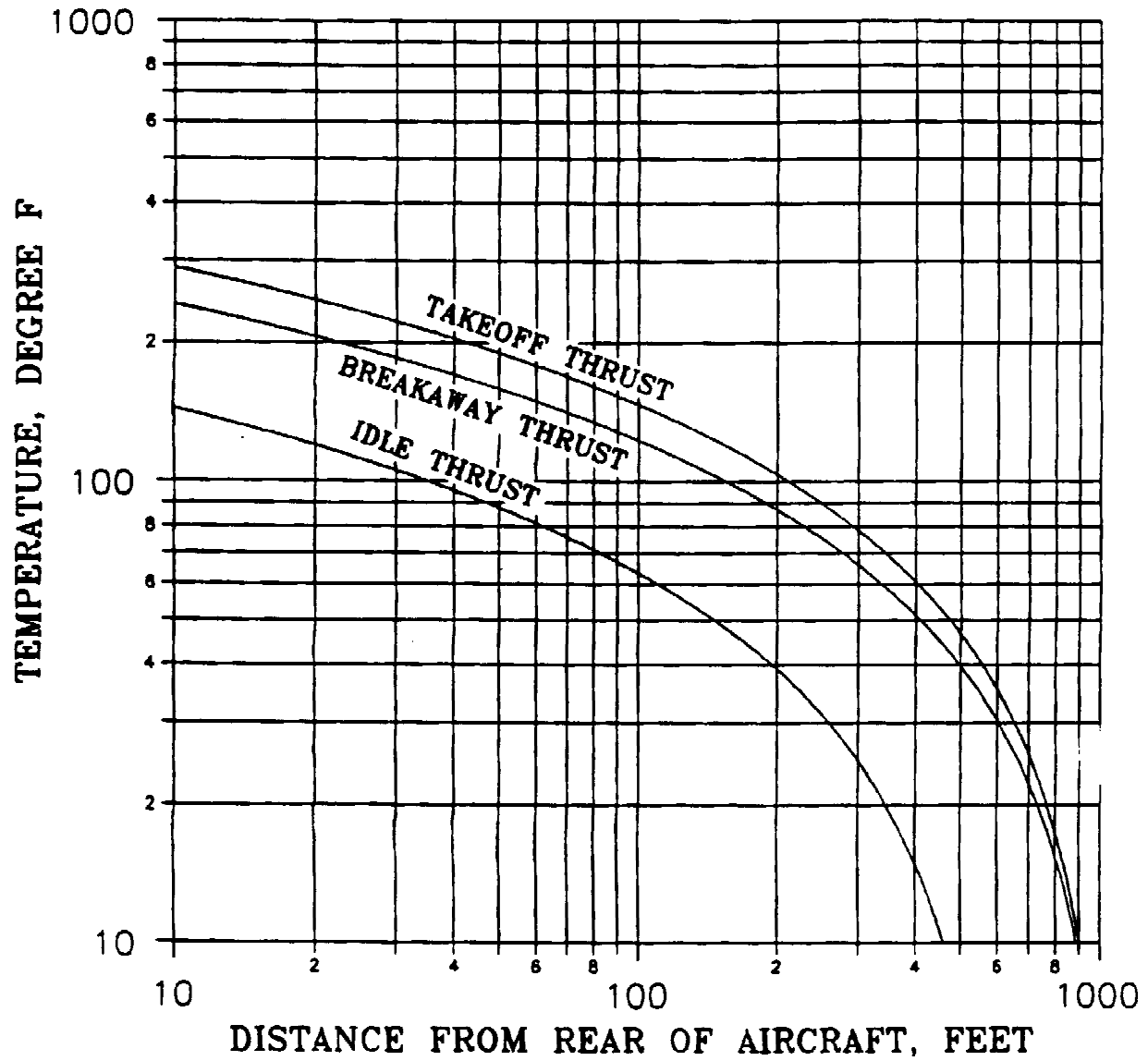
- NOTES: 1. ACTUAL OPERATING TURNING RADIUS MAY BE GREATER THAN SHOWN.
2. DIMENSIONS IN TABLE ARE IN FEET.

STEERING ANGLE (DEGREES)	R-1	R-2	R-3	R-4	R-5	R-6
	INNER GEAR	OUTER GEAR	NOSE GEAR	WING TIP	NOSE	TAIL
30	83	102	106	148	115	127
35	67	86	83	132	102	114
40	54	73	83	120	93	103
45	44	63	75	109	87	96
50	35	54	70	101	82	89
55	28	47	65	94	78	85
60	21	40	62	87	75	80
65	15	34	59	82	73	77
70	10	29	57	77	71	74
75	6	24	55	72	70	72
78 (MAXIMUM)	2	21	54	69	69	71

Boeing 727-100/-100C,
Turning Radii - No Slip Angle



Boeing 727-100/-100C,
Velocity - Distance Curves



Boeing 727-100/-100C, Temperature - Distance Curves

Aircraft: **727-200**

ALC Mgr: Manuf: *Boeing* Group Index:
 Wing Span: *108.0'* Length: *153.17'* Height: *34.92'* Vert. Clr: *37.0"*
 Pivot Pt: *13.50'* Turn Radius: *65.0'* 180° Turn Diameter: *142.0'* Controlling Gear: *Nose*

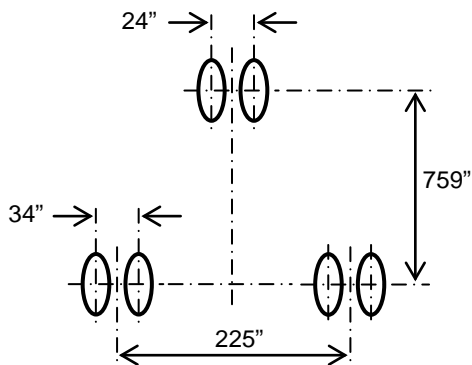
Basic Empty Wt:	<i>100.7</i>	Basic Mis, T/O Wt:		Max T/O Wt :	<i>209.5</i>
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	<i>161.0</i>	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

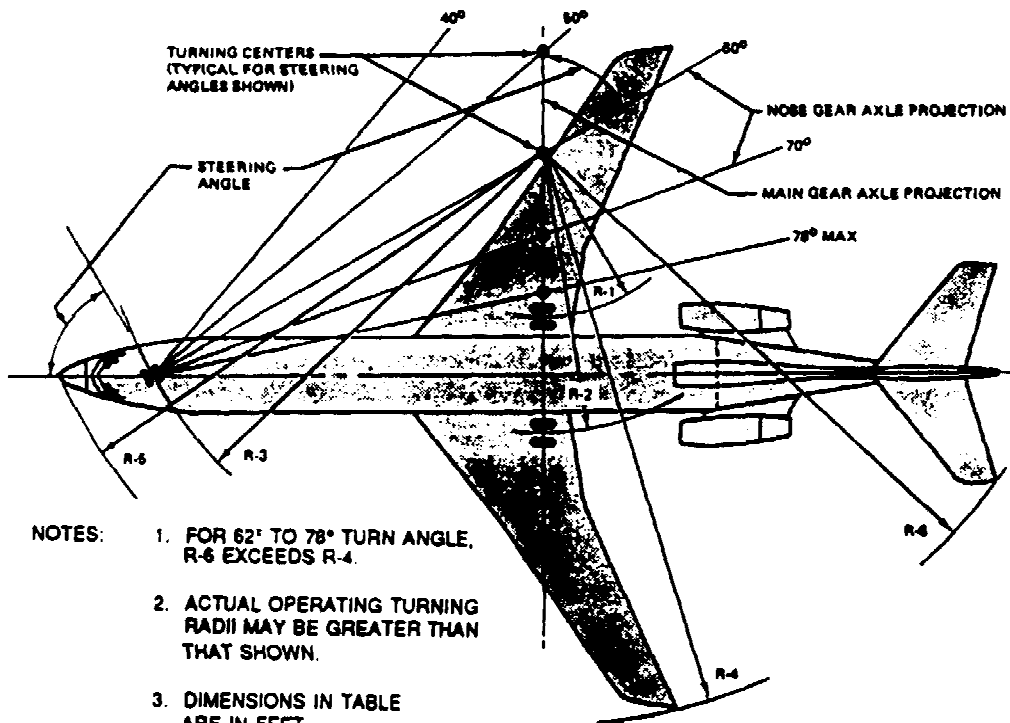
Gear: <i>FAA D, Dual Wheel Main Gear with Dual Wheel Nose Gear</i>		
Number of Assemblies/Tires per Assembly:	Nose: <i>1-2</i>	Main: <i>2-2</i>

Main Gear:	% Gross Load on Assembly:	<i>92.95</i>	Max Assembly Load:	<i>97.365</i>
	Max Single Wheel Load:	<i>48.683</i>		
	Contact Pressure:	<i>173</i>	Contact Area:	<i>281.40</i>
	Footprint Width:	<i>14.66"</i>		

Nose Gear:	% Gross Load on Assembly:	<i>7.05</i>	Max Assembly Load:	<i>14.770</i>
	Max Single Wheel Load:	<i>7.385</i>		
	Contact Pressure:	<i>100</i>	Contact Area:	<i>73.85</i>
	Footprint Width:	<i>7.51"</i>		

Aircraft Classification Numbers (ACNs)								
Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt <i>100.7</i>	<i>23.9</i>	<i>25.7</i>	<i>27.4</i>	<i>28.4</i>	<i>22.2</i>	<i>22.5</i>	<i>24.7</i>	<i>28.8</i>
Max Wgt <i>209.5</i>	<i>57.3</i>	<i>61.4</i>	<i>64.5</i>	<i>66.2</i>	<i>51.8</i>	<i>54.9</i>	<i>61.8</i>	<i>66.7</i>

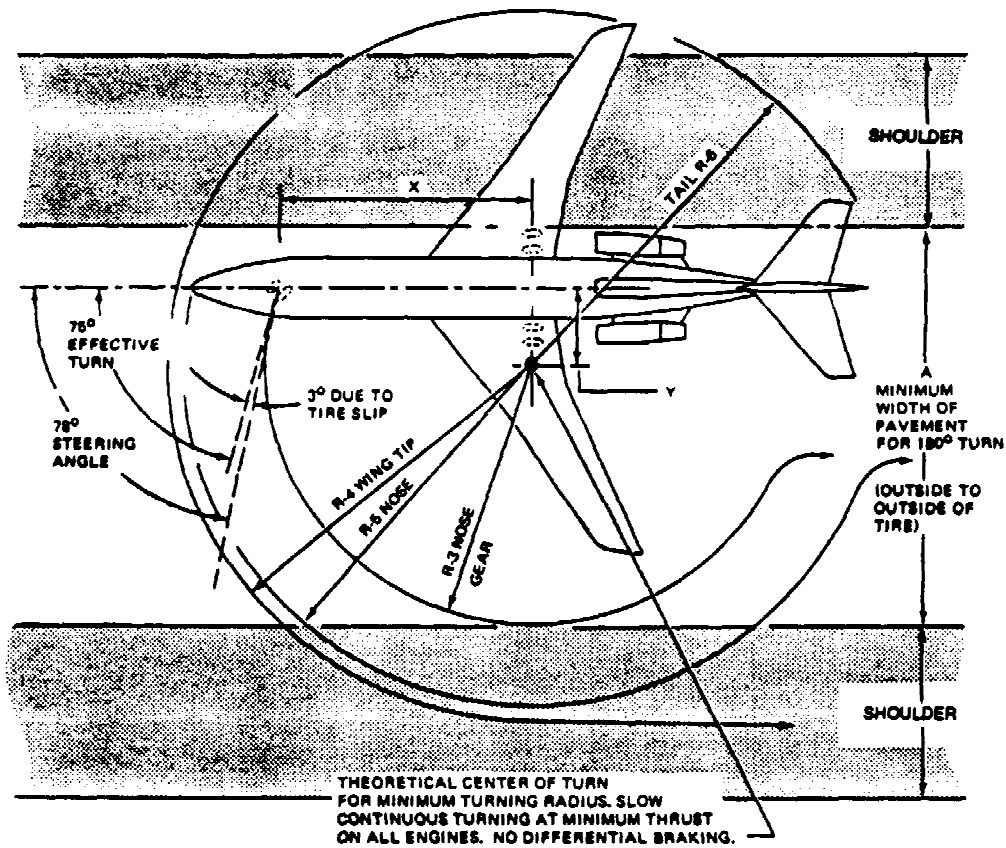




- NOTES:
1. FOR 62° TO 78° TURN ANGLE, R-6 EXCEEDS R-4.
 2. ACTUAL OPERATING TURNING RADII MAY BE GREATER THAN THAT SHOWN.
 3. DIMENSIONS IN TABLE ARE IN FEET.

STEERING ANGLE (DEGREES)	R-1	R-2	R-3	R-4	R-5	R-6
	INNER GEAR	OUTER GEAR	NOSE GEAR	WING TIP	NOSE	TAIL
30	100	119	126	168	135	147
35	81	100	110	146	120	131
40	66	85	109	131	109	119
45	54	73	100	119	101	110
50	44	63	87	109	95	103
55	35	54	77	100	90	97
60	27	46	73	93	86	92
65	20	39	70	86	84	88
70	14	33	67	80	81	85
75	8	27	66	74	80	82
78 (MAXIMUM)	4	23	65	71	79.5	80

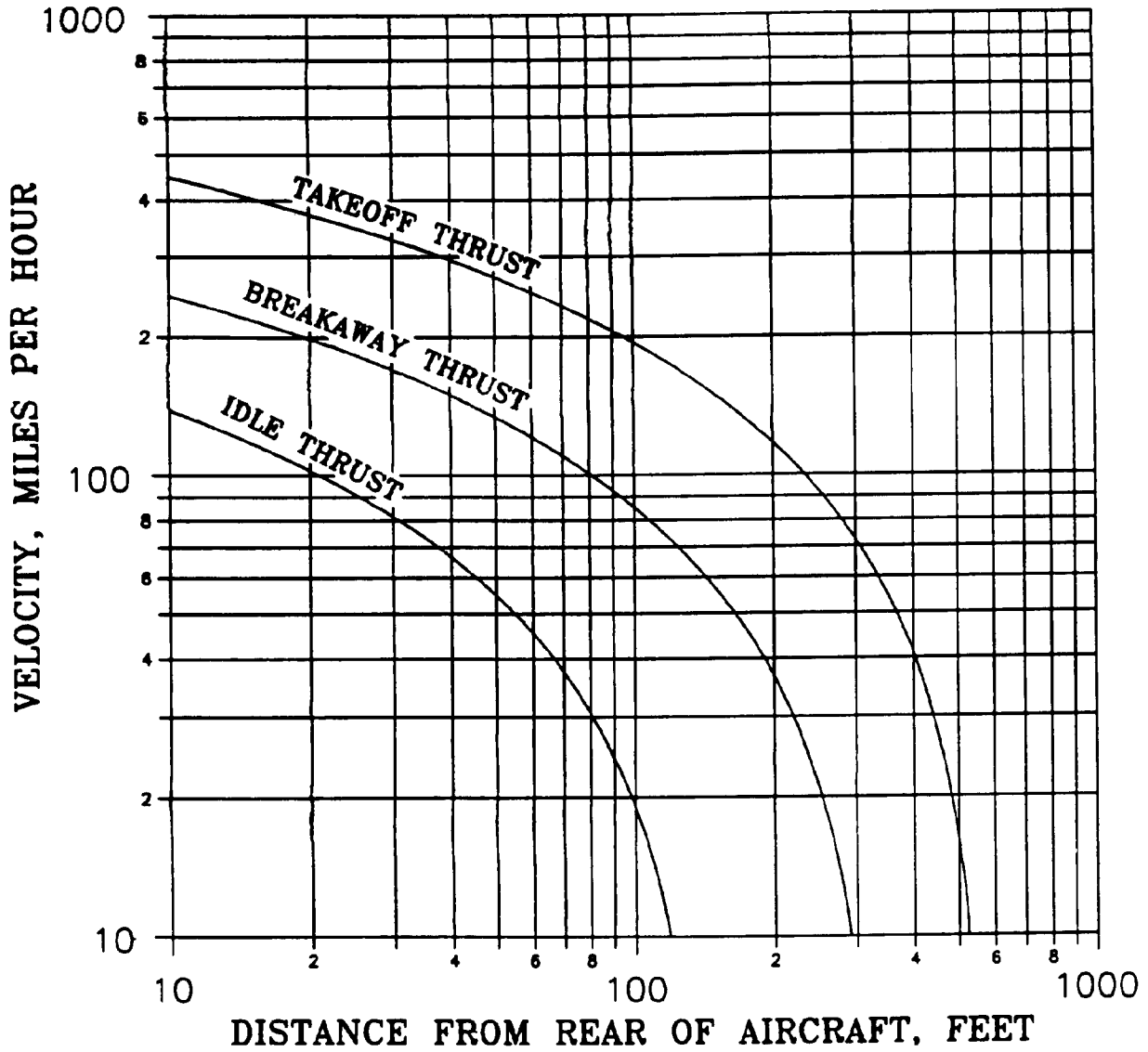
Boeing 727-200, Turning Radii - No Slip Angle



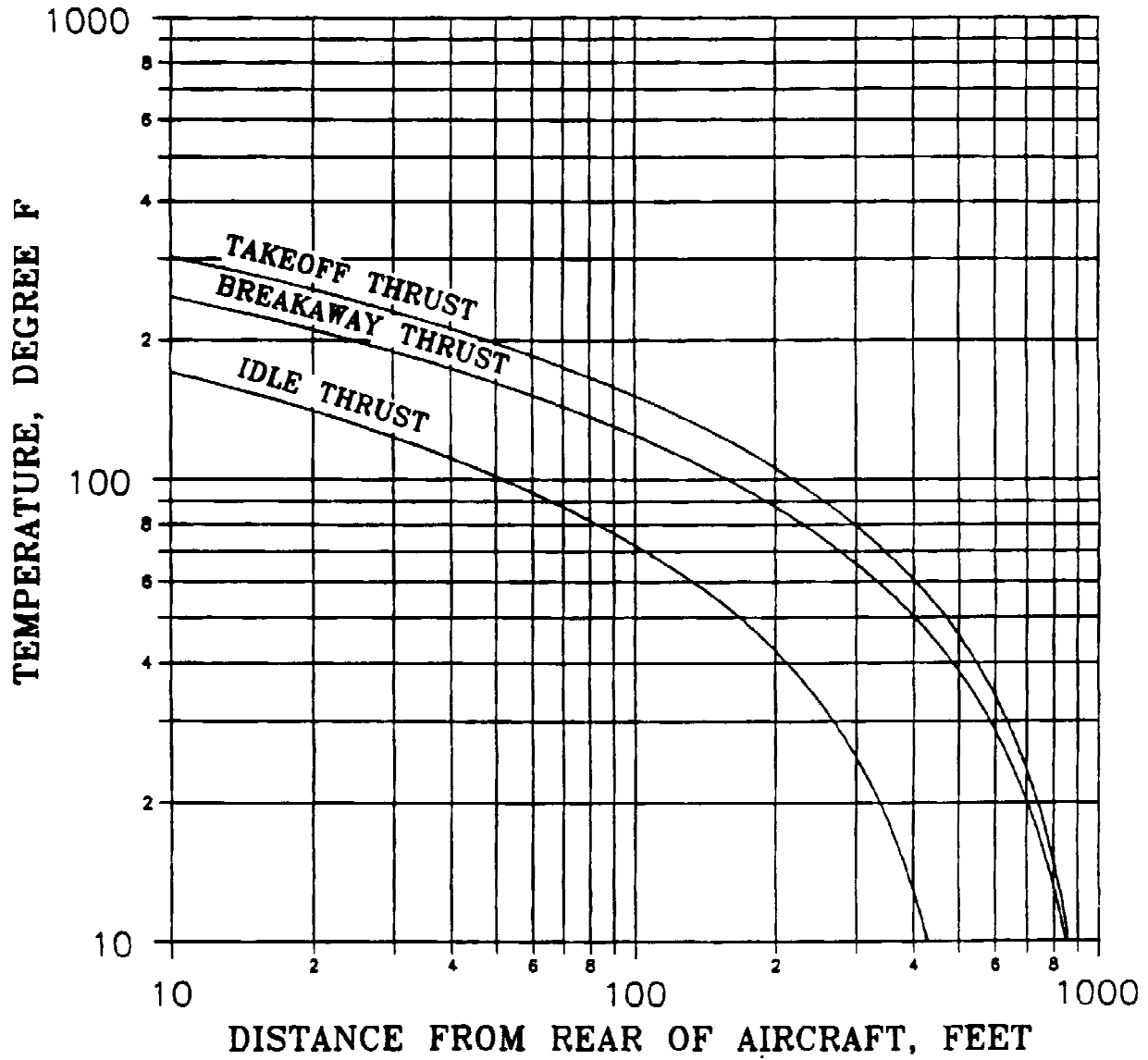
- NOTES: 1. 3° TIRE SLIP ANGLE APPROXIMATE FOR 78° TURN ANGLE.
 2. DIMENSIONS IN TABLE ARE IN FEET.

FOR AN EFFECTIVE TURN ANGLE OF 75°							
MODEL	X	Y	A	R-3	R-4	R-5	R-6
727-100 -100C	53.3	14.3	82.5	55.0	72.0	70.0	72.0
727-200	63.3	16.9	95.7	66.0	74.0	80.0	82.0

Boeing 727-100/-100C/-200, Minimum
 Turning Radii - 3° Slip Angle



Boeing 727-200, Velocity - Distance Curves



Boeing 727-200, Temperature - Distance Curves

Aircraft: **737-100**

ALC Mgr: Manuf: *Boeing* Group Index:
 Wing Span: 93.0' Length: 94.0' Height: 37.17' Vert. Clr: 20.0"
 Pivot Pt: 10.45' Turn Radius: 36.0' 180° Turn Diameter: 110.6' Controlling Gear: *Nose*

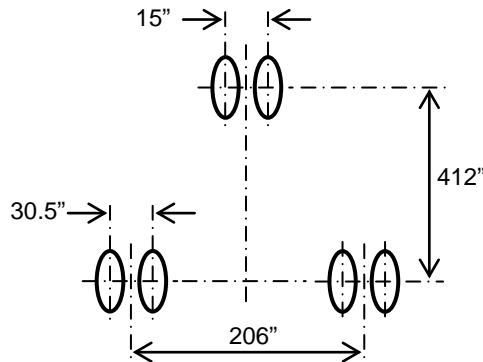
Basic Empty Wt:	62.0	Basic Mis, T/O Wt:		Max T/O Wt :	110.0
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	99.0	T/O Dist:	8,200'
T/O Dist. (50'):		Ldg. Dist:	4,800'	Ldg. Dist. (50'):	

Gear: *FAA D, Dual Wheel Main Gear with Dual Wheel Nose Gear*
 Number of Assemblies/Tires per Assembly: Nose: 1-2 Main: 2-2

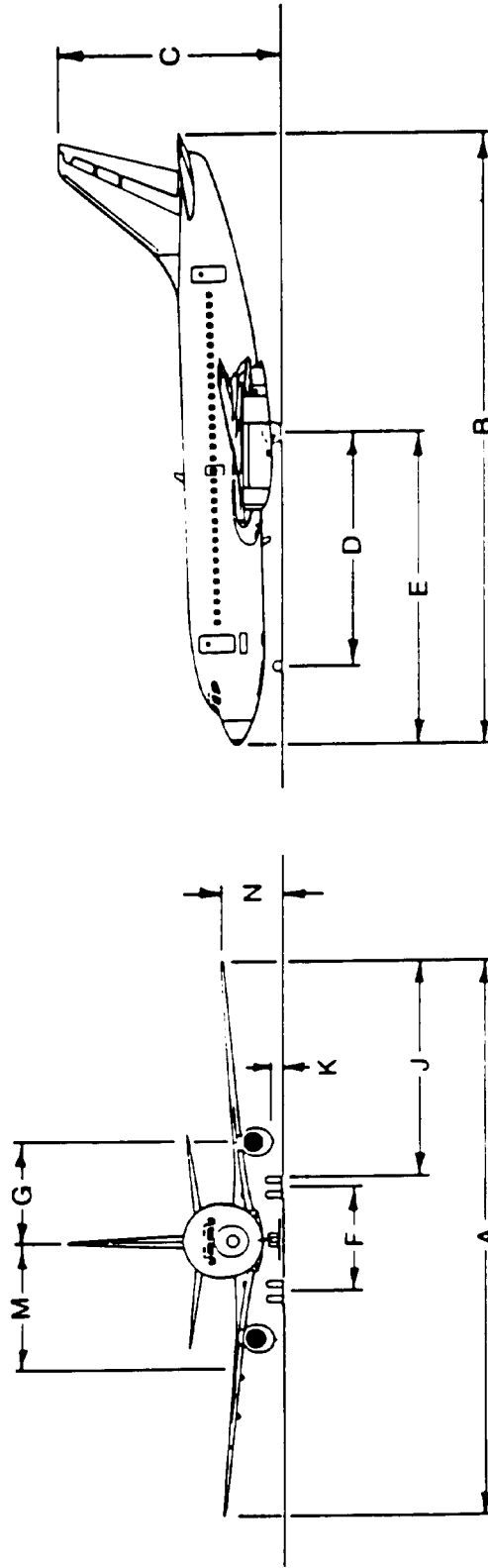
Main Gear:	% Gross Load on Assembly:	91.89	Max Assembly Load:	50.540
	Max Single Wheel Load:	25.270		
	Contact Pressure:	157	Contact Area:	160.96
	Footprint Width:	11.09"		

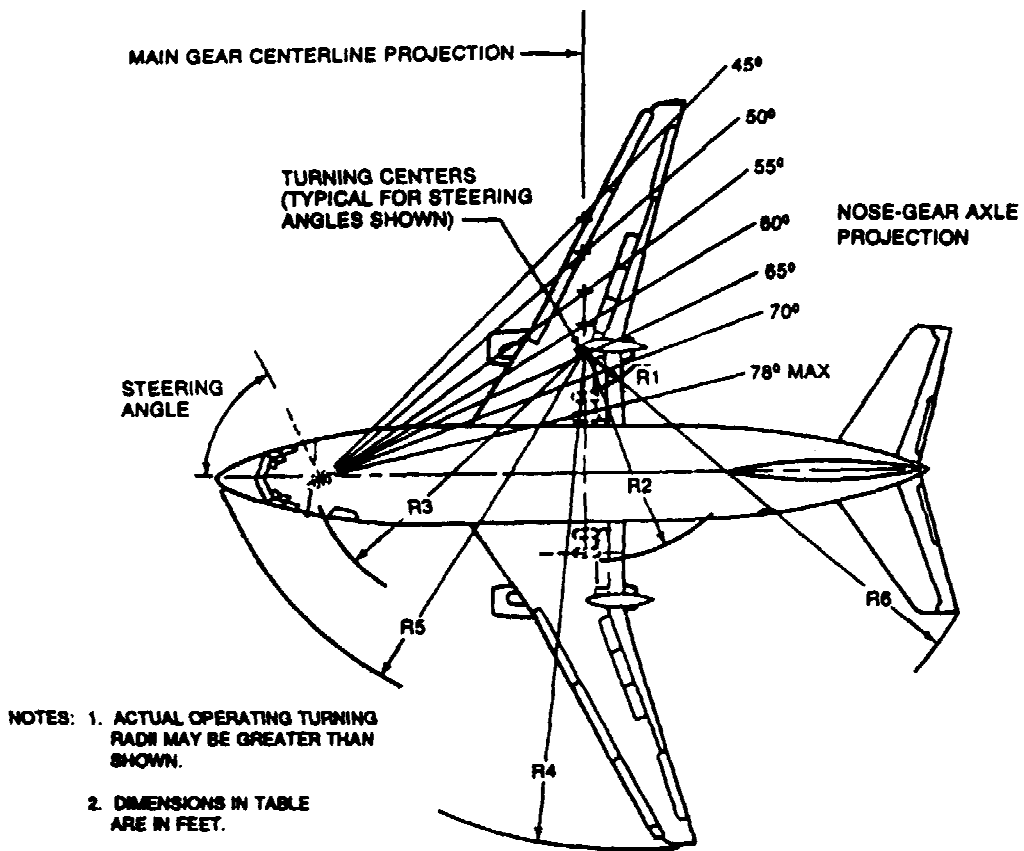
Nose Gear:	% Gross Load on Assembly:	8.11	Max Assembly Load:	8.921
	Max Single Wheel Load:	4.460		
	Contact Pressure:	145	Contact Area:	30.76
	Footprint Width:	4.85"		

Aircraft Classification Numbers (ACNs)									
Aircraft Weight		Rigid Pavement Subgrades				Flexible Pavement Subgrades			
		High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt	62.0	13.5	14.6	15.7	16.3	12.7	13.0	14.1	16.3
Max Wgt	110.0	26.7	28.8	30.6	31.6	24.7	25.4	28.5	32.7



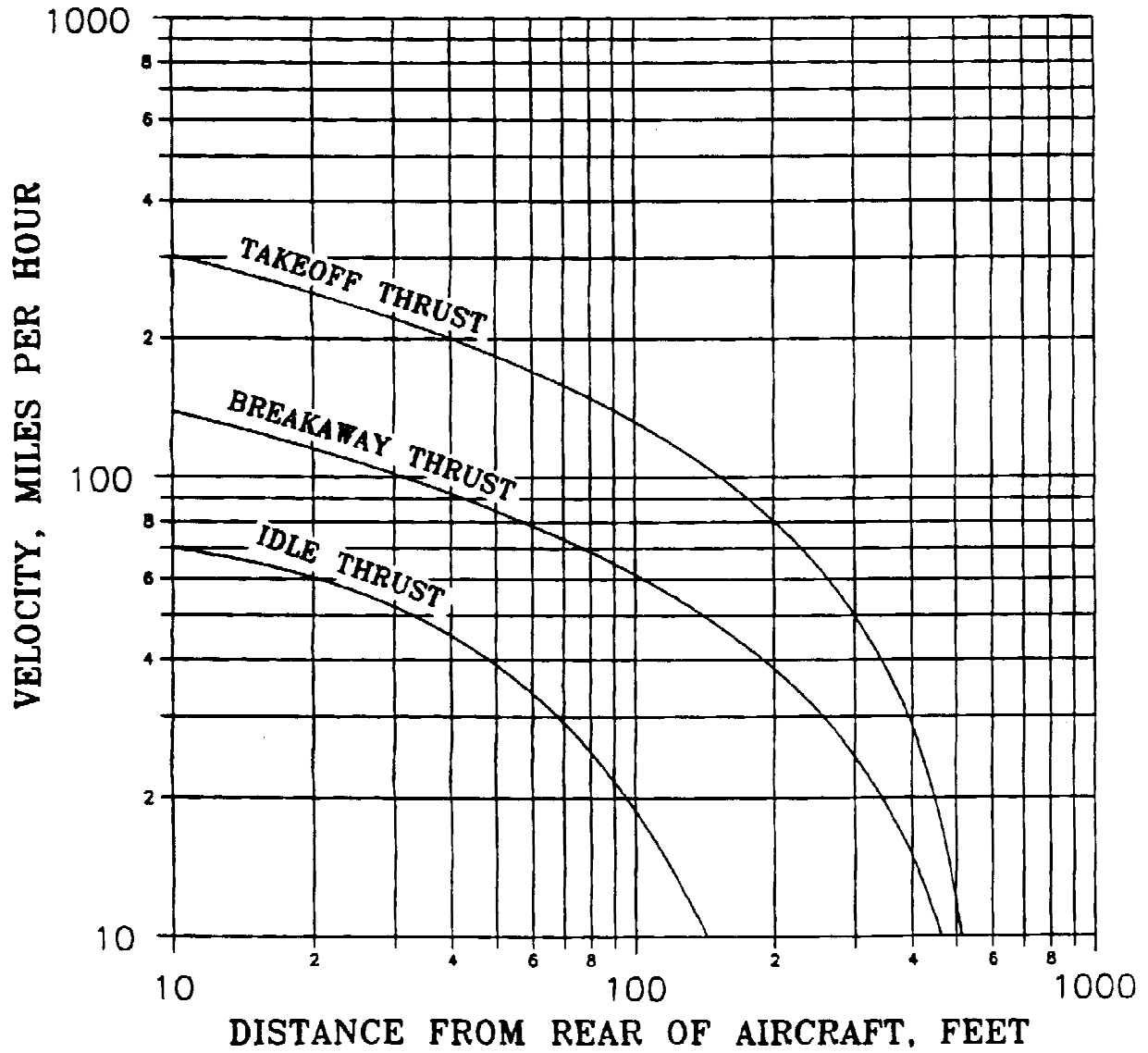
MODEL	MAXIMUM TIRE PRESSURE, PSI		A	B	C	D	E	F	G	J	K	M	N
	MAIN GEAR	NOSE GEAR											
100	157	145	93.0	94.0	37.2	34.3	47.3	17.2	15.8	36.1	1.7	9.2	10.0
200	182	140	93.0	100.2	37.3	37.3	50.3	17.2	15.8	36.1	1.7	10.0	10.0
300	195	165	94.8	109.6	36.6	40.8	54.0	17.2	15.8	36.9	1.5	11.0	10.0
400	203	172	94.8	119.6	36.5	46.8	60.0	17.2	15.8	36.9	1.5	12.4	10.0



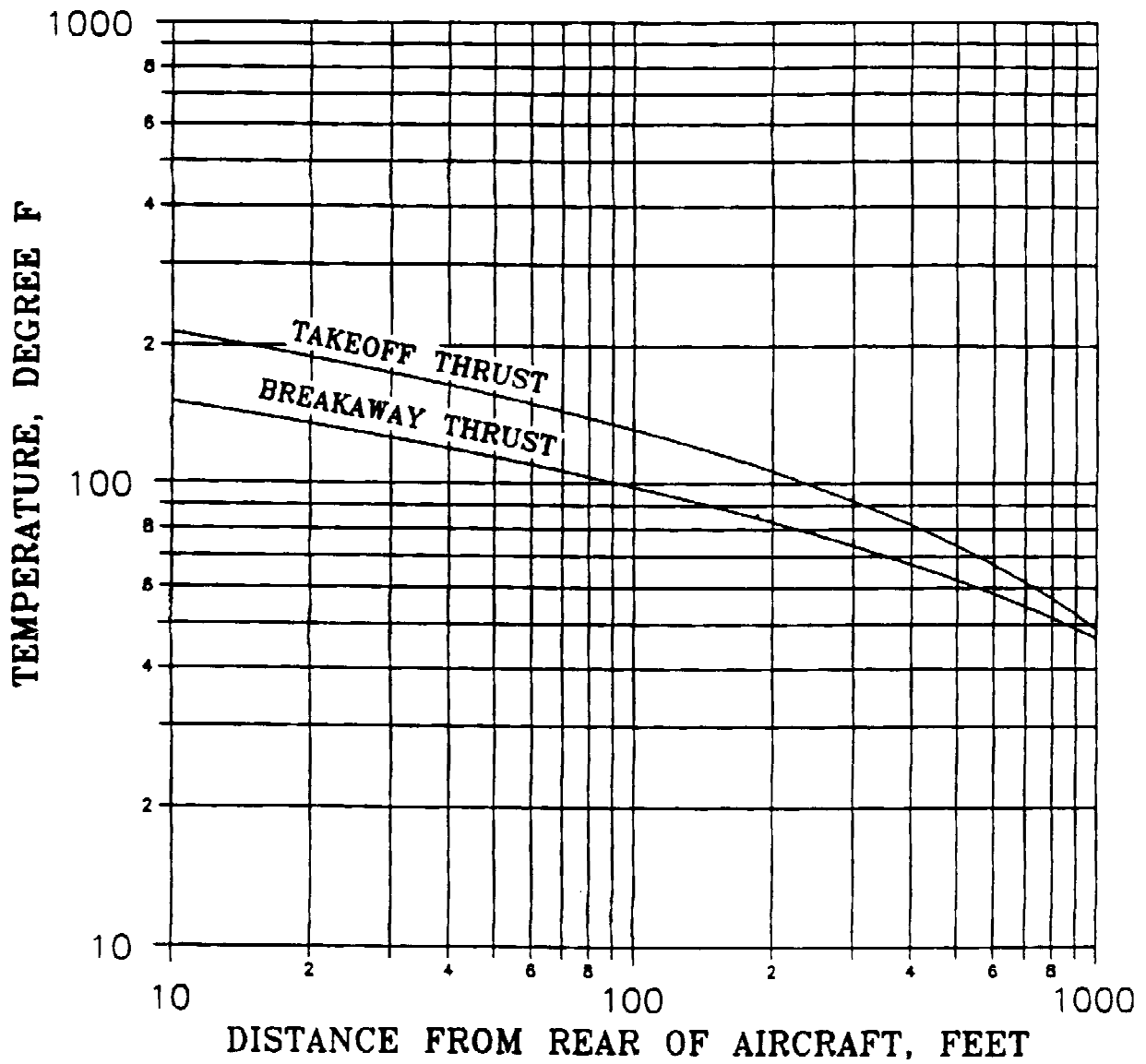


STEERING ANGLE (DEGREES)	R1	R2	R3	R4	R5	R6
	INNER GEAR	OUTER GEAR	NOSE GEAR	WING TIP	NOSE	TAIL
30	48	70	70	107	78	90
45	24	45	50	82	58	70
50	18	39	48	78	55	66
55	13	35	45	72	53	63
60	9	30	41	68	51	60
65	6	26	39	64	50	58
70	2	23	37	60	49	56
78 (MAXIMUM)	-3	18	36	55	48	53

Boeing 737-100, Turning Radii - No Slip Angle



Boeing 737-100, Velocity - Distance Curves



Boeing 737-100, Temperature - Distance Curves

Aircraft: **737-200**

ALC Mgr:

Manuf: *Boeing*

Group Index:

Wing Span: 93.0'

Length: 100.17'

Height: 37.25'

Vert. Clr: 20.0"

Pivot Pt: 10.45'

Turn Radius: 39.1'

180° Turn Diameter: 112.0'

Controlling Gear: *Nose*

Basic Empty Wt:	54.90	Basic Mis, T/O Wt:		Max T/O Wt :	115.50
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	103.0	T/O Dist:	3,150'
T/O Dist. (50)':	4,300'	Ldg. Dist:	1,460'	Ldg. Dist. (50)':	2,380'

Gear: *FAA D, Dual Wheel Main Gear with Dual Wheel Nose Gear*

Number of Assemblies/Tires per Assembly:

Nose: 1-2

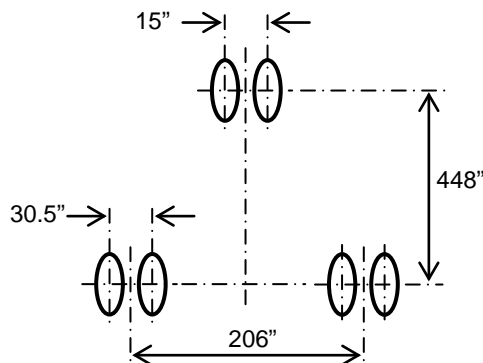
Main: 2-2

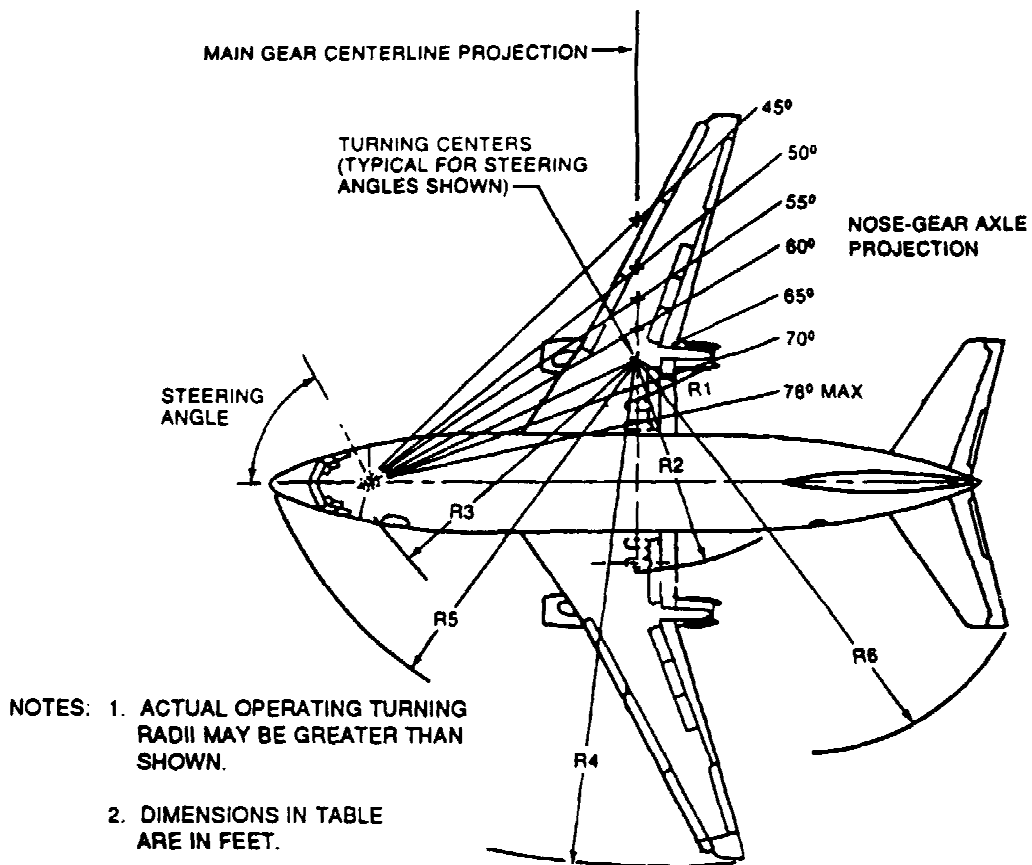
Main Gear:	% Gross Load on Assembly:	91.03	Max Assembly Load:	52.570
	Max Single Wheel Load:	26.285	Contact Area:	166.36
	Contact Pressure:	158	Footprint Width:	11.27"

Nose Gear:	% Gross Load on Assembly:	8.97	Max Assembly Load:	10.360
	Max Single Wheel Load:	5.180	Contact Area:	35.72
	Contact Pressure:	145	Footprint Width:	5.22"

Aircraft Classification Numbers (ACNs)

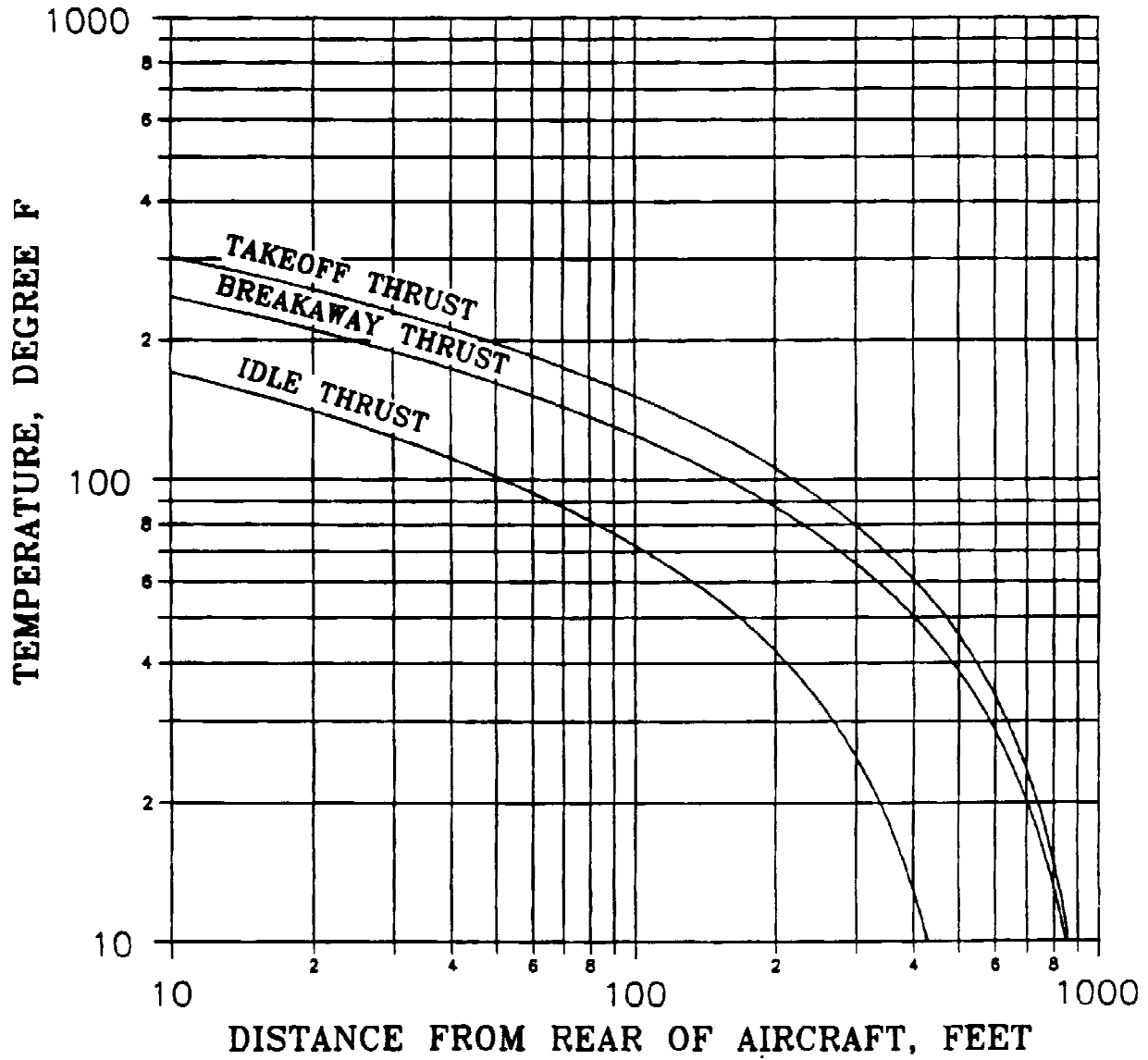
Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt 54.9	11.7	12.6	13.4	14.1	11.0	11.2	12.1	13.8
Max Wgt 115.0	27.9	30.0	31.8	32.9	25.9	26.5	29.8	34.1





STEERING ANGLE (DEGREES)	R1	R2	R3	R4	R5	R6
	INNER GEAR	OUTER GEAR	NOSE GEAR	WING TIP	NOSE	TAIL
30	54	75	76	112	82	96
45	27	48	54	85	63	74
50	21	42	50	79	59	70
55	16	37	47	74	57	67
60	11	32	44	70	55	64
65	7	28	42	65	53	61
70	3	24	41	62	52	59
78 (MAXIMUM)	3	18	39	56	51	56

Boeing 737-200, Turning Radii - No Slip Angle



Boeing 727-200, Temperature - Distance Curves

Aircraft: **737-200ADV/-200C/-200QC**

ALC Mgr: _____ Manuf: *Boeing* Group Index: _____

Wing Span: **93.0'** Length: **100.17'** Height: **37.25'** Vert. Clr: **20.0"**

Pivot Pt: **10.45'** Turn Radius: **39.1'** 180° Turn Diameter: **112.0'** Controlling Gear: *Nose*

Basic Empty Wt: 65.30	Basic Mis, T/O Wt:	Max T/O Wt: 128.10
Basic Mis. Ldg. Wt:	Max Ldg. Wt: 107.0	T/O Dist:
T/O Dist. (50'):	Ldg. Dist:	Ldg. Dist. (50'):

Gear: *FAA D, Dual Wheel Main Gear with Dual Wheel Nose Gear*

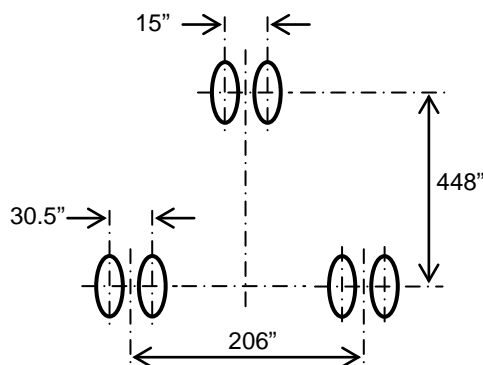
Number of Assemblies/Tires per Assembly: _____ Nose: **1-2** Main: **2-2**

Main Gear:	% Gross Load on Assembly: 91.91	Max Assembly Load: 58.868
	Max Single Wheel Load: 29.434	
	Contact Pressure: 182	Contact Area: 161.73
	Footprint Width: 11.11"	

Nose Gear:	% Gross Load on Assembly: 8.09	Max Assembly Load: 10.363
	Max Single Wheel Load: 5.182	
	Contact Pressure: 172	Contact Area: 30.13
	Footprint Width: 4.80"	

Aircraft Classification Numbers (ACNs)

Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt 65.3	15.1	16.2	17.2	17.9	13.9	14.1	15.2	17.5
Max Wgt 128.1	33.6	35.9	37.7	38.8	29.8	30.9	35.0	39.1



Aircraft: **737-300**

ALC Mgr: Manuf: *Boeing* Group Index:
Wing Span: **94.75'** Length: **109.58'** Height: **36.58'** Vert. Clr: **18.0"**
Pivot Pt: **10.45'** Turn Radius: **42.7'** 180^o Turn Diameter: **116.0'** Controlling Gear: *Nose*

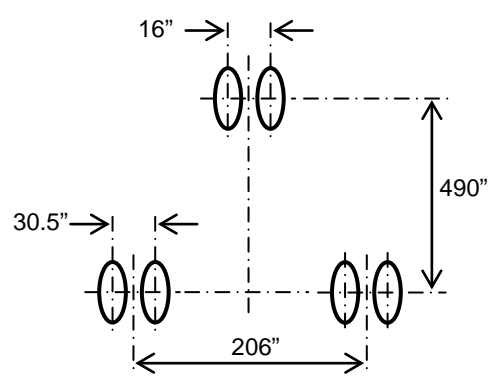
Basic Empty Wt: 72.540	Basic Mis, T/O Wt:	Max T/O Wt: 139.50
Basic Mis. Ldg. Wt:	Max Ldg. Wt: 115.80	T/O Dist:
T/O Dist. (50'):	Ldg. Dist:	Ldg. Dist. (50'):

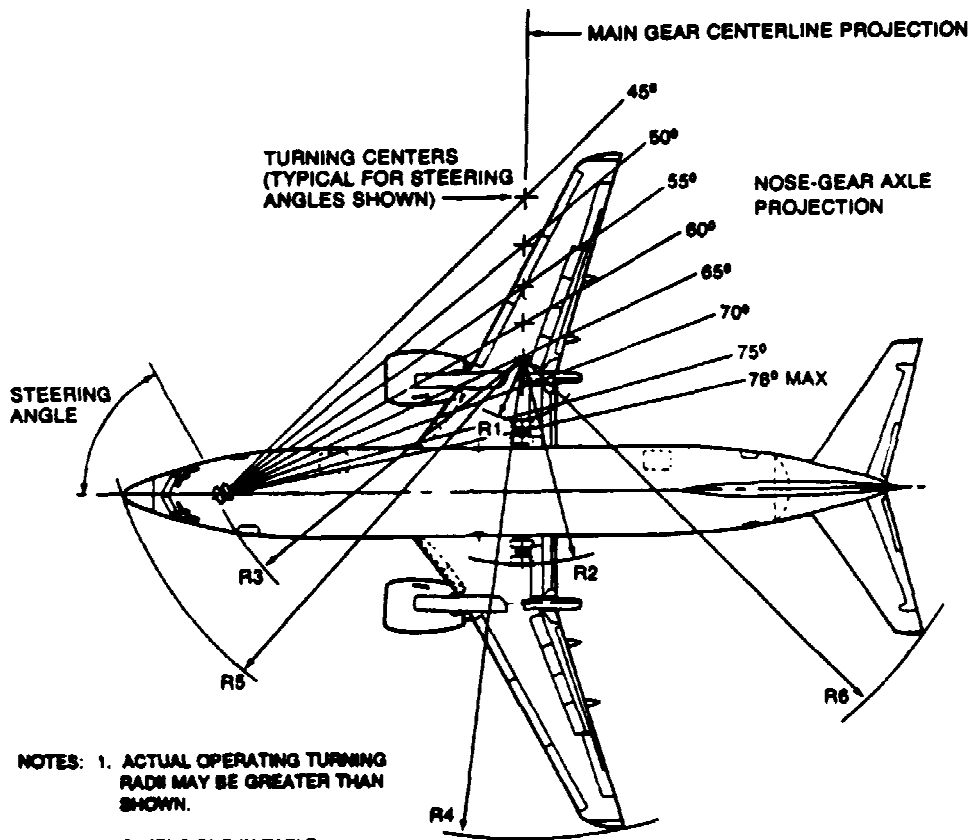
Gear: *FAA D, Dual Wheel Main Gear with Dual Wheel Nose Gear*
Number of Assemblies/Tires per Assembly: Nose: *1-2* Main: *2-2*

Main Gear:	% Gross Load on Assembly: 90.86	Max Assembly Load: 63.375
	Max Single Wheel Load: 31.687	
	Contact Pressure: 201	Contact Area: 157.65
	Footprint Width: 10.87"	

Nose Gear:	% Gross Load on Assembly: 9.14	Max Assembly Load: 12.750
	Max Single Wheel Load: 6.375	
	Contact Pressure: 166	Contact Area: 38.40
	Footprint Width: 5.42"	

Aircraft Classification Numbers (ACNs)									
Aircraft Weight		Rigid Pavement Subgrades				Flexible Pavement Subgrades			
		High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt	72.5	17.4	18.5	19.6	20.3	15.5	15.7	17.0	19.7
Max Wgt	139.5	37.7	40.1	41.8	43.0	32.9	34.7	38.6	42.6

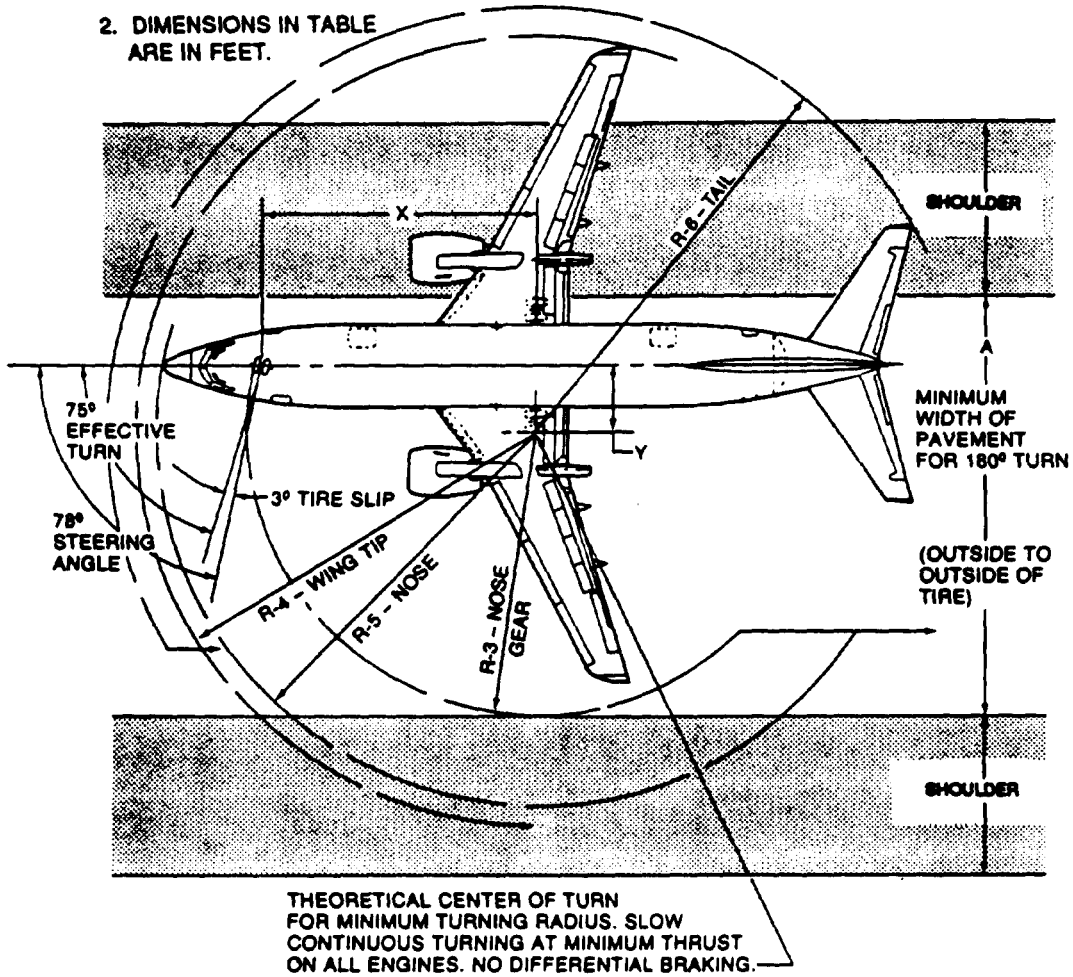




- NOTES: 1. ACTUAL OPERATING TURNING RADIi MAY BE GREATER THAN SHOWN.
2. DIMENSIONS IN TABLE ARE IN FEET.

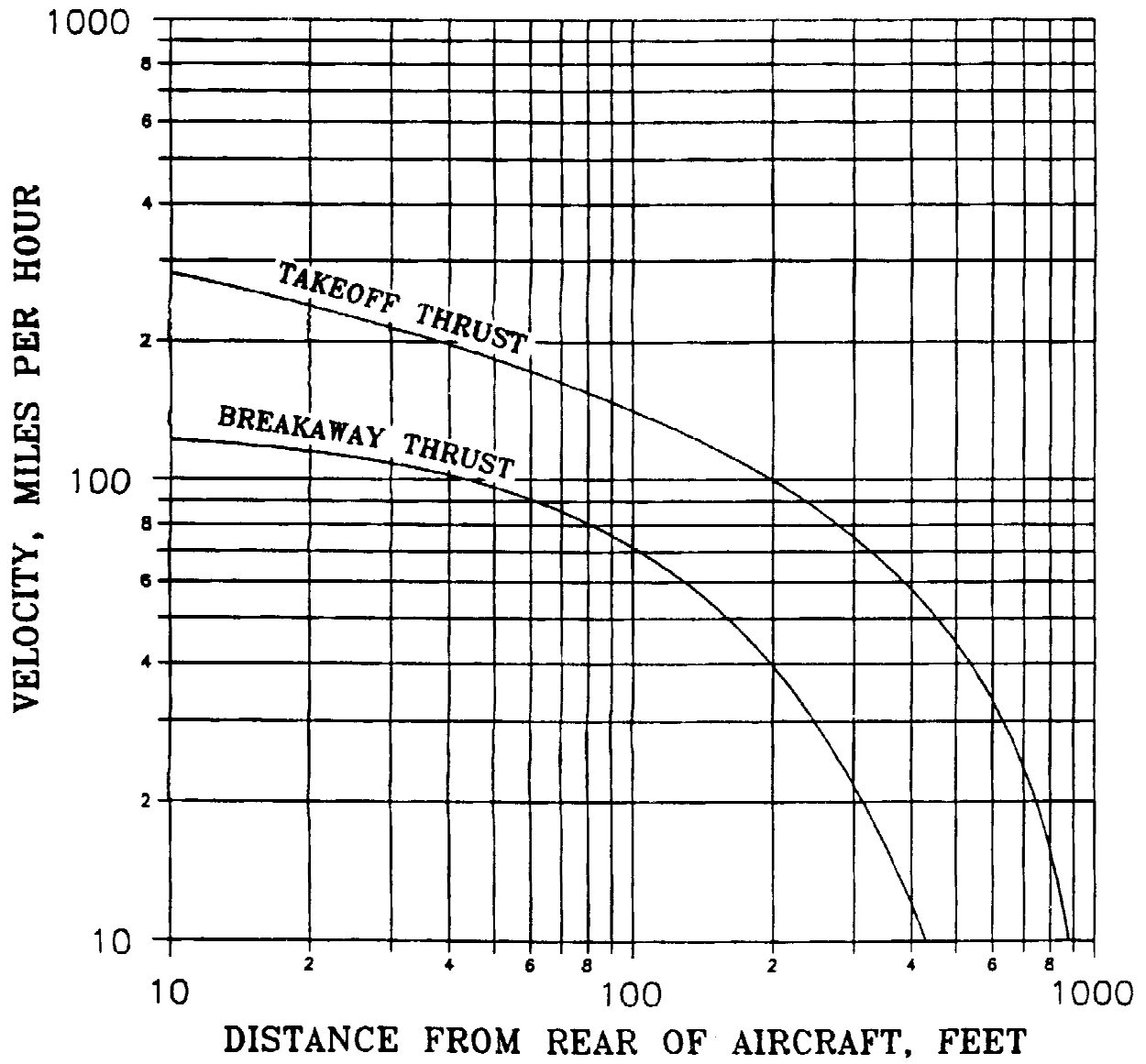
STEERING ANGLE (DEGREES)	R1	R2	R3	R4	R5	R6
	INNER GEAR	OUTER GEAR	NOSE GEAR	WING TIP	NOSE	TAIL
30	60	61	63	119	69	107
45	30	51	59	90	68	83
50	24	45	54	83	64	78
55	18	39	51	77	61	74
60	13	34	48	73	59	71
65	9	30	46	68	57	68
70	4	25	44	64	55	65
78 (MAXIMUM)	-2	19	43	58	55	63

- NOTES: 1. 3° TIRE SLIP ANGLE APPROXIMATE FOR 78° TURN ANGLE.
 2. DIMENSIONS IN TABLE ARE IN FEET.



AIRPLANE MODEL	EFFECTIVE TURNING ANGLE	X	Y	A	R-3	R-4	R-5	R-6
737-300	75°	40.8	11.0	64.6	43.3	60.2	55.0	64.0
737-400	75°	46.8	12.5	72.4	49.4	61.8	61.3	68.3

Boeing 737-300/-400, Minimum Turning Radii - 3° Slip Angle



Boeing 737-300/-400, Velocity - Distance Curves

Aircraft: **737-400**

ALC Mgr: Manuf: *Boeing* Group Index:
 Wing Span: **94.75'** Length: **119.58'** Height: **36.58'** Vert. Clr: **18.0"**
 Pivot Pt: **9.95'** Turn Radius: **48.9'** 180° Turn Diameter: **118.4'** Controlling Gear: *Nose*

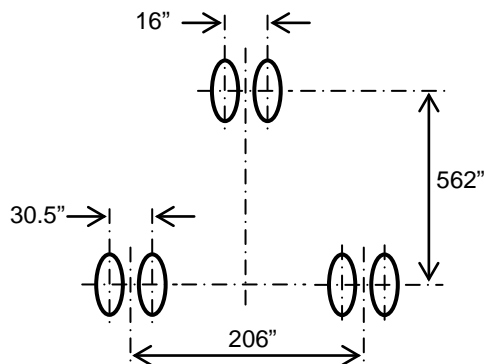
Basic Empty Wt:	74.170	Basic Mis, T/O Wt:		Max T/O Wt :	150.0
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	124.0	T/O Dist:	
T/O Dist. (50')		Ldg. Dist:		Ldg. Dist. (50')	

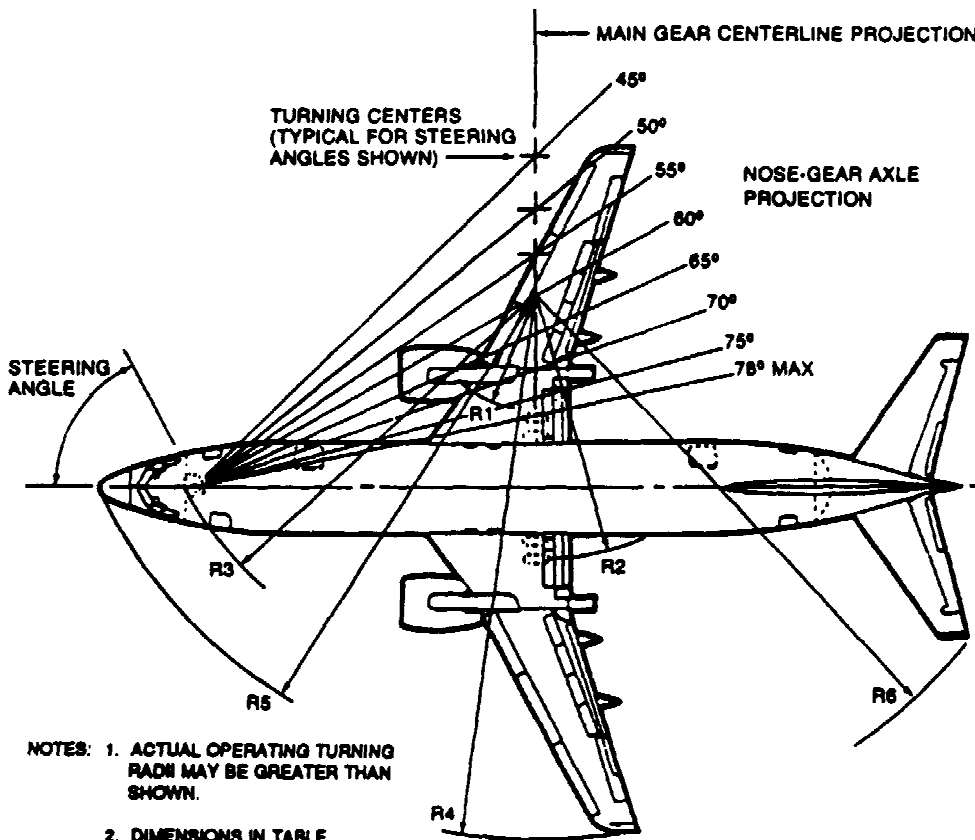
Gear: <i>FAA D, Dual Wheel Main Gear with Dual Wheel Nose Gear</i>		
Number of Assemblies/Tires per Assembly:	Nose: 1-2	Main: 2-2

Main Gear:	% Gross Load on Assembly:	93.82	Max Assembly Load:	70.365
	Max Single Wheel Load:	35.182		
	Contact Pressure:	185	Contact Area:	190.17
	Footprint Width:	12.05"		

Nose Gear:	% Gross Load on Assembly:	6.18	Max Assembly Load:	9.270
	Max Single Wheel Load:	4.635		
	Contact Pressure:	177	Contact Area:	26.19
	Footprint Width:	4.47"		

Aircraft Classification Numbers (ACNs)									
Aircraft Weight		Rigid Pavement Subgrades				Flexible Pavement Subgrades			
		High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt	74.2	18.0	19.3	20.4	21.2	16.4	16.7	18.1	21.1
Max Wgt	150.0	41.7	44.6	46.6	47.8	36.9	39.1	43.8	47.7





- NOTES: 1. ACTUAL OPERATING TURNING RADIi MAY BE GREATER THAN SHOWN.
2. DIMENSIONS IN TABLE ARE IN FEET.

STEERING ANGLE (DEGREES)	R1	R2	R3	R4	R5	R6
	INNER GEAR	OUTER GEAR	NOSE GEAR	WING TIP	NOSE	TAIL
30	71	92	96	129	101	118
45	36	57	67	95	76	90
50	29	50	62	86	72	85
55	22	43	56	82	68	80
60	17	38	53	78	66	76
65	11	32	53	71	64	73
70	7	28	51	66	62	71
78 (MAXIMUM)	-1	20	49	59	61	67

Boeing 737-400, Turning Radii - No Slip Angle

Aircraft: **737-500**

ALC Mgr: Manuf: *Boeing* Group Index:
 Wing Span: **94.75'** Length: **101.75'** Height: **36.58'** Vert. Clr: **18.0"**
 Pivot Pt: **10.45'** Turn Radius: **39.1'** 180° Turn Diameter: **114.2'** Controlling Gear: *Nose*

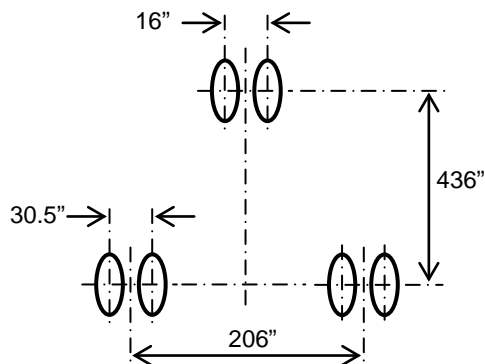
Basic Empty Wt: 69.030	Basic Mis, T/O Wt:	Max T/O Wt : 136.0
Basic Mis. Ldg. Wt:	Max Ldg. Wt: 110.0	T/O Dist: 8,200'
T/O Dist. (50)':	Ldg. Dist: 4,500'	Ldg. Dist. (50)':

Gear: *FAA D, Dual Wheel Main Gear with Dual Wheel Nose Gear*
 Number of Assemblies/Tires per Assembly: Nose: **1-2** Main: **2-2**

Main Gear:	% Gross Load on Assembly: 92.24	Max Assembly Load: 62.723
	Max Single Wheel Load: 31.362	
	Contact Pressure: 194	Contact Area: 161.66
	Footprint Width: 11.11"	

Nose Gear:	% Gross Load on Assembly: 7.76	Max Assembly Load: 10.554
	Max Single Wheel Load: 5.277	
	Contact Pressure: 186	Contact Area: 28.37
	Footprint Width: 4.66"	

		Aircraft Classification Numbers (ACNs)							
		Rigid Pavement Subgrades				Flexible Pavement Subgrades			
Aircraft Weight		High	Medium	Low	Ultra Low	High	Medium	Low	Ultra Low
		A	B	C	D	A	B	C	D
Min Wgt	69.0	16.5	17.7	18.7	19.3	14.9	15.1	16.3	18.9
Max Wgt	136.0	36.9	39.4	41.1	42.1	32.4	33.9	38.0	42.1



Aircraft: **737-600**

ALC Mgr: Manuf: *Boeing* Group Index:
 Wing Span: *112.58'* Length: *102.50'* Height: *41.67'* Vert. Clr: *18.0"*
 Pivot Pt: *7.85'* Turn Radius: *38.50'* 180° Turn Diameter: *132.8'* Controlling Gear: *Nose*

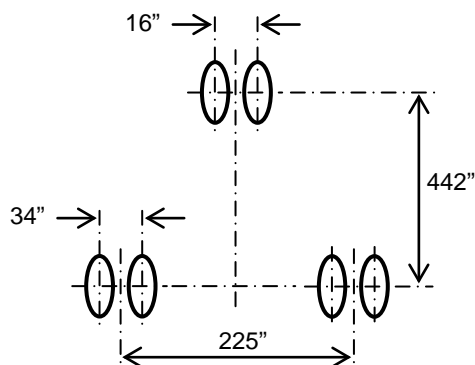
Basic Empty Wt:	<i>80.20</i>	Basic Mis, T/O Wt:		Max T/O Wt :	<i>144.50</i>
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	<i>121.50</i>	T/O Dist:	<i>8200'</i>
T/O Dist. (50'):		Ldg. Dist:	<i>4400'</i>	Ldg. Dist. (50'):	

Gear: <i>FAA D, Dual Wheel Main Gear with Dual Wheel Nose Gear</i>		
Number of Assemblies/Tires per Assembly:	Nose: <i>1-2</i>	Main: <i>2-2</i>

Main Gear:	% Gross Load on Assembly:	<i>91.66</i>	Max Assembly Load:	<i>66.224</i>
	Max Single Wheel Load:	<i>33.112</i>		
	Contact Pressure:	<i>205</i>	Contact Area:	<i>161.52</i>
	Footprint Width:	<i>11.11"</i>		

Nose Gear:	% Gross Load on Assembly:	<i>8.34</i>	Max Assembly Load:	<i>12.051</i>
	Max Single Wheel Load:	<i>6.026</i>		
	Contact Pressure:	<i>206</i>	Contact Area:	<i>29.25</i>
	Footprint Width:	<i>4.73"</i>		

Aircraft Classification Numbers (ACNs)									
Aircraft Weight		Rigid Pavement Subgrades				Flexible Pavement Subgrades			
		High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt	<i>80.2</i>	<i>19.0</i>	<i>20.3</i>	<i>21.4</i>	<i>22.2</i>	<i>17.1</i>	<i>17.3</i>	<i>18.6</i>	<i>21.4</i>
Max Wgt	<i>144.5</i>	<i>37.9</i>	<i>40.4</i>	<i>42.5</i>	<i>43.6</i>	<i>33.4</i>	<i>34.9</i>	<i>38.4</i>	<i>43.5</i>



Aircraft: **737-600 with Winglets**

ALC Mgr: Manuf: *Boeing* Group Index:
 Wing Span: 117.42' Length: 102.50' Height: 41.67' Vert. Clr: 18.0"
 Pivot Pt: 7.85' Turn Radius: 38.90' 180° Turn Diameter: 139.4' Controlling Gear: *Nose*

Basic Empty Wt:	80.20	Basic Mis, T/O Wt:		Max T/O Wt :	144.50
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	121.50	T/O Dist:	8200'
T/O Dist. (50'):		Ldg. Dist:	4400'	Ldg. Dist. (50'):	

Gear: *FAA D, Dual Wheel Main Gear with Dual Wheel Nose Gear*

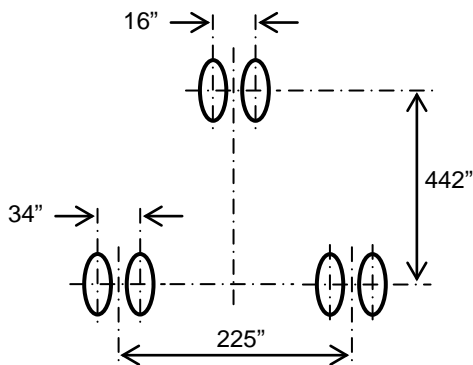
Number of Assemblies/Tires per Assembly: Nose: 1-2 Main: 2-2

Main Gear:	% Gross Load on Assembly:	91.66	Max Assembly Load:	66.224
	Max Single Wheel Load:	33.112		
	Contact Pressure:	205	Contact Area:	161.52
	Footprint Width:	11.11"		

Nose Gear:	% Gross Load on Assembly:	8.34	Max Assembly Load:	12.051
	Max Single Wheel Load:	6.026		
	Contact Pressure:	206	Contact Area:	29.25
	Footprint Width:	4.73"		

Aircraft Classification Numbers (ACNs)

Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt 80.2	19.0	20.3	21.4	22.2	17.1	17.3	18.6	21.4
Max Wgt 144.5	37.9	40.4	42.5	43.6	33.4	34.9	38.4	43.5



Aircraft: **737-700/700C**

ALC Mgr: Manuf: *Boeing* Group Index:
Wing Span: *112.58'* Length: *110.33'* Height: *41.58'* Vert. Clr: *18.0''*
Pivot Pt: *8.75'* Turn Radius: *43.10'* 180° Turn Diameter: *134.60'* Controlling Gear: *Nose*

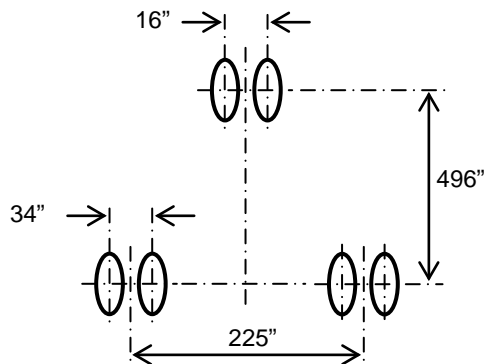
Basic Empty Wt: 83.00	Basic Mis, T/O Wt:	Max T/O Wt : 154.50
Basic Mis. Ldg. Wt:	Max Ldg. Wt: 129.20	T/O Dist: 9200'
T/O Dist. (50'):	Ldg. Dist: 4700'	Ldg. Dist. (50'):

Gear: *FAA D, Dual Wheel Main Gear with Dual Wheel Nose Gear*
Number of Assemblies/Tires per Assembly: Nose: *1-2* Main: *2-2*

Main Gear:	% Gross Load on Assembly: 91.690	Max Assembly Load: 70.830
	Max Single Wheel Load: 35.415	
	Contact Pressure: 205	Contact Area: 172.76
	Footprint Width: 11.49''	

Nose Gear:	% Gross Load on Assembly: 8.31	Max Assembly Load: 12.839
	Max Single Wheel Load: 6.420	
	Contact Pressure: 205	Contact Area: 31.32
	Footprint Width: 4.89''	

Aircraft Classification Numbers (ACNs)									
Aircraft Weight		Rigid Pavement Subgrades				Flexible Pavement Subgrades			
		High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt	83.0	19.7	21.2	22.2	23.1	17.8	18.1	19.4	22.4
Max Wgt	154.5	41.2	43.8	45.9	47.1	36.1	37.9	41.9	47.0



Aircraft: **737-700/700C with Winglets**

ALC Mgr: Manuf: *Boeing* Group Index:
 Wing Span: 117.42' Length: 110.33' Height: 41.58' Vert. Clr: 18.0"
 Pivot Pt: 8.75' Turn Radius: 43.10' 180° Turn Diameter: 140.80' Controlling Gear: *Nose*

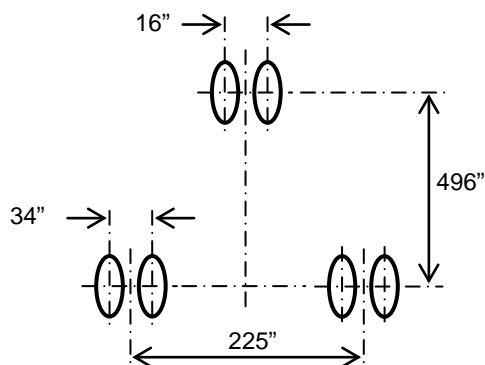
Basic Empty Wt: 83.00	Basic Mis, T/O Wt:	Max T/O Wt : 154.50
Basic Mis. Ldg. Wt:	Max Ldg. Wt: 129.20	T/O Dist: 9200'
T/O Dist. (50'):	Ldg. Dist: 4700'	Ldg. Dist. (50'):

Gear: <i>FAA D, Dual Wheel Main Gear with Dual Wheel Nose Gear</i>		
Number of Assemblies/Tires per Assembly:	Nose: 1-2	Main: 2-2

Main Gear:	% Gross Load on Assembly: 91.690	Max Assembly Load: 70.830
	Max Single Wheel Load: 35.415	
	Contact Pressure: 205	Contact Area: 172.76
	Footprint Width: 11.49"	

Nose Gear:	% Gross Load on Assembly: 8.31	Max Assembly Load: 12.839
	Max Single Wheel Load: 6.420	
	Contact Pressure: 205	Contact Area: 31.32
	Footprint Width: 4.89"	

Aircraft Classification Numbers (ACNs)									
Aircraft Weight		Rigid Pavement Subgrades				Flexible Pavement Subgrades			
		High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt	83.0	19.7	21.2	22.2	23.1	17.8	18.1	19.4	22.4
Max Wgt	154.5	41.2	43.8	45.9	47.1	36.1	37.9	41.9	47.0



Aircraft: **737-800**

ALC Mgr: Manuf: *Boeing* Group Index:
Wing Span: *112.58'* Length: *129.5'* Height: *41.42'* Vert. Clr: *19.0"*
Pivot Pt: *10.85'* Turn Radius: *53.2'* 180° Turn Diameter: *138.8'* Controlling Gear: *Nose*

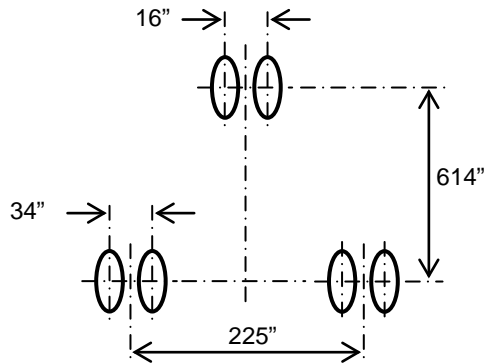
Basic Empty Wt:	<i>91.300</i>	Basic Mis, T/O Wt:		Max T/O Wt :	<i>174.20</i>
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	<i>146.30</i>	T/O Dist:	<i>9200'</i>
T/O Dist. (50'):		Ldg. Dist:	<i>5600'</i>	Ldg. Dist. (50'):	

Gear: <i>FAA D, Dual Wheel Main Gear with Dual Wheel Nose Gear</i>		
Number of Assemblies/Tires per Assembly:	Nose: <i>1-2</i>	Main: <i>2-2</i>

Main Gear:	% Gross Load on Assembly:	<i>93.560</i>	Max Assembly Load:	<i>81.491</i>
	Max Single Wheel Load:	<i>40.745</i>	Contact Area:	<i>198.76</i>
	Contact Pressure:	<i>205</i>		
	Footprint Width:	<i>12.32"</i>		

Nose Gear:	% Gross Load on Assembly:	<i>6.44</i>	Max Assembly Load:	<i>11.218</i>
	Max Single Wheel Load:	<i>5.609</i>	Contact Area:	<i>30.32</i>
	Contact Pressure:	<i>185</i>		
	Footprint Width:	<i>4.81"</i>		

Aircraft Classification Numbers (ACNs)									
Aircraft Weight		Rigid Pavement Subgrades				Flexible Pavement Subgrades			
		High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt	<i>91.3</i>	<i>22.6</i>	<i>24.2</i>	<i>25.5</i>	<i>26.3</i>	<i>20.3</i>	<i>20.7</i>	<i>22.3</i>	<i>25.8</i>
Max Wgt	<i>174.2</i>	<i>48.7</i>	<i>51.8</i>	<i>54.1</i>	<i>55.5</i>	<i>42.7</i>	<i>45.1</i>	<i>50.1</i>	<i>55.0</i>



Aircraft: **737-800 with Winglets**

ALC Mgr: Manuf: *Boeing* Group Index:
 Wing Span: *117.42'* Length: *129.50'* Height: *41.42'* Vert. Clr: *19.0"*
 Pivot Pt: *10.85'* Turn Radius: *53.20'* 180° Turn Diameter: *138.8'* Controlling Gear: *Nose*

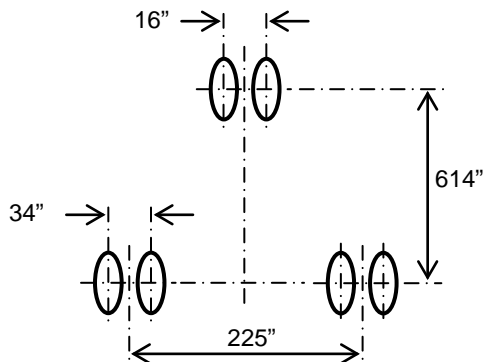
Basic Empty Wt: <i>91.30</i>	Basic Mis, T/O Wt:	Max T/O Wt : <i>174.20</i>
Basic Mis. Ldg. Wt:	Max Ldg. Wt: <i>146.30</i>	T/O Dist: <i>9100'</i>
T/O Dist. (50'): Ldg. Dist: <i>5400'</i>	Ldg. Dist. (50'):	

Gear: <i>FAA D, Dual Wheel Main Gear with Dual Wheel Nose Gear</i>		
Number of Assemblies/Tires per Assembly:	Nose: <i>1-2</i>	Main: <i>2-2</i>

Main Gear:	% Gross Load on Assembly: <i>93.560</i>	Max Assembly Load: <i>81.491</i>
	Max Single Wheel Load: <i>40.745</i>	
	Contact Pressure: <i>205</i>	Contact Area: <i>198.76</i>
	Footprint Width: <i>12.32"</i>	

Nose Gear:	% Gross Load on Assembly: <i>6.44</i>	Max Assembly Load: <i>11.218</i>
	Max Single Wheel Load: <i>5.609</i>	
	Contact Pressure: <i>185</i>	Contact Area: <i>30.32</i>
	Footprint Width: <i>4.81"</i>	

Aircraft Classification Numbers (ACNs)									
Aircraft Weight		Rigid Pavement Subgrades				Flexible Pavement Subgrades			
		High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt	<i>91.3</i>	<i>22.6</i>	<i>24.2</i>	<i>25.5</i>	<i>26.3</i>	<i>20.3</i>	<i>20.7</i>	<i>22.3</i>	<i>25.8</i>
Max Wgt	<i>174.2</i>	<i>48.7</i>	<i>51.8</i>	<i>54.1</i>	<i>55.5</i>	<i>42.7</i>	<i>45.1</i>	<i>50.1</i>	<i>55.0</i>



Aircraft: **737-900**

ALC Mgr: Manuf: *Boeing* Group Index:
 Wing Span: *112.58'* Length: *138.17'* Height: *41.42'* Vert. Clr: *19.0"*
 Pivot Pt: *11.90'* Turn Radius: *58.50'* 180° Turn Diameter: *140.80'* Controlling Gear: *Nose*

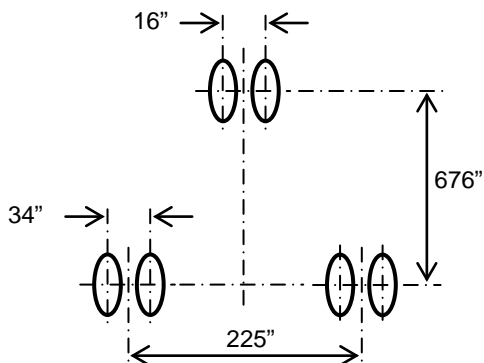
Basic Empty Wt:	<i>94.580</i>	Basic Mis, T/O Wt:		Max T/O Wt :	<i>174.20</i>
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	<i>146.30</i>	T/O Dist:	<i>9200'</i>
T/O Dist. (50'):		Ldg. Dist:	<i>5600'</i>	Ldg. Dist. (50'):	

Gear: <i>FAA D, Dual Wheel Main Gear with Dual Wheel Nose Gear</i>		
Number of Assemblies/Tires per Assembly:	Nose: <i>1-2</i>	Main: <i>2-2</i>

Main Gear:	% Gross Load on Assembly:	<i>93.580</i>	Max Assembly Load:	<i>81.508</i>
	Max Single Wheel Load:	<i>40.754</i>		
	Contact Pressure:	<i>205</i>	Contact Area:	<i>198.80</i>
	Footprint Width:	<i>12.32"</i>		

Nose Gear:	% Gross Load on Assembly:	<i>6.42</i>	Max Assembly Load:	<i>11.184</i>
	Max Single Wheel Load:	<i>5.592</i>		
	Contact Pressure:	<i>185</i>	Contact Area:	<i>30.23</i>
	Footprint Width:	<i>4.81"</i>		

Aircraft Classification Numbers (ACNs)								
Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt <i>94.6</i>	<i>23.5</i>	<i>25.2</i>	<i>26.6</i>	<i>27.5</i>	<i>21.1</i>	<i>21.6</i>	<i>23.3</i>	<i>27.0</i>
Max Wgt <i>174.2</i>	<i>48.7</i>	<i>51.8</i>	<i>54.1</i>	<i>55.5</i>	<i>42.7</i>	<i>45.1</i>	<i>50.1</i>	<i>55.0</i>



Aircraft: **737-900 with Winglets**

ALC Mgr: Manuf: *Boeing* Group Index:
 Wing Span: *117.42'* Length: *138.17'* Height: *41.42'* Vert. Clr: *19.0"*
 Pivot Pt: *11.90'* Turn Radius: *58.50'* 180° Turn Diameter: *147.20'* Controlling Gear: *Nose*

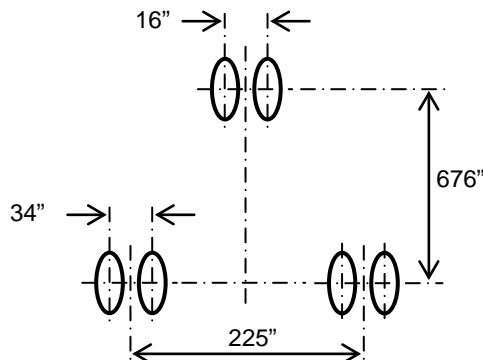
Basic Empty Wt:	<i>94.580</i>	Basic Mis, T/O Wt:		Max T/O Wt :	<i>174.20</i>
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	<i>146.30</i>	T/O Dist:	<i>9200'</i>
T/O Dist. (50'):		Ldg. Dist:	<i>5600'</i>	Ldg. Dist. (50'):	

Gear: *FAA D, Dual Wheel Main Gear with Dual Wheel Nose Gear*
 Number of Assemblies/Tires per Assembly: Nose: *1-2* Main: *2-2*

Main Gear:	% Gross Load on Assembly:	<i>93.580</i>	Max Assembly Load:	<i>81.508</i>
	Max Single Wheel Load:	<i>40.754</i>		
	Contact Pressure:	<i>205</i>	Contact Area:	<i>198.80</i>
	Footprint Width:	<i>12.32"</i>		

Nose Gear:	% Gross Load on Assembly:	<i>6.42</i>	Max Assembly Load:	<i>11.184</i>
	Max Single Wheel Load:	<i>5.592</i>		
	Contact Pressure:	<i>185</i>	Contact Area:	<i>30.23</i>
	Footprint Width:	<i>4.81"</i>		

Aircraft Classification Numbers (ACNs)									
Aircraft Weight		Rigid Pavement Subgrades				Flexible Pavement Subgrades			
		High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt	<i>94.6</i>	<i>23.5</i>	<i>25.2</i>	<i>26.6</i>	<i>27.5</i>	<i>21.1</i>	<i>21.6</i>	<i>23.3</i>	<i>27.0</i>
Max Wgt	<i>174.2</i>	<i>48.7</i>	<i>51.8</i>	<i>54.1</i>	<i>55.5</i>	<i>42.7</i>	<i>45.1</i>	<i>50.1</i>	<i>55.0</i>



Aircraft: **737-900ER**

ALC Mgr: Manuf: *Boeing* Group Index:
Wing Span: *112.58'* Length: *138.17'* Height: *41.42'* Vert. Clr: *19.0"*
Pivot Pt: *11.90'* Turn Radius: *58.50'* 180° Turn Diameter: *140.80'* Controlling Gear: *Nose*

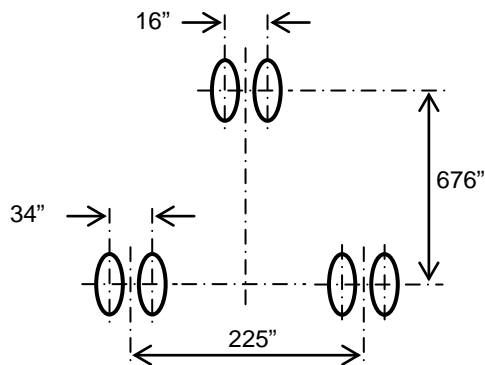
Basic Empty Wt:	<i>98.495</i>	Basic Mis, T/O Wt:		Max T/O Wt :	<i>187.70</i>
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	<i>157.30</i>	T/O Dist:	<i>9400'</i>
T/O Dist. (50'):		Ldg. Dist:	<i>5400'</i>	Ldg. Dist. (50'):	

Gear: *FAA D, Dual Wheel Main Gear with Dual Wheel Nose Gear*
Number of Assemblies/Tires per Assembly: Nose: *1-2* Main: *2-2*

Main Gear:	% Gross Load on Assembly:	<i>94.570</i>	Max Assembly Load:	<i>88.754</i>
	Max Single Wheel Load:	<i>44.377</i>		
	Contact Pressure:	<i>220</i>	Contact Area:	<i>201.70</i>
	Footprint Width:	<i>12.41"</i>		

Nose Gear:	% Gross Load on Assembly:	<i>5.43</i>	Max Assembly Load:	<i>10.192</i>
	Max Single Wheel Load:	<i>5.096</i>		
	Contact Pressure:	<i>185</i>	Contact Area:	<i>27.546</i>
	Footprint Width:	<i>4.59"</i>		

Aircraft Classification Numbers (ACNs)									
Aircraft Weight		Rigid Pavement Subgrades				Flexible Pavement Subgrades			
		High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt	<i>98.5</i>	<i>25.6</i>	<i>27.2</i>	<i>28.7</i>	<i>29.5</i>	<i>22.6</i>	<i>23.2</i>	<i>24.9</i>	<i>28.8</i>
Max Wgt	<i>187.7</i>	<i>55.1</i>	<i>58.1</i>	<i>60.5</i>	<i>61.8</i>	<i>47.7</i>	<i>50.5</i>	<i>55.8</i>	<i>60.6</i>



Aircraft: **737-900ER with Winglets**

ALC Mgr: Manuf: *Boeing* Group Index:

Wing Span: *117.42'* Length: *138.17'* Height: *41.42'* Vert. Clr: *19.0"*

Pivot Pt: *11.90'* Turn Radius: *58.50'* 180° Turn Diameter: *147.2'* Controlling Gear: *Nose*

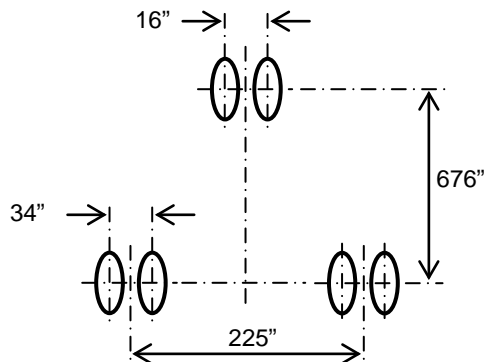
Basic Empty Wt:	98.495	Basic Mis, T/O Wt:		Max T/O Wt :	187.70
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	157.30	T/O Dist:	9400'
T/O Dist. (50'):		Ldg. Dist:	5400'	Ldg. Dist. (50'):	

Gear: <i>FAA D, Dual Wheel Main Gear with Dual Wheel Nose Gear</i>		
Number of Assemblies/Tires per Assembly:	Nose: <i>1-2</i>	Main: <i>2-2</i>

Main Gear:	% Gross Load on Assembly:	94.570	Max Assembly Load:	88.754
	Max Single Wheel Load:	44.377		
	Contact Pressure:	220	Contact Area:	201.70
	Footprint Width:	12.41"		

Nose Gear:	% Gross Load on Assembly:	5.43	Max Assembly Load:	10.192
	Max Single Wheel Load:	5.096		
	Contact Pressure:	185	Contact Area:	27.546
	Footprint Width:	4.59"		

Aircraft Classification Numbers (ACNs)									
Aircraft Weight		Rigid Pavement Subgrades				Flexible Pavement Subgrades			
		High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt	98.5	25.6	27.2	28.7	29.5	22.6	23.2	24.9	28.8
Max Wgt	187.7	55.1	58.1	60.5	61.8	47.7	50.5	55.8	60.6



Aircraft: **737-BBJ**

ALC Mgr: Manuf: **Boeing** Group Index:
 Wing Span: **117.42'** Length: **110.33'** Height: **41.58'** Vert. Clr: **18.0"**
 Pivot Pt: **8.75'** Turn Radius: **43.10'** 180° Turn Diameter: **140.80'** Controlling Gear: **Nose**

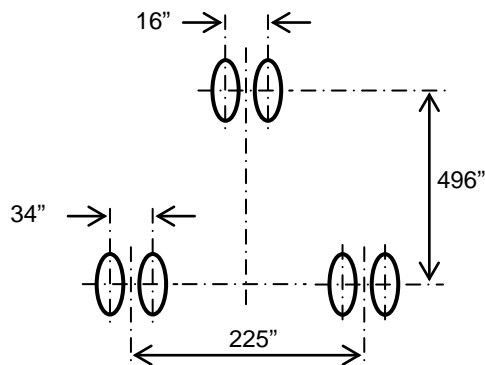
Basic Empty Wt:	92.345	Basic Mis, T/O Wt:		Max T/O Wt :	171.00
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	134.00	T/O Dist:	7600'
T/O Dist. (50'):		Ldg. Dist:	4700'	Ldg. Dist. (50'):	

Gear: FAA D, Dual Wheel Main Gear with Dual Wheel Nose Gear		
Number of Assemblies/Tires per Assembly:	Nose: 1-2	Main: 2-2

Main Gear:	% Gross Load on Assembly:	91.78	Max Assembly Load:	78.472
	Max Single Wheel Load:	39.236		
	Contact Pressure:	204	Contact Area:	192.33
	Footprint Width:	12.12"		

Nose Gear:	% Gross Load on Assembly:	8.22	Max Assembly Load:	14.056
	Max Single Wheel Load:	7.028		
	Contact Pressure:	185	Contact Area:	37.99
	Footprint Width:	5.39"		

Aircraft Classification Numbers (ACNs)									
Aircraft Weight		Rigid Pavement Subgrades				Flexible Pavement Subgrades			
		High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt	92.3	22.4	24.0	25.2	26.1	20.1	20.5	22.1	25.6
Max Wgt	171.0	46.5	49.6	51.7	52.9	40.8	43.0	47.7	52.7



Aircraft: **737-BBJ2**

ALC Mgr: _____ Manuf: *Boeing* Group Index: _____
Wing Span: *117.42'* Length: *129.50'* Height: *41.42'* Vert. Clr: *19.0''*
Pivot Pt: *10.85'* Turn Radius: *53.2'* 180° Turn Diameter: *145.0'* Controlling Gear: *Nose*

Basic Empty Wt: <i>97.00</i>	Basic Mis, T/O Wt:	Max T/O Wt: <i>174.20</i>
Basic Mis. Ldg. Wt:	Max Ldg. Wt: <i>146.30</i>	T/O Dist: <i>7000'</i>
T/O Dist. (50'):	Ldg. Dist: <i>5400'</i>	Ldg. Dist. (50'):

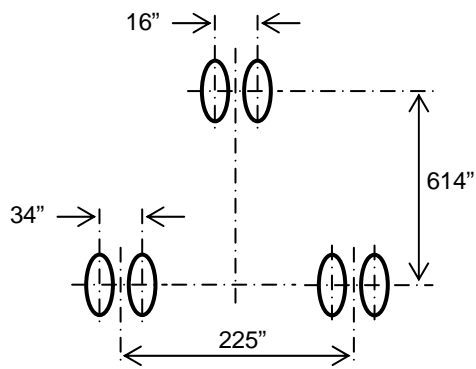
Gear: *FAA D, Dual Wheel Main Gear with Dual Wheel Nose Gear*

Number of Assemblies/Tires per Assembly:	Nose: <i>1-2</i>	Main: <i>2-2</i>
--	------------------	------------------

Main Gear: % Gross Load on Assembly:	<i>93.53</i>	Max Assembly Load: <i>81.465</i>
Max Single Wheel Load:	<i>40.733</i>	Contact Area: <i>199.67</i>
Contact Pressure:	<i>204</i>	Footprint Width: <i>12.35''</i>

Nose Gear: % Gross Load on Assembly:	<i>6.47</i>	Max Assembly Load: <i>11.271</i>
Max Single Wheel Load:	<i>5.635</i>	Contact Area: <i>30.46</i>
Contact Pressure:	<i>185</i>	Footprint Width: <i>4.82''</i>

		Aircraft Classification Numbers (ACNs)							
		Rigid Pavement Subgrades				Flexible Pavement Subgrades			
Aircraft Weight		High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt	<i>97.0</i>	<i>24.3</i>	<i>25.9</i>	<i>27.4</i>	<i>28.3</i>	<i>21.7</i>	<i>22.3</i>	<i>24.0</i>	<i>27.8</i>
Max Wgt	<i>174.2</i>	<i>48.4</i>	<i>51.8</i>	<i>54.1</i>	<i>55.5</i>	<i>42.7</i>	<i>45.1</i>	<i>50.0</i>	<i>55.0</i>



Aircraft: **747-8/-8F**

ALC Mgr: Manuf: *Boeing* Group Index:
Wing Span: *224.6'* Length: *250.75'* Height: *64.2'* Vert. Clr: *52.0"*
Pivot Pt: *36.0'* Turn Radius: *107.0'* 180° Turn Diameter: *318.0'* Controlling Gear: *Nose/Body*

Basic Empty Wt: <i>394.0</i>	Basic Mis, T/O Wt:	Max T/O Wt: <i>975.0</i>
Basic Mis. Ldg. Wt:	Max Ldg. Wt: <i>757.0</i>	T/O Dist:
T/O Dist. (50)':	Ldg. Dist:	Ldg. Dist. (50)':

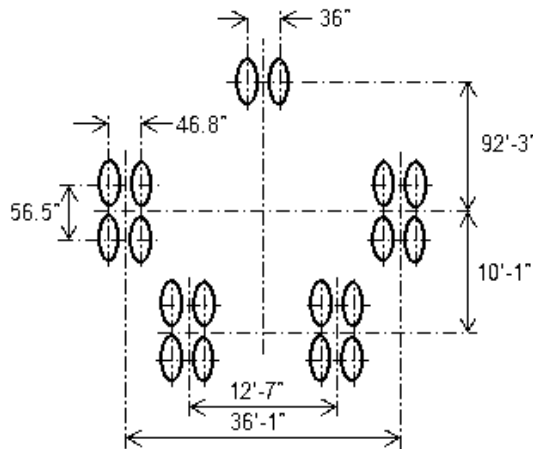
Gear: *FAA 2D/2D2, Two Dual Wheels in Tandem Main Gear / Two Dual Wheels in Tandem Body Gear with Dual Wheel Nose Gear*

Number of Assemblies/Tires per Assembly: Nose: *1-2* Main: *4-4*

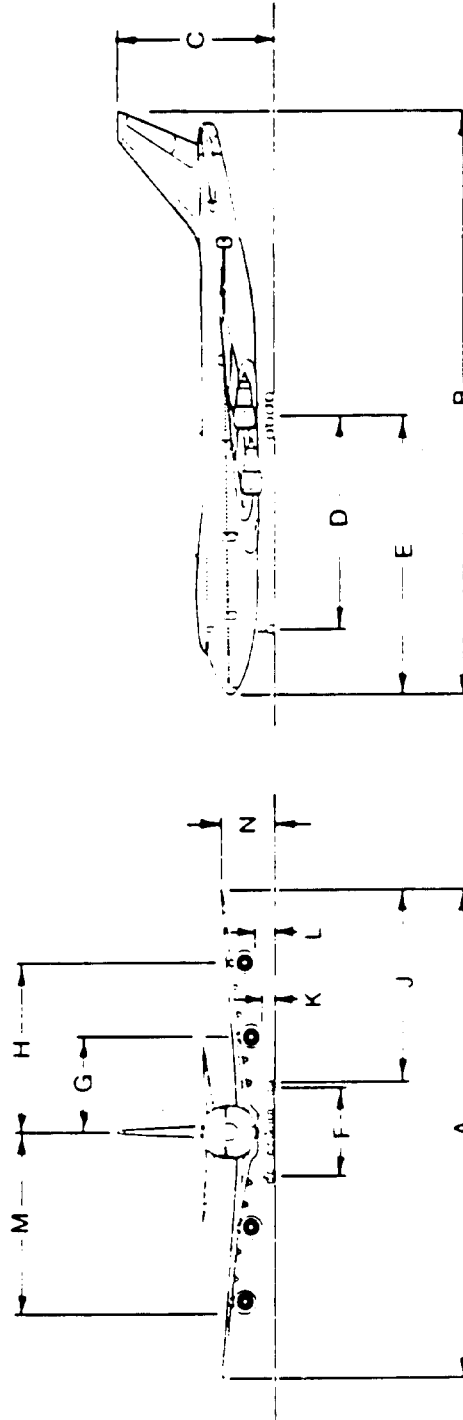
Main Gear:	% Gross Load on Assembly: <i>94.686</i>	Max Assembly Load: <i>230.797</i>
	Max Single Wheel Load: <i>57.699</i>	
	Contact Pressure: <i>221</i>	Contact Area: <i>261.081</i>
	Footprint Width: <i>14.122"</i>	

Nose Gear:	% Gross Load on Assembly: <i>5.314</i>	Max Assembly Load: <i>51.812</i>
	Max Single Wheel Load: <i>25.906</i>	
	Contact Pressure: <i>166</i>	Contact Area: <i>156.059</i>
	Footprint Width: <i>10.918"</i>	

Aircraft Classification Numbers (ACNs)								
Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt <i>394.0</i>	<i>20.2</i>	<i>22.4</i>	<i>25.9</i>	<i>29.5</i>	<i>21.7</i>	<i>22.9</i>	<i>25.3</i>	<i>32.8</i>
Max Wgt <i>975.0</i>	<i>63.0</i>	<i>75.9</i>	<i>89.0</i>	<i>99.7</i>	<i>67.2</i>	<i>75.6</i>	<i>94.8</i>	<i>118.1</i>

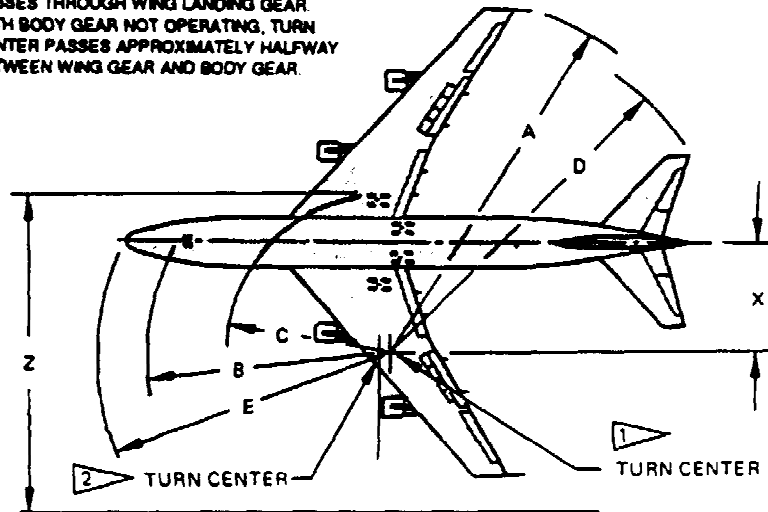


MODEL	MAXIMUM TIRE PRESSURE, PSI		A	B	C	D	E	F	G	H	J	K	L	M	N
	MAIN GEAR	NOSE GEAR													
100B 200B,C 300PASS	190	183	195.7	231.8	64.3	84.0	109.4	36.1	39.8	69.8	77.3	3.8	4.9	40.0	17.6
200C 200F CARGO	201	188	195.7	231.8	64.7	84.0	109.4	36.1	39.8	69.8	77.3	3.8	6.0	40.0	17.6
SP	205	209	195.7	184.8	65.8	67.3	92.8	36.1	39.2	69.5	77.3	3.6	5.6	40.0	17.2
400	210	205	211.0	231.8	64.3	84.0	109.4	36.1	39.2	69.5	84.8	3.8	6.0	40.0	24.4



X TURN RADIUS (FEET)	RADIUS (FEET)										z 3 MINIMUM WIDTH FOR 180° TURN (FEET)	
	A WING TIP		B 3 NOSE GEAR		C 3 WING GEAR		D TAIL TIP		E NOSE		1	2
	1	2	1	2	1	2	1	2	1	2		
0	113	116	88	81	23	21	126	130	110	105	100	102
20	131	133	89	84	42	41	132	136	111	106	131	126
40	148	151	95	82	62	61	142	146	116	112	156	153
60	168	170	105	102	82	81	153	156	125	121	188	183
80	186	187	118	116	102	101	167	170	136	132	220	216
100	206	206	133	130	121	121	181	184	149	146	254	251
120	225	226	149	146	141	141	197	200	163	160	290	287
140	244	245	166	163	161	161	213	216	178	175	327	324
160	264	265	183	181	181	181	230	232	195	192	364	362

- 1 BODY GEAR STEERING INOPERATIVE
- 2 WITH BODY GEAR STEERING
- 3 MEASURED TO OUTSIDE TIRE FACES
- 4 WITH BODY GEAR OPERATING, TURN CENTER PASSES THROUGH WING LANDING GEAR. WITH BODY GEAR NOT OPERATING, TURN CENTER PASSES APPROXIMATELY HALFWAY BETWEEN WING GEAR AND BODY GEAR.



Boeing 747-100B/-200B-Pass/-200C-Pass/
-200C-Cargo/-200F-Cargo/-300-Pass, Turning Radii

Aircraft: **747-100B/-300**

ALC Mgr: Manuf: *Boeing* Group Index:
Wing Span: *195.67'* Length: *229.17'* Height: *64.25'* Vert. Clr: *28.0"*
Pivot Pt: *8.75'* Turn Radius: *181.0'* 180° Turn Diameter: *530.0'* Controlling Gear: *Nose/Body*

Basic Empty Wt:	<i>358.0</i>	Basic Mis, T/O Wt:		Max T/O Wt :	<i>750.0</i>
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	<i>585.0</i>	T/O Dist:	<i>10100'</i>
T/O Dist. (50'):		Ldg. Dist:	<i>6700'</i>	Ldg. Dist. (50'):	

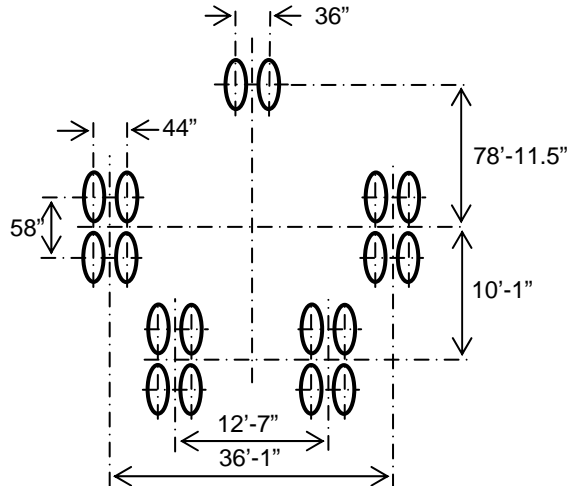
Gear: *FAA 2D/2D2, Two Dual Wheels in Tandem Main Gear / Two Dual Wheels in Tandem Body Gear with Dual Wheel Nose Gear*

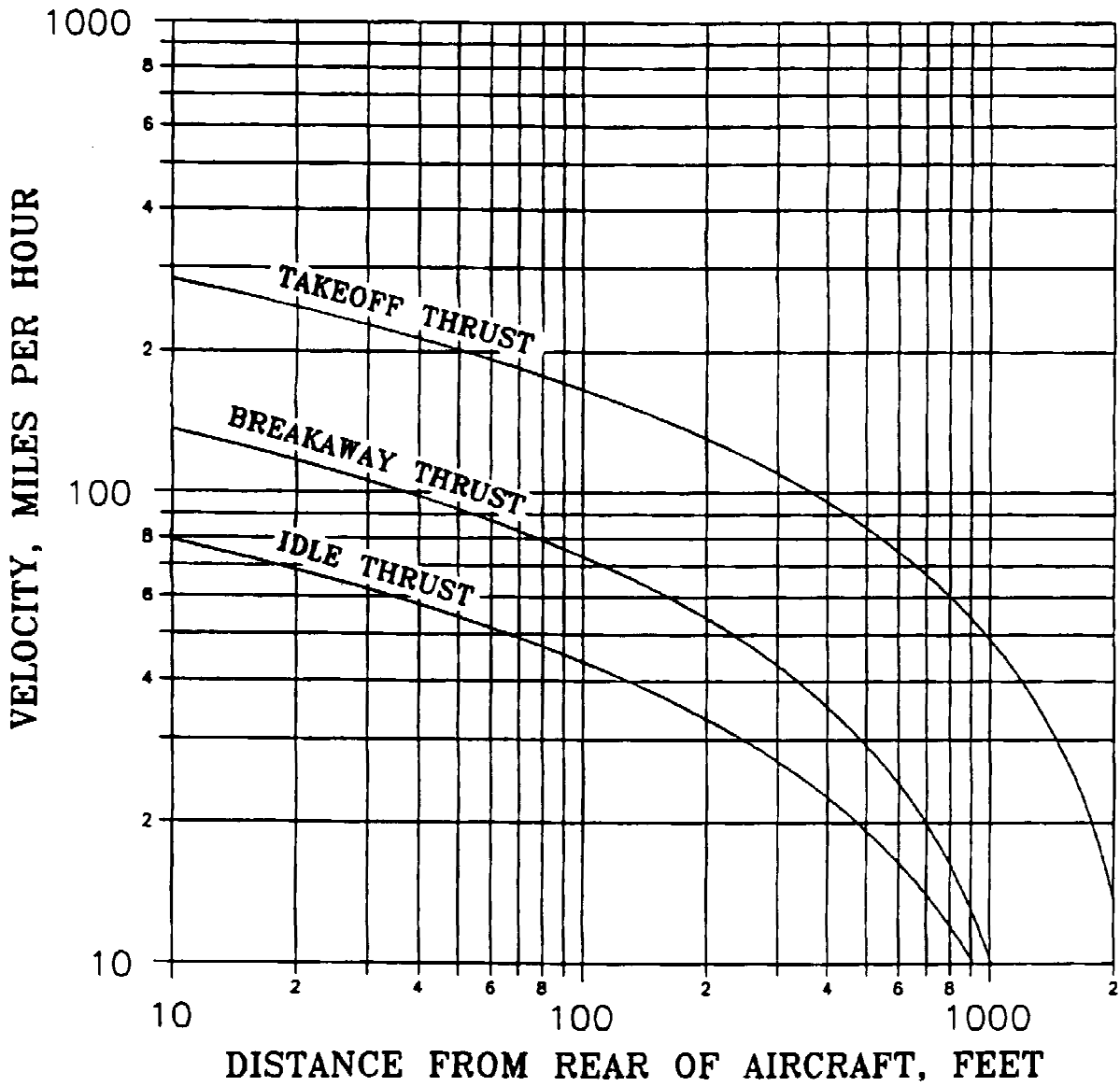
Number of Assemblies/Tires per Assembly: Nose: *1-2* Main: *4-4*

Main Gear:	% Gross Load on Assembly:	<i>92.43</i>	Max Assembly Load:	<i>173.306</i>
	Max Single Wheel Load:	<i>43.327</i>		
	Contact Pressure:	<i>192</i>	Contact Area:	<i>225.66</i>
	Footprint Width:	<i>13.13"</i>		

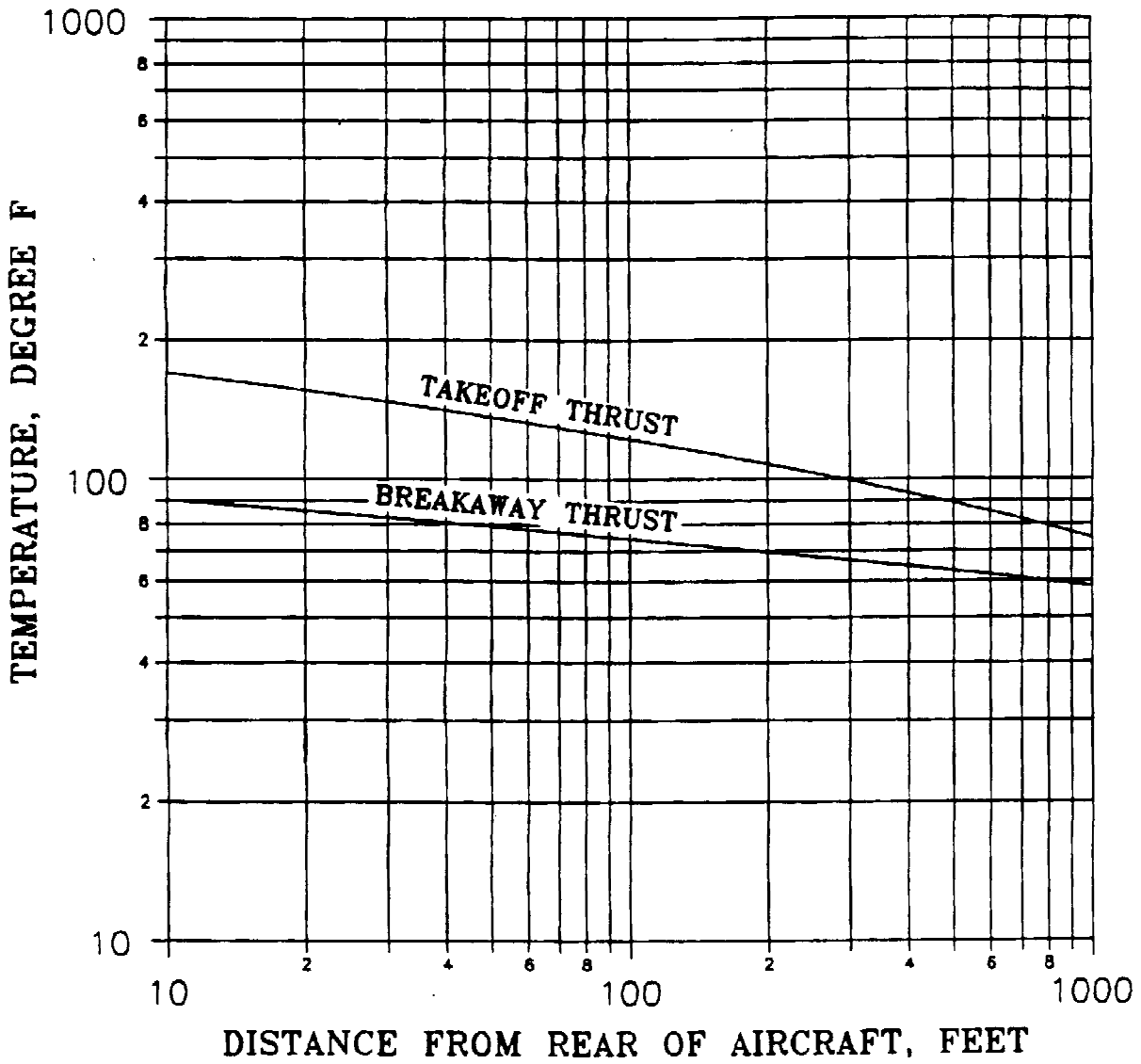
Nose Gear:	% Gross Load on Assembly:	<i>7.57</i>	Max Assembly Load:	<i>56.775</i>
	Max Single Wheel Load:	<i>28.388</i>		
	Contact Pressure:	<i>170</i>	Contact Area:	<i>166.99</i>
	Footprint Width:	<i>11.29"</i>		

Aircraft Classification Numbers (ACNs)									
Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades				
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D	
Min Wgt <i>358.0</i>	<i>16.7</i>	<i>18.7</i>	<i>21.6</i>	<i>24.6</i>	<i>18.6</i>	<i>19.6</i>	<i>21.7</i>	<i>27.7</i>	
Max Wgt <i>750.0</i>	<i>40.9</i>	<i>49.3</i>	<i>58.8</i>	<i>66.8</i>	<i>46.2</i>	<i>51.0</i>	<i>61.8</i>	<i>82.0</i>	





Boeing 747-100B/-200B-Pass/-200C-Cargo/-200C-Pass/
-200F-Cargo/-300-Pass, Velocity - Distance Curves



Boeing 747-100B/-200B-Pass/-200C-Cargo/-200C-Pass/
-200F-Cargo/-300-Pass, Temperature - Distance Curves

Aircraft: **747-200B/-200BCombi/-300**

ALC Mgr: Manuf: *Boeing* Group Index:
 Wing Span: 195.67' Length: 229.17' Height: 64.25' Vert. Clr: 28.0"
 Pivot Pt: Turn Radius: 181.0' 180° Turn Diameter: 530.0' Controlling Gear: *Nose/Body*

Basic Empty Wt: 376.120	Basic Mis, T/O Wt:	Max T/O Wt : 833.0
Basic Mis. Ldg. Wt:	Max Ldg. Wt: 630.0	T/O Dist: 10700'
T/O Dist. (50)':	Ldg. Dist: 7300'	Ldg. Dist. (50)':

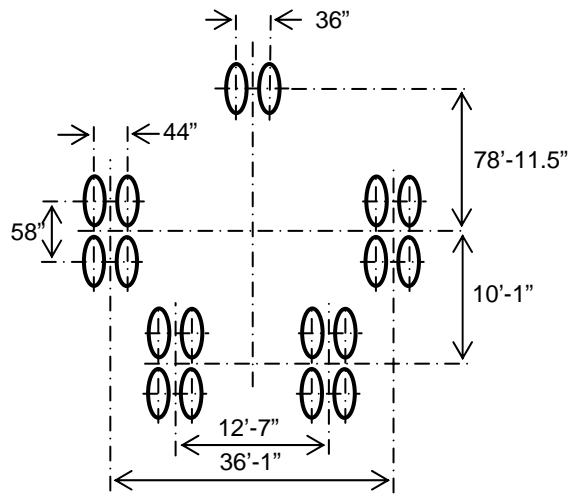
Gear: *FAA 2D/2D2, Two Dual Wheels in Tandem Main Gear / Two Dual Wheels in Tandem Body Gear with Dual Wheel Nose Gear*

Number of Assemblies/Tires per Assembly: Nose: 1-2 Main: 4-4

Main Gear:	% Gross Load on Assembly: 90.96	Max Assembly Load: 189.424
	Max Single Wheel Load: 47.356	
	Contact Pressure: 190	Contact Area: 249.24
	Footprint Width: 13.80"	

Nose Gear:	% Gross Load on Assembly: 9.04	Max Assembly Load: 75.303
	Max Single Wheel Load: 37.652	
	Contact Pressure: 183	Contact Area: 205.75
	Footprint Width: 12.54"	

Aircraft Classification Numbers (ACNs)								
Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt 376.1	17.3	19.3	22.4	25.8	19.3	20.4	22.7	29.2
Max Wgt 833.0	46.0	55.8	66.3	75.6	51.7	57.6	70.7	92.2



Aircraft: 747-200C/-200F

ALC Mgr: Manuf: *Boeing* Group Index:
 Wing Span: *195.67'* Length: *229.17'* Height: *64.67'* Vert. Clr: *28.0"*
 Pivot Pt: Turn Radius: *181.0'* 180° Turn Diameter: *530.0'* Controlling Gear: *Nose/Body*

Basic Empty Wt:	<i>342.180</i>	Basic Mis, T/O Wt:	Max T/O Wt :	<i>833.0</i>
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	T/O Dist:	<i>10300'</i>
T/O Dist. (50')		Ldg. Dist:	Ldg. Dist. (50')	

Gear: *FAA 2D/2D2, Two Dual Wheels in Tandem Main Gear / Two Dual Wheels in Tandem Body Gear with Dual Wheel Nose Gear*

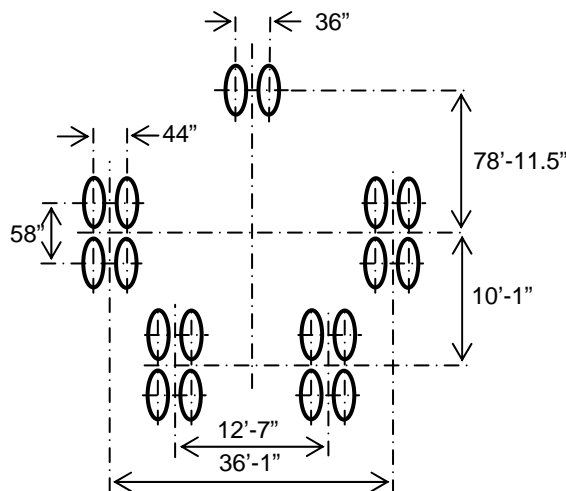
Number of Assemblies/Tires per Assembly: Nose: *1-2* Main: *4-4*

Main Gear:	% Gross Load on Assembly:	<i>92.78</i>	Max Assembly Load:	<i>193.214</i>
	Max Single Wheel Load:	<i>48.304</i>		
	Contact Pressure:	<i>190</i>	Contact Area:	<i>254.23</i>
	Footprint Width:	<i>13.94"</i>		

Nose Gear:	% Gross Load on Assembly:	<i>7.22</i>	Max Assembly Load:	<i>60.142</i>
	Max Single Wheel Load:	<i>30.071</i>		
	Contact Pressure:	<i>183</i>	Contact Area:	<i>164.32</i>
	Footprint Width:	<i>11.20"</i>		

Aircraft Classification Numbers (ACNs)

Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt <i>342.2</i>	<i>15.9</i>	<i>17.7</i>	<i>20.3</i>	<i>23.3</i>	<i>17.8</i>	<i>18.5</i>	<i>20.6</i>	<i>26.0</i>
Max Wgt <i>833.0</i>	<i>47.1</i>	<i>57.5</i>	<i>68.4</i>	<i>77.4</i>	<i>53.1</i>	<i>59.2</i>	<i>72.9</i>	<i>94.6</i>



Aircraft: **747-300Combi**

ALC Mgr: Manuf: *Boeing* Group Index:
 Wing Span: **195.67'** Length: **229.17'** Height: **64.25'** Vert. Clr: **28.0"**
 Pivot Pt: Turn Radius: **181.0'** 180° Turn Diameter: **530.0'** Controlling Gear: **Nose/Body**

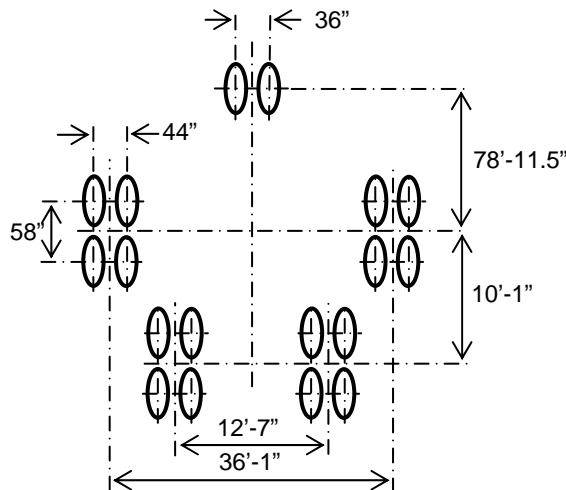
Basic Empty Wt:	385.430	Basic Mis, T/O Wt:	Max T/O Wt :	833.0
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	T/O Dist:	10400'
T/O Dist. (50')		Ldg. Dist:	Ldg. Dist. (50')	

Gear: *FAA 2D/2D2, Two Dual Wheels in Tandem Main Gear / Two Dual Wheels in Tandem Body Gear with Dual Wheel Nose Gear*
 Number of Assemblies/Tires per Assembly: Nose: **1-2** Main: **4-4**

Main Gear: % Gross Load on Assembly:	92.78	Max Assembly Load:	193.214
Max Single Wheel Load:	48.304	Contact Area:	240.32
Contact Pressure:	201	Footprint Width:	13.55"
Footprint Width:	13.55"		

Nose Gear: % Gross Load on Assembly:	7.22	Max Assembly Load:	60.142
Max Single Wheel Load:	30.071	Contact Area:	159.95
Contact Pressure:	188	Footprint Width:	11.05"
Footprint Width:	11.05"		

Aircraft Classification Numbers (ACNs)									
Aircraft Weight		Rigid Pavement Subgrades				Flexible Pavement Subgrades			
		High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt	385.4	18.5	20.8	24.1	27.7	20.6	21.7	24.1	31.2
Max Wgt	833.0	48.2	58.4	69.3	78.0	53.5	59.4	72.9	94.6



Aircraft: **747-400 Domestic**

ALC Mgr: Manuf: *Boeing* Group Index:

Wing Span: *195.67'* Length: *231.85'* Height: *64.25'* Vert. Clr: *45.0"*

Pivot Pt: *40.0'* Turn Radius: *91.0'* 180° Turn Diameter: *302.0'* Controlling Gear: *Nose/Body*

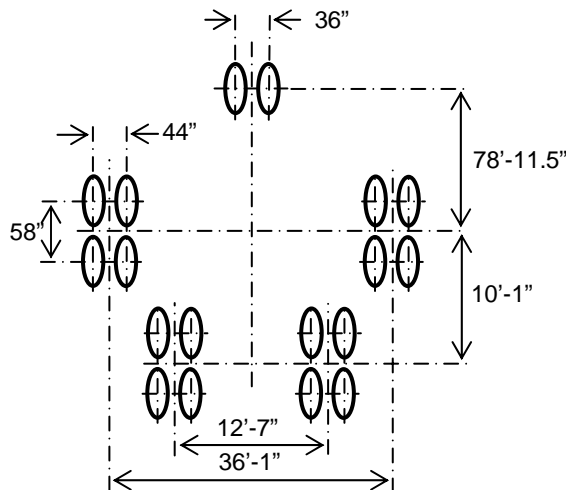
Basic Empty Wt:	<i>400.630</i>	Basic Mis, T/O Wt:		Max T/O Wt :	<i>610.0</i>
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	<i>574.0</i>	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

Gear: <i>FAA 2D/2D2, Two Dual Wheels in Tandem Main Gear / Two Dual Wheels in Tandem Body Gear with Dual Wheel Nose Gear</i>		
Number of Assemblies/Tires per Assembly:	Nose: <i>1-2</i>	Main: <i>4-4</i>

Main Gear:	% Gross Load on Assembly:	<i>96.36</i>	Max Assembly Load:	<i>146.949</i>
	Max Single Wheel Load:	<i>36.737</i>		
	Contact Pressure:	<i>150</i>	Contact Area:	<i>244.91</i>
	Footprint Width:	<i>13.68"</i>		

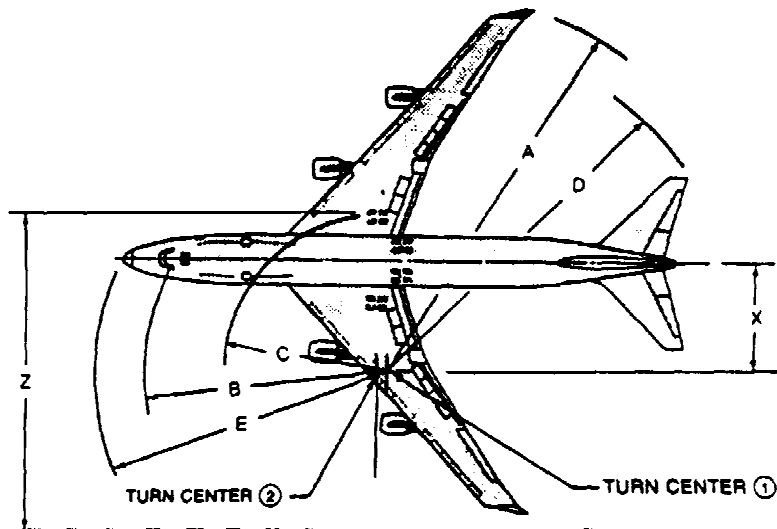
Nose Gear:	% Gross Load on Assembly:	<i>3.64</i>	Max Assembly Load:	<i>22.204</i>
	Max Single Wheel Load:	<i>11.102</i>		
	Contact Pressure:	<i>150</i>	Contact Area:	<i>74.01</i>
	Footprint Width:	<i>7.52"</i>		

Aircraft Classification Numbers (ACNs)									
Aircraft Weight		Rigid Pavement Subgrades				Flexible Pavement Subgrades			
		High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt	<i>400.6</i>	<i>17.8</i>	<i>20.7</i>	<i>24.5</i>	<i>28.8</i>	<i>21.9</i>	<i>22.9</i>	<i>26.3</i>	<i>35.0</i>
Max Wgt	<i>610.0</i>	<i>29.4</i>	<i>35.9</i>	<i>43.7</i>	<i>50.9</i>	<i>36.7</i>	<i>39.1</i>	<i>47.5</i>	<i>65.4</i>



X TURN RADIUS (FEET)	RADIUS (FEET)										Z ③	
	A ④ WING TIP		B ③ NOSE GEAR		C ③ WING GEAR		D TAIL TIP		E NOSE		MINIMUM WIDTH FOR 180° TURN (FEET)	
	①	②	①	②	①	②	①	②	①	②	①	②
40	157	159	96	91	81	81	142	146	117	112	156	152
60	176	177	106	102	81	81	154	158	125	120	187	183
80	196	196	119	115	101	101	167	171	136	132	219	216
100	214	215	133	130	121	121	182	186	148	145	254	251
120	233	234	149	146	141	141	197	200	162	159	290	287
140	253	254	166	163	161	161	213	216	176	175	327	324
160	272	273	183	181	181	181	230	233	194	191	364	362

- ① BODY GEAR STEERING INOPERATIVE
- ② WITH BODY GEAR STEERING
- ③ MEASURED TO OUTSIDE TIRE FACES
- ④ WINGSPAN AT 213 FT



Aircraft: **747-400 Freighter**

ALC Mgr:	Manuf: <i>Boeing</i>	Group Index:
Wing Span: <i>213.0'</i>	Length: <i>231.85'</i>	Height: <i>64.08'</i>
Pivot Pt: <i>40.0'</i>	Turn Radius: <i>91.0'</i>	180° Turn Diameter: <i>318.0'</i>
		Controlling Gear: <i>Nose/Body</i>

Basic Empty Wt: <i>363.954</i>	Basic Mis, T/O Wt:	Max T/O Wt : <i>875.0</i>
Basic Mis. Ldg. Wt:	Max Ldg. Wt: <i>666.0</i>	T/O Dist:
T/O Dist. (50'):	Ldg. Dist:	Ldg. Dist. (50'):

Gear: *FAA 2D/2D2, Two Dual Wheels in Tandem Main Gear / Two Dual Wheels in Tandem Body Gear with Dual Wheel Nose Gear*

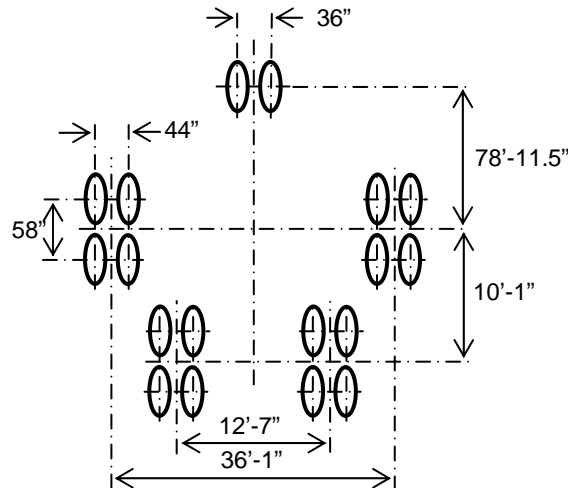
Number of Assemblies/Tires per Assembly: Nose: *1-2* Main: *4-4*

Main Gear:	% Gross Load on Assembly: <i>93.30</i>	Max Assembly Load: <i>204.094</i>
	Max Single Wheel Load: <i>51.024</i>	
	Contact Pressure: <i>200</i>	Contact Area: <i>255.12</i>
	Footprint Width: <i>13.96"</i>	

Nose Gear:	% Gross Load on Assembly: <i>6.7</i>	Max Assembly Load: <i>58.625</i>
	Max Single Wheel Load: <i>29.313</i>	
	Contact Pressure: <i>175</i>	Contact Area: <i>167.50</i>
	Footprint Width: <i>11.31"</i>	

Aircraft Classification Numbers (ACNs)

Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt <i>364.0</i>	<i>17.5</i>	<i>19.5</i>	<i>22.6</i>	<i>25.8</i>	<i>19.3</i>	<i>20.4</i>	<i>22.5</i>	<i>28.8</i>
Max Wgt <i>875.0</i>	<i>52.2</i>	<i>62.9</i>	<i>74.9</i>	<i>84.3</i>	<i>57.5</i>	<i>64.2</i>	<i>79.3</i>	<i>101.5</i>



Aircraft: **747-400**

ALC Mgr:

Manuf: *Boeing*

Group Index:

Wing Span: 213.0'

Length: 231.85'

Height: 64.0'

Vert. Clr: 27.0"

Pivot Pt: 40.0'

Turn Radius: 91.0'

180° Turn Diameter: 318.0'

Controlling Gear: *Nose/Body*

Basic Empty Wt: 394.088	Basic Mis, T/O Wt:	Max T/O Wt : 875.0
Basic Mis. Ldg. Wt:	Max Ldg. Wt: 630.0	T/O Dist:
T/O Dist. (50'):	Ldg. Dist:	Ldg. Dist. (50'):

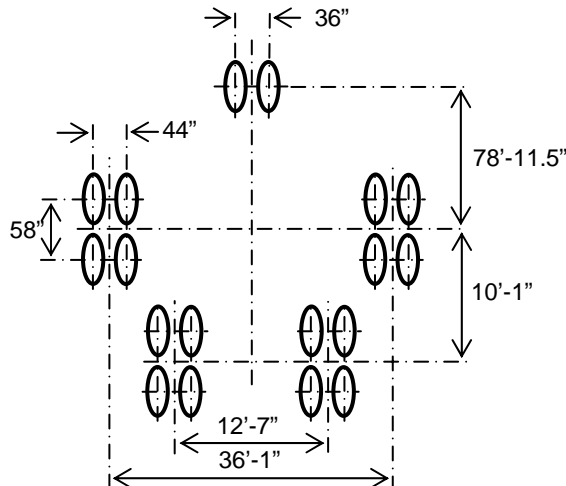
Gear: <i>FAA 2D/2D2, Two Dual Wheels in Tandem Main Gear / Two Dual Wheels in Tandem Body Gear with Dual Wheel Nose Gear</i>		
Number of Assemblies/Tires per Assembly:	Nose: 1-2	Main: 4-4

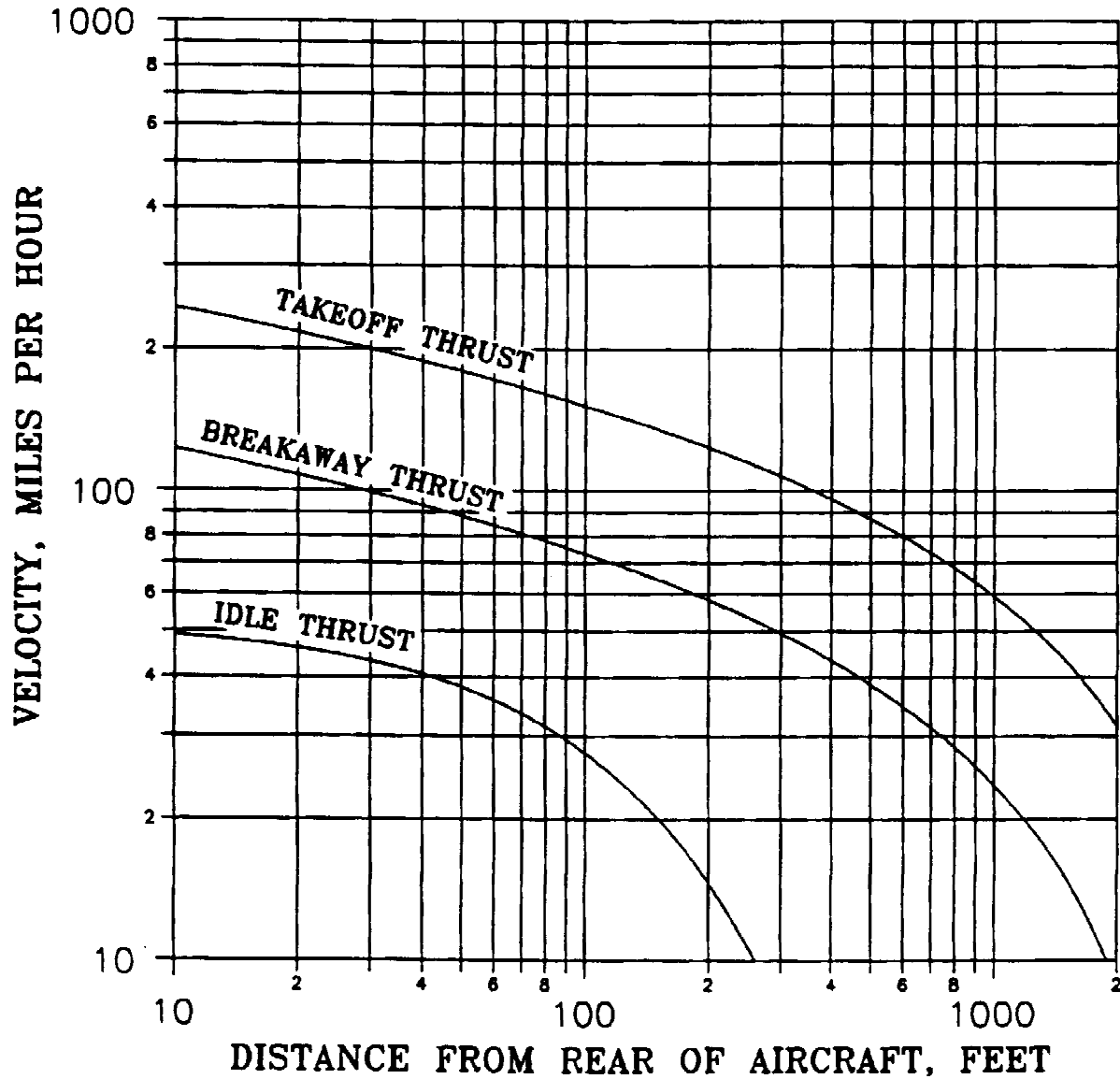
Main Gear: % Gross Load on Assembly:	93.27	Max Assembly Load:	204.028
Max Single Wheel Load:	51.007	Contact Area:	255.03
Contact Pressure:	200	Footprint Width:	13.96"

Nose Gear: % Gross Load on Assembly:	6.73	Max Assembly Load:	58.888
Max Single Wheel Load:	29.444	Contact Area:	147.22
Contact Pressure:	200	Footprint Width:	10.60"

Aircraft Classification Numbers (ACNs)

Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt 394.1	19.0	21.5	25.0	28.8	21.3	22.5	25.0	32.6
Max Wgt 875.0	52.2	62.9	74.9	84.3	57.5	64.1	79.3	101.5





Boeing 747-400, Velocity - Distance Curves

Aircraft: **747-400ER**

ALC Mgr: Manuf: *Boeing* Group Index:
Wing Span: 213.0' Length: 231.85' Height: 64.25' Vert. Clr: 28.0"
Pivot Pt: 40.0' Turn Radius: 91.0' 180° Turn Diameter: 318.0' Controlling Gear: *Nose/Body*

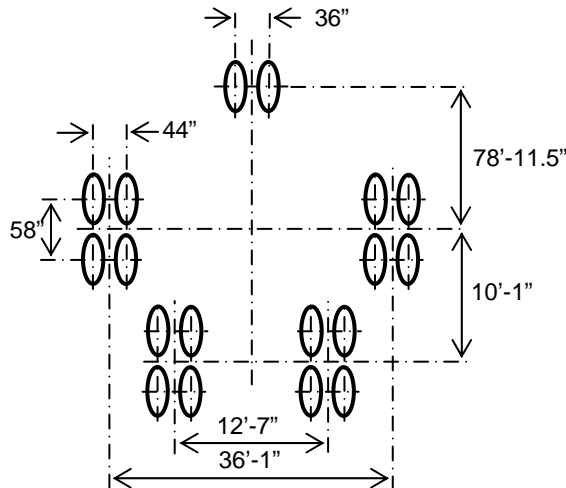
Basic Empty Wt:	406.90	Basic Mis, T/O Wt:	Max T/O Wt :	910.0
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:	Ldg. Dist. (50'):	

Gear: <i>FAA 2D/2D2, Two Dual Wheels in Tandem Main Gear / Two Dual Wheels in Tandem Body Gear with Dual Wheel Nose Gear</i>			
Number of Assemblies/Tires per Assembly:	Nose: 1-2	Main:	4-4

Main Gear:	% Gross Load on Assembly:	93.58	Max Assembly Load:	212.894
	Max Single Wheel Load:	53.224	Contact Area:	231.41
	Contact Pressure:	230	Footprint Width:	13.30"

Nose Gear:	% Gross Load on Assembly:	6.42	Max Assembly Load:	58.422
	Max Single Wheel Load:	29.211	Contact Area:	153.74
	Contact Pressure:	190	Footprint Width:	10.84"

Aircraft Classification Numbers (ACNs)								
Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt 406.9	20.9	23.6	27.2	31.0	22.6	23.7	26.3	34.5
Max Wgt 910.0	58.2	69.9	81.5	91.5	61.5	68.6	84.8	107.2



Aircraft: **747-SP**

ALC Mgr: Manuf: *Boeing* Group Index:
Wing Span: *195.67'* Length: *183.25'* Height: *65.83'* Vert. Clr: *43.0"*
Pivot Pt: Turn Radius: *175.0'* 180° Turn Diameter: *530.0'* Controlling Gear: *Nose/Body*

Basic Empty Wt:	<i>325.660</i>	Basic Mis, T/O Wt:		Max T/O Wt :	<i>695.0</i>
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	<i>450.0</i>	T/O Dist:	<i>9200'</i>
T/O Dist. (50'):		Ldg. Dist:	<i>5400'</i>	Ldg. Dist. (50'):	

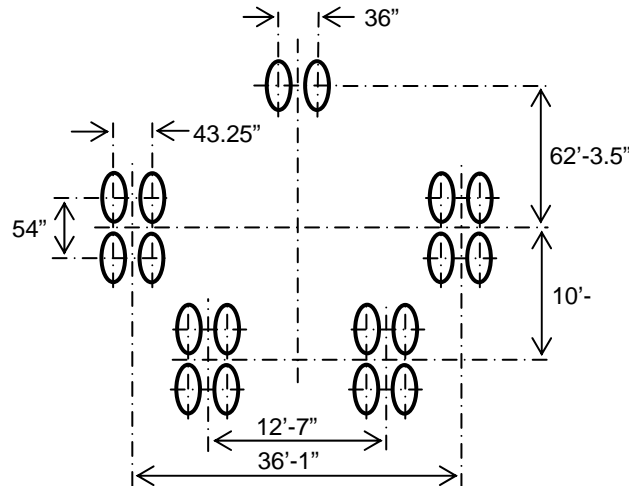
Gear: *FAA 2D/2D2, Two Dual Wheels in Tandem Main Gear / Two Dual Wheels in Tandem Body Gear with Dual Wheel Nose Gear*

Number of Assemblies/Tires per Assembly: Nose: *1-2* Main: *4-4*

Main Gear:	% Gross Load on Assembly:	<i>87.68</i>	Max Assembly Load:	<i>152.344</i>
	Max Single Wheel Load:	<i>38.086</i>	Contact Area:	<i>185.79</i>
	Contact Pressure:	<i>205</i>	Footprint Width:	<i>11.91"</i>
	Footprint Width:	<i>11.91"</i>		

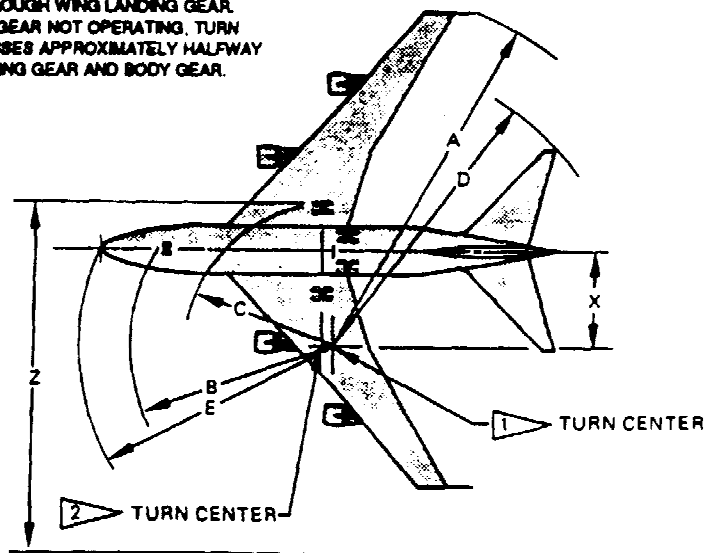
Nose Gear:	% Gross Load on Assembly:	<i>12.32</i>	Max Assembly Load:	<i>85.624</i>
	Max Single Wheel Load:	<i>42.812</i>	Contact Area:	<i>204.84</i>
	Contact Pressure:	<i>209</i>	Footprint Width:	<i>12.51"</i>
	Footprint Width:	<i>12.51"</i>		

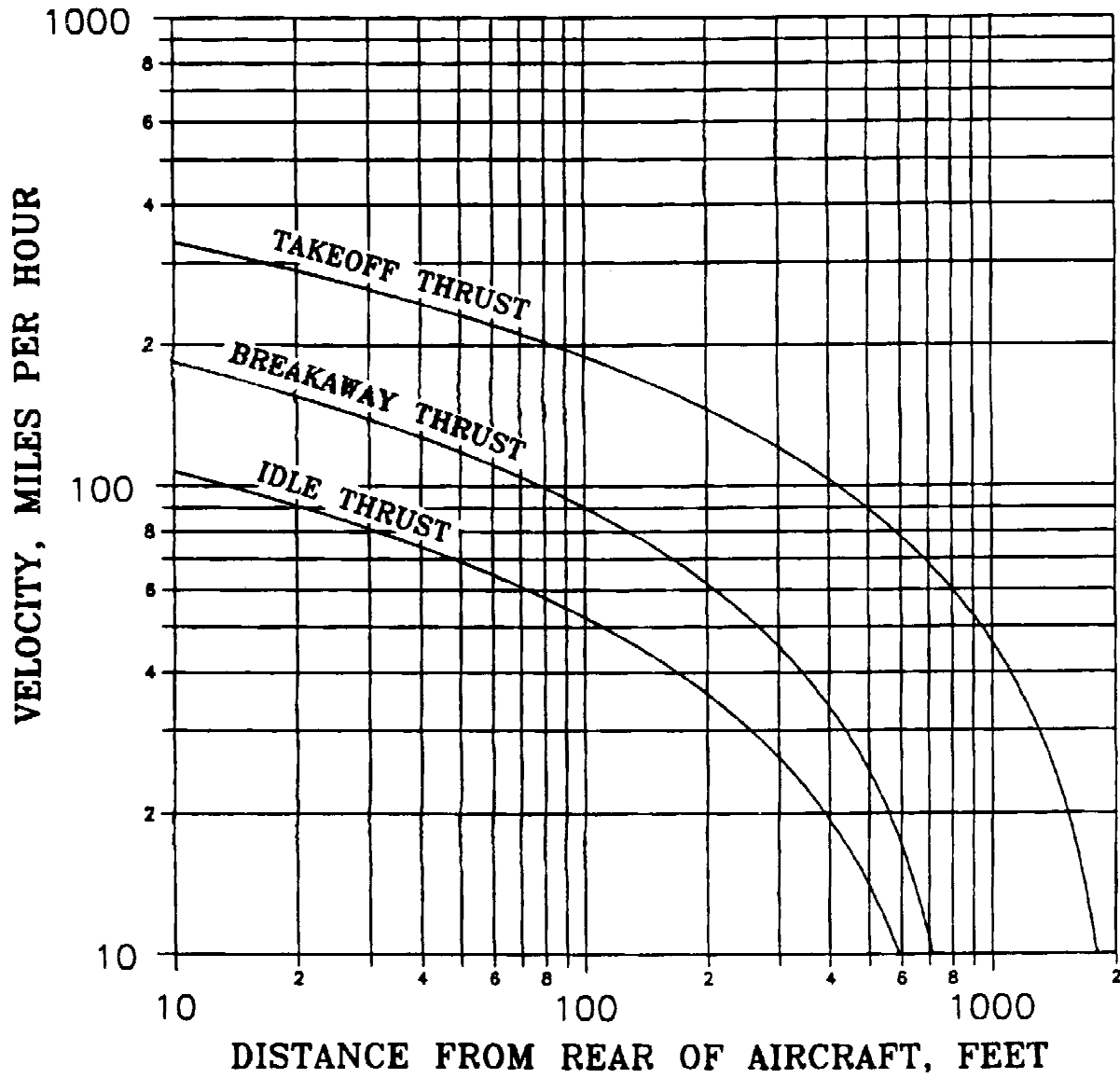
		Rigid Pavement Subgrades				Flexible Pavement Subgrades			
		High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt	<i>325.7</i>	<i>14.9</i>	<i>16.4</i>	<i>18.7</i>	<i>21.4</i>	<i>16.1</i>	<i>16.8</i>	<i>18.5</i>	<i>23.2</i>
Max Wgt	<i>695.0</i>	<i>36.9</i>	<i>44.1</i>	<i>52.3</i>	<i>59.1</i>	<i>40.5</i>	<i>44.3</i>	<i>52.9</i>	<i>71.5</i>



X TURN RADIUS (FEET)	RADIUS (FEET)										2 3 MINIMUM WIDTH FOR 180° TURN (FEET)	
	A WING TIP		B 3 NOSE GEAR		C 3 WING GEAR		D TAIL TIP		E NOSE		1	2
	1	2	1	2	1	2	1	2	1	2		
0	113	115	70	66	23	21	97	101	93	88	93	88
20	131	133	74	69	42	41	107	111	96	91	116	110
40	148	151	81	77	62	61	119	122	101	97	143	138
60	163	170	83	80	82	81	134	137	111	107	175	171
80	186	187	108	105	102	101	150	153	123	119	210	206
100	206	208	124	121	121	121	168	169	137	134	245	242
120	226	226	141	138	141	141	184	186	152	149	282	279
140	244	245	158	156	161	161	202	204	168	166	319	317
160	264	266	177	176	181	181	220	222	186	183	358	356

- 1 BODY GEAR STEERING INOPERATIVE
- 2 WITH BODY GEAR STEERING
- 3 MEASURED TO OUTSIDE TIRE FACES
- 4 WITH BODY GEAR OPERATING, TURN CENTER PASSES THROUGH WING LANDING GEAR. WITH BODY GEAR NOT OPERATING, TURN CENTER PASSES APPROXIMATELY HALFWAY BETWEEN WING GEAR AND BODY GEAR.





Boeing 747SP, Velocity - Distance Curves

Aircraft: **757-200/-200PF**

ALC Mgr:

Manuf: *Boeing*

Group Index:

Wing Span: **124.83'**

Length: **155.25'**

Height: **45.08'**

Vert. Clr: **29.0"**

Pivot Pt: **30.0'**

Turn Radius: **68.0'**

180° Turn Diameter: **184.0'**

Controlling Gear: *Nose*

Basic Empty Wt: 114.0	Basic Mis, T/O Wt:	Max T/O Wt : 255.0
Basic Mis. Ldg. Wt:	Max Ldg. Wt: 210.0	T/O Dist: 9600'
T/O Dist. (50)':	Ldg. Dist: 5100'	Ldg. Dist. (50)':

Gear: *FAA 2D Two Dual Wheels in Tandem Main Gear with Dual Wheel Nose Gear*

Number of Assemblies/Tires per Assembly:

Nose: **1-2**

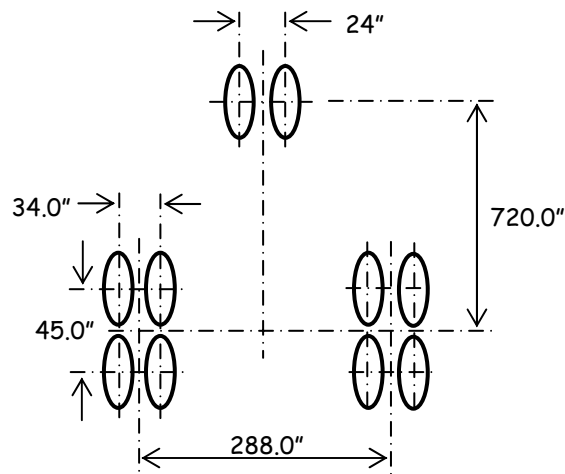
Main: **2-4**

Main Gear: % Gross Load on Assembly: 91.17	Max Assembly Load: 116.242
Max Single Wheel Load: 29.060	
Contact Pressure: 183	Contact Area: 158.80
Footprint Width: 11.01"	

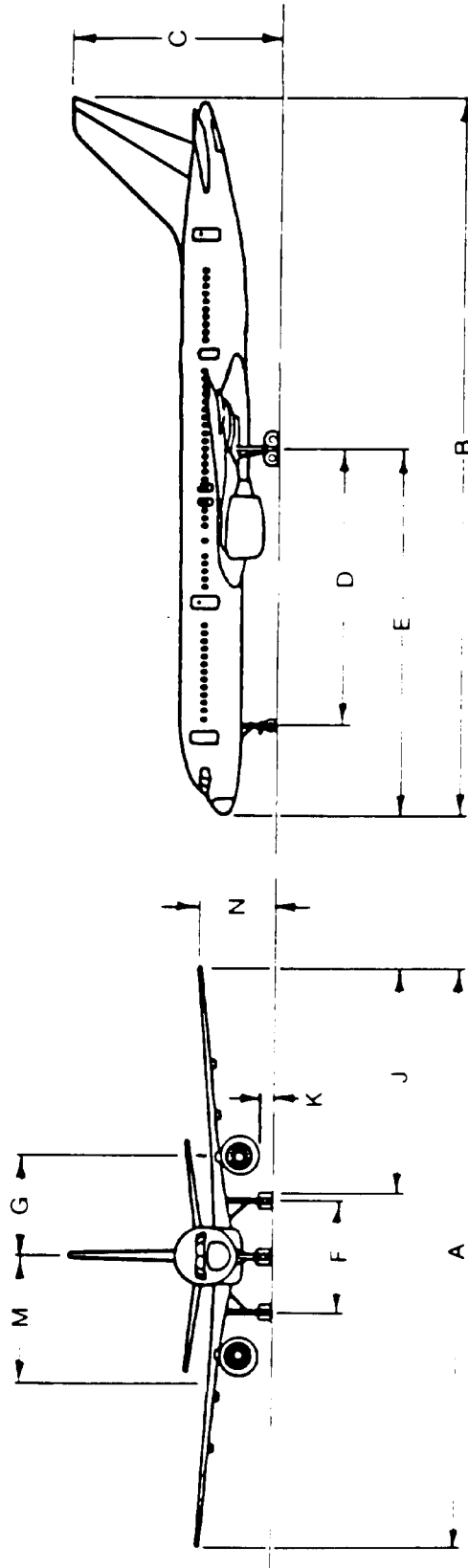
Nose Gear: % Gross Load on Assembly: 8.83	Max Assembly Load: 22.516
Max Single Wheel Load: 11.258	
Contact Pressure: 155	Contact Area: 72.63
Footprint Width: 7.45"	

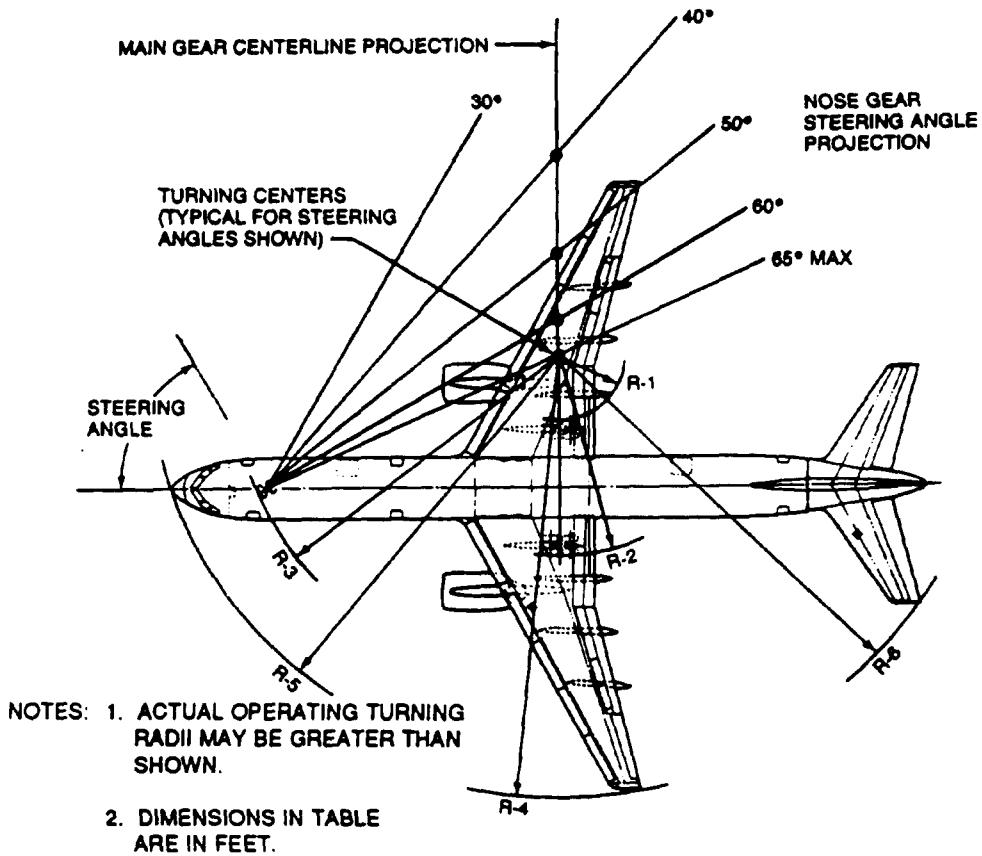
Aircraft Classification Numbers (ACNs)

Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt 114.0	10.5	12.2	14.3	16.5	11.8	12.3	13.8	17.9
Max Wgt 255.0	30.2	36.6	43.2	48.5	31.9	35.6	43.9	56.9



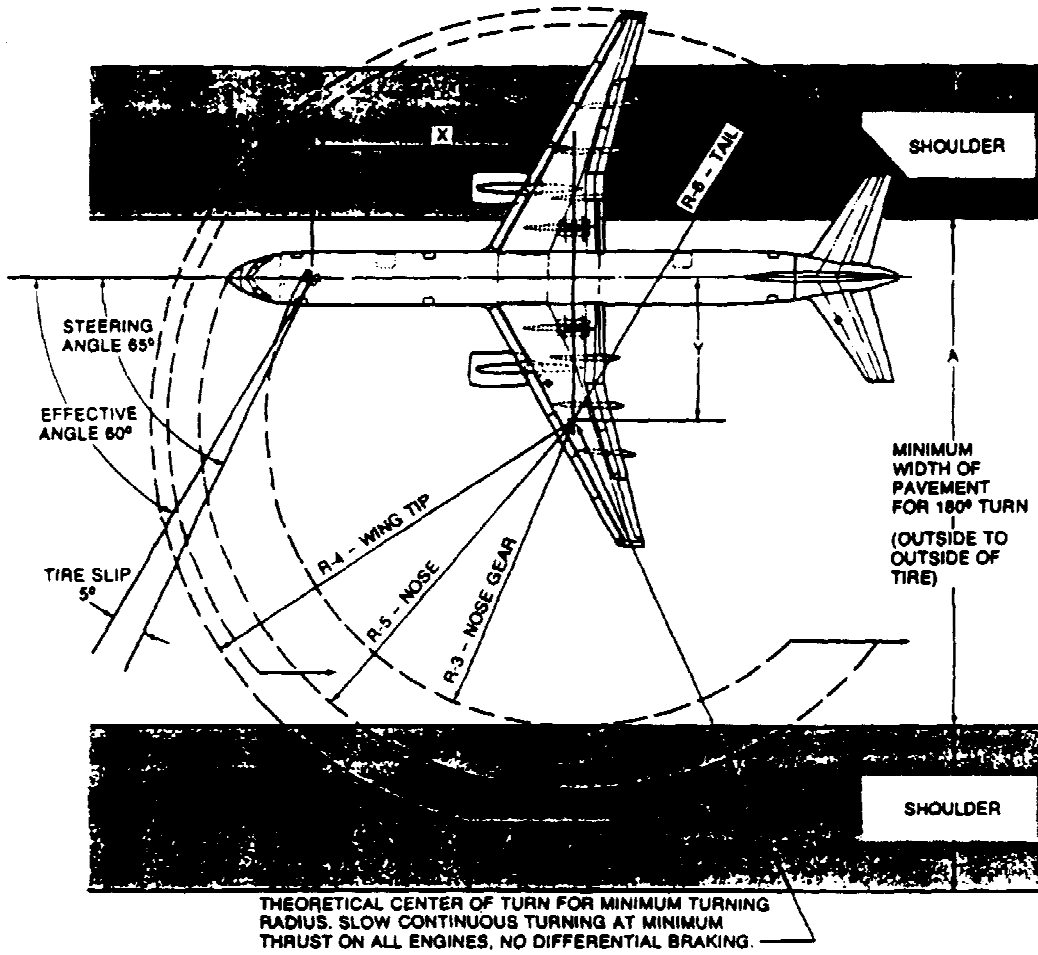
MODEL	MAXIMUM TIRE PRESSURE, PSI		A	B	C	D	E	F	G	J	K	M	N
	MAIN GEAR	NOSE GEAR											
200	170	150	124.8	155.3	45.1	60.0	79.3	24.0	21.3	48.2	2.4	35.0	15.3





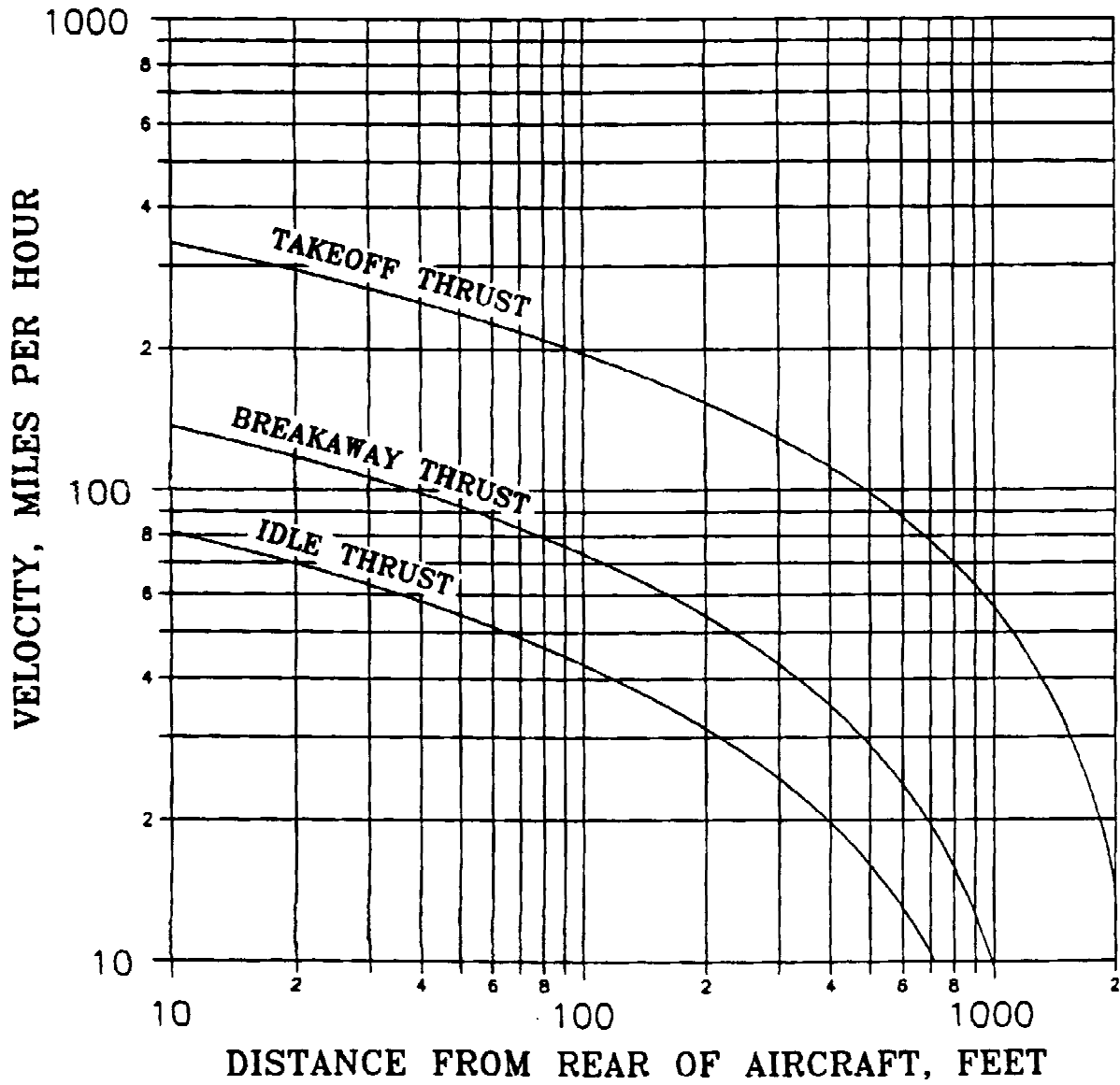
STEERING ANGLE (DEGREES)	R-1	R-2	R-3	R-4	R-5	R-6
	INNER GEAR	OUTER GEAR	NOSE GEAR	WING TIP	NOSE	TAIL
30	90	118	122	167	131	149
36	72	100	106	149	117	133
40	58	88	95	135	107	121
45	46	74	88	124	99	112
50	36	64	80	114	94	105
55	28	56	75	106	90	100
60	21	49	71	98	87	95
65 (MAXIMUM)	14	42	68	92	84	91

Boeing 757-200, Turning Radii - No Slip Angle



EFFECTIVE TURNING ANGLE	X	Y	A	R-3	R-4	R-5	R-6
60°	60	35	120	71	98	87	95

- NOTES: 1. 5° TIRE SLIP ANGLE APPROXIMATE FOR 65° TURN ANGLE.
2. DIMENSIONS IN TABLE ARE IN FEET.



Boeing 757-200, Velocity - Distance Curves

Aircraft: **757-300**

ALC Mgr: Manuf: *Boeing* Group Index:
 Wing Span: **124.83'** Length: **177.42'** Height: **44.75'** Vert. Clr: **32.0''**
 Pivot Pt: **36.0'** Turn Radius: **82.0'** 180° Turn Diameter: **196.0'** Controlling Gear: *Nose*

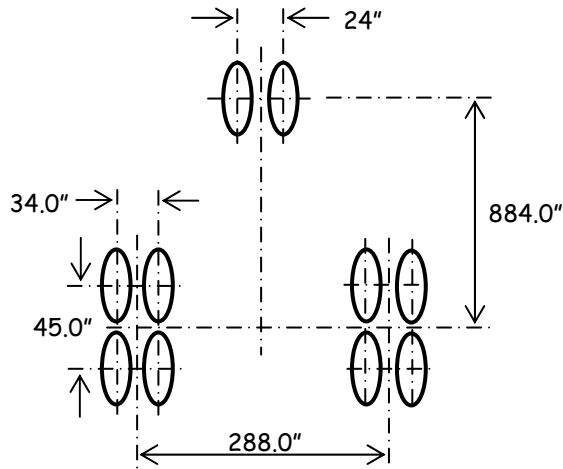
Basic Empty Wt:	141.80	Basic Mis, T/O Wt:		Max T/O Wt :	270.0
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	224.0	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

Gear: *FAA 2D Two Dual Wheels in Tandem Main Gear with Dual Wheel Nose Gear*
 Number of Assemblies/Tires per Assembly: Nose: **1-2** Main: **2-4**

Main Gear:	% Gross Load on Assembly:	92.61	Max Assembly Load:	125.024
	Max Single Wheel Load:	31.256		
	Contact Pressure:	195	Contact Area:	160.29
	Footprint Width:	11.07''		

Nose Gear:	% Gross Load on Assembly:	7.39	Max Assembly Load:	19.953
	Max Single Wheel Load:	9.977		
	Contact Pressure:	155	Contact Area:	64.37
	Footprint Width:	7.01''		

Aircraft Classification Numbers (ACNs)									
Aircraft Weight		Rigid Pavement Subgrades				Flexible Pavement Subgrades			
		High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt	141.8	14.6	17.0	20.0	22.8	15.7	16.7	18.9	25.5
Max Wgt	270.0	34.3	41.3	48.4	53.9	35.4	39.6	49.1	62.5



Aircraft: **767-200**

ALC Mgr: Manuf: *Boeing* Group Index:
Wing Span: *156.08'* Length: *159.17'* Height: *52.92'* Vert. Clr: *32.0''*
Pivot Pt: *30.15'* Turn Radius: *72.9'* 180° Turn Diameter: *223.6'* Controlling Gear: *Nose*

Basic Empty Wt:	<i>176.650</i>	Basic Mis, T/O Wt:		Max T/O Wt :	<i>315.0</i>
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	<i>272.0</i>	T/O Dist:	<i>9,100'</i>
T/O Dist. (50'):		Ldg. Dist:	<i>5,000'</i>	Ldg. Dist. (50'):	

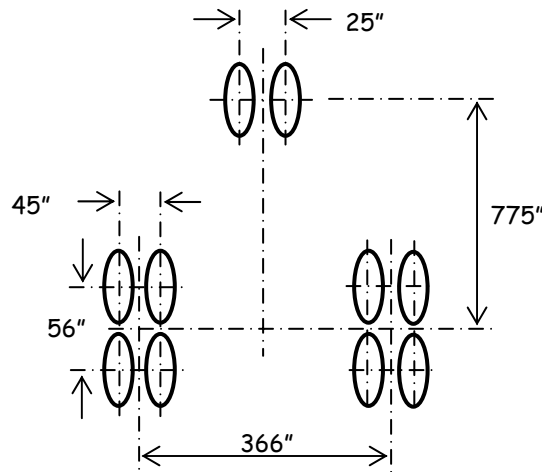
Gear: <i>FAA 2D Two Dual Wheels in Tandem Main Gear with Dual Wheel Nose Gear</i>		
Number of Assemblies/Tires per Assembly:	Nose: <i>1-2</i>	Main: <i>2-4</i>

Main Gear:	% Gross Load on Assembly:	<i>92.30</i>	Max Assembly Load:	<i>145.373</i>
	Max Single Wheel Load:	<i>36.343</i>		
	Contact Pressure:	<i>190</i>	Contact Area:	<i>191.28</i>
	Footprint Width:	<i>12.09''</i>		

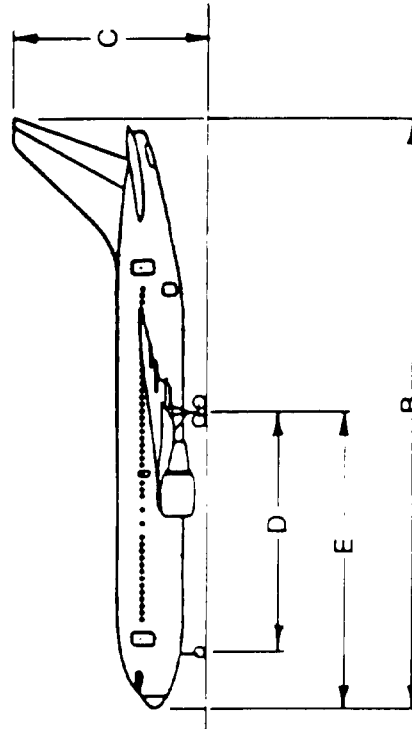
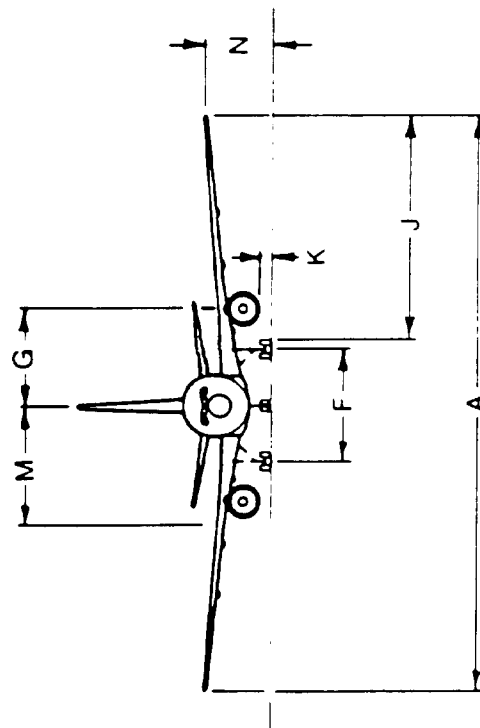
Nose Gear:	% Gross Load on Assembly:	<i>7.70</i>	Max Assembly Load:	<i>24.255</i>
	Max Single Wheel Load:	<i>12.127</i>		
	Contact Pressure:	<i>145</i>	Contact Area:	<i>83.64</i>
	Footprint Width:	<i>7.99''</i>		

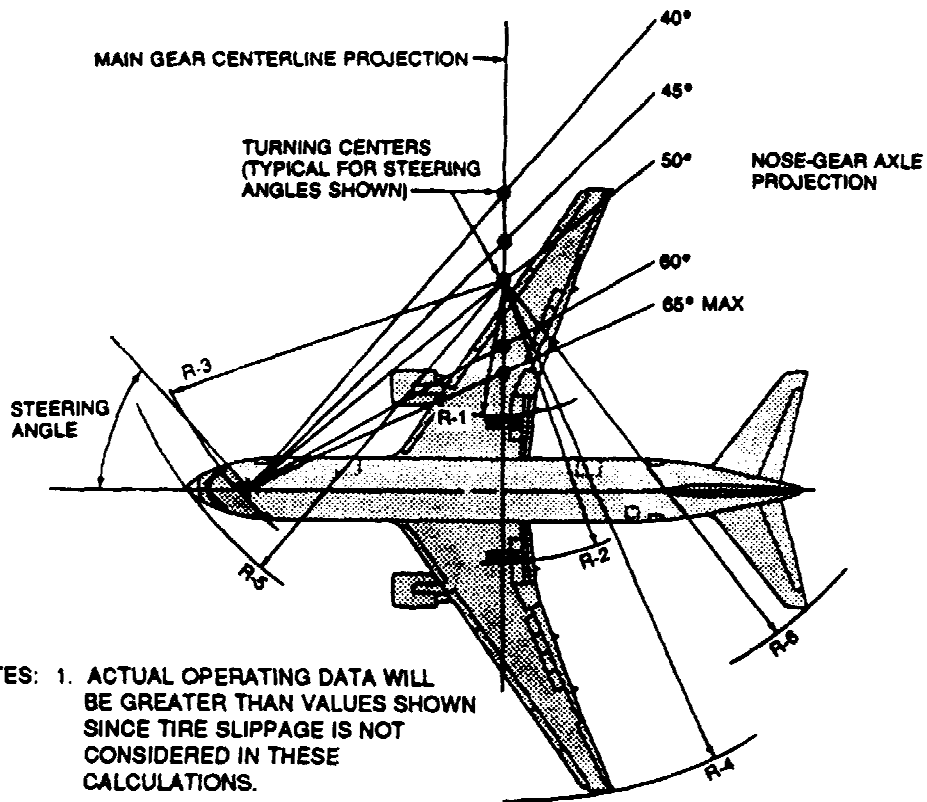
Aircraft Classification Numbers (ACNs)

Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt <i>176.7</i>	<i>16.6</i>	<i>18.4</i>	<i>21.1</i>	<i>24.3</i>	<i>18.3</i>	<i>19.2</i>	<i>21.4</i>	<i>27.3</i>
Max Wgt <i>315.0</i>	<i>32.7</i>	<i>38.9</i>	<i>46.1</i>	<i>52.9</i>	<i>37.1</i>	<i>40.3</i>	<i>47.4</i>	<i>65.2</i>



MODEL	MAXIMUM TIRE PRESSURE, PSI		A	B	C	D	E	F	G	J	K	M	N
	MAIN GEAR	NOSE GEAR											
200	190	145	156.1	159.2	52.9	64.6	79.5	30.5	26.0	60.1	2.7	36.0	16.3
200ER	190	155	156.1	159.2	52.9	64.6	79.5	30.5	26.0	60.1	2.7	36.0	16.3
300	190	150	156.1	180.3	52.6	74.7	89.6	30.5	26.0	60.1	2.8	41.0	16.1
300ER	190	150	156.1	180.3	52.6	74.7	89.6	30.5	26.0	60.1	2.8	41.0	16.1

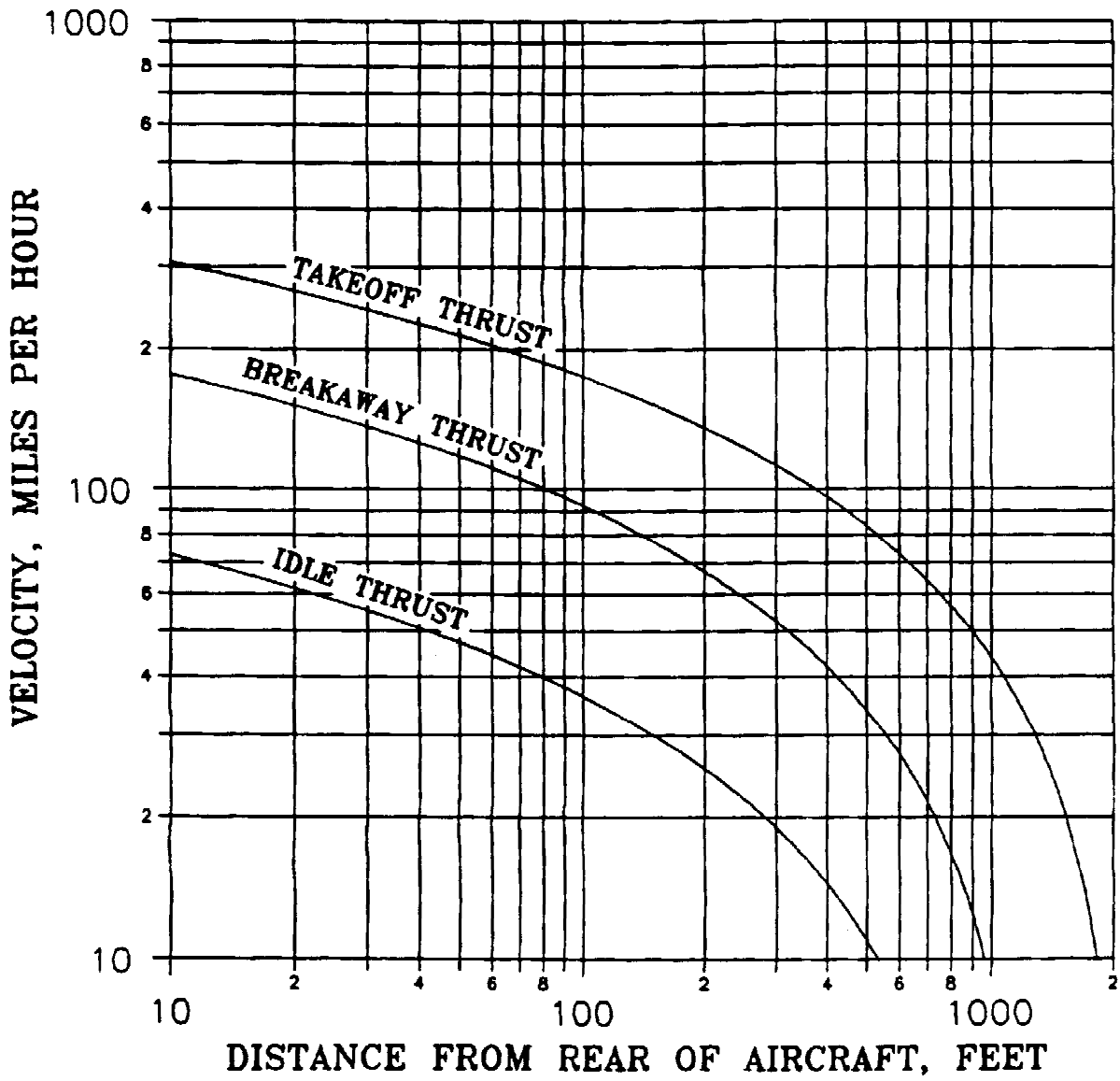




NOTES: 1. ACTUAL OPERATING DATA WILL BE GREATER THAN VALUES SHOWN SINCE TIRE SLIPPAGE IS NOT CONSIDERED IN THESE CALCULATIONS.

2. DIMENSIONS IN TABLE ARE IN FEET.

STEERING ANGLE (DEGREES)	R-1	R-2	R-3	R-4	R-5	R-6
	INNER GEAR	OUTER GEAR	NOSE GEAR	WING TIP	NOSE	TAIL
30	84	130	131	182	137	162
35	74	110	114	173	122	145
40	58	85	102	166	111	132
45	47	83	83	146	102	122
50	36	72	86	135	96	114
55	27	63	81	127	82	108
60	19	55	76	118	88	102
65 (MAXIMUM)	12	48	73	112	85	98



Boeing 767-200/-200ER/-300 with PW-JT9D-7R4E
Engines, Velocity - Distance Curves

Aircraft: **767-200ER**

ALC Mgr: Manuf: *Boeing* Group Index:
 Wing Span: *156.08'* Length: *159.17'* Height: *52.92'* Vert. Clr: *32.0"*
 Pivot Pt: *30.15'* Turn Radius: *72.9'* 180° Turn Diameter: *223.6'* Controlling Gear: *Nose*

Basic Empty Wt:	<i>181.610</i>	Basic Mis, T/O Wt:		Max T/O Wt :	<i>395.0</i>
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	<i>300.0</i>	T/O Dist:	<i>9,100'</i>
T/O Dist. (50'):		Ldg. Dist:	<i>5,000'</i>	Ldg. Dist. (50'):	

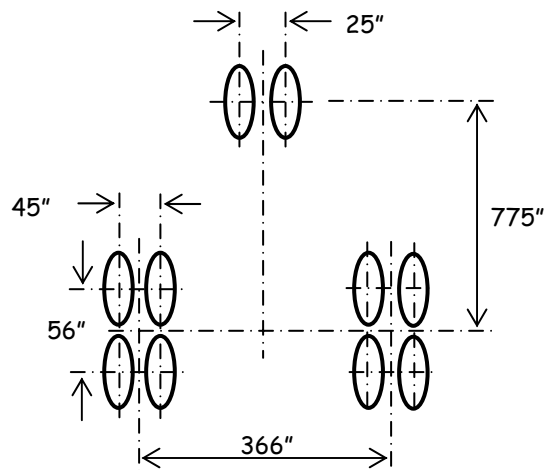
Gear: *FAA 2D Two Dual Wheels in Tandem Main Gear with Dual Wheel Nose Gear*
 Number of Assemblies/Tires per Assembly: Nose: *1-2* Main: *2-4*

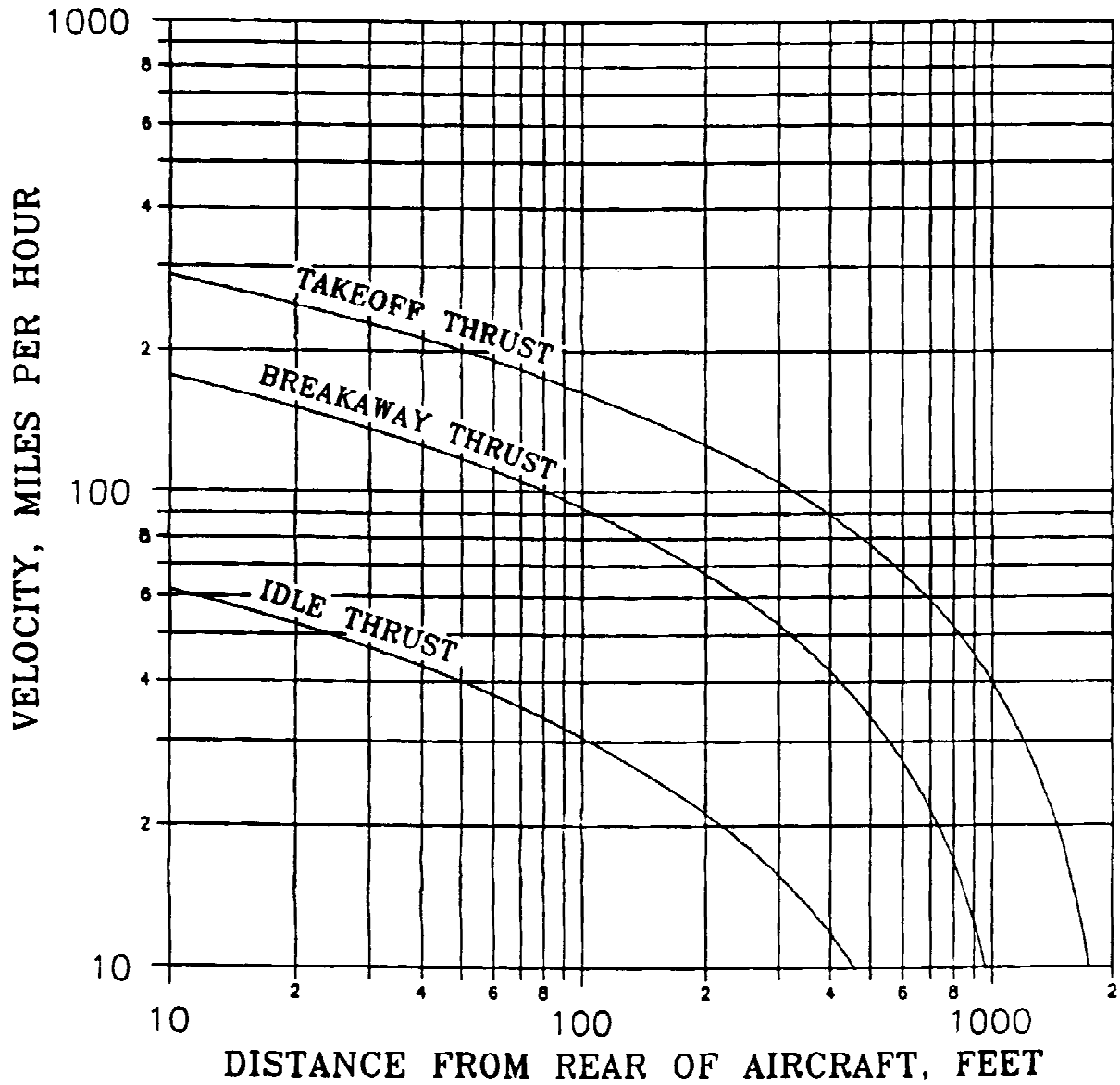
Main Gear:	% Gross Load on Assembly:	<i>90.81</i>	Max Assembly Load:	<i>179.35</i>
	Max Single Wheel Load:	<i>44.837</i>		
	Contact Pressure:	<i>190</i>	Contact Area:	<i>235.99</i>
	Footprint Width:	<i>13.43"</i>		

Nose Gear:	% Gross Load on Assembly:	<i>9.19</i>	Max Assembly Load:	<i>36.30</i>
	Max Single Wheel Load:	<i>18.150</i>		
	Contact Pressure:	<i>185</i>	Contact Area:	<i>98.11</i>
	Footprint Width:	<i>8.66"</i>		

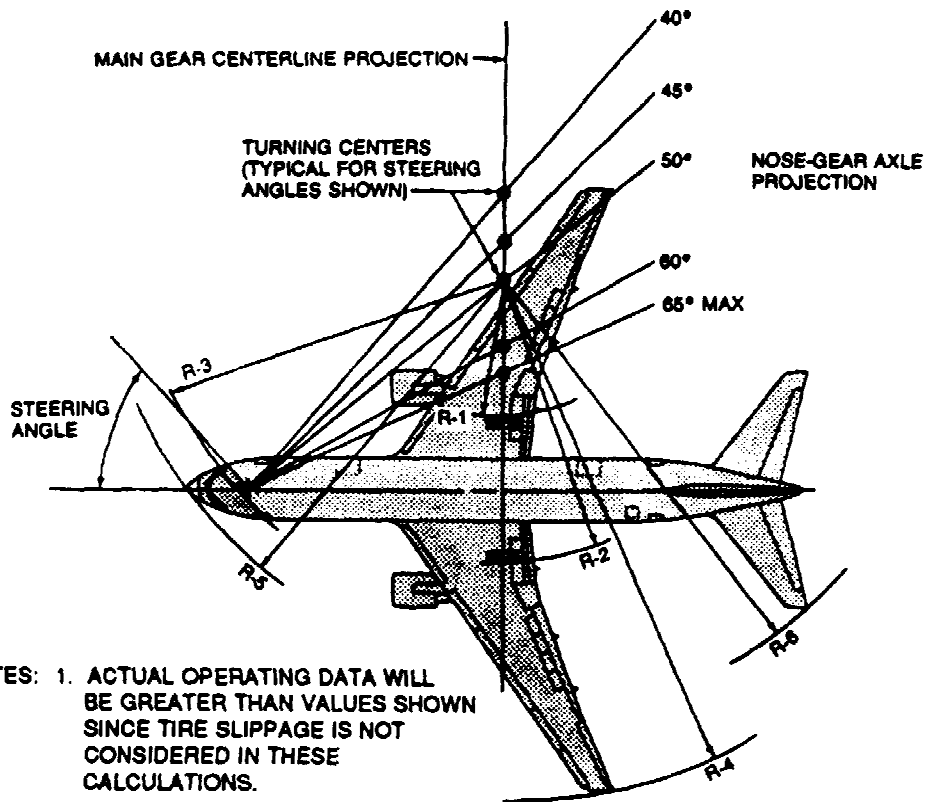
Aircraft Classification Numbers (ACNs)

Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt <i>181.6</i>	<i>16.7</i>	<i>18.5</i>	<i>21.4</i>	<i>24.6</i>	<i>18.5</i>	<i>19.5</i>	<i>21.7</i>	<i>27.8</i>
Max Wgt <i>395.0</i>	<i>43.0</i>	<i>51.8</i>	<i>62.2</i>	<i>70.5</i>	<i>48.4</i>	<i>53.6</i>	<i>65.4</i>	<i>86.5</i>





Boeing 767-200ER/-300 with GE-CF6-80A2
Engines, Velocity - Distance Curves



NOTES: 1. ACTUAL OPERATING DATA WILL BE GREATER THAN VALUES SHOWN SINCE TIRE SLIPPAGE IS NOT CONSIDERED IN THESE CALCULATIONS.

2. DIMENSIONS IN TABLE ARE IN FEET.

STEERING ANGLE (DEGREES)	R-1	R-2	R-3	R-4	R-5	R-6
	INNER GEAR	OUTER GEAR	NOSE GEAR	WING TIP	NOSE	TAIL
30	84	130	131	182	137	162
35	74	110	114	173	122	145
40	58	85	102	166	111	132
45	47	83	83	146	102	122
50	36	72	86	135	96	114
55	27	63	81	127	82	108
60	19	55	76	118	88	102
65 (MAXIMUM)	12	48	73	112	85	98

Aircraft: **767-300**

ALC Mgr: Manuf: *Boeing* Group Index:
 Wing Span: 156.08' Length: 180.25' Height: 52.58' Vert. Clr: 22.0"
 Pivot Pt: 34.8' Turn Radius: 84.1' 180° Turn Diameter: 232.8' Controlling Gear: *Nose*

Basic Empty Wt:	189.750	Basic Mis, T/O Wt:		Max T/O Wt :	350.0
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	300.0	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

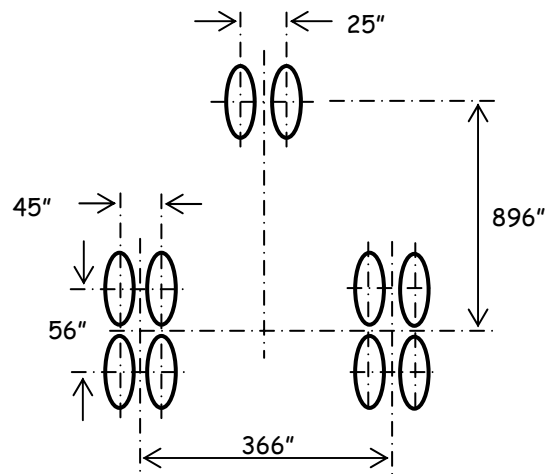
Gear: *FAA 2D Two Dual Wheels in Tandem Main Gear with Dual Wheel Nose Gear*
 Number of Assemblies/Tires per Assembly: Nose: 1-2 Main: 2-4

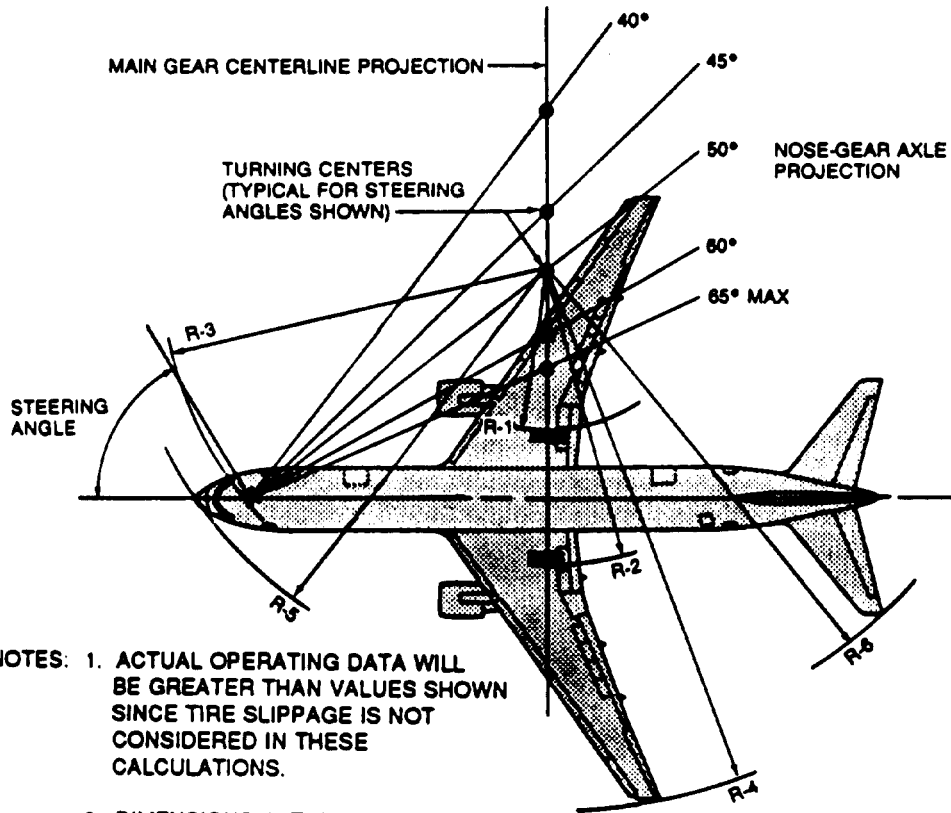
Main Gear:	% Gross Load on Assembly:	92.27	Max Assembly Load:	161.472
	Max Single Wheel Load:	40.368		
	Contact Pressure:	195	Contact Area:	207.02
	Footprint Width:	12.58"		

Nose Gear:	% Gross Load on Assembly:	7.73	Max Assembly Load:	27.055
	Max Single Wheel Load:	13.528		
	Contact Pressure:	145	Contact Area:	93.29
	Footprint Width:	8.44"		

Aircraft Classification Numbers (ACNs)

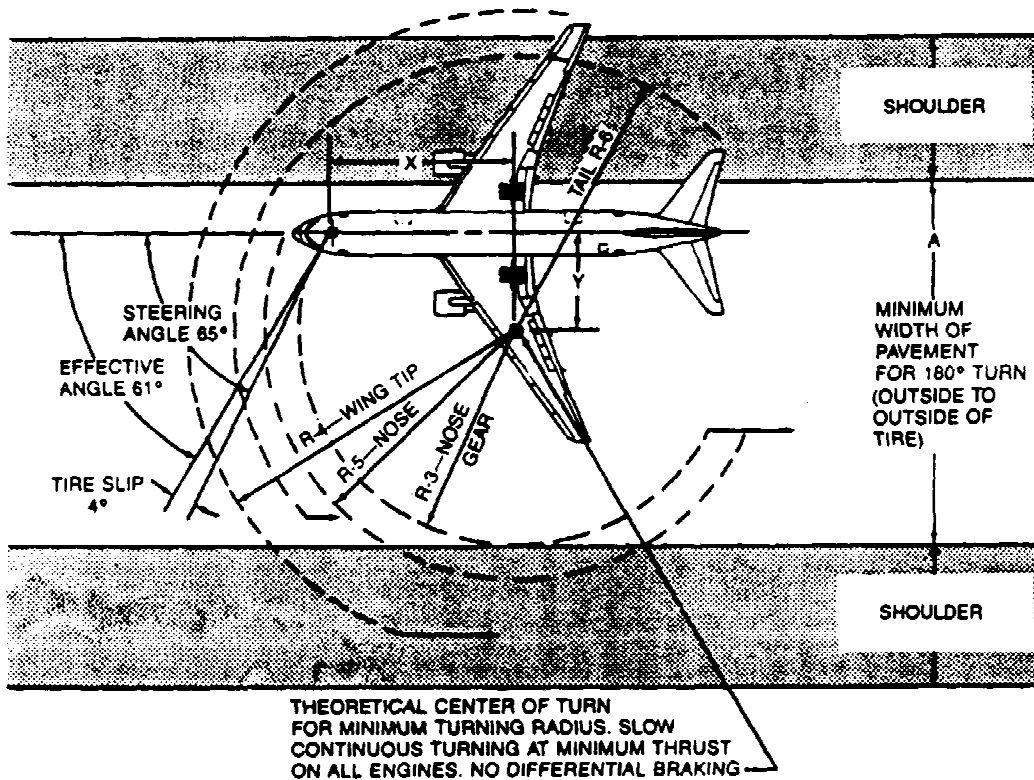
Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt 189.8	18.0	20.1	23.4	26.8	20.1	21.1	23.5	30.4
Max Wgt 350.0	37.7	45.4	53.8	61.3	42.4	46.5	55.5	75.3





- NOTES: 1. ACTUAL OPERATING DATA WILL BE GREATER THAN VALUES SHOWN SINCE TIRE SLIPPAGE IS NOT CONSIDERED IN THESE CALCULATIONS.
2. DIMENSIONS IN TABLE ARE IN FEET.

STEERING ANGLE (DEGREES)	R-1	R-2	R-3	R-4	R-5	R-6
	INNER GEAR	OUTER GEAR	NOSE GEAR	WING TIP	NOSE	TAIL
30	112	147	151	200	157	182
35	89	125	132	187	139	162
40	71	107	118	168	126	148
45	57	93	107	155	117	138
50	45	81	99	144	109	127
55	34	70	93	133	104	120
60	25	61	88	124	99	114
65 (MAXIMUM)	17	53	84	115	95	108



- NOTES: 1. 4° TIRE SLIP ANGLE APPROXIMATE FOR 65° TURN ANGLE.
2. DIMENSIONS IN TABLE ARE IN FEET.

MODEL	EFFECTIVE TURNING ANGLE	X	Y	A	R-3	R-4	R-5	R-6
767-200, -200ER	61°	65	36	129	76	117	87	101
767-300, -300ER	61°	75	41	146	87	123	99	113

Boeing 767-200/-200ER/-300/-300ER,
Minimum Turning Radii - 4° Slip Angle

Aircraft: **767-300ER**

ALC Mgr: Manuf: *Boeing* Group Index:
 Wing Span: *156.08'* Length: *180.25'* Height: *52.58'* Vert. Clr: *22.0''*
 Pivot Pt: *34.8'* Turn Radius: *84.1'* 180° Turn Diameter: *232.8'* Controlling Gear: *Nose*

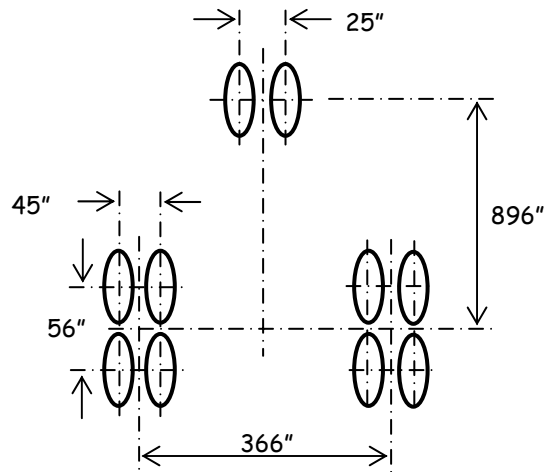
Basic Empty Wt:	<i>193.840</i>	Basic Mis, T/O Wt:		Max T/O Wt :	<i>412.0</i>
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	<i>320.0</i>	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

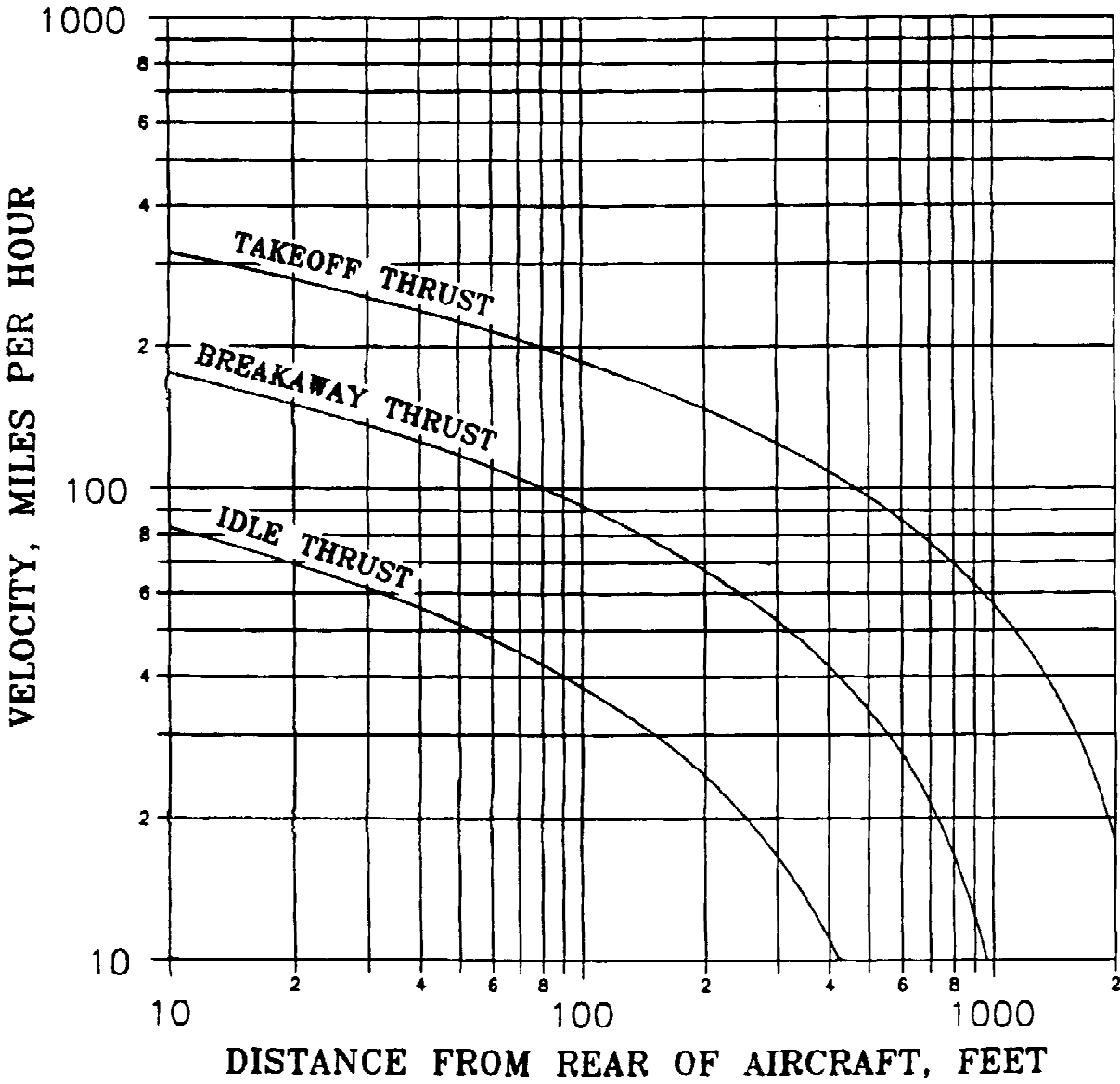
Gear: *FAA 2D Two Dual Wheels in Tandem Main Gear with Dual Wheel Nose Gear*
 Number of Assemblies/Tires per Assembly: Nose: *1-2* Main: *2-4*

Main Gear:	% Gross Load on Assembly:	<i>92.40</i>	Max Assembly Load:	<i>190.344</i>
	Max Single Wheel Load:	<i>47.586</i>		
	Contact Pressure:	<i>200</i>	Contact Area:	<i>237.93</i>
	Footprint Width:	<i>13.48''</i>		

Nose Gear:	% Gross Load on Assembly:	<i>7.60</i>	Max Assembly Load:	<i>31.312</i>
	Max Single Wheel Load:	<i>15.656</i>		
	Contact Pressure:	<i>170</i>	Contact Area:	<i>92.09</i>
	Footprint Width:	<i>8.39''</i>		

Aircraft Classification Numbers (ACNs)									
Aircraft Weight		Rigid Pavement Subgrades				Flexible Pavement Subgrades			
		High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt	<i>193.8</i>	<i>18.7</i>	<i>21.0</i>	<i>24.3</i>	<i>27.9</i>	<i>20.7</i>	<i>21.8</i>	<i>24.2</i>	<i>31.5</i>
Max Wgt	<i>412.0</i>	<i>47.6</i>	<i>57.5</i>	<i>68.1</i>	<i>77.4</i>	<i>52.6</i>	<i>58.4</i>	<i>71.9</i>	<i>93.5</i>





Boeing 767-300ER, Velocity - Distance Curves

Aircraft: **767-400ER**

ALC Mgr: Manuf: *Boeing* Group Index:
 Wing Span: *170.33'* Length: *200.33'* Height: *55.83'* Vert. Clr: *47.0"*
 Pivot Pt: *40.0'* Turn Radius: *96.2'* 180° Turn Diameter: *259.0'* Controlling Gear: *Nose*

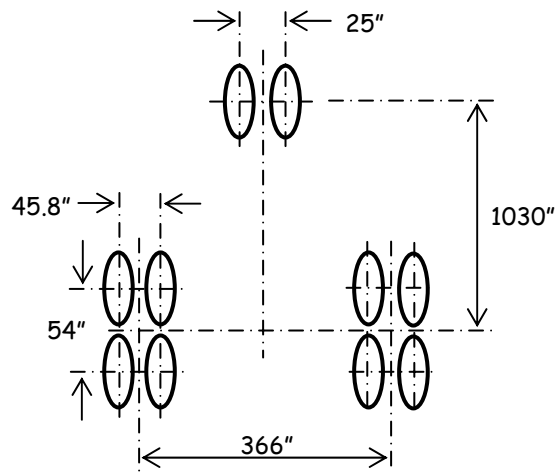
Basic Empty Wt:	<i>227.40</i>	Basic Mis, T/O Wt:		Max T/O Wt:	<i>450.0</i>
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	<i>350.0</i>	T/O Dist:	
T/O Dist. (50'):		Ldg. Dist:		Ldg. Dist. (50'):	

Gear: <i>FAA 2D Two Dual Wheels in Tandem Main Gear with Dual Wheel Nose Gear</i>		
Number of Assemblies/Tires per Assembly:	Nose: <i>1-2</i>	Main: <i>2-4</i>

Main Gear:	% Gross Load on Assembly:	<i>93.95</i>	Max Assembly Load:	<i>211.388</i>
	Max Single Wheel Load:	<i>52.847</i>		
	Contact Pressure:	<i>215</i>	Contact Area:	<i>245.80</i>
	Footprint Width:	<i>13.70"</i>		

Nose Gear:	% Gross Load on Assembly:	<i>6.05</i>	Max Assembly Load:	<i>27.225</i>
	Max Single Wheel Load:	<i>13.613</i>		
	Contact Pressure:	<i>185</i>	Contact Area:	<i>73.58</i>
	Footprint Width:	<i>7.50"</i>		

Aircraft Classification Numbers (ACNs)									
Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades				
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D	
Min Wgt <i>227.4</i>	<i>23.7</i>	<i>27.0</i>	<i>31.6</i>	<i>36.1</i>	<i>25.7</i>	<i>27.5</i>	<i>30.9</i>	<i>42.1</i>	
Max Wgt <i>450.0</i>	<i>57.0</i>	<i>68.6</i>	<i>80.8</i>	<i>90.8</i>	<i>61.3</i>	<i>68.5</i>	<i>86.0</i>	<i>107.7</i>	



Aircraft: **777-200**

ALC Mgr: Manuf: *Boeing* Group Index:
Wing Span: 199.92' Length: 209.08' Height: 61.50' Vert. Clr: 34.0"
Pivot Pt: 40.4' Turn Radius: 90.0' 180° Turn Diameter: 270.0' Controlling Gear: *Nose*

Basic Empty Wt: 299.0	Basic Mis, T/O Wt: 569.250	Max T/O Wt : 632.50
Basic Mis. Ldg. Wt:	Max Ldg. Wt: 460.0	T/O Dist: 11,200'
T/O Dist. (50'):	Ldg. Dist: 5,250'	Ldg. Dist. (50'):

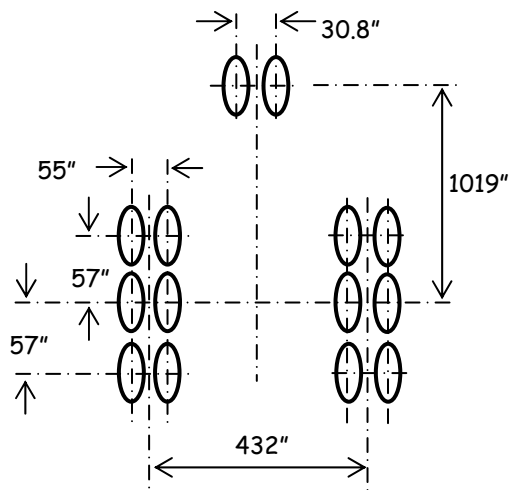
Gear: *FAA 3D Three Dual Wheels in Tandem Main Gear with Dual Wheel Nose Gear*
Number of Assemblies/Tires per Assembly: Nose: 1-2 Main: 2-6

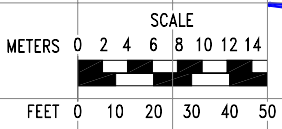
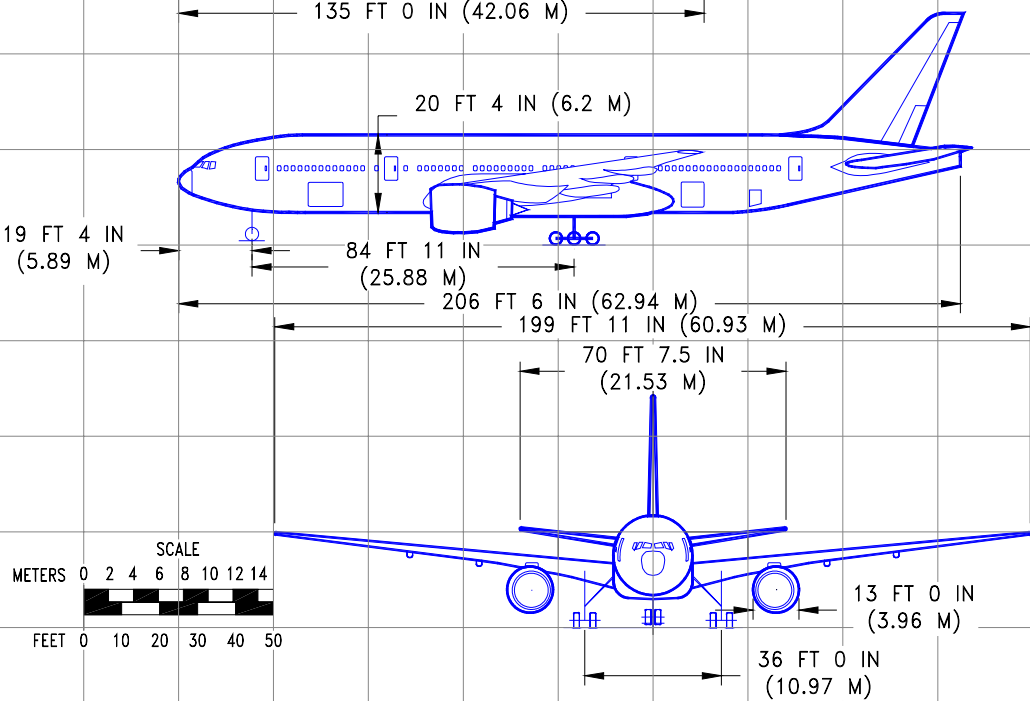
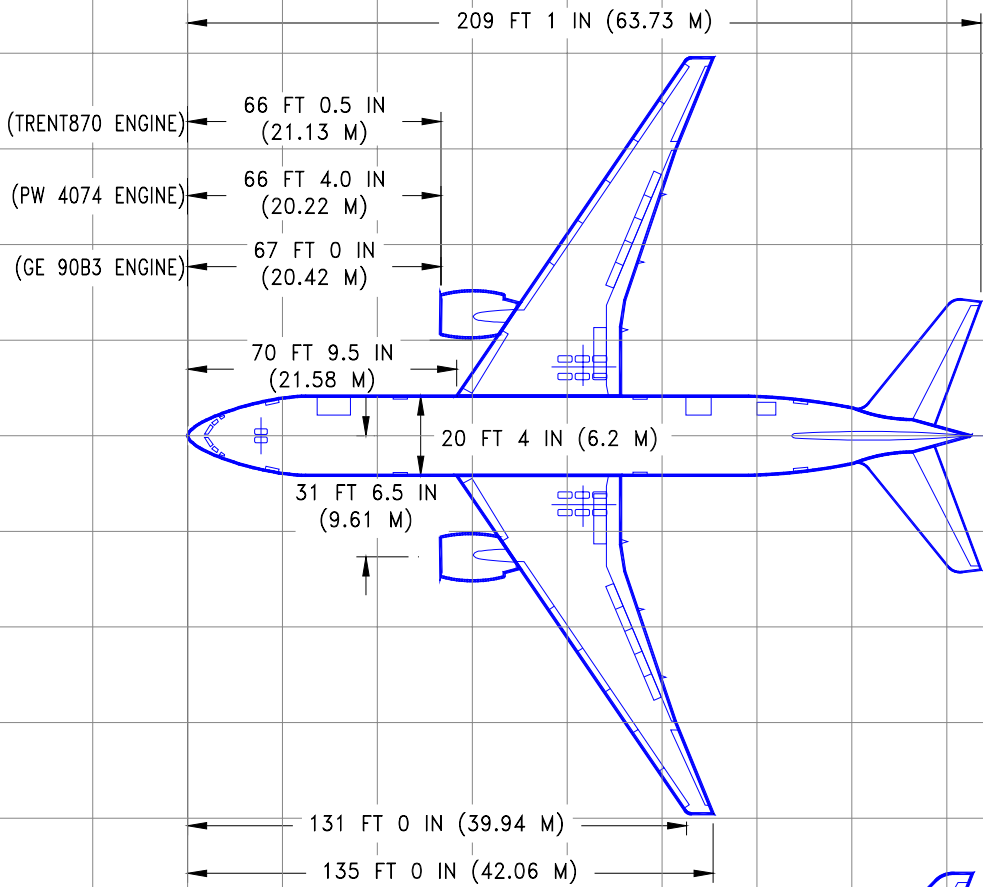
Main Gear:	% Gross Load on Assembly: 93.77	Max Assembly Load: 296.548
	Max Single Wheel Load: 49.425	
	Contact Pressure: 215	Contact Area: 229.88
	Footprint Width: 13.25"	

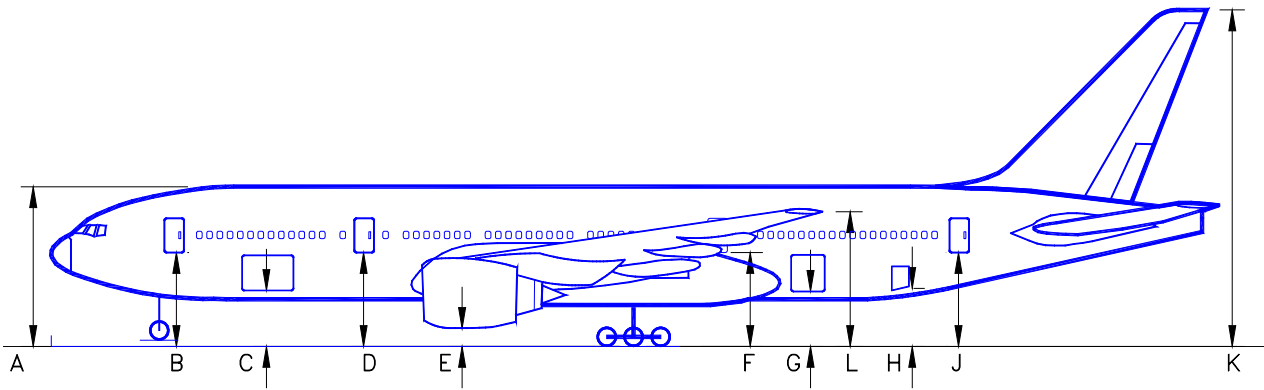
Nose Gear:	% Gross Load on Assembly: 6.23	Max Assembly Load: 39.405
	Max Single Wheel Load: 19.702	
	Contact Pressure: 200	Contact Area: 98.51
	Footprint Width: 8.67"	

Aircraft Classification Numbers (ACNs)

Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt 299.0	21.5	21.7	26.1	31.8	23.0	24.7	28.4	38.6
Max Wgt 632.5	49.3	62.9	81.5	98.3	62.1	69.9	87.8	118.7





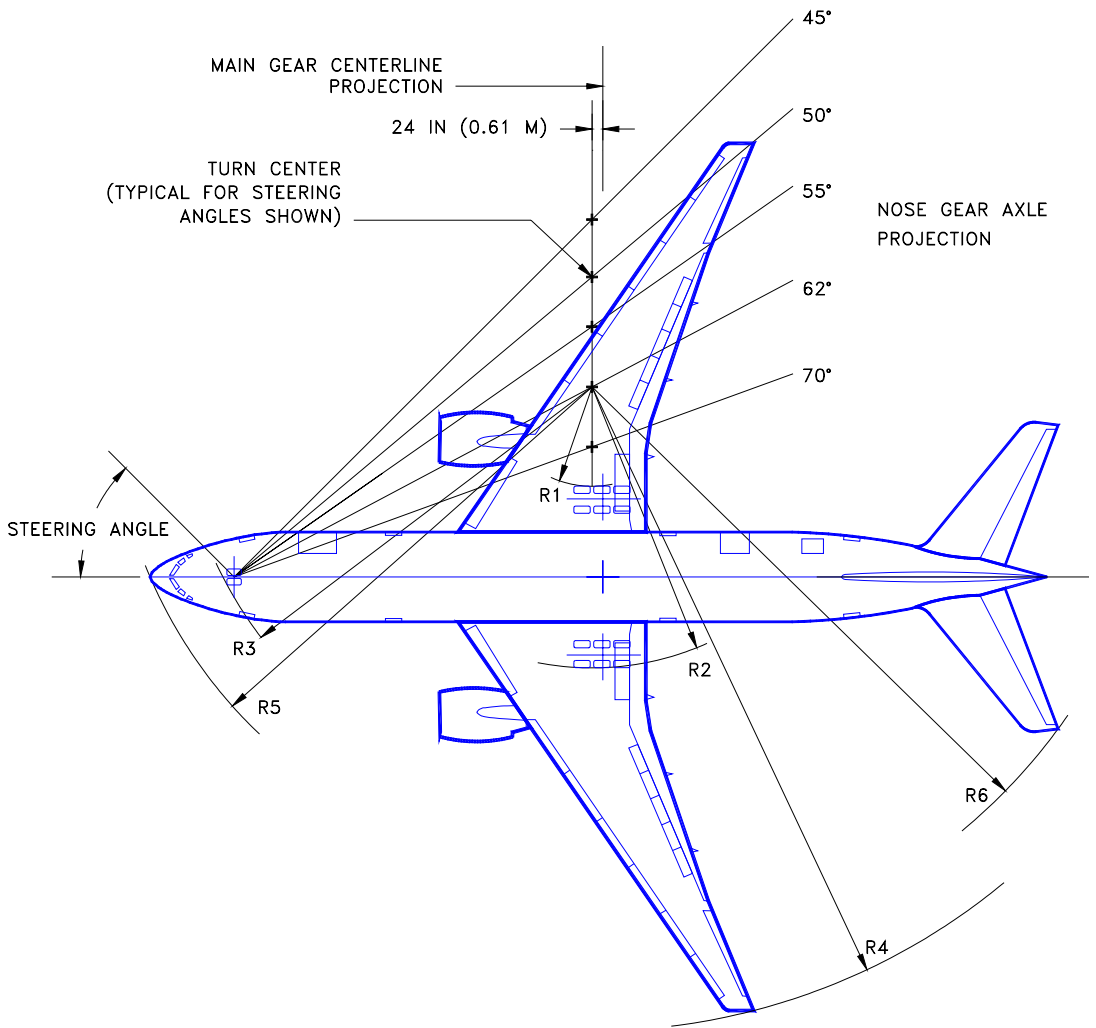


	MINIMUM*		MAXIMUM*	
	FEET - INCHES	METERS	FEET - INCHES	METERS
A	27 - 6	8.39	28 - 6	8.68
B	15 - 5	4.71	16 - 5	5.00
C	9 - 3	2.81	10 - 0	3.05
D	16 - 0	4.88	16 - 7	5.07
E (PW)	3 - 2	0.96	3 - 5	1.04
E (GE)	2 - 10	0.85	3 - 1	0.93
E (RR)	3 - 7	1.09	3 - 10	1.17
F	16 - 10	5.14	17 - 4	5.28
G(LARGE DOOR)	10 - 7	3.23	11 - 2	3.41
G(SMALL DOOR)	10 - 6	3.22	11 - 2	3.40
H	10 - 7	3.23	11 - 5	3.48
J	17 - 4	5.28	18 - 2	5.54
K	60 - 5	18.42	61 - 6	18.76
L	23 - 6	7.16	24 - 6	7.49

NOTES: VERTICAL CLEARANCES SHOWN OCCUR DURING MAXIMUM VARIATIONS OF AIRPLANE ATTITUDE. COMBINATIONS OF AIRPLANE LOADING AND UNLOADING ACTIVITIES THAT PRODUCE THE GREATEST POSSIBLE VARIATIONS IN ATTITUDE WERE USED TO ESTABLISH THE VARIATIONS SHOWN.

DURING ROUTINE SERVICING, THE AIRPLANE REMAINS RELATIVELY STABLE, PITCH AND ELEVATION CHANGES OCCURRING SLOWLY.

* NOMINAL DIMENSIONS



- NOTES: *DATA SHOWN FOR AIRPLANE WITH AFT AXLE STEERING
 *ACTUAL OPERATING TURNING RADII MAY BE GREATER THAN SHOWN.
 *CONSULT WITH AIRLINE FOR SPECIFIC OPERATING PROCEDURE
 *DIMENSIONS ROUNDED TO NEAREST FOOT AND 0.1 METER.

STEERING ANGLE	R1 INNER GEAR		R2 OUTER GEAR		R3 NOSE GEAR		R4 WING TIP		R5 NOSE		R6 TAIL	
	(DEG)	FT	M	FT	M	FT	M	FT	M	FT	M	FT
30	123	37.5	165	50.3	168	51.3	247	75.3	177	53.8	209	63.6
35	98	29.7	140	42.6	147	44.8	222	67.6	157	47.8	187	57.1
40	78	23.7	120	36.6	131	40.0	202	61.7	142	43.4	171	52.2
45	62	18.9	104	31.7	120	36.4	187	56.9	132	40.2	159	48.5
50	49	14.8	91	27.7	111	33.7	174	52.9	124	37.7	150	45.6
55	37	11.2	79	24.1	103	31.5	162	49.5	118	35.8	142	43.2
60	27	8.1	69	21.0	98	29.9	152	46.5	113	34.4	135	41.2
65	17	5.3	60	18.2	94	28.6	143	43.7	109	33.3	130	39.5
70 (MAX)	9	2.7	51	15.6	90	27.6	135	41.2	107	32.5	125	38.1

Aircraft: **777-200LR**

ALC Mgr:

Manuf: *Boeing*

Group Index:

Wing Span: **212.58'**

Length: **209.08'**

Height: **61.50'**

Vert. Clr: **30.0''**

Pivot Pt: **40.4'**

Turn Radius: **92.1'**

180° Turn Diameter: **284.0'**

Controlling Gear: **Nose**

Basic Empty Wt:	320.0	Basic Mis, T/O Wt:	690.120	Max T/O Wt :	766.800
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	492.0	T/O Dist:	11,200'
T/O Dist. (50'):		Ldg. Dist:	5,250'	Ldg. Dist. (50'):	

Gear: ***FAA 3D Three Dual Wheels in Tandem Main Gear with Dual Wheel Nose Gear***

Number of Assemblies/Tires per Assembly:

Nose: **1-2**

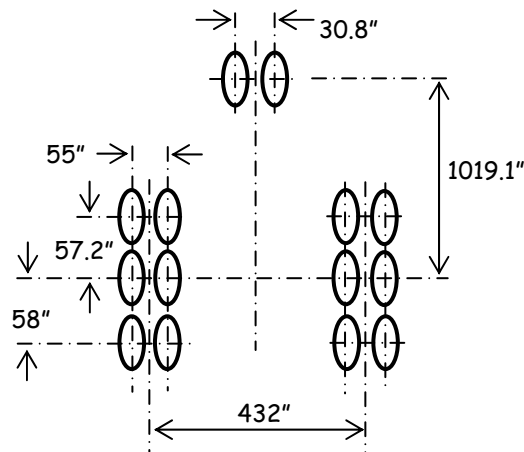
Main: **2-6**

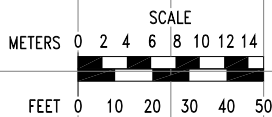
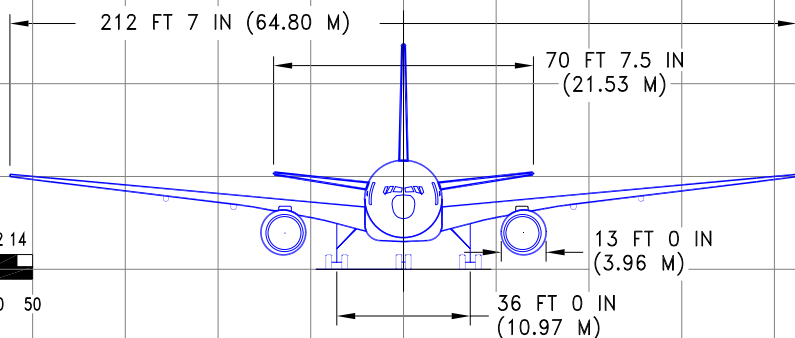
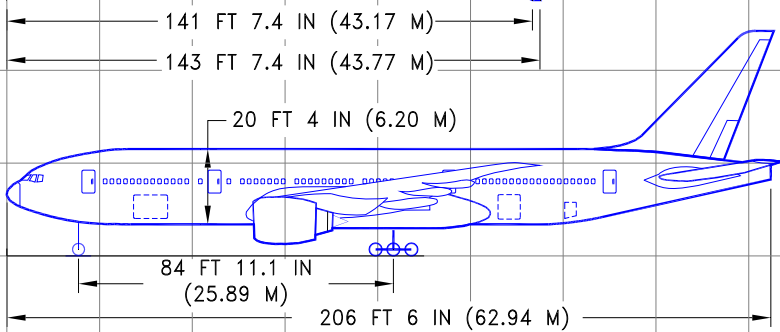
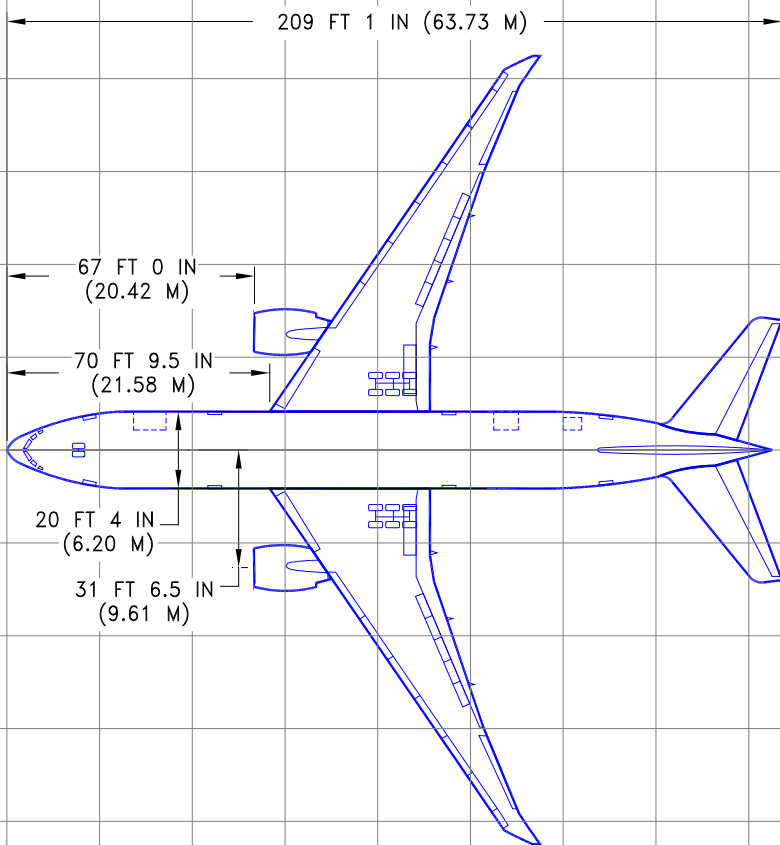
Main Gear:	% Gross Load on Assembly:	91.68	Max Assembly Load:	351.501
	Max Single Wheel Load:	58.584		
	Contact Pressure:	218	Contact Area:	268.73
	Footprint Width:	14.33''		

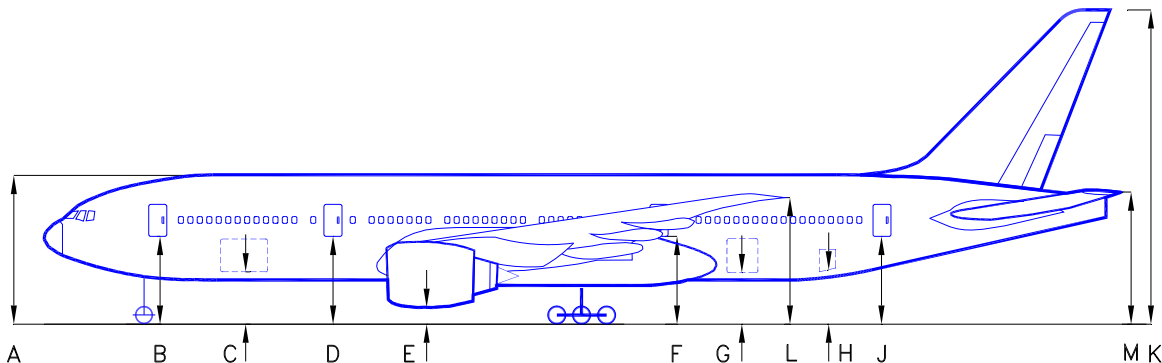
Nose Gear:	% Gross Load on Assembly:	8.32	Max Assembly Load:	63.798
	Max Single Wheel Load:	31.899		
	Contact Pressure:	218	Contact Area:	146.33
	Footprint Width:	10.57''		

Aircraft Classification Numbers (ACNs)

Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt 320.0	22.6	22.9	27.5	34.1	24.3	26.2	30.1	41.2
Max Wgt 766.8	63.3	82.8	105.8	125.8	79.0	89.7	114.5	148.5





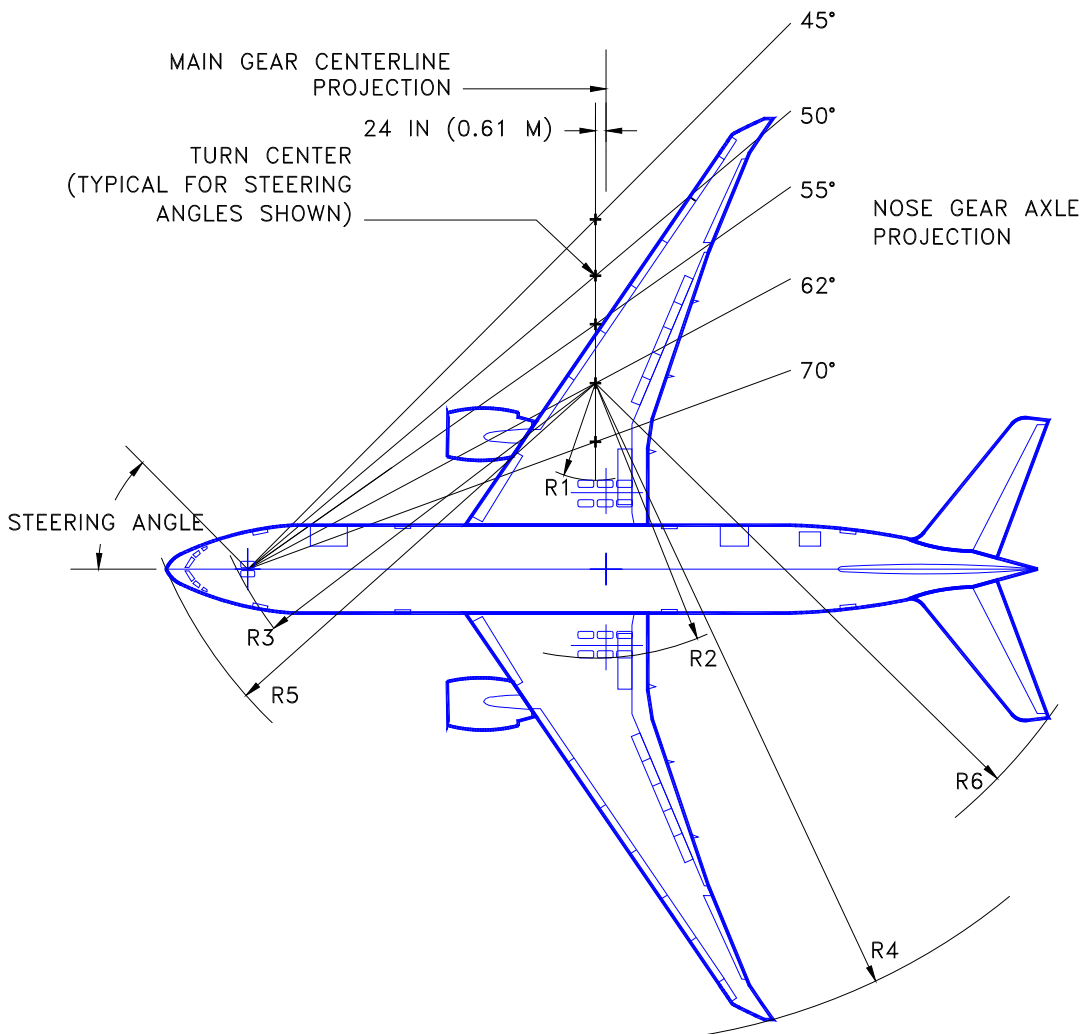


	MINIMUM*		MAXIMUM*	
	FT - INCHES	METERS	FT - INCHES	METERS
A	27 - 5	8.36	28 - 7	8.70
B	15 - 5	4.69	16 - 7	5.06
C	9 - 2	2.79	10 - 2	3.11
D	15 - 11	4.85	16 - 10	5.11
E	2 - 4	0.70	2 - 10	0.88
F	16 - 10	5.14	17 - 5	5.30
G(LARGE/SMALL DOOR)	10 - 6	3.19	11 - 9	3.58
H	11 - 2	3.40	11 - 10	3.61
J	17 - 5	5.31	18 - 1	5.52
K	60 - 8	18.48	61 - 6	18.75
L	23 - 6	7.16	24 - 7	7.49
M	26 - 2	8.06	27 - 5	8.34

NOTES: VERTICAL CLEARANCES SHOWN OCCUR DURING MAXIMUM VARIATIONS OF AIRPLANE ATTITUDE. COMBINATIONS OF AIRPLANE LOADING AND UNLOADING ACTIVITIES THAT PRODUCE THE GREATEST POSSIBLE VARIATIONS IN ATTITUDE WERE USED TO ESTABLISH THE VARIATIONS SHOWN.

DURING ROUTINE SERVICING, THE AIRPLANE REMAINS RELATIVELY STABLE, PITCH AND ELEVATION CHANGES OCCURRING SLOWLY.

* NOMINAL DIMENSIONS ROUNDED TO NEAREST INCH AND NEAREST CENTIMETER



NOTES: DATA SHOWN FOR AIRPLANE WITH AFT AXLE STEERING
 ACTUAL OPERATING TURNING RADII MAY BE GREATER THAN SHOWN
 CONSULT WITH AIRLINE FOR SPECIFIC OPERATING PROCEDURE
 DIMENSIONS ROUNDED TO NEAREST 0.1 FOOT AND 0.1 METER

STEERING ANGLE	R1 INNER GEAR		R2 OUTER GEAR		R3 NOSE GEAR		R4 WING TIP		R5 NOSE		R6 TAIL	
	FT	M	FT	M	FT	M	FT	M	FT	M	FT	M
(DEG)												
30	122.4	37.3	164.8	50.2	168.8	51.5	253.0	77.1	177.4	54.1	207.4	63.2
35	97.2	29.6	139.6	42.6	147.7	45.0	228.1	69.5	157.7	48.1	186.1	56.7
40	77.6	23.7	120.0	36.6	132.3	40.3	208.8	63.6	143.6	43.8	170.3	51.9
45	61.7	18.8	104.1	31.7	120.7	36.8	193.3	58.9	133.2	40.6	158.0	48.2
50	48.4	14.8	90.8	27.7	111.8	34.1	180.2	54.9	125.3	38.2	148.3	45.2
55	36.8	11.2	79.2	24.1	104.8	31.9	169.0	51.5	119.3	36.4	140.4	42.8
60	26.7	8.1	69.1	21.1	99.5	30.3	159.1	48.5	114.7	35.0	133.9	40.8
65	17.5	5.3	59.9	18.3	95.3	29.0	150.2	45.8	111.1	33.9	128.3	39.1
70 (MAX)	9.0	2.7	51.4	15.7	92.1	28.1	142.0	43.3	108.5	33.1	123.7	37.7

Aircraft: **777-300**

ALC Mgr: Manuf: *Boeing* Group Index:
Wing Span: 199.92' Length: 242.33' Height: 61.50' Vert. Clr: 34.0"
Pivot Pt: 49.0' Turn Radius: 109.0' 180° Turn Diameter: 264.0' Controlling Gear: *Nose*

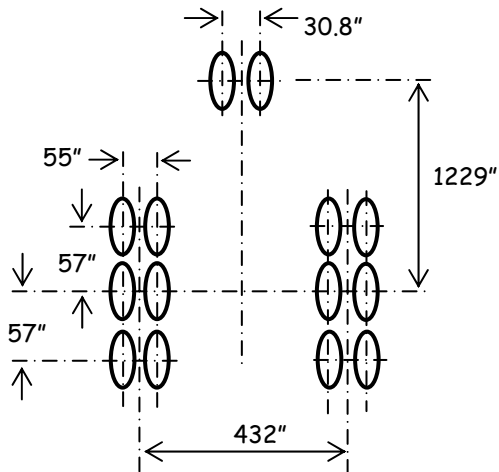
Basic Empty Wt:	347.80	Basic Mis, T/O Wt:	594.0	Max T/O Wt :	660.0
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	524.0	T/O Dist:	12,300'
T/O Dist. (50'):		Ldg. Dist:	6,050'	Ldg. Dist. (50'):	

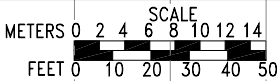
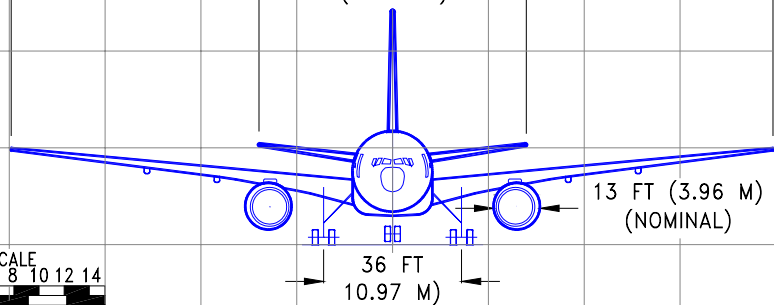
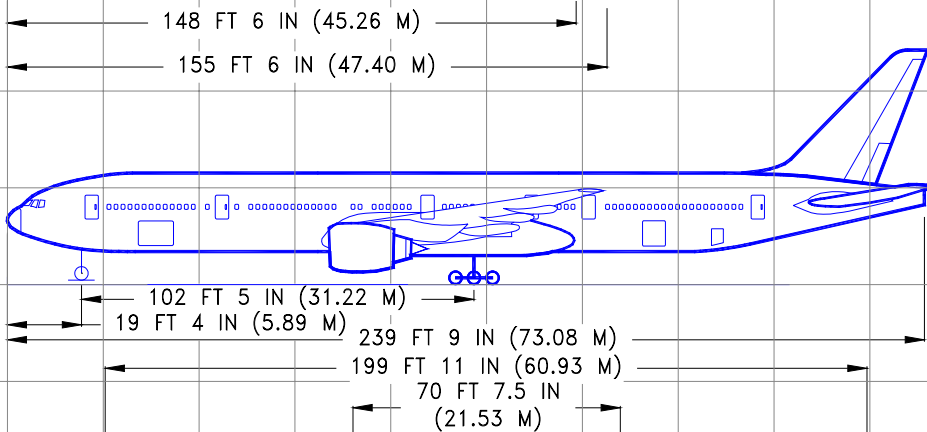
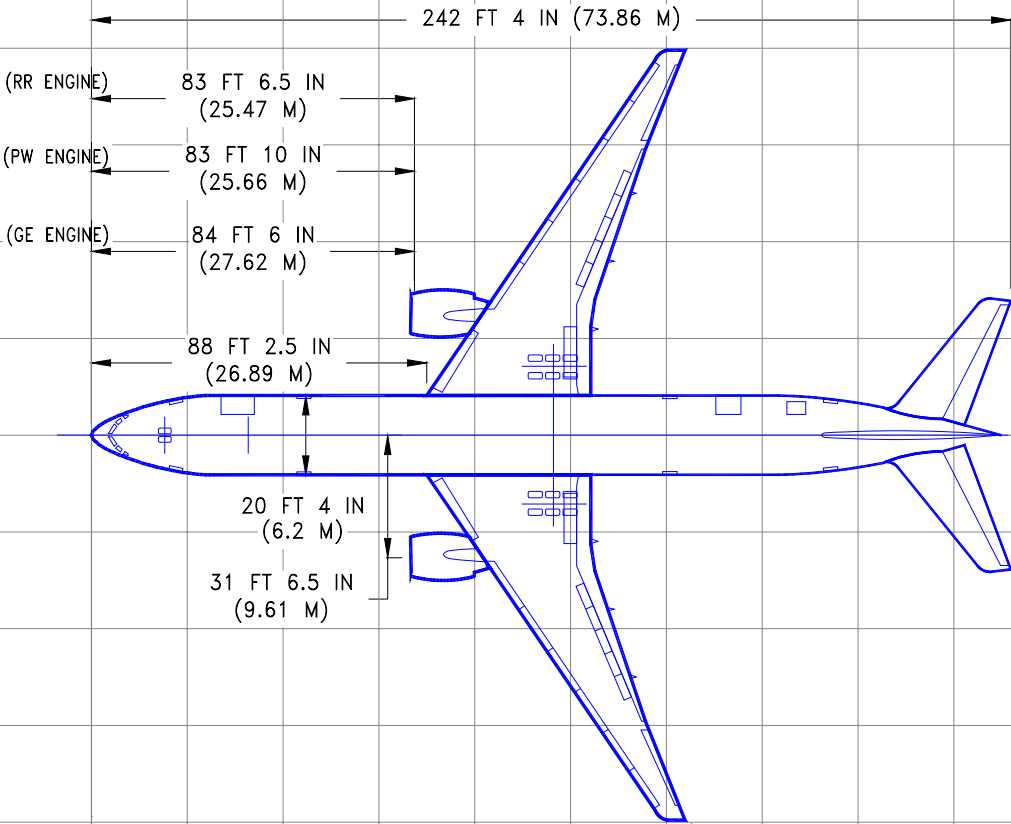
Gear: *FAA 3D Three Dual Wheels in Tandem Main Gear with Dual Wheel Nose Gear*
Number of Assemblies/Tires per Assembly: Nose: 1-2 Main: 2-6

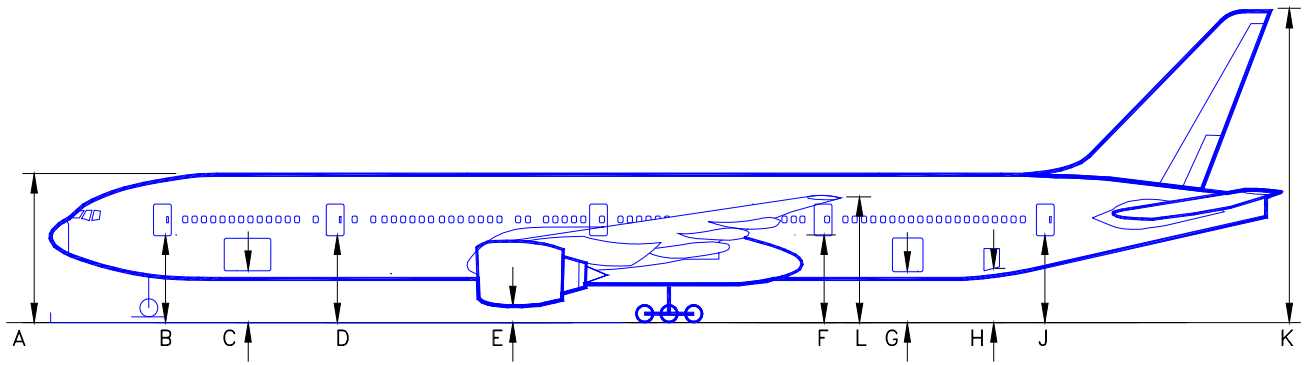
Main Gear:	% Gross Load on Assembly:	94.83	Max Assembly Load:	312.939
	Max Single Wheel Load:	52.156		
	Contact Pressure:	215	Contact Area:	242.59
	Footprint Width:	13.61"		

Nose Gear:	% Gross Load on Assembly:	5.17	Max Assembly Load:	34.122
	Max Single Wheel Load:	17.061		
	Contact Pressure:	205	Contact Area:	83.22
	Footprint Width:	7.97"		

Aircraft Classification Numbers (ACNs)								
Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt 347.8	25.8	26.8	33.0	40.8	28.2	30.7	35.8	50.1
Max Wgt 660.0	53.4	68.6	89.0	106.8	67.1	75.8	95.8	127.8





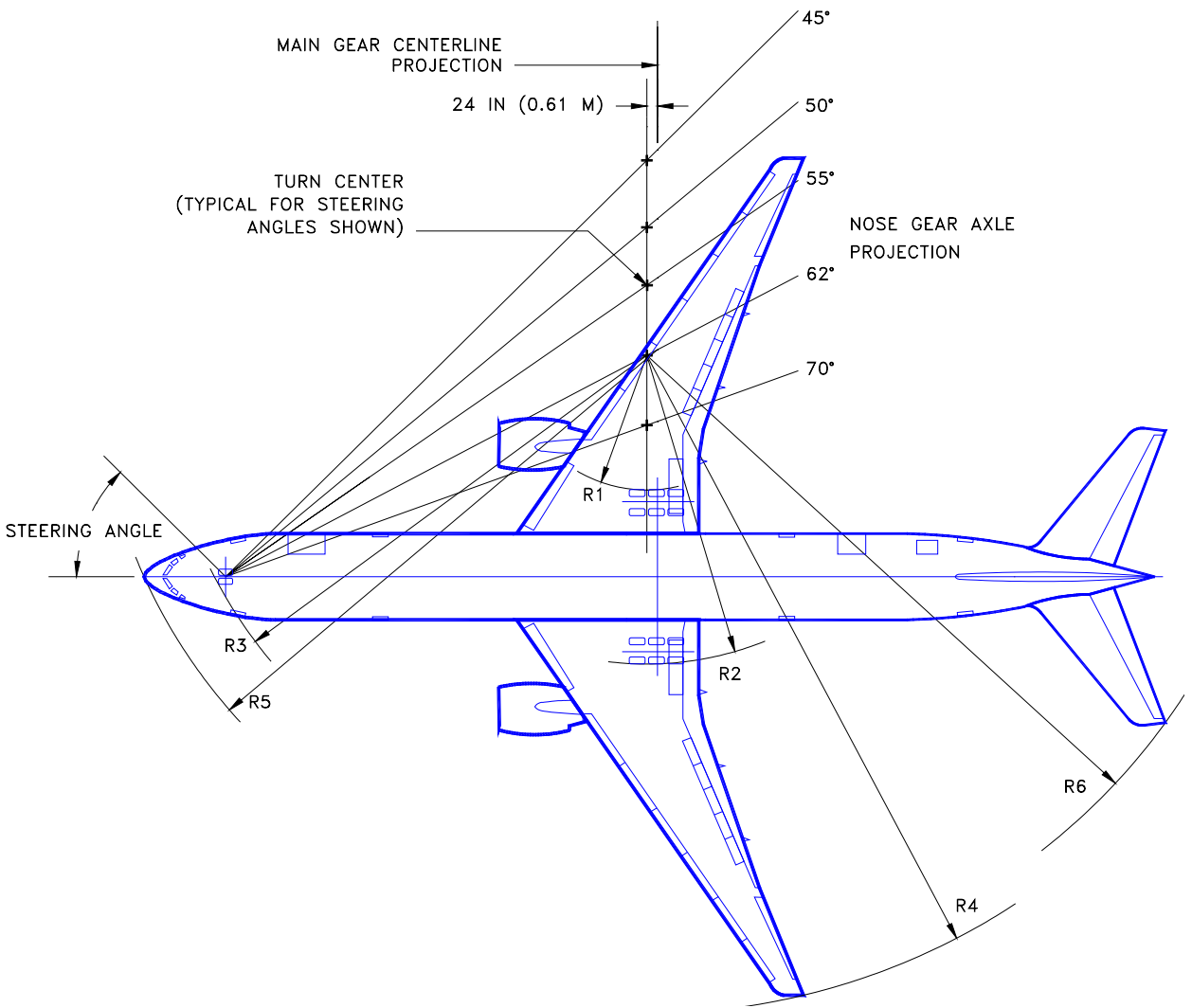


	MINIMUM*		MAXIMUM*	
	FEET - INCHES	METERS	FEET - INCHES	METERS
A	27 - 6	8.39	28 - 6	8.68
B	15 - 5	4.71	16 - 5	5.00
C	9 - 3	2.81	10 - 0	3.05
D	16 - 0	4.88	16 - 7	5.07
E (PW)	3 - 2	0.96	3 - 5	1.04
E (GE)	2 - 10	0.85	3 - 1	0.93
E (RR)	3 - 7	1.09	3 - 10	1.17
F	16 - 10	5.14	17 - 4	5.28
G(LARGE DOOR)	10 - 7	3.23	11 - 2	3.41
G(SMALL DOOR)	10 - 6	3.22	11 - 2	3.40
H	10 - 7	3.23	11 - 5	3.48
J	17 - 4	5.28	18 - 2	5.54
K	60 - 5	18.42	61 - 6	18.76
L	23 - 6	7.16	24 - 6	7.49

NOTES: VERTICAL CLEARANCES SHOWN OCCUR DURING MAXIMUM VARIATIONS OF AIRPLANE ATTITUDE. COMBINATIONS OF AIRPLANE LOADING AND UNLOADING ACTIVITIES THAT PRODUCE THE GREATEST POSSIBLE VARIATIONS IN ATTITUDE WERE USED TO ESTABLISH THE VARIATIONS SHOWN.

DURING ROUTINE SERVICING, THE AIRPLANE REMAINS RELATIVELY STABLE, PITCH AND ELEVATION CHANGES OCCURRING SLOWLY.

* NOMINAL DIMENSIONS



NOTES: *DATA SHOWN FOR AIRPLANE WITH AFT AXLE STEERING
 *ACTUAL OPERATING TURNING RADII MAY BE GREATER THAN SHOWN.
 *CONSULT WITH AIRLINE FOR SPECIFIC OPERATING PROCEDURE
 *DIMENSIONS ROUNDED TO NEAREST FOOT AND 0.1 METER.

STEERING ANGLE (DEG)	R1 INNER GEAR		R2 OUTER GEAR		R3 NOSE GEAR		R4 WING TIP		R5 NOSE		R6 TAIL	
	FT	M	FT	M	FT	M	FT	M	FT	M	FT	M
30	153	46.6	195	59.4	203	61.8	276	84.2	211	64.3	243	73.9
35	122	37.3	165	50.1	177	53.9	246	75.0	188	56.9	217	66.1
40	99	30.0	141	42.9	158	48.2	223	67.8	169	51.6	198	60.2
45	79	24.2	122	37.0	144	43.9	204	62.0	156	47.6	183	55.7
50	63	19.2	105	32.1	133	40.5	188	57.2	146	44.6	171	52.2
55	49	15.0	91	27.9	125	37.9	174	53.0	139	42.3	162	49.3
60	37	11.2	79	24.1	118	35.9	162	49.4	133	40.5	154	47.0
65	26	7.8	68	20.7	113	34.3	151	46.0	129	39.2	148	45.0
70 (MAX)	15	4.7	58	17.6	109	33.1	132	43.0	125	38.1	142	43.3

Aircraft: **777-300ER**

ALC Mgr: Manuf: *Boeing* Group Index:
Wing Span: 212.58' Length: 242.33' Height: 61.83' Vert. Clr: 29.0"
Pivot Pt: 49.0' Turn Radius: 110.7' 180° Turn Diameter: 296.4' Controlling Gear: *Nose*

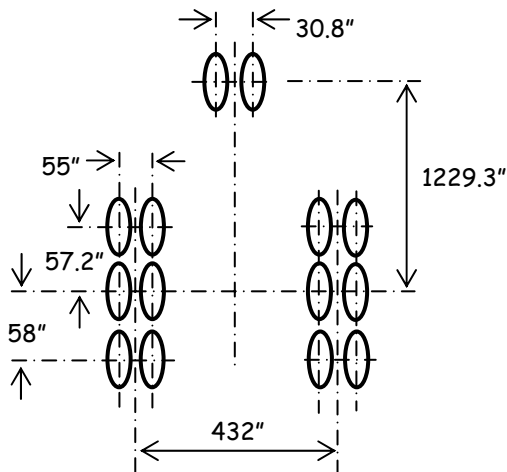
Basic Empty Wt:	370.0	Basic Mis, T/O Wt:	697.50	Max T/O Wt :	775.0
Basic Mis. Ldg. Wt:		Max Ldg. Wt:	554.0	T/O Dist:	12,300'
T/O Dist. (50'):		Ldg. Dist:	6,050'	Ldg. Dist. (50'):	

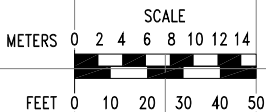
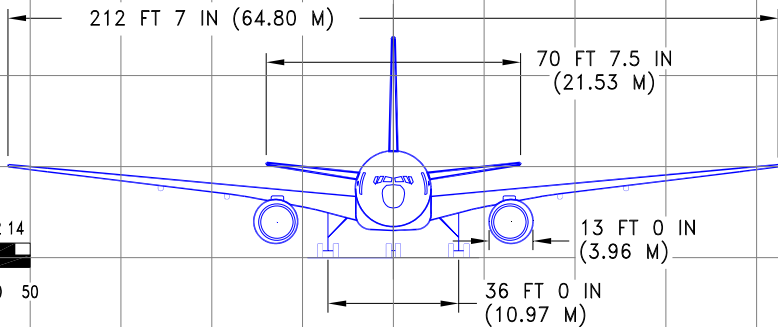
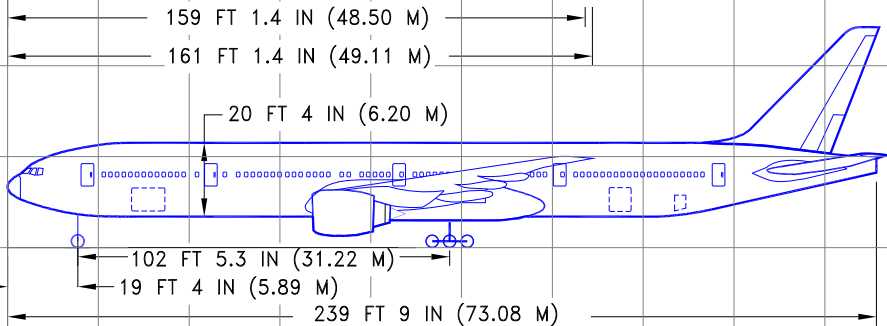
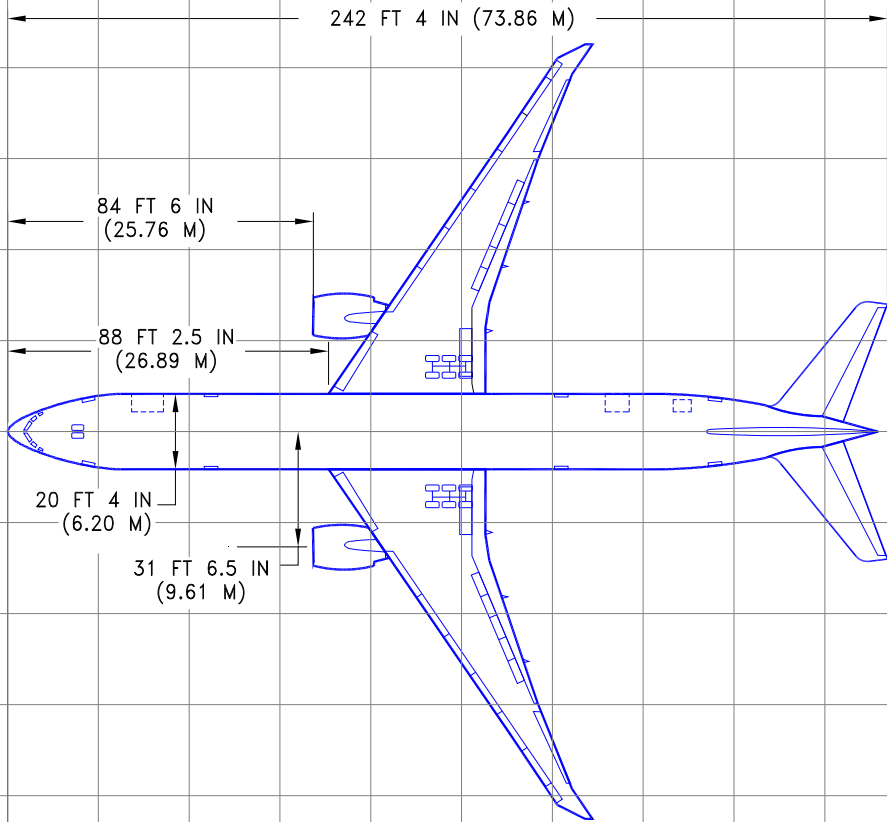
Gear: *FAA 3D Three Dual Wheels in Tandem Main Gear with Dual Wheel Nose Gear*
Number of Assemblies/Tires per Assembly: Nose: 1-2 Main: 2-6

Main Gear:	% Gross Load on Assembly:	92.45	Max Assembly Load:	358.244
	Max Single Wheel Load:	59.707		
	Contact Pressure:	221	Contact Area:	270.17
	Footprint Width:	14.37"		

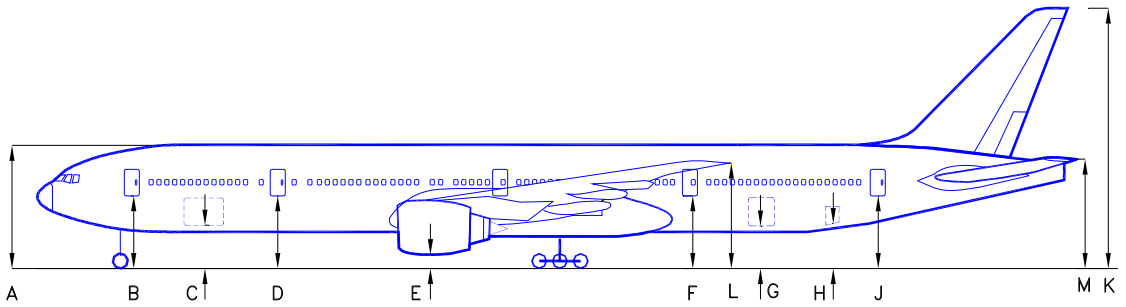
Nose Gear:	% Gross Load on Assembly:	7.55	Max Assembly Load:	58.512
	Max Single Wheel Load:	29.256		
	Contact Pressure:	218	Contact Area:	134.20
	Footprint Width:	10.12"		

Aircraft Classification Numbers (ACNs)								
Aircraft Weight	Rigid Pavement Subgrades				Flexible Pavement Subgrades			
	High A	Medium B	Low C	Ultra Low D	High A	Medium B	Low C	Ultra Low D
Min Wgt 370.0	27.3	28.2	34.9	43.0	29.6	32.2	37.7	53.0
Max Wgt 775.0	65.9	86.4	110.5	130.6	81.6	92.8	118.5	152.6





13 FT 0 IN (3.96 M)

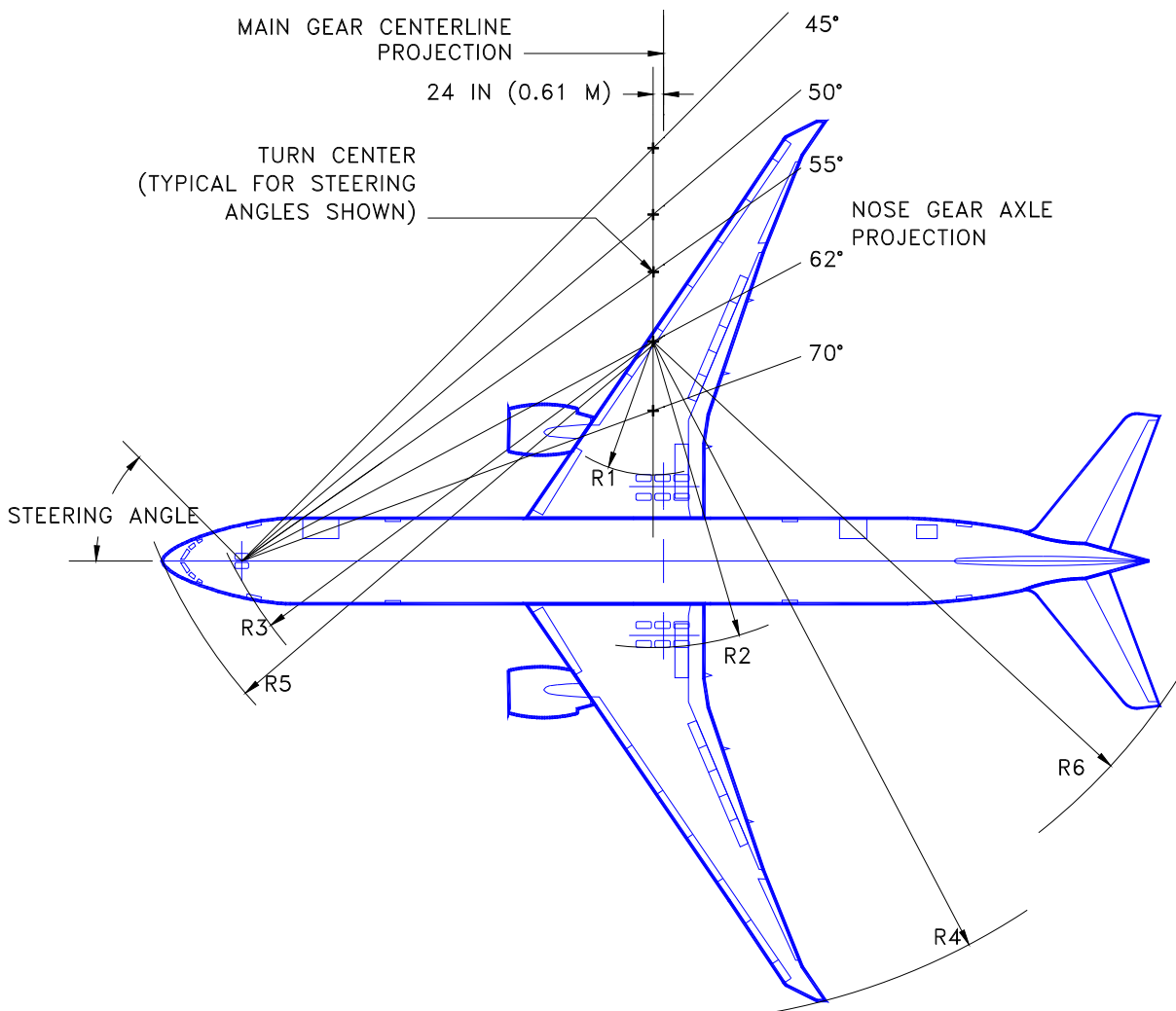


	MINIMUM*		MAXIMUM*	
	FEET - INCHES	METERS	FEET - INCHES	METERS
A	27 - 9	8.46	28 - 10	8.78
B	15 - 9	4.80	16 - 10	5.13
C	9 - 5	2.88	10 - 6	3.19
D	16 - 2	4.92	17 - 1	5.20
E	2 - 5	0.73	3 - 3	0.99
F	16 - 9	5.11	17 - 5	5.32
G(LARGE/SMALL DOOR)	10 - 6	3.19	11 - 9	3.58
H	10 - 11	3.32	12 - 4	3.76
J	17 - 0	5.19	18 - 7	5.66
K	59 - 10	18.24	61 - 10	18.85
L	23 - 11	7.29	25 - 11	7.90
M	25 - 7	7.79	27 - 8	8.43

NOTES: VERTICAL CLEARANCES SHOWN OCCUR DURING MAXIMUM VARIATIONS OF AIRPLANE ATTITUDE. COMBINATIONS OF AIRPLANE LOADING AND UNLOADING ACTIVITIES THAT PRODUCE THE GREATEST POSSIBLE VARIATIONS IN ATTITUDE WERE USED TO ESTABLISH THE VARIATIONS SHOWN.

DURING ROUTINE SERVICING, THE AIRPLANE REMAINS RELATIVELY STABLE, PITCH AND ELEVATION CHANGES OCCURRING SLOWLY.

* NOMINAL DIMENSIONS ROUNDED TO NEAREST INCH AND NEAREST CENTIMETER



NOTES: DATA SHOWN FOR AIRPLANE WITH AFT AXLE STEERING
 ACTUAL OPERATING TURNING RADII MAY BE GREATER THAN SHOWN
 CONSULT WITH AIRLINE FOR SPECIFIC OPERATING PROCEDURE
 DIMENSIONS ROUNDED TO NEAREST 0.1 FOOT AND 0.1 METER

STEERING ANGLE (DEG)	R1 INNER GEAR		R2 OUTER GEAR		R3 NOSE GEAR		R4 WING TIP		R5 NOSE		R6 TAIL	
	FT	M	FT	M	FT	M	FT	M	FT	M	FT	M
30	152.7	46.5	195.1	59.5	203.8	62.1	283.3	86.4	212.3	64.7	241.5	73.6
35	122.2	37.2	164.6	50.2	178.2	54.3	252.8	77.1	188.1	57.3	215.6	65.7
40	98.5	30.0	140.9	42.9	159.5	48.6	229.4	69.9	170.7	52.0	196.4	59.9
45	79.2	24.1	121.6	37.1	145.4	44.3	210.4	64.1	157.8	48.1	181.5	55.3
50	63.0	19.2	106.5	32.4	134.6	41.0	194.6	59.3	148.0	45.1	169.4	51.6
55	49.1	15.0	91.5	27.9	126.2	38.5	180.9	55.1	140.5	42.8	160.3	48.9
60	36.8	11.2	79.2	24.1	119.7	36.5	168.9	51.5	134.8	41.1	152.5	46.5
65	25.6	7.8	68.0	20.7	114.6	34.9	158.1	48.2	130.4	39.7	145.9	44.5
70 (MAX)	15.3	4.7	57.7	17.6	110.7	33.7	148.2	45.2	124.6	38.0	140.4	42.8

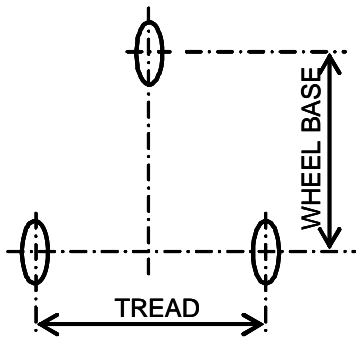
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SECTION IV

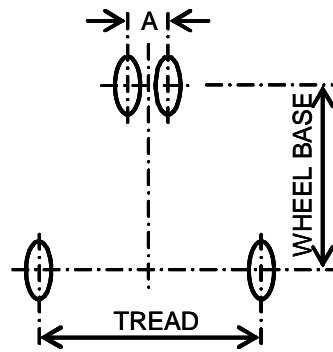
AIRCRAFT GEAR CONFIGURATIONS

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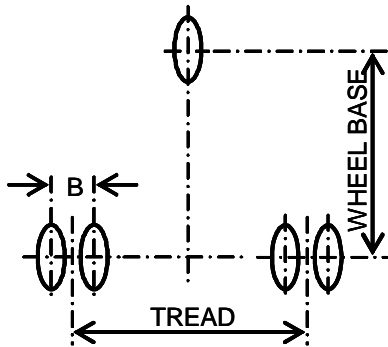
GEAR CONFIGURATIONS : FIGURE 1



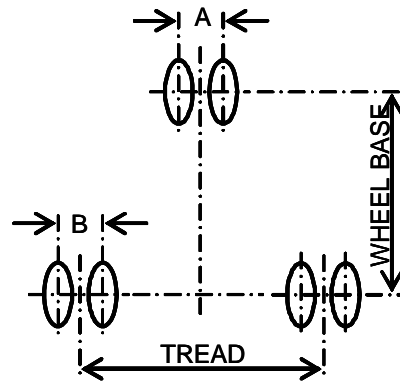
USAF (old)
Group: A
Designation: S
Name: Single, Tricycle
FAA (new)
Name: S
Description: Single Wheel Main Gear with Single Wheel Nose Gear



USAF (old)
Group: B
Designation: S
Name: Single, Tricycle
FAA (new)
Name: S
Description: Single Wheel Main Gear with Dual Wheel Nose Gear

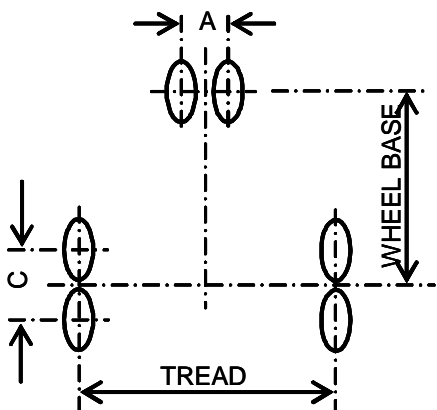


USAF (old)
Group: C
Designation: T
Name: Twin, Tricycle
FAA (new)
Name: D
Description: Dual Wheel Main Gear with Single Wheel Nose Gear

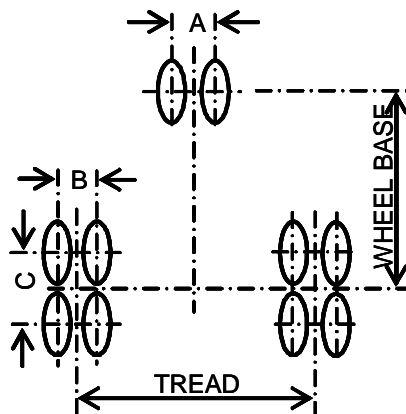


USAF (old)
Group: D
Designation: T
Name: Twin, Tricycle
FAA (new)
Name: D
Description: Dual Wheel Main Gear with Dual Wheel Nose Gear

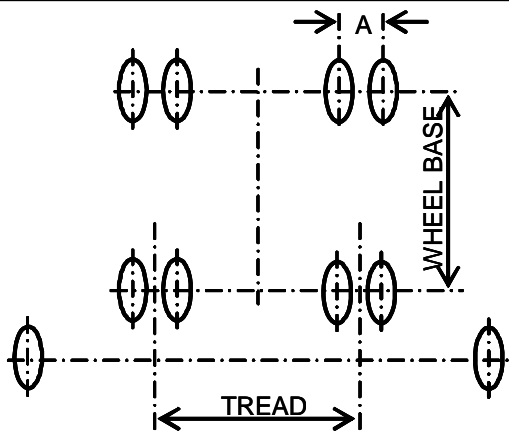
GEAR CONFIGURATIONS : FIGURE 2



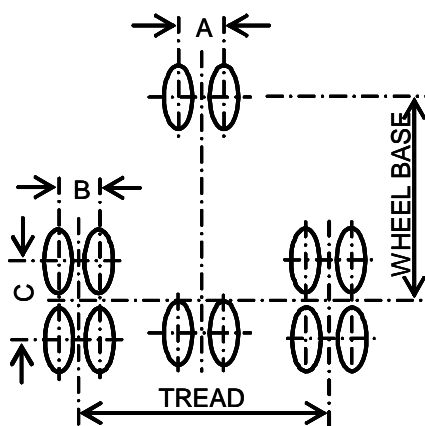
USAF (old)
Group: E
Designation: S-TA
Name: Single-Tandem, Tricycle
FAA (new)
Name: 2S
Description: Two Single Wheels in Tandem Main Gear with Dual Wheel Nose Gear



USAF (old)
Group: F
Designation: T-TA
Name: Twin-Tandem, Tricycle
FAA (new)
Name: 2D
Description: Two Dual Wheels in Tandem Main Gear with Dual Wheel Nose Gear

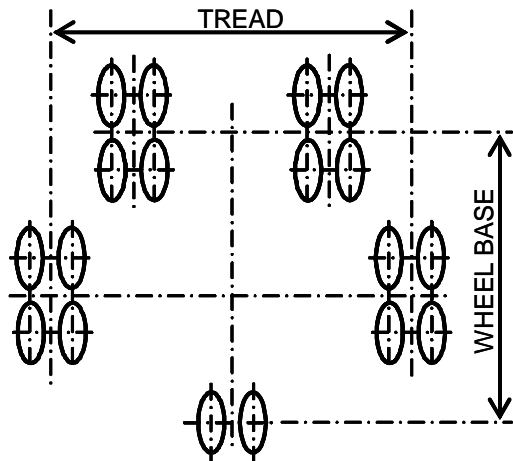


USAF (old)
Group: G
Designation: T-T
Name: Twin-Twin, Bicycle
FAA (new)
Name: D2
Description: Dual Wheel Gear Two Struts per Side Main Gear with No Nose Gear (Single Wheel Outriggers Ignored)

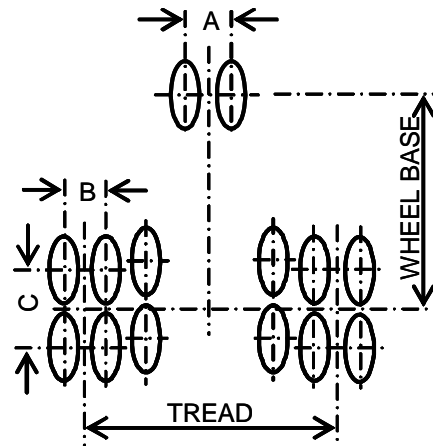


USAF (old)
Group: H
Designation: T-TA
Name: Twin-Twin, Bicycle
FAA (new)
Name: 2D/D1
Description: Two Dual Wheels in Tandem Main Gear / Dual Wheel Body Gear with Dual Wheel Nose Gear

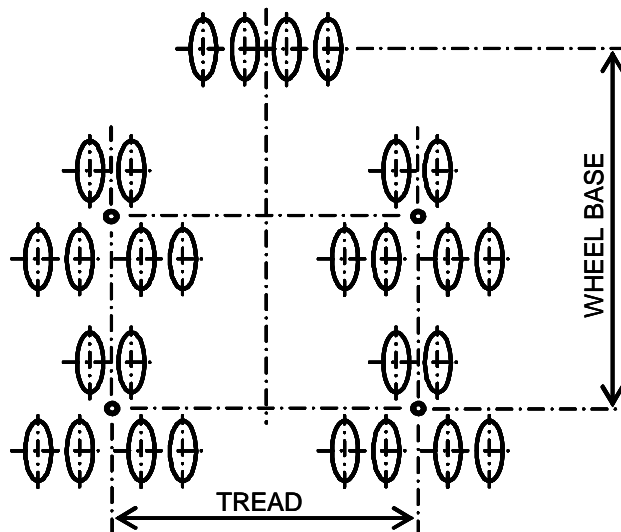
GEAR CONFIGURATIONS : FIGURE 3



USAF (old)
Group: J
Designation: T-TA
Name: Twin-Tandem, Tricycle
FAA (new)
Name: 2D/2D2
Description: Two Dual Wheels in Tandem
Main Gear / Two Dual Wheels in Tandem
Body Gear with Dual Wheel Nose Gear



USAF (old)
Group: L
Designation: TR-TA
Name: Twin-Tandem, Tricycle
FAA (new)
Name: 2T
Description: Two Triple Wheels in Tandem
Main Gear with Dual Wheel Nose Gear



USAF (old)
Group: K
Designation: T-D-TA
Name: Twin-Delta-Tandem, Tricycle
FAA (new)
Name: C5
Description: Complex Gear Comprised of Dual Wheel and Quadruple Wheel
Combination Main Gear with Quadruple Wheel Nose Gear