



A380

AIRPLANE CHARACTERISTICS

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*AIRBUS S.A.S.
Customer Services
Technical Data Support and Services
31707 Blagnac Cedex
FRANCE*

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SCOPE

1-1-0 Purpose

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

Purpose

1. General

This A380 AIRPLANE CHARACTERISTICS (AC) manual is issued for the A380-800 and A380-800F series aircraft to provide necessary data to airport operators and airlines for airport facilities planning.

The A380-800 is a subsonic, very long range, very high capacity, civil transport aircraft.

There are two models in the A380-800 series :

- A380-841 model equipped with Rolls-Royce Trent 970 engine,
- A380-861 model equipped with Engine Alliance GP 7270 engine.

The A380-800F is a subsonic, very long range, civil freighter aircraft.

There are two models in the A380-800F series :

- A380-843F model equipped with Rolls-Royce Trent 977 engine,
- A380-863F model equipped with Engine Alliance GP 7277 engine.

In this manual, effectivity is managed as follows :

- by default, the data is effective for all A380-800 and A380-800F models,
- "A380-800/800F models" indicates that the related data or page is effective for all A380-800 and A380-800F models,
- "A380-800 models" restricts the effectivity of the related data or page to the A380-841 and A380-861 models,
- "A380-800F models" restricts the effectivity of the related data or page to the A380-843F and A380-863F models,
- the mention of a specific model (e.g. A380-841 model, A380-863F model, etc.) restricts the effectivity of the related data or page to that specific model.

This document conforms to NAS 3601.



AIRPLANE CHARACTERISTICS

CORRESPONDENCE

Correspondence concerning this publication should be directed to :

AIRBUS S.A.S.
Technical Data Support and Services
1 Rond Point Maurice BELLONTE
31707 BLAGNAC CEDEX
FRANCE

1-2-0 Introduction

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

Introduction

1. General

This manual comprises 9 chapters with a List of Effective Content (L.E.C.) and a Table Of Contents (TOC) at the beginning of the manual.

CHAPTER 1 : SCOPE

CHAPTER 2 : AIRPLANE DESCRIPTION

This chapter contains general dimensional and other basic aircraft data.

It covers :

- aircraft dimensions and ground clearances,
- passenger and cargo compartment arrangements.

CHAPTER 3 : AIRPLANE PERFORMANCE

This chapter indicates the aircraft performance.

It covers :

- payload/range,
- take-off and landing runway requirements,
- landing approach speed.

CHAPTER 4 : GROUND MANEUVERING

This chapter provides the aircraft turning capability and maneuvering characteristics on the ground.

It includes :

- turning radii and visibility from the cockpit,
- runway and taxiway turn path.

CHAPTER 5 : TERMINAL SERVICING

This chapter provides information for the arrangement of ground handling and servicing equipment.

It covers :

- location and connections of ground servicing equipment,
- engines starting pneumatic and preconditioned airflow requirements.

CHAPTER 6 : OPERATING CONDITIONS

This chapter contains data and safety/environmental precautions related to engine and APU operation on the ground.

It includes :

- engine and APU exhaust velocities and temperatures data,
- engine noise data.

CHAPTER 7 : PAVEMENT DATA

This chapter contains the pavements data helpful for airport planning.

It gives :

- landing gear foot print and static load,
- charts for flexible pavements with Load Classification Number (LCN),
- charts for rigid pavements with LCN,
- Aircraft Classification Number (ACN), Pavement Classification Number (PCN), reporting system for flexible and rigid pavements.

CHAPTER 8 : DERIVATIVE AIRPLANES

This chapter gives relevant data of a possible new version with the associated size change.

CHAPTER 9 : SCALED DRAWINGS

This chapter contains different A380-800 and A380-800F scaled drawings.

1-2-1 Glossary

****ON A/C A380-800 Models A380-800F Models**Glossary

1. List of Abbreviations

A/C Aircraft

ACN	Aircraft Classification Number
APU	Auxiliary Power Unit
BLG	Body Landing Gear
CAS	Calibrated Air Speed
CBR	California Bearing Ratio
CG	Center of Gravity
C/L	Center Line
E	Young's Modulus
FAA	Federal Aviation Administration
FDL	Fuselage Datum Line
FR	Frame
FSTE	Full Size Trolley Equivalent
FWD	Forward
GPU	Ground Power Unit
GSE	Ground Support Equipment
ICAO	International Civil Aviation Organisation
ISA	International Standard Atmosphere
L	Left
L	Radius of relative stiffness
LCN	Load Classification Number
LPS	Last Pax Seating
MAC	Mean Aerodynamic Chord
MAX	Maximum
MIN	Minimum
MLW	Maximum Design Landing Weight
MRW	Maximum Design Ramp Weight
MTOW	Maximum Design Take-Off Weight
MTW	Maximum Design Taxi Weight
MZFW	Maximum Design Zero Fuel Weight
NLG	Nose Landing Gear
OAT	Outside Air Temperature
OEW	Operational Empty Weight

PAX	Passenger
PB/D	Passenger Boarding/Deboarding
PCN	Pavement Classification Number
R	Right
SLS	Sea Level Static condition
TBD	To Be Determined
TBIL	To Be Issued Later
ULD	Unit Load Device
US	United States
VF	Variable Frequency
Vref	Landing reference speed
WLG	Wing Landing Gear

2. Units of Measurement

°	degree (angle)
%	percent
°C	degree Celsius
°F	degree Fahrenheit
bar	bar
cm	centimeter
deg	degree (angle)
ft	foot
ft/s	foot per second
ft/s ²	foot per second squared
ft ²	square foot
ft ³	cubic foot
in	inch
kg	kilogram
kg/l	kilogram per liter
km/h	kilometer per hour
kt	knot
kVA	kiloVolt Ampere
l	liter
lb	pound
m	meter
m/s	meter per second
m ²	square meter
m ³	cubic meter

min	minute
mm	millimeter
MN/m ³	MegaNewton per cubic meter
MPa	MegaPascal
nm	nautical mile
pci	pound-force per cubic inch
psi	pound-force per square inch
t	tonne
US gal	United States gallon

3. Design Weight Terminology

- Maximum Design Ramp Weight (MRW) :
Maximum weight for ground maneuver (including weight of taxi and runup fuel) as limited by aircraft strength and airworthiness requirements. It is also called Maximum Design Taxi Weight (MTW).
- Maximum Design Landing Weight (MLW) :
Maximum weight for landing as limited by aircraft strength and airworthiness requirements.
- Maximum Design Takeoff Weight (MTOW) :
Maximum weight for takeoff as limited by aircraft strength and airworthiness requirements. (This is the maximum weight at start of the take-off run).
- Maximum Design Zero Fuel Weight (MZFW) :
Maximum permissible weight of the aircraft less usable fuel.
- Operational Empty Weight (OEW) :
Weight of structure, powerplant, furnishings, systems, and other items of equipment that are an integral part of a particular aircraft configuration plus the operator's items. The operator's items are the flight and cabin crew and their baggage, unusable fuel, engine oil, emergency equipment, toilet chemical and fluids, galley structure, catering equipment, seats, documents, etc.
- Maximum Payload :
Maximum Design Zero Fuel Weight (MZFW) minus Operating Weight Empty (OWE).
- Maximum Seating Capacity :
Maximum number of passengers specifically certified or anticipated for certification.
- Maximum Cargo Volume :
Maximum usable volume available for cargo.
- Usable Fuel :
Fuel available for aircraft propulsion.



AIRPLANE CHARACTERISTICS

AIRPLANE DESCRIPTION

2-1-0 General Airplane Characteristics

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

General Airplane Characteristics

1. General Airplane Characteristics

2-1-1 General Airplane Characteristics Data

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

General Airplane Characteristics Data

- The following table provides characteristics of A380-800 Models, these data are specific to each Weight Variant:

Aircraft Characteristics				
	WV000	WV001	WV002	WV003
Maximum Ramp Weight (MRW)	562 000 kg	512 000 kg	571 000 kg	512 000 kg
Maximum Taxi Weight (MTW)	(1 238 998 lb)	(1 128 766 lb)	(1 258 839 lb)	(1 128 766 lb)
Maximum Take off Weight (MTOW)	560 000 kg	510 000 kg	569 000 kg	510 000 kg
	(1 234 588 lb)	(1 124 357 lb)	(1 254 430 lb)	(1 124 357 lb)
Maximum Landing Weight (MLW)	386 000 kg	394 000 kg	391 000 kg	395 000 kg
	(850 984 lb)	(868 621 lb)	(862 007 lb)	(870 826 lb)
Maximum Zero Fuel Weight (MZFW)	361 000 kg	372 000 kg	366 000 kg	373 000 kg
	(795 869 lb)	(820 119 lb)	(806 892 lb)	(822 324 lb)
Estimated Operating Empty Weight (OEW)	With Trent 970 Engines : 270 364 kg (596 050 lb)			
	With GP 7270 Engines : 270 630 kg (596 637 lb)			
Estimated Maximum Payload Trent 970	90 636 kg	101 636 kg	95 636 kg	102 636 kg
	(199 818 lb)	(224 069 lb)	(210 841 lb)	(226 274 lb)
Estimated Maximum Payload GP 7270	90 370 kg	101 370 kg	95 370 kg	102 370 kg
	(199 232 lb)	(223 483 lb)	(210 255 lb)	(225 687 lb)

Aircraft Characteristics		
	WV004	WV005
Maximum Ramp Weight (MRW)	562 000 kg	562 000 kg
Maximum Taxi Weight (MTW)	(1 238 998 lb)	(1 238 998 lb)
Maximum Take Off Weight (MTOW)	560 000 kg	560 000
	(1 234 588 lb)	(1 234 588 lb)
Maximum Landing Weight (MLW)	391 000 kg	386 000 kg
	(862 007 lb)	(850984 lb)
Maximum Zero Fuel Weight (MZFW)	366 000 kg	366 000 kg
	(806 892 lb)	(806 892 lb)
Estimated Operating Empty Weight (OEW)	With Trent 970 Engines : 270 364 kg (596 050 lb)	
	With GP 7270 Engines : 270 630 kg (596 637 lb)	

Aircraft Characteristics		
	WV004	WV005
Estimated Maximum Payload Trent 970	95 636 kg (210841 lb)	95 636 kg 210 841 lb)
Estimated Maximum Payload GP 7270	95 370 kg (210 255 lb)	95 370 kg (210 255 lb)

**ON A/C A380-800 Models

2. The following table provides characteristics of A380-800 Models, these data are common to each Weight Variant:

Aircraft Characteristics						
	WV000	WV001	WV002	WV003	WV004	WV005
Standard Seating Capacity <1>	555					
Usable Fuel Capacity (density = 0.785 kg/l)	323 546 l (85 472 US gal)					
	253 983 kg (559 937 lb)					
Pressurized Fuselage Volume (A/C non equipped, main and upper deck)	2100 m ³ (74 161 ft ³)					
Passenger Compartment Volume (main deck)	775 m ³ (27 369 ft ³)					
Passenger Compartment Volume (upper deck)	530 m ³ (18 717 ft ³)					
Cockpit Volume	12 m ³ (424 ft ³)					
Usable Volume, FWD CC (Based on LD3)	89.4 m ³ (3 160 ft ³)					
Usable Volume, AFT CC (Based on LD3)	71.5 m ³ (2 528 ft ³)					
Usable Volume, Bulk CC	14.3 m ³ (505 ft ³)					
Water Volume, FWD CC	131 m ³ (4 626 ft ³)					
Water Volume, AFT CC	107.8 m ³ (3 807 ft ³)					

Aircraft Characteristics						
	WV000	WV001	WV002	WV003	WV004	WV005
Water Volume, Bulk CC	17.3 m ³ (611 ft ³)					

**ON A/C A380-800F Models

3. The following table provides characteristics of A380-800F Models:

Aircraft Characteristics		
Airplane Model	A380-843F	A380-863F
Engines	TRENT 977	GP 7277
Maximum Design Ramp Weight (MRW)	592 000 kg (1 305 136 lb)	592 000 kg (1 305 136 lb)
Maximum Design Take Off Weight (MTOW)	590 000 kg (1 300 727 lb)	590 000 kg (1 300 727 lb)
Maximum Design Landing Weight (MLW)	427 000 kg (941 374 lb)	427 000 kg (941 374 lb)
Maximum Design Zero Fuel Weight (MZFW)	402 000 kg (886 258 lb)	402 000 kg (886 258 lb)
Operating Empty Weight (OEW) – Typical	250 560 kg (552 390 lb)	250 826 kg (552 976 lb)
Maximum Payload	151 440 kg (333 868 lb)	151 174 kg (333 281 lb)
Usable Fuel Capacity (density = 0.785 kg/l)	310 000 l <2> (81 893 US gal)	310 000 l <2> (81 893 US gal)
	243 350 kg (536 494 lb)	243 350 kg (536 494 lb)
Volume of Cargo Compartments <1>	938.4 m ³ (33 139 ft ³)	938.4 m ³ (33 139 ft ³)
Volume of Cockpit	12.60 m ³ (444.96 ft ³)	12.60 m ³ (444.96 ft ³)

<1> Volume of cargo compartments :

- Lower deck forward cargo compartment (usable containerized volume) : 90 m³ (3 157 ft³)
- Lower deck aft cargo compartment (usable containerized volume) : 72 m³ (2 525 ft³)
- Lower bulk cargo compartment (usable volume) : 18.4 m³ (650 ft³)
- main deck cargo compartment (usable palletized volume) : 508 m³ (18 222 ft³)
- upper deck cargo compartment (usable palletized volume) : 250 m³ (9 075 ft³)

<2> Usable fuel capacity wiyh center tank: 355 850 l (94 005 US gal)



AIRPLANE CHARACTERISTICS

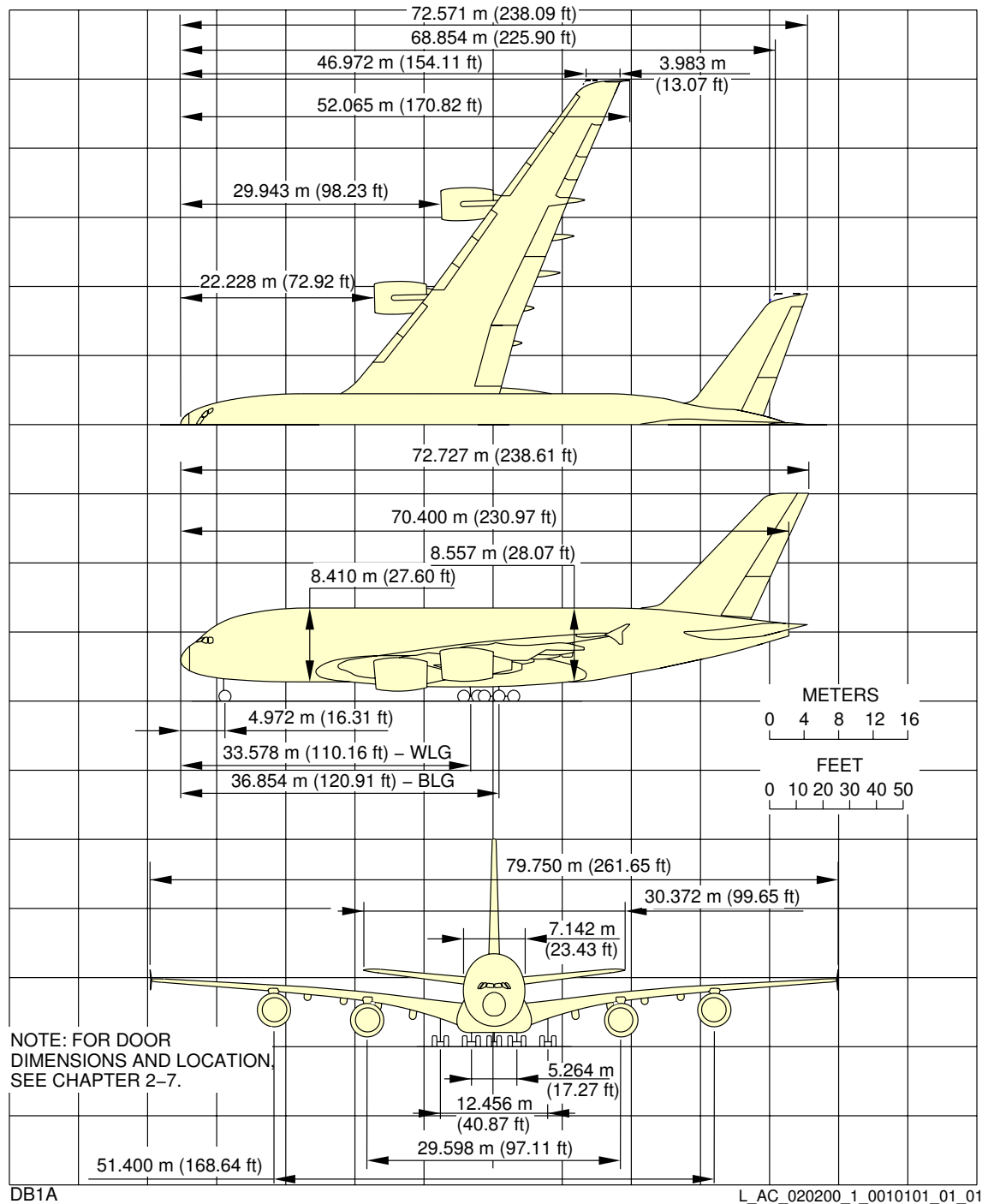
2-2-0 General Airplane Dimensions

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

General Airplane Dimensions Data

1. This section provides General Airplane Dimensions.

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



General Airplane Dimensions
FIGURE 1



AIRPLANE CHARACTERISTICS

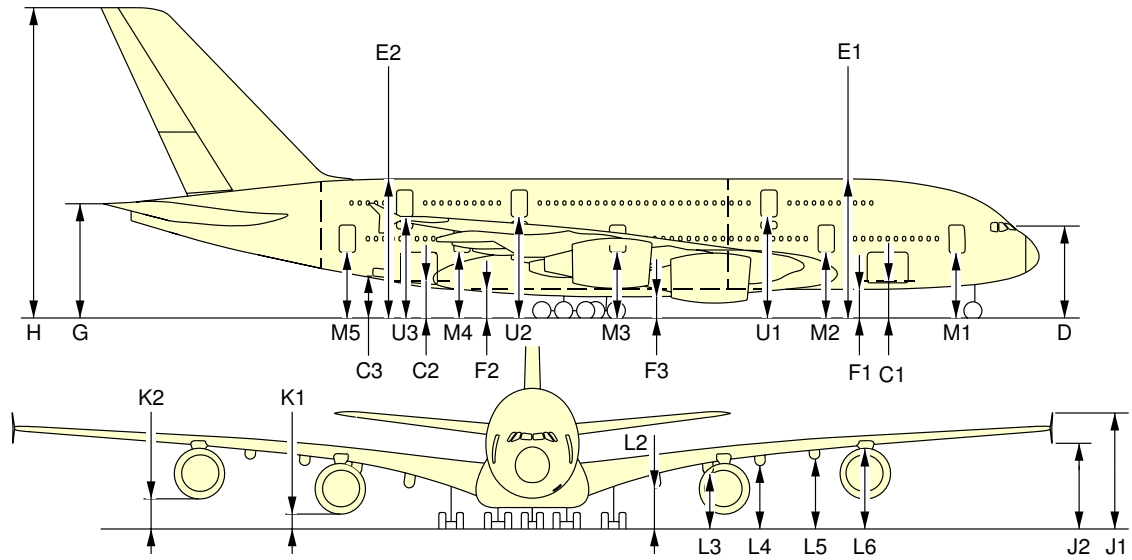
2-3-0 Ground Clearances

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

Ground Clearances - Pax

1. This section gives ground clearances of A380-800 Models.

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



A/C CONFIGURATION	MRW (562t) FWD CG		MRW AFT CG		300t AFT CG		290t MID CG		A/C JACKED FDL = 7.2 m (23.6 ft)	
	m	ft	m	ft	m	ft	m	ft	m	ft
C1	3.05	10.0	3.11	10.2	3.30	10.8	3.19	10.5	5.12	16.8
C2	3.14	10.3	3.10	10.2	3.23	10.6	3.32	10.9	5.12	16.8
C3	3.27	10.7	3.22	10.6	3.36	11.0	3.43	11.3	5.24	17.2
D	7.13	23.4	7.21	23.7	7.42	24.3	7.25	23.8	9.22	30.2
E1	10.76	35.3	10.81	35.5	11.00	36.1	10.90	35.8	12.82	42.1
E2	10.84	35.6	10.80	35.4	10.93	35.9	11.03	36.2	12.82	42.1
F1	2.35	7.7	2.40	7.9	2.59	8.5	2.49	8.2	4.41	14.5
F2	2.27	7.5	2.24	7.4	2.38	7.8	2.46	8.1	4.27	14.0
F3	1.66	5.4	1.66	5.5	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	9.43	30.9	11.14	36.6
H	24.18	79.3	24.08	79.0	24.17	79.3	24.40	80.1	26.11	85.7
J1	7.55	24.8	7.50	24.6	8.22	27.0	8.33	27.3	10.12	33.2
J2	5.27	17.3	5.22	17.1	5.94	19.5	6.05	19.8	7.84	25.7
K1	1.05	3.5	1.08	3.5	1.30	4.2	1.25	4.1	3.14	10.3
K2	1.90	6.2	1.90	6.2	2.27	7.4	2.27	7.5	4.13	13.5
L2	3.08	10.1	3.07	10.1	3.26	10.7	3.27	10.7	5.12	16.8
L3	4.10	13.4	4.08	13.4	4.31	14.1	4.34	14.2	6.18	20.3
L4	4.67	15.3	4.65	15.3	4.93	16.2	4.98	16.4	6.81	22.4
L5	5.01	16.4	4.99	16.4	5.34	17.5	5.40	17.7	7.22	23.7
L6	5.21	17.1	5.18	17.0	5.61	18.4	5.67	18.6	7.50	24.6
M1	5.07	16.6	5.14	16.9	5.34	17.5	5.19	17.0	7.15	23.5
M2	5.09	16.7	5.14	16.9	5.32	17.5	5.23	17.2	7.15	23.5
M3	5.13	16.8	5.13	16.8	5.29	17.3	5.29	17.4	7.15	23.5
M4	5.16	16.9	5.13	16.8	5.26	17.3	5.34	17.5	7.15	23.5
M5	5.18	17.0	5.12	16.8	5.25	17.2	5.37	17.6	7.15	23.5
U1	7.85	25.8	7.89	25.9	8.06	26.5	8.00	26.3	9.90	32.5
U2	7.90	25.9	7.88	25.9	8.03	26.3	8.07	26.5	9.90	32.5
U3	7.92	26.0	7.88	25.8	8.01	26.3	8.11	26.6	9.90	32.5

NOTE: MAXIMUM JACKING WEIGHT = 333 700 kg

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Ground Clearances
A380-800 Models
FIGURE 1



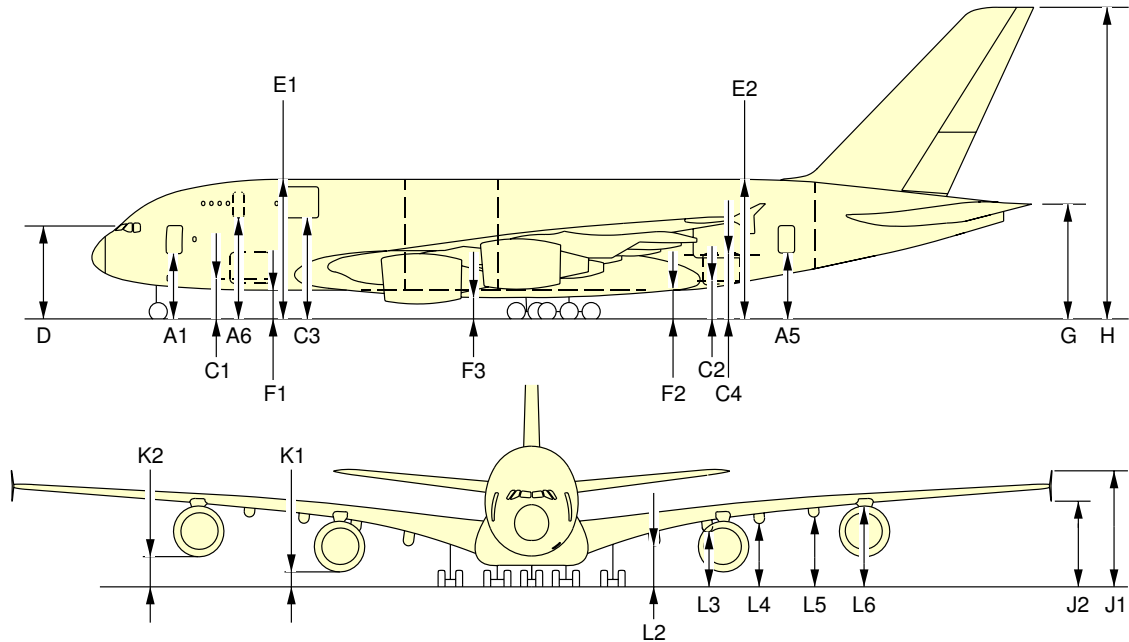
AIRPLANE CHARACTERISTICS

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

Ground Clearances - Freighter

1. This section gives ground clearances of A380-800F models.

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



A/C CONFIGURATION	MRW FWD CG		MRW AFT CG		300t AFT CG		OWE MID CG		A/C JACKED FDL = 7.3 m (24.0 ft)	
	m	ft	m	ft	m	ft	m	ft	m	ft
A1	5.03	16.5	5.12	16.8	5.34	17.5	5.21	17.1	7.25	23.8
A5	5.16	16.9	5.10	16.7	5.24	17.2	5.41	17.7	7.25	23.8
A6	7.80	25.6	7.87	25.8	8.08	26.5	7.99	26.2	10.00	32.8
C1	3.02	9.9	3.09	10.1	3.30	10.8	3.21	10.5	5.22	17.1
C2	3.12	10.2	3.07	10.1	3.22	10.6	3.36	11.0	5.22	17.1
C3	7.93	26.0	7.99	26.2	8.19	26.9	8.12	26.6	10.12	33.2
C4	5.15	16.9	5.10	16.7	5.25	17.2	5.38	17.7	7.25	23.8
D	7.09	23.3	7.19	23.6	7.41	24.3	7.27	23.8	9.32	30.6
E1	10.73	35.2	10.79	35.4	11.00	36.1	10.92	35.8	12.92	42.4
E2	10.83	35.5	10.78	35.4	10.92	35.8	11.07	36.3	12.92	42.4
F1	2.32	7.6	2.38	7.8	2.59	8.5	2.51	8.2	4.51	14.8
F2	2.26	7.4	2.22	7.3	2.37	7.8	2.49	8.2	4.37	14.3
F3	1.63	5.4	1.64	5.4	1.81	5.9	1.85	6.1	3.78	12.4
G	9.21	30.2	9.08	29.8	9.19	30.1	9.48	31.1	11.24	36.9
H	24.18	79.3	24.05	78.9	24.16	79.3	24.45	80.2	26.21	86.0
J1	7.54	24.7	7.48	24.5	8.21	26.9	8.37	27.5	10.22	33.5
J2	5.26	17.2	5.20	17.1	5.93	19.4	6.08	20.0	7.94	26.0
K1	1.03	3.4	1.05	3.5	1.29	4.2	1.28	4.2	3.24	10.6
K2	1.88	6.2	1.88	6.2	2.26	7.4	2.30	7.5	4.23	13.9
L2	3.05	10.0	3.05	10.0	3.25	10.7	3.30	10.8	5.22	17.1
L3	4.08	13.4	4.06	13.3	4.30	14.1	4.37	14.3	6.28	20.6
L4	4.65	15.3	4.63	15.2	4.93	16.2	5.02	16.5	6.91	22.7
L5	4.99	16.4	4.96	16.3	5.33	17.5	5.43	17.8	7.32	24.0
L6	5.19	17.0	5.16	16.9	5.60	18.4	5.71	18.7	7.60	24.9

L_AC_020300_1_0030101_01_00

Ground clearances
A380-800F Models
FIGURE 2



AIRPLANE CHARACTERISTICS

2-4-0 Interior Arrangement - Plan View

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

Interior Arrangement - Plan View

1. Interior Arrangement - Plan View



AIRPLANE CHARACTERISTICS

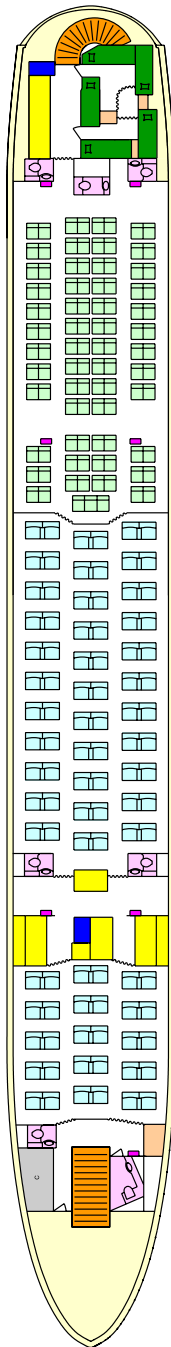
2-4-1 Standard Configuration

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

Standard Configuration - Pax

1. This section gives the standard configuration of A380-800 models

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



UPPER DECK

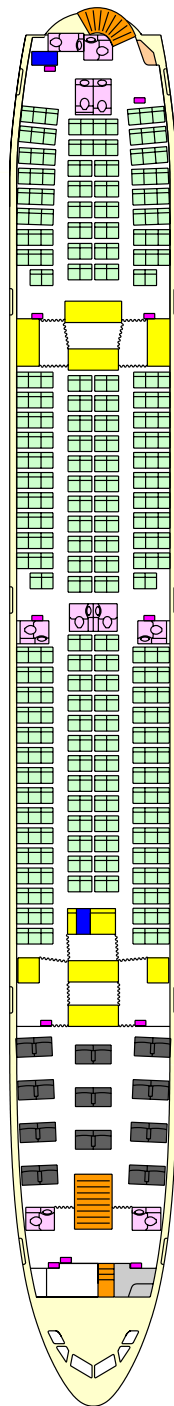
PASSENGER SEATS UPPER DECK (199 TOTAL)

- BUSINESS CLASS 96 SEATS
- TOURIST CLASS 103 SEATS
- ATTENDANT SEATS 8
- COAT STOWAGE 6
- GALLEYS 8
- LAVATORIES 7
- STOWAGES 1
- LIFT 2
- STAIRS 2
- CREW REST BUNKS 5

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Interior Arrangements - Plan View
Standard Configuration - Upper Deck
FIGURE 1

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



MAIN DECK

PASSENGER SEATS MAIN DECK (356 TOTAL)

- FIRST CLASS 22 SEATS
- TOURIST CLASS 334 SEATS
- ATTENDANT SEATS 12
- COAT STOWAGE 1
- GALLEYS 9
- LAVATORIES 10
- STOWAGES 1
- LIFT 2
- STAIRS 2

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Interior Arrangements - Plan View
Standard Configuration - Main Deck
FIGURE 2



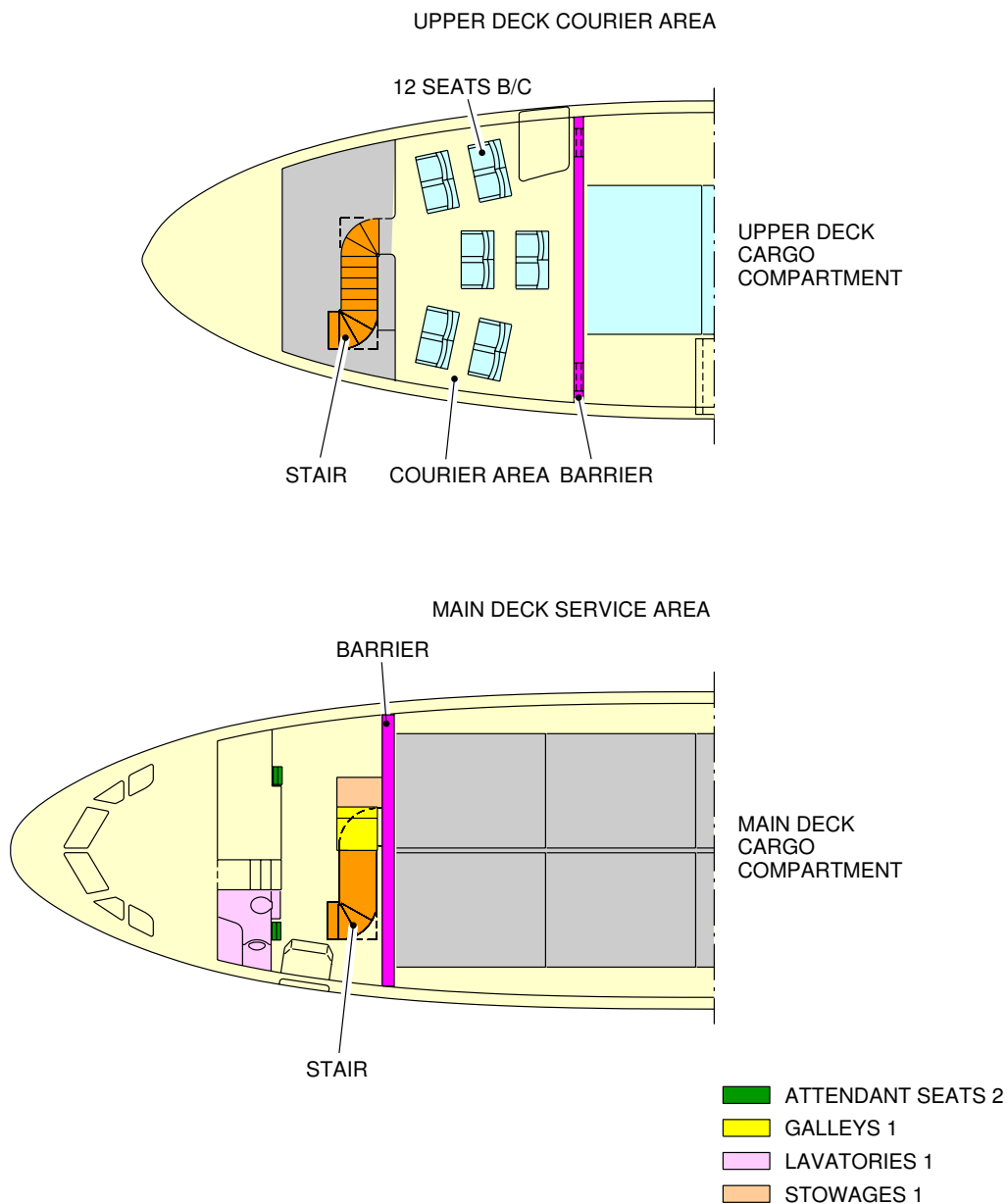
AIRPLANE CHARACTERISTICS

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

Standard Configuration - Freighter

1. This section gives the standard configuration of A380-800F models.

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



L_AC_020401_1_0030101_01_00

Interior Arrangements - Plan View
Standard Configuration
FIGURE 3



AIRPLANE CHARACTERISTICS

2-5-0 Interior Arrangements - Cross Section

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

Interior Arrangements - Cross Section

1. Interior Arrangements - Cross Section



AIRPLANE CHARACTERISTICS

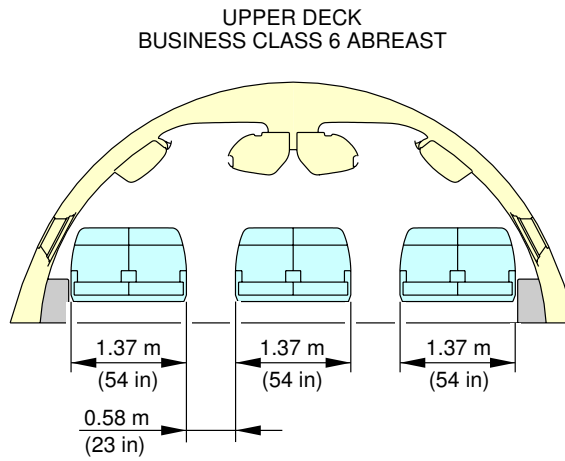
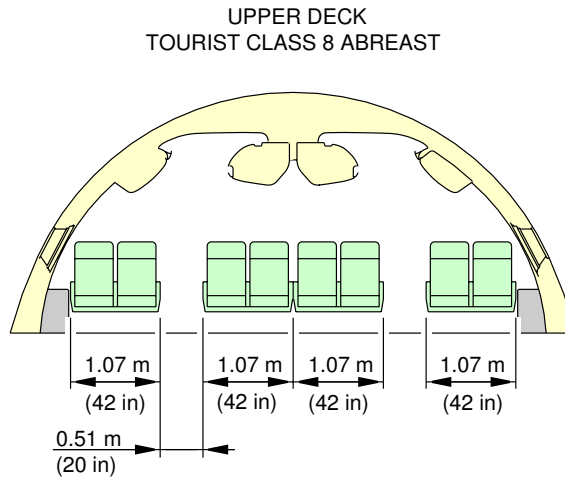
2-5-1 Typical Configuration

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

Typical Configuration - Pax

1. This section gives the typical configuration of A380-800 models.

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

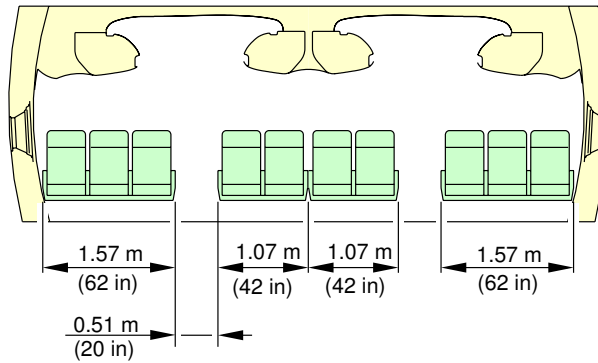


L_AC_020501_1_0010101_01_00

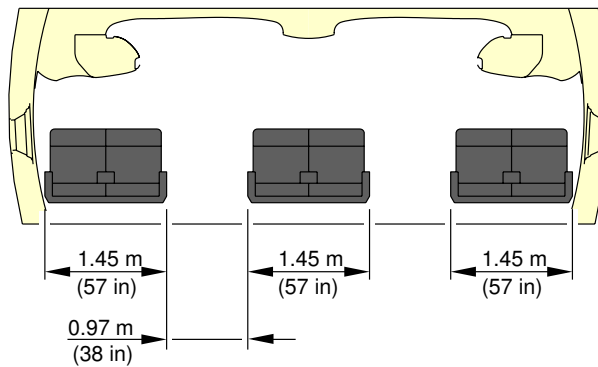
Interior Arrangements - Cross-section
Typical Configuration - Upper Deck
FIGURE 1

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

MAIN DECK
TOURIST CLASS 10 ABREAST



MAIN DECK
FIRST CLASS 6 ABREAST



L_AC_020501_1_0020101_01_00

Interior Arrangements - Cross-section
Typical Configuration - Main Deck
FIGURE 2



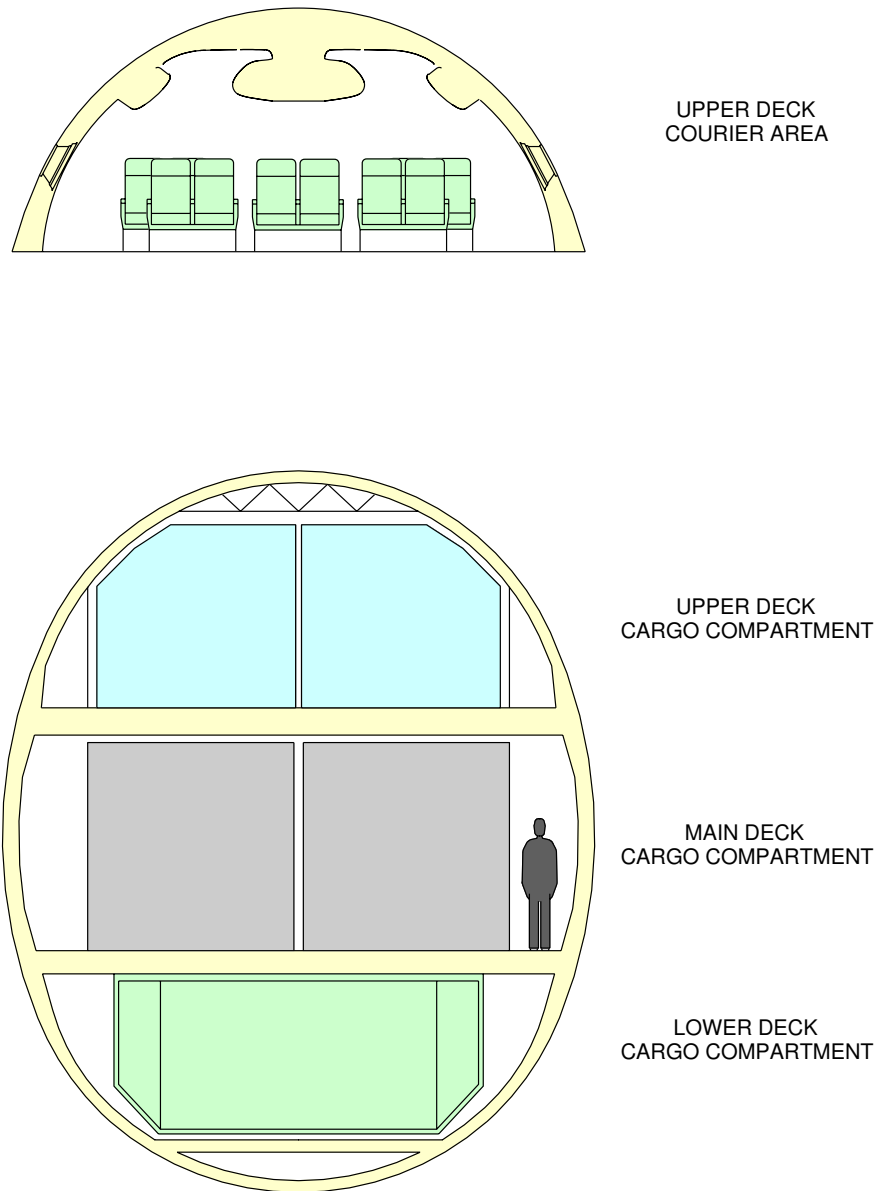
AIRPLANE CHARACTERISTICS

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

Typical Configuration - Freighter

1. This section gives the typical configuration of A380-800F models.

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



L_AC_020501_1_0030101_01_00

Interior Arrangements - Cross-section
 Typical Configuration - A380- 800F Models All Decks
 FIGURE 3



AIRPLANE CHARACTERISTICS

2-6-0 Cargo Compartments

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

Cargo Compartments

1. Cargo Compartments



AIRPLANE CHARACTERISTICS

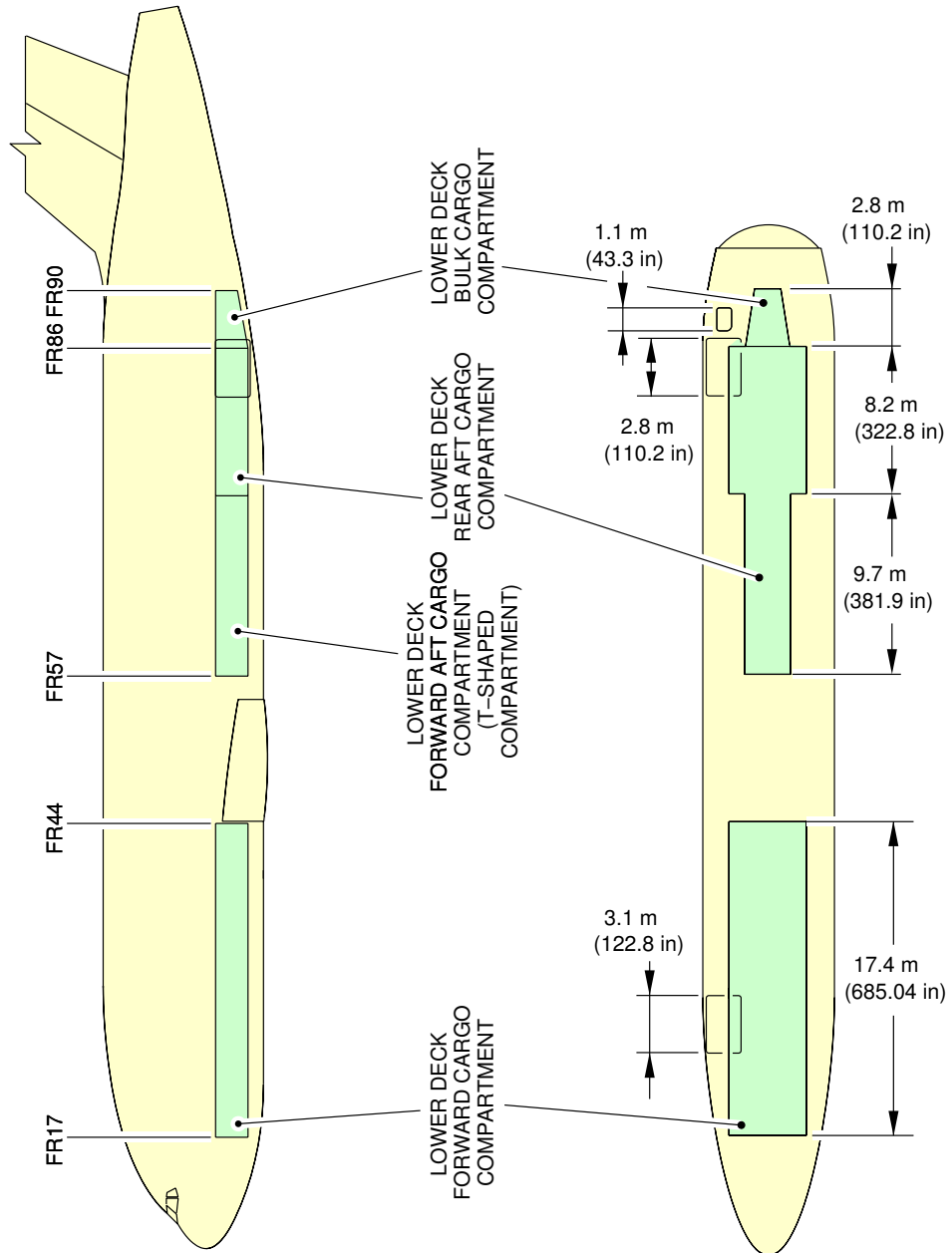
2-6-1 Location and Dimensions

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

Location and Dimensions - Pax

1. This section gives the cargo compartments location and dimensions of A380-800 models.

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



L_AC_020601_1_0010101_01_00

Cargo Compartments
Location and Dimensions
FIGURE 1



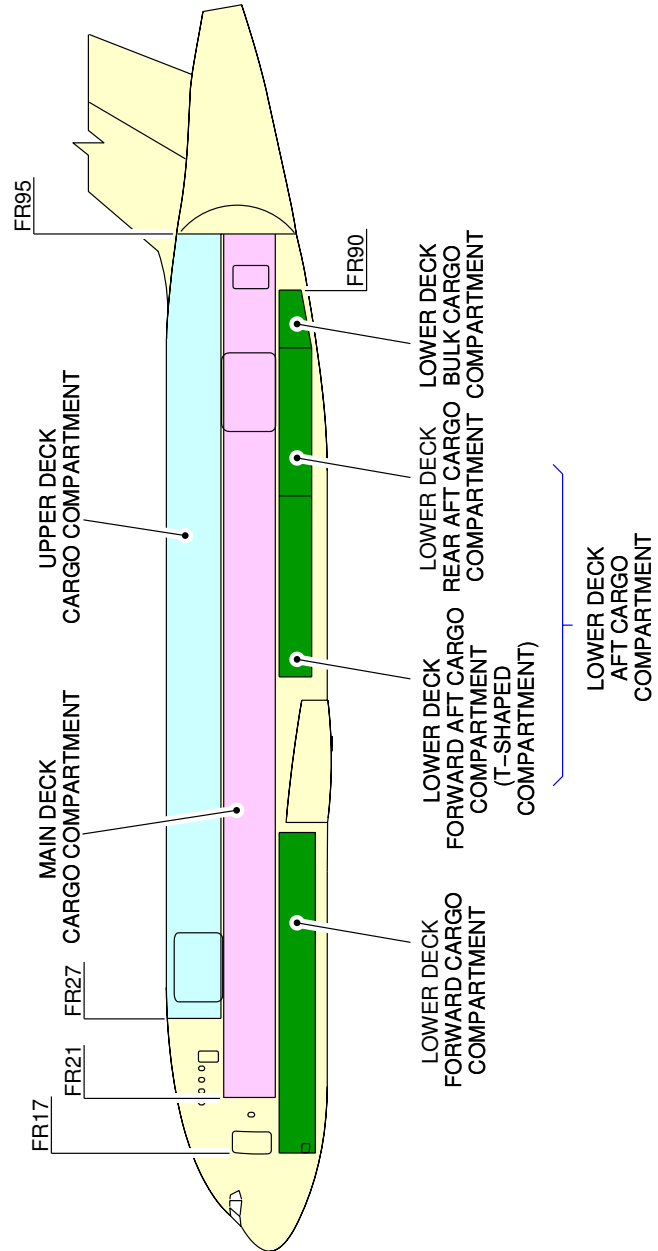
AIRPLANE CHARACTERISTICS

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

Location and Dimensions - Freighter

1. This section gives the cargo compartments location and dimensions of A380-800F models.

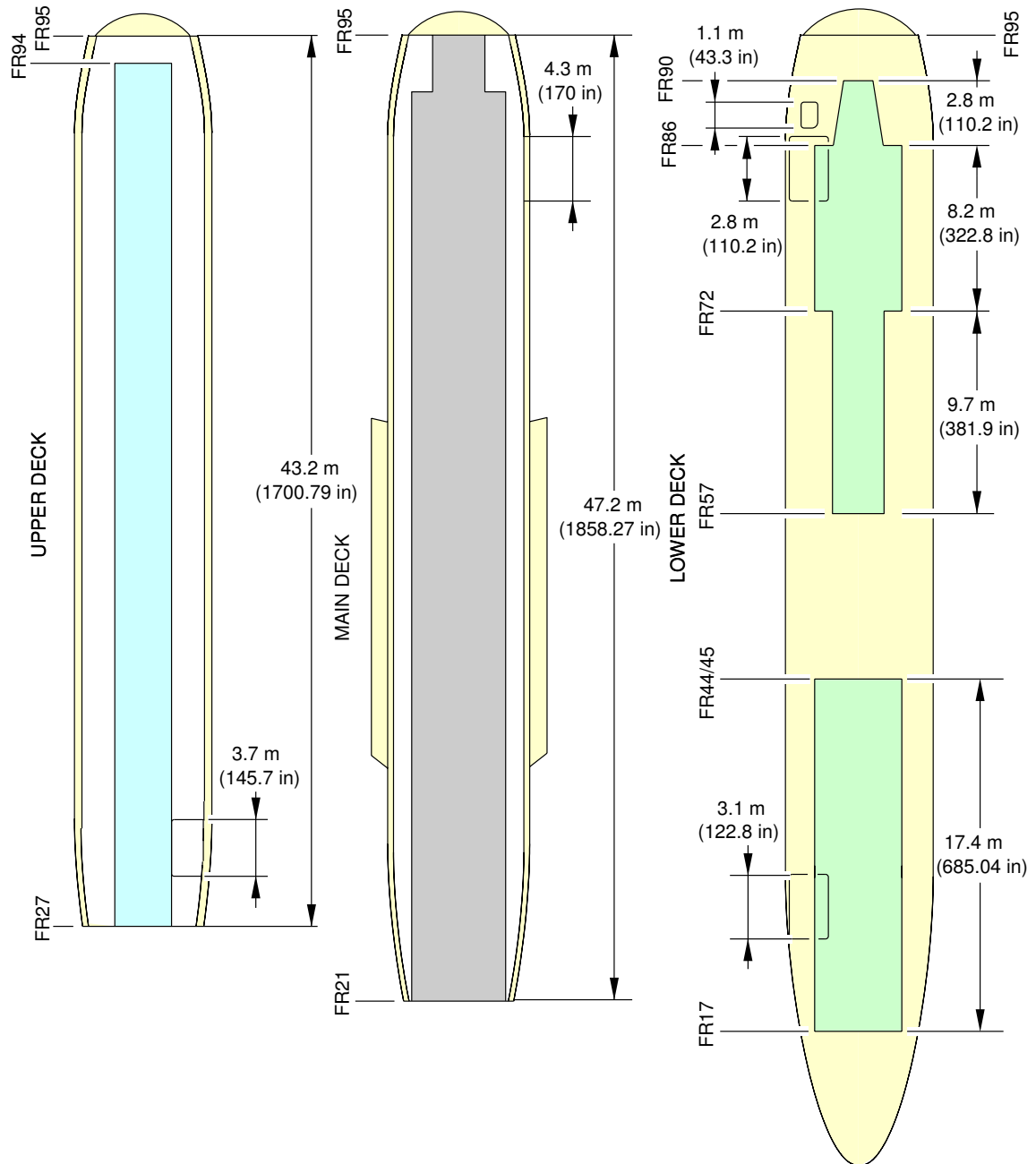
****ON A/C A380-800F Models**



L_AC_020601_1_0020101_01_00

Cargo Compartments
Location and Dimensions (Sheet 1)
FIGURE 2

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



L_AC_020601_1_0030101_01_00

Cargo Compartments
Location and Dimensions (Sheet 2)
FIGURE 3



AIRPLANE CHARACTERISTICS

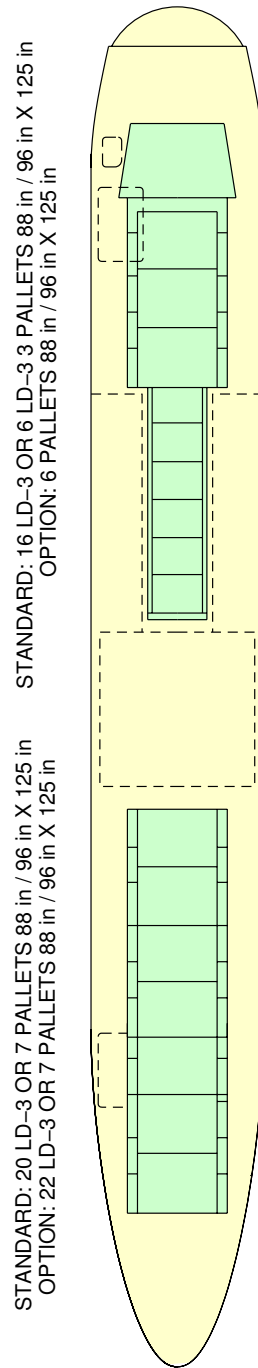
2-6-2 Loading Combinations

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

Loading Combinations - Pax

1. This section gives cargo compartments loading combinations.

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



L_AC_020602_1_0010101_01_00

Cargo Compartments
Loading Combinations
FIGURE 1



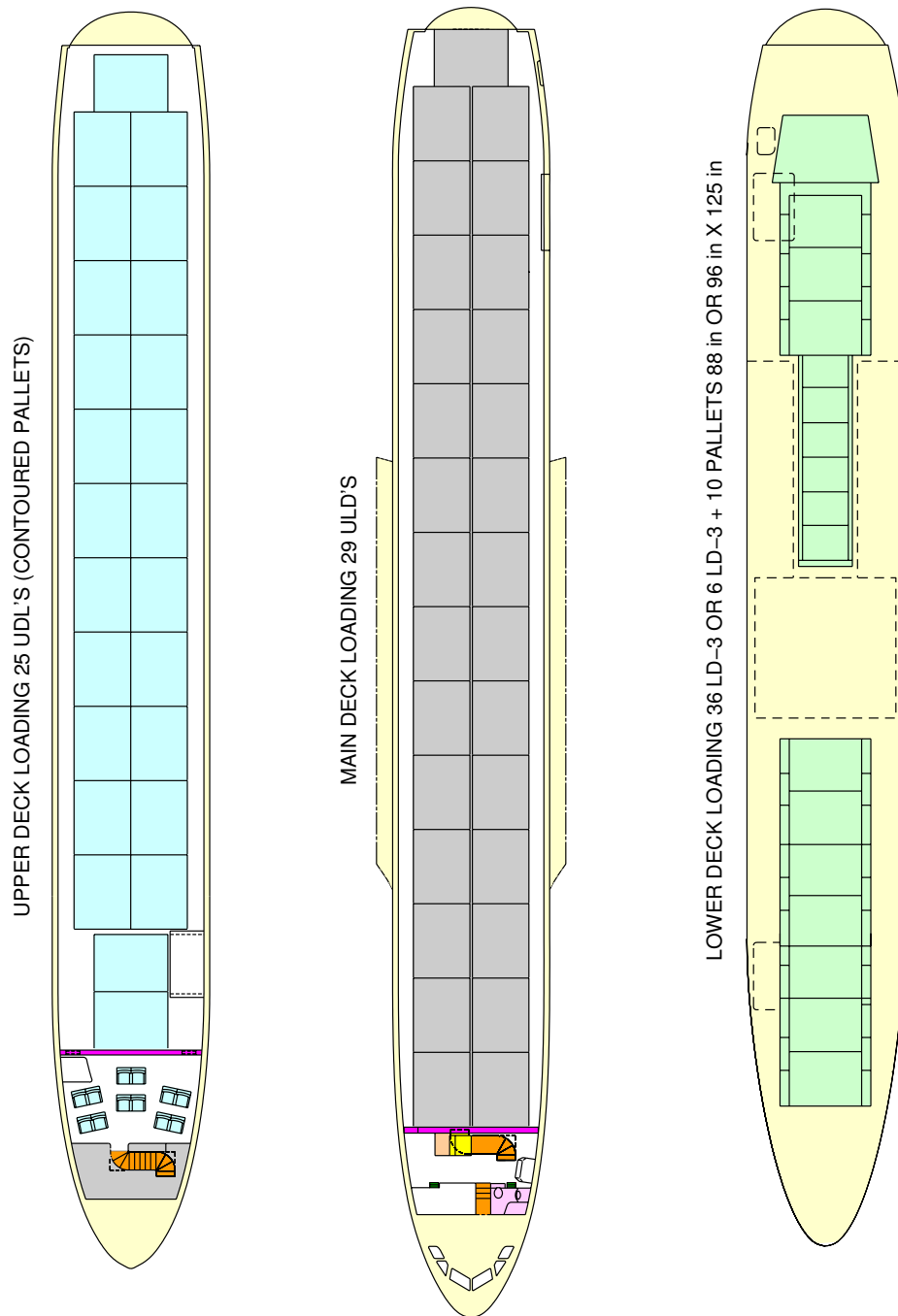
AIRPLANE CHARACTERISTICS

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

Loading Combinations - Freighter

1. This section gives cargo compartments loading combinations.

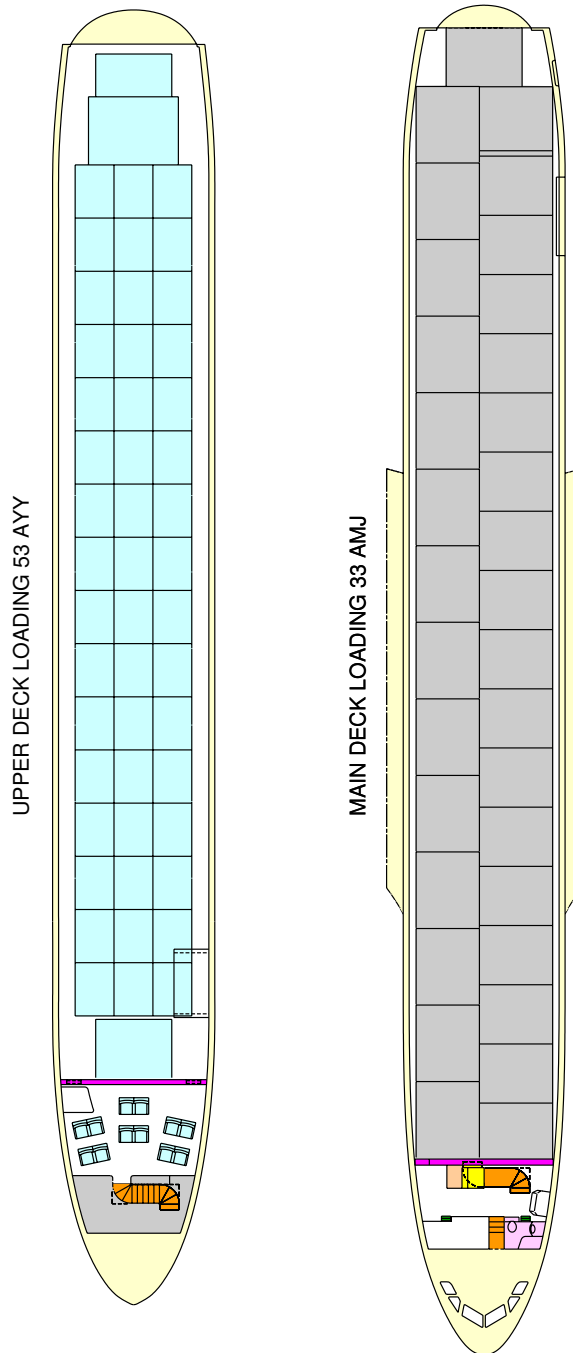
****ON A/C A380-800F Models**



L_AC_020602_1_0020101_01_00

Cargo Compartments
Loading Combinations (Sheet 1)
FIGURE 2

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



L_AC_020602_1_0030101_01_00

Cargo Compartments
Loading Combinations (Sheet 2)
FIGURE 3



AIRPLANE CHARACTERISTICS

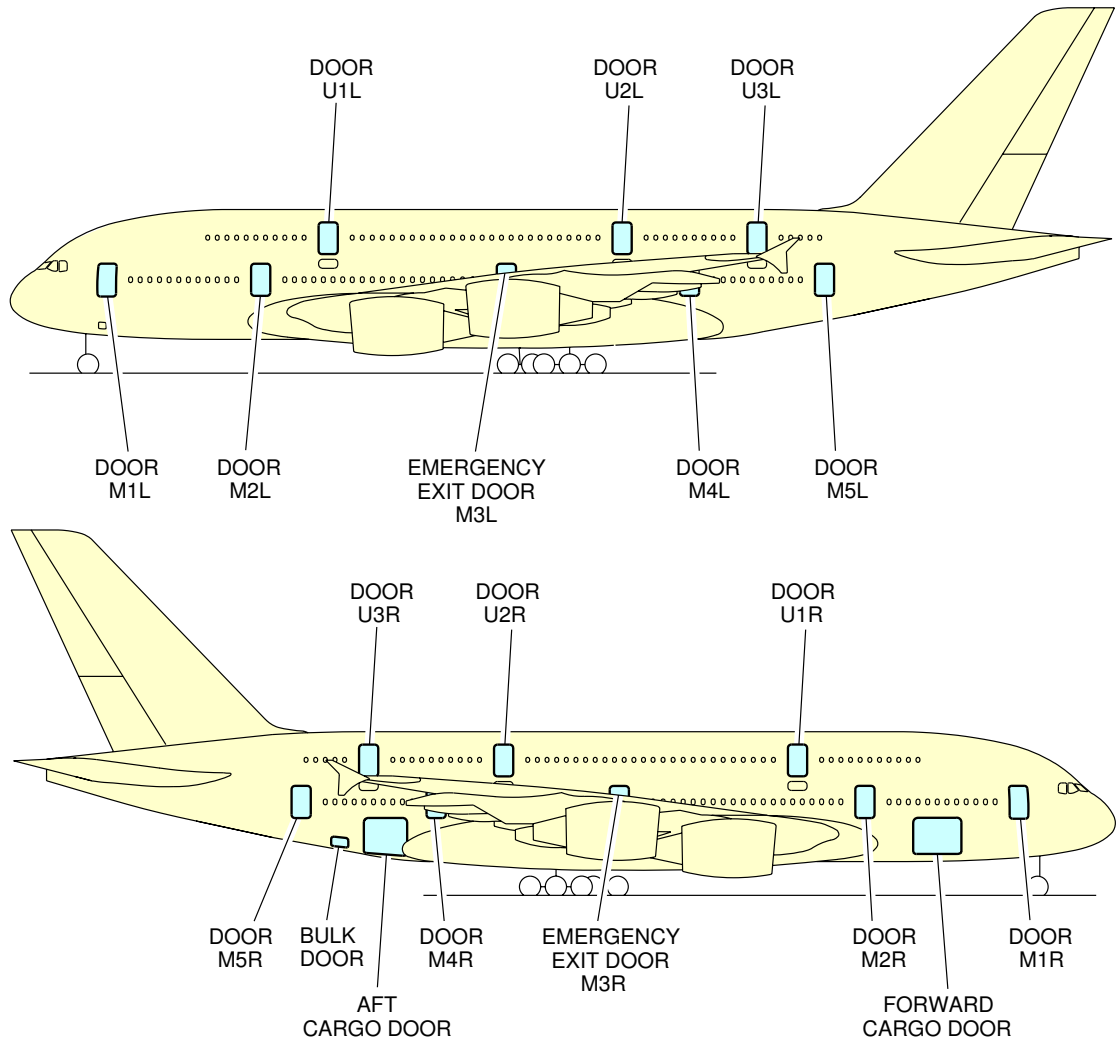
2-7-0 Door Clearances

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

Door Clearances - Pax

1. This section gives Door Clearances.

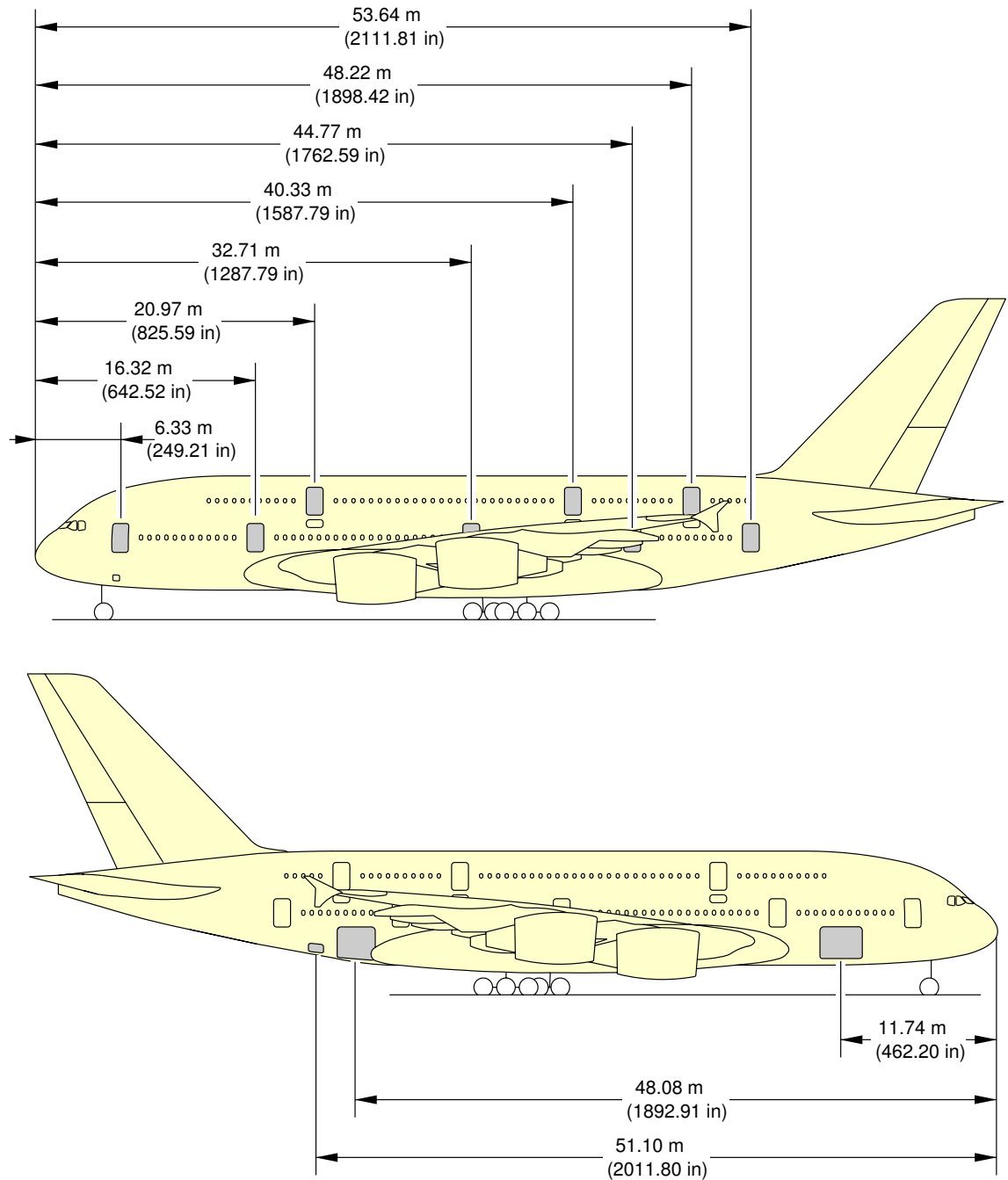
****ON A/C A380-800 Models**



L_AC_020700_1_0010101_01_00

Door Clearances
Door Location (Sheet 1) - A380-800 Models
FIGURE 1

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



L_AC_020700_1_0020101_01_00

Door Clearances
Door Location (Sheet 2) - A380-800 Models
FIGURE 2



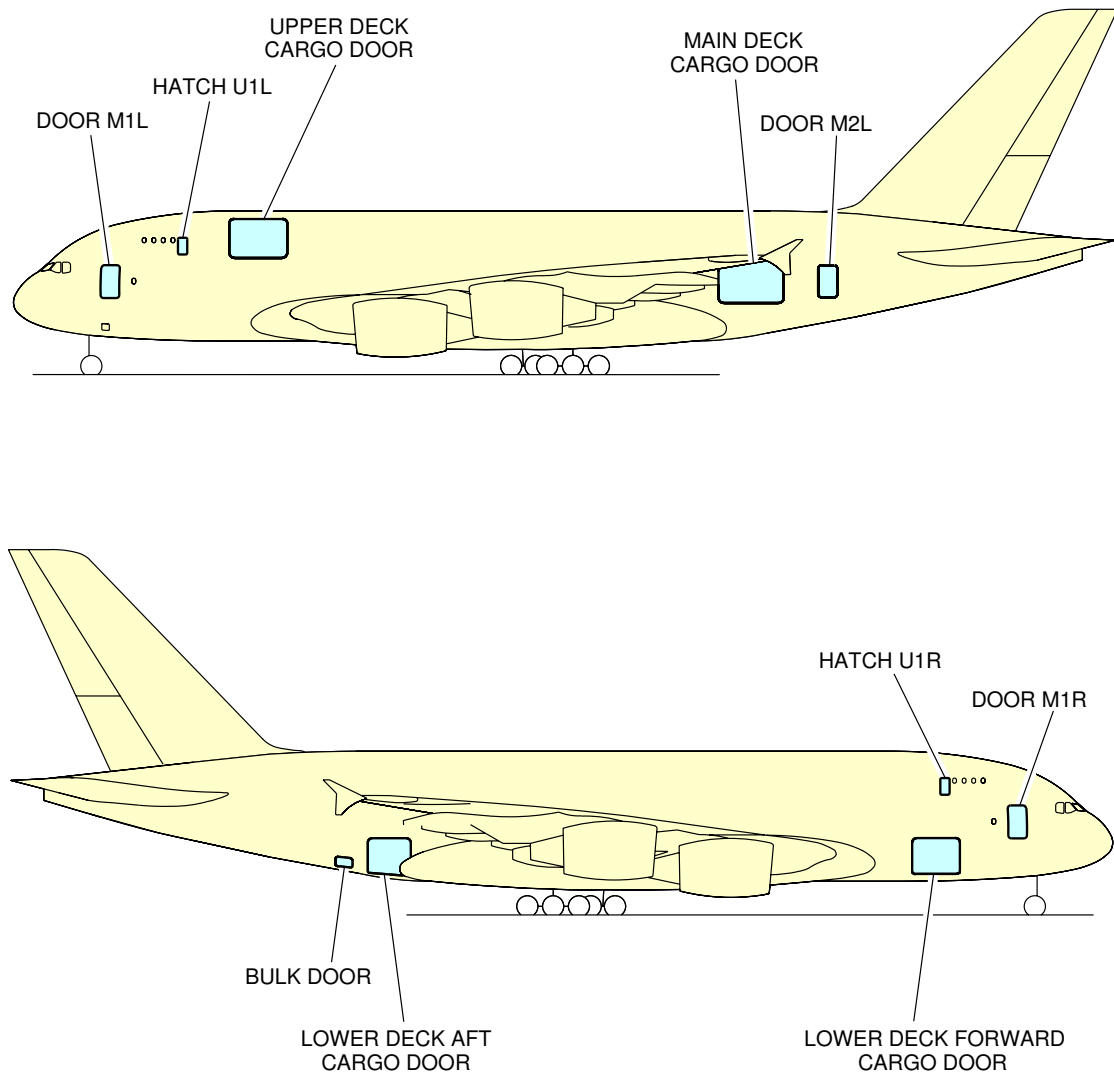
AIRPLANE CHARACTERISTICS

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

Door Clearances - Freighter

1. This section gives door clearances.

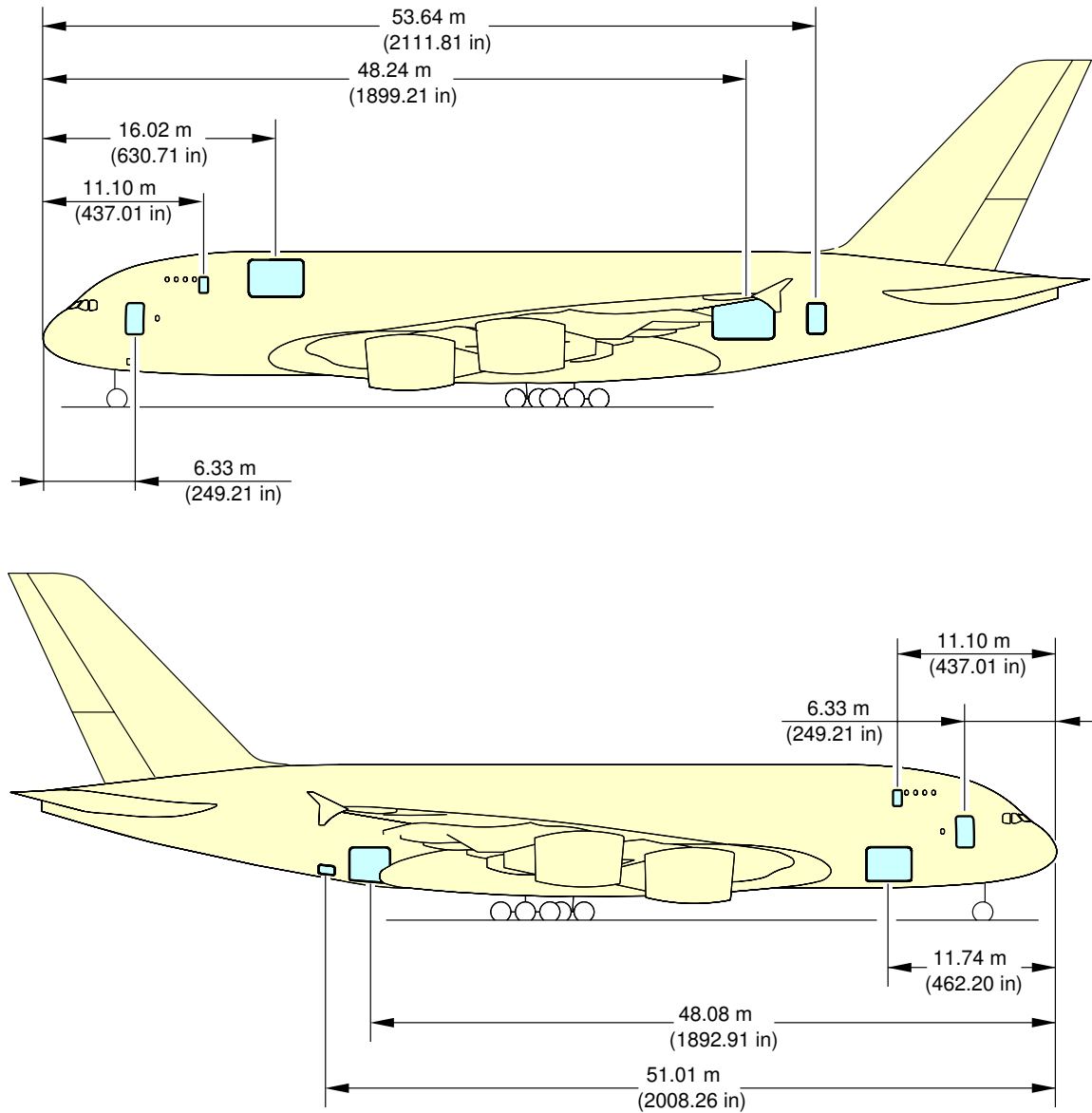
****ON A/C A380-800F Models**



L_AC_020700_1_0030101_01_00

Door Clearances
Door Location (Sheet 1) - A380-800F Models
FIGURE 3

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



L_AC_020700_1_0040101_01_00

Door Clearances
Door Location (Sheet 2) - A380-800F Models
FIGURE 4



AIRPLANE CHARACTERISTICS

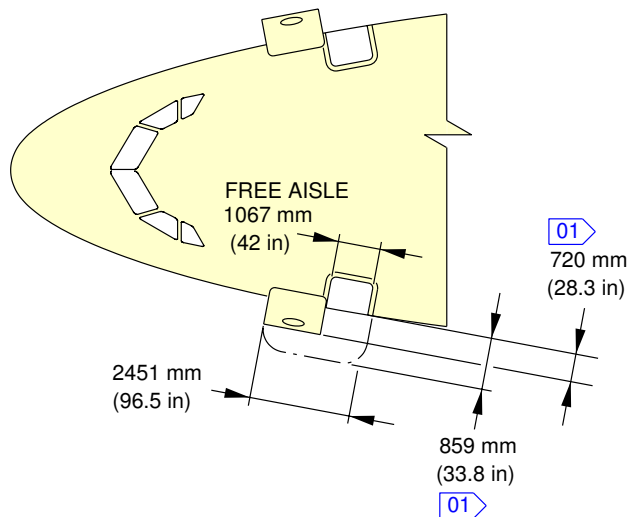
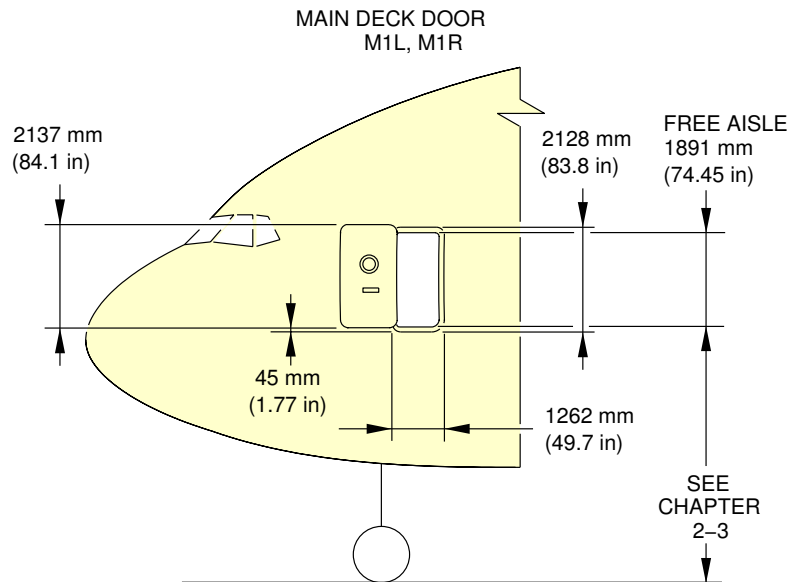
2-7-1 Forward Doors

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

Forward Doors

1. This section gives forward doors clearances.

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



NOTE:

[01] MEASURED FROM THE EXTERNAL POINT OF THE SCUFF PLATE AND THE MOST EXTERNAL POINT OF THE DOOR SKIN

L_AC_020701_1_0010101_01_00

Door Clearances
Forward Doors
FIGURE 1



AIRPLANE CHARACTERISTICS

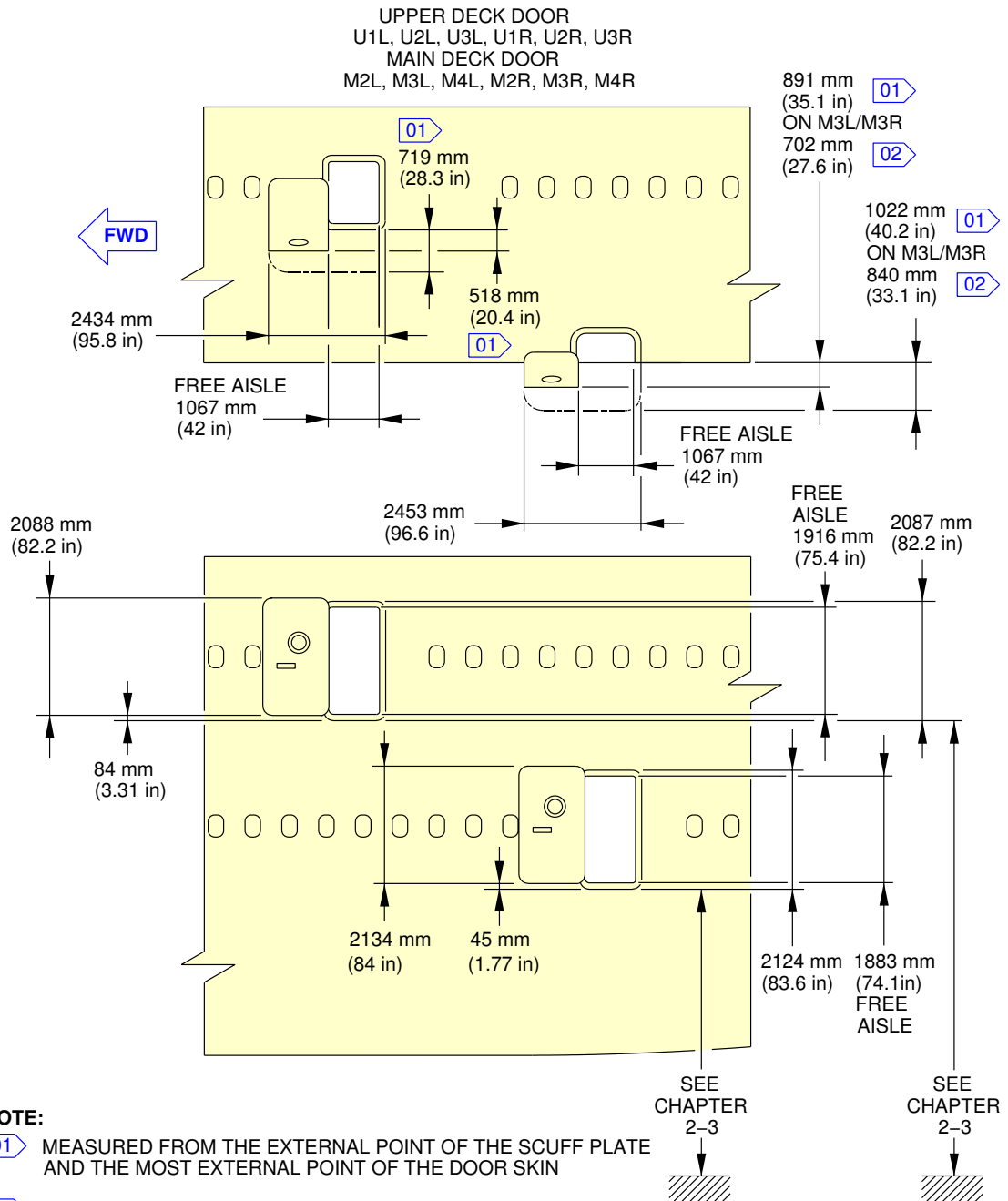
2-7-2 Main and Upper Deck Doors

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

Main and Upper Deck Doors - Pax

1. This section gives main and upper deck doors clearances.

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



NOTE:

- [01] MEASURED FROM THE EXTERNAL POINT OF THE SCUFF PLATE AND THE MOST EXTERNAL POINT OF THE DOOR SKIN
- [02] ON DOOR M3L/M3R MEASURED FROM THE EXTERNAL POINT OF THE CUTOUT IN THE BELLY FAIRING AND THE MOST EXTERNAL POINT OF THE BELLY FAIRING FROM THE DOOR

L_AC_020702_1_0010101_01_00

Door Clearances
Main and Upper Deck Doors - A380-800 Models
FIGURE 1



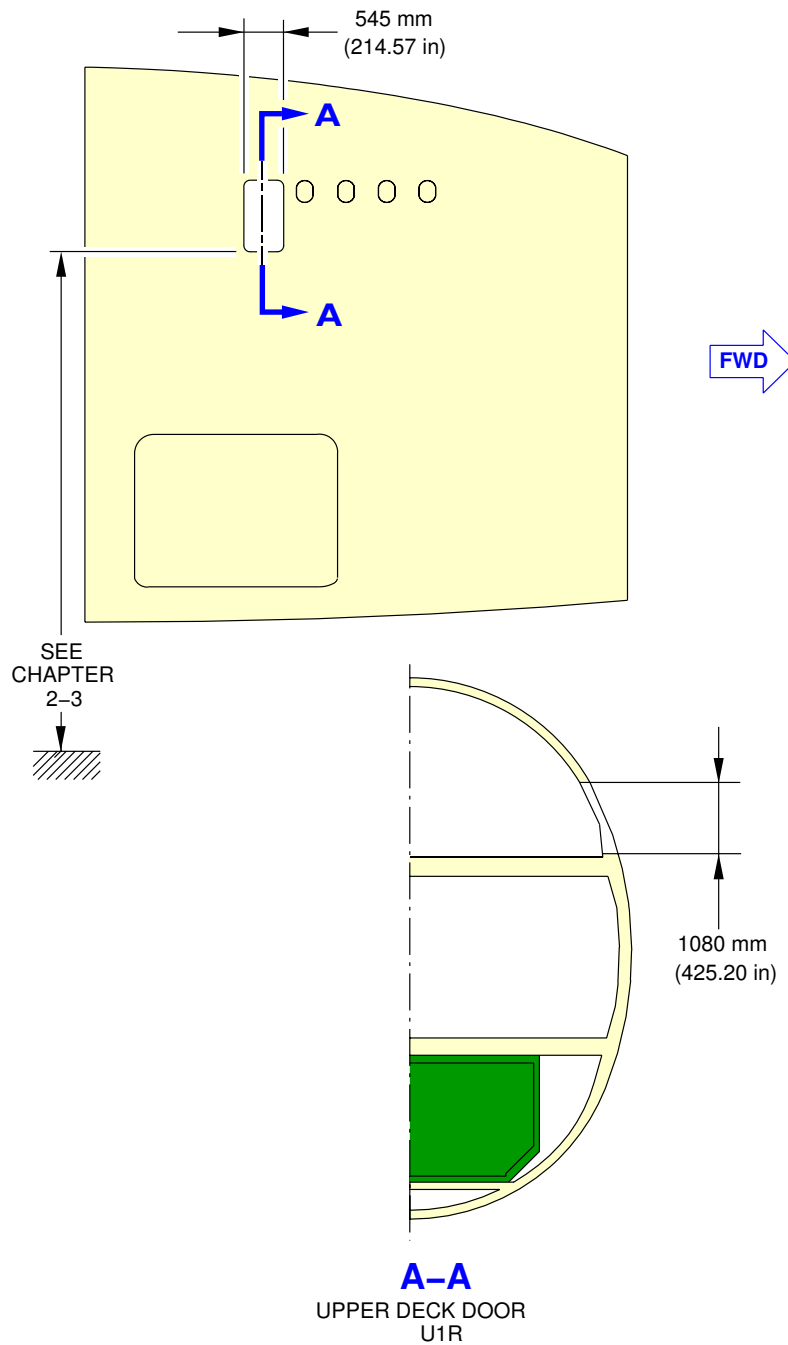
AIRPLANE CHARACTERISTICS

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

Upper Deck Door - Freighter

1. This section gives upper deck door clearances.

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



L_AC_020702_1_0020101_01_00

Door Clearances
Upper Deck Door - A380-800F Models
FIGURE 2



AIRPLANE CHARACTERISTICS

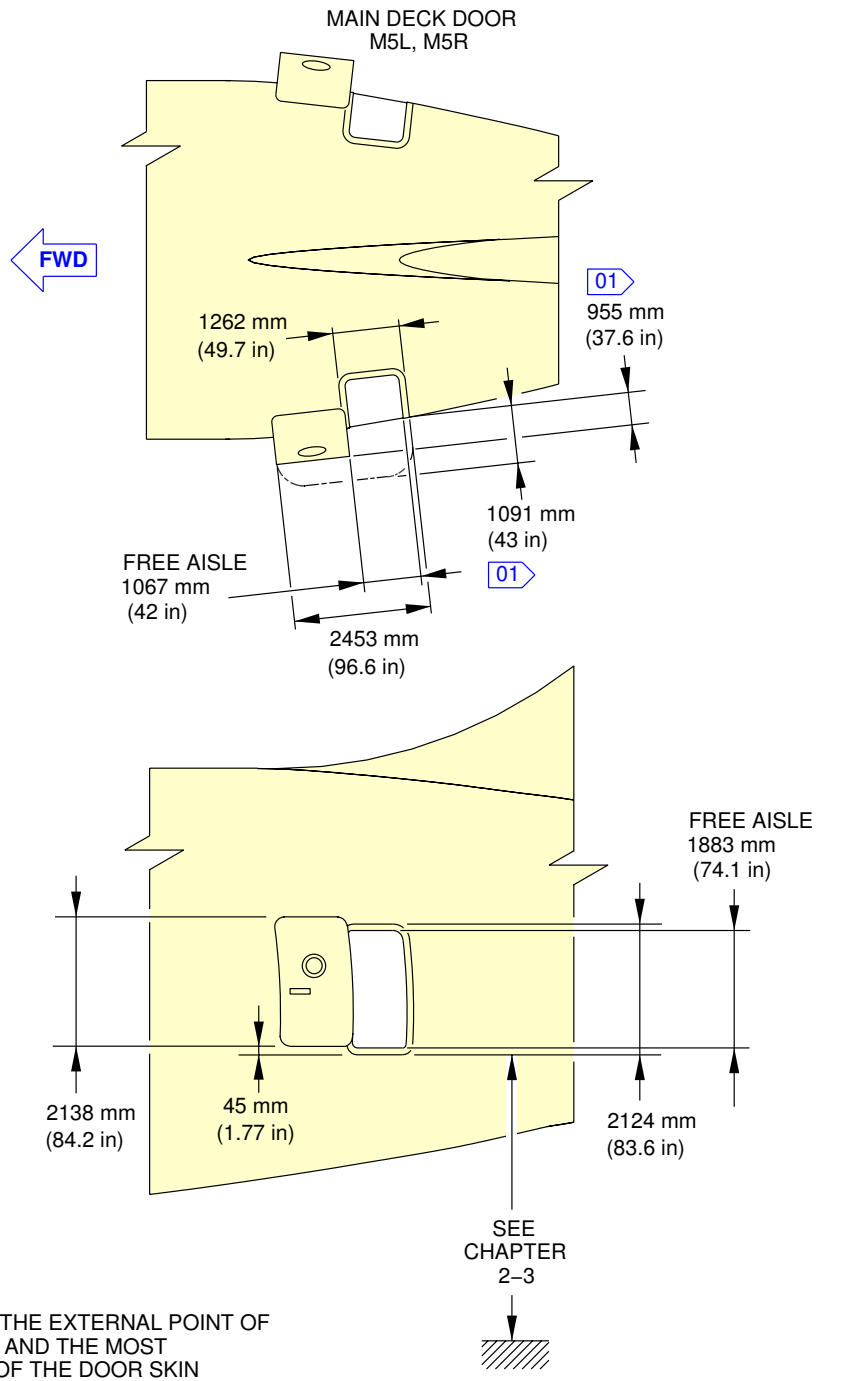
2-7-3 Aft Doors

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

Aft Doors - Pax

1. This section gives aft doors clearances.

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



Door Clearances
Aft Doors - A380-800 Models
FIGURE 1



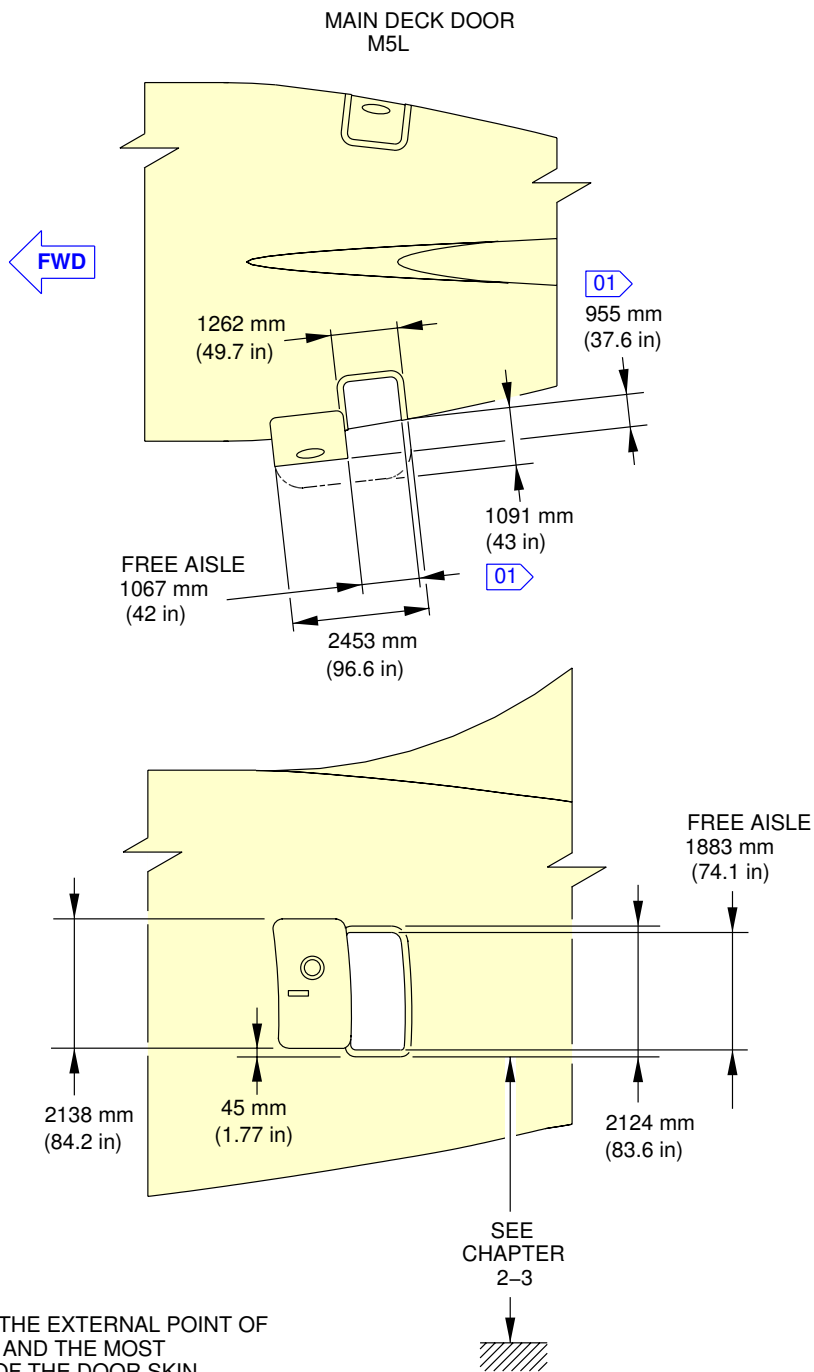
AIRPLANE CHARACTERISTICS

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

Aft Doors - Freighter

1. This section gives aft doors clearances.

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



NOTE:

01 MEASURED FROM THE EXTERNAL POINT OF THE SCUFF PLATE AND THE MOST EXTERNAL POINT OF THE DOOR SKIN

L_AC_020703_1_0020101_01_00

Door Clearances
Aft Doors - A380-800F Models
FIGURE 2



AIRPLANE CHARACTERISTICS

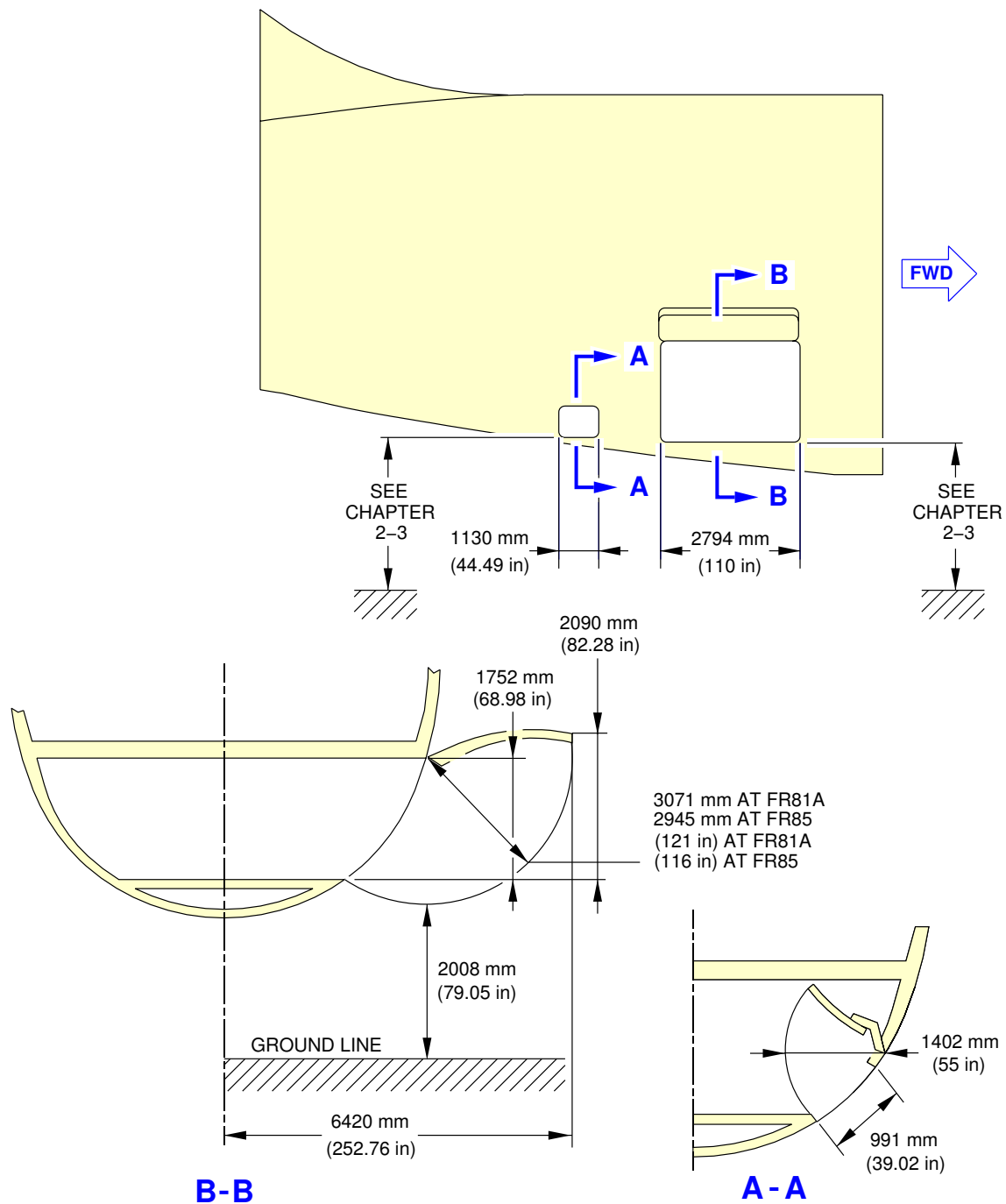
2-7-4 Aft Cargo Compartment Doors

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

Aft Cargo Compartment Doors - Pax

1. This section gives aft cargo compartment doors clearances.

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



L_AC_020704_1_0010101_01_01

Door Clearances
Aft Cargo Compartment Doors - A380-800 Models
FIGURE 1



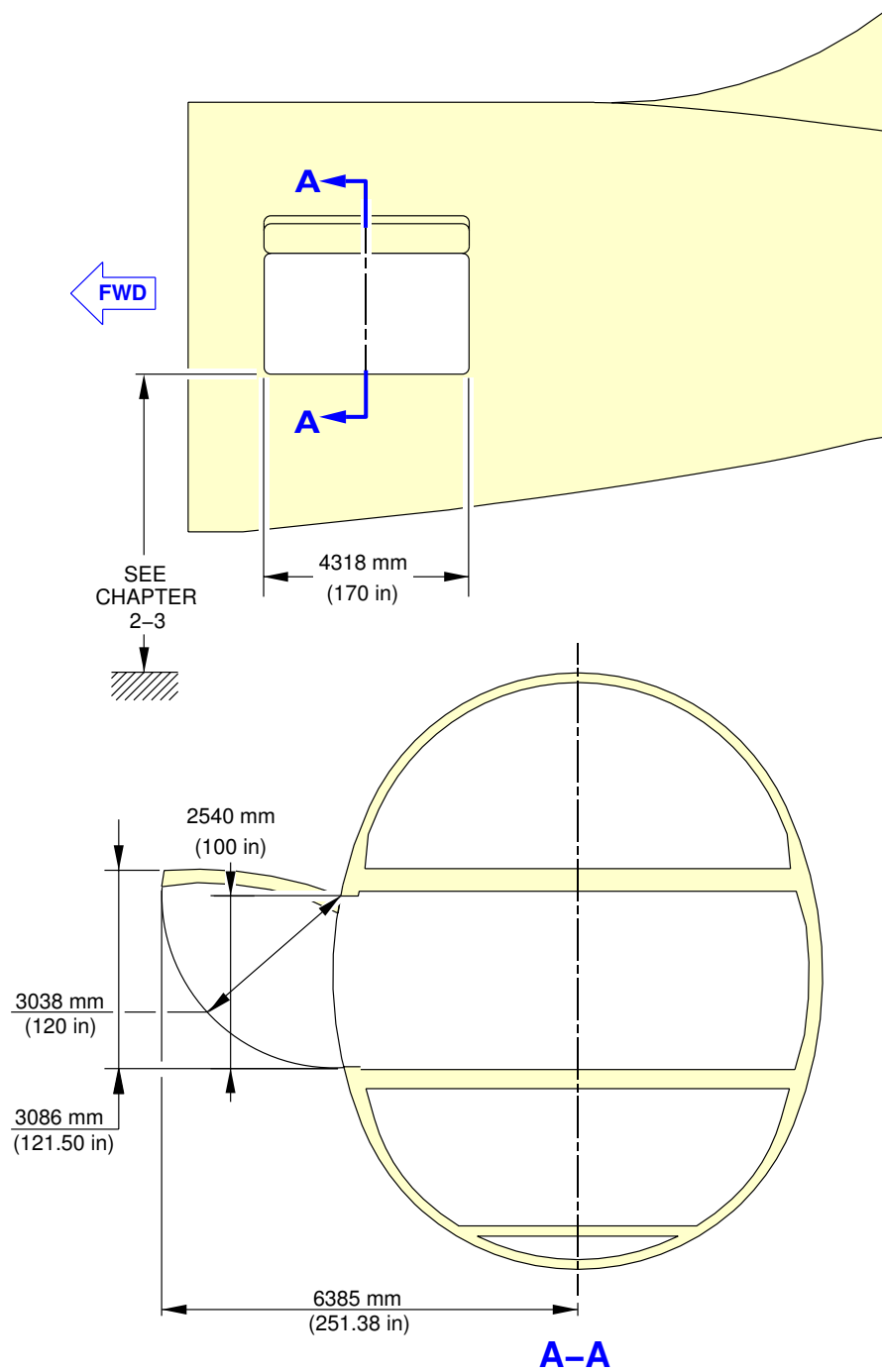
AIRPLANE CHARACTERISTICS

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

Aft Cargo Compartment Doors - Freighter

1. This section gives aft cargo compartment doors clearances.

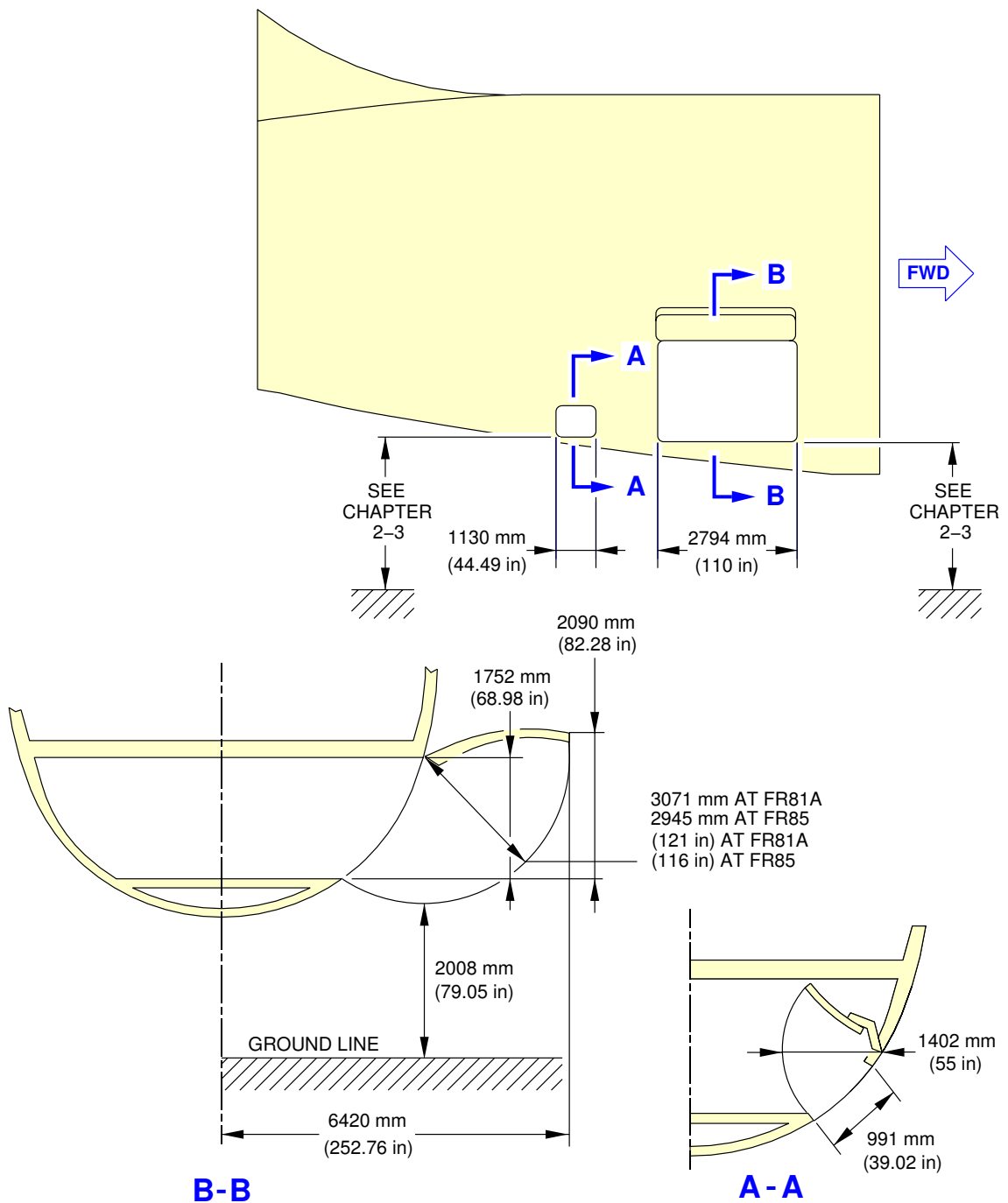
****ON A/C A380-800F Models**



L_AC_020704_1_0020101_01_00

Door Clearances
Main Deck Cargo Door - A380-800F Models
FIGURE 2

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



L_AC_020704_1_0030101_01_01

Door Clearances
Lower Deck Aft Cargo Doors - A380-800F Models
FIGURE 3



AIRPLANE CHARACTERISTICS

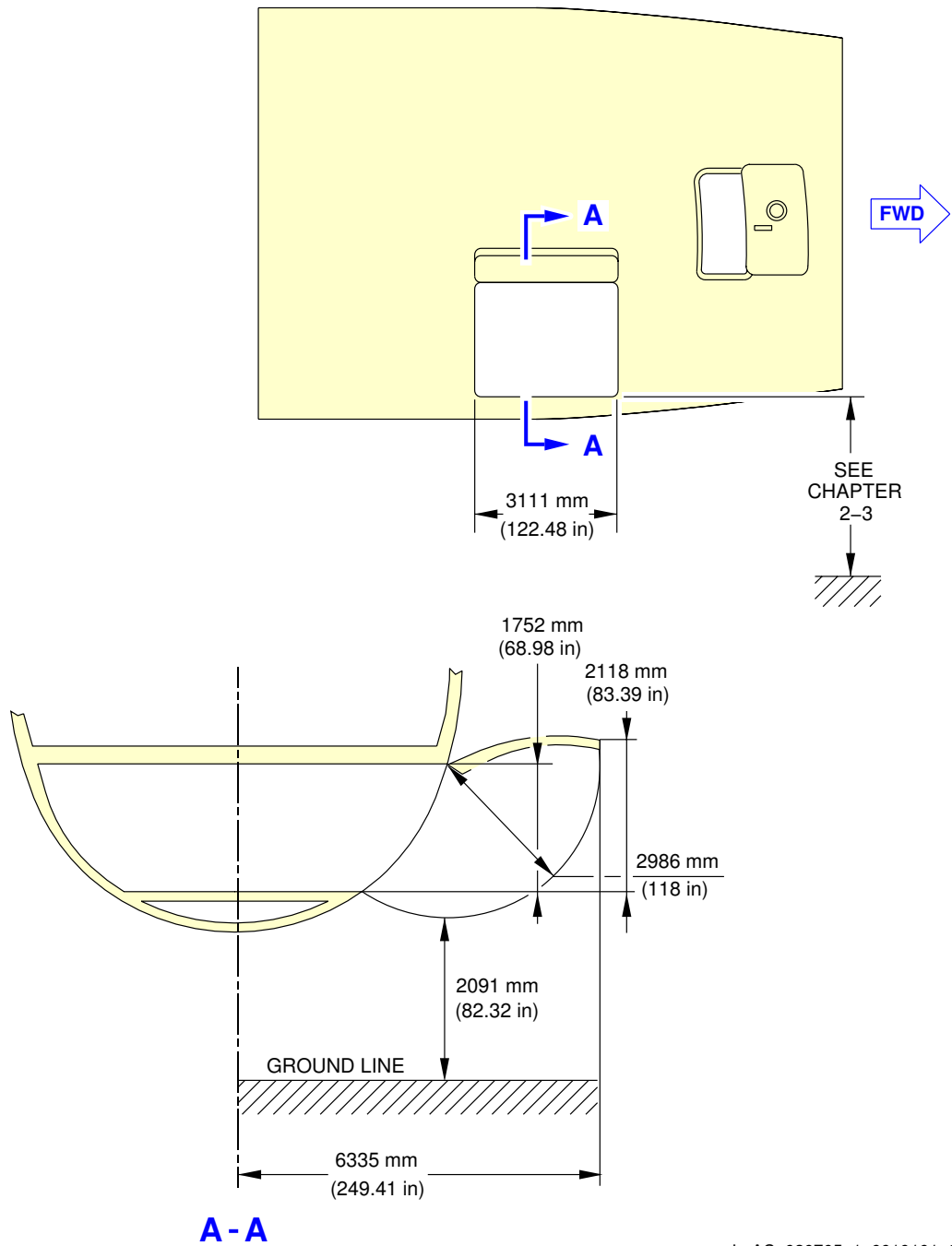
2-7-5 Forward Cargo Compartment Doors

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

Forward Cargo Compartment Doors - Pax

1. This section gives forward cargo compartment doors clearances.

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



L_AC_020705_1_0010101_01_01

Door Clearances
Forward Cargo Compartment Doors - A380-800 Models
FIGURE 1



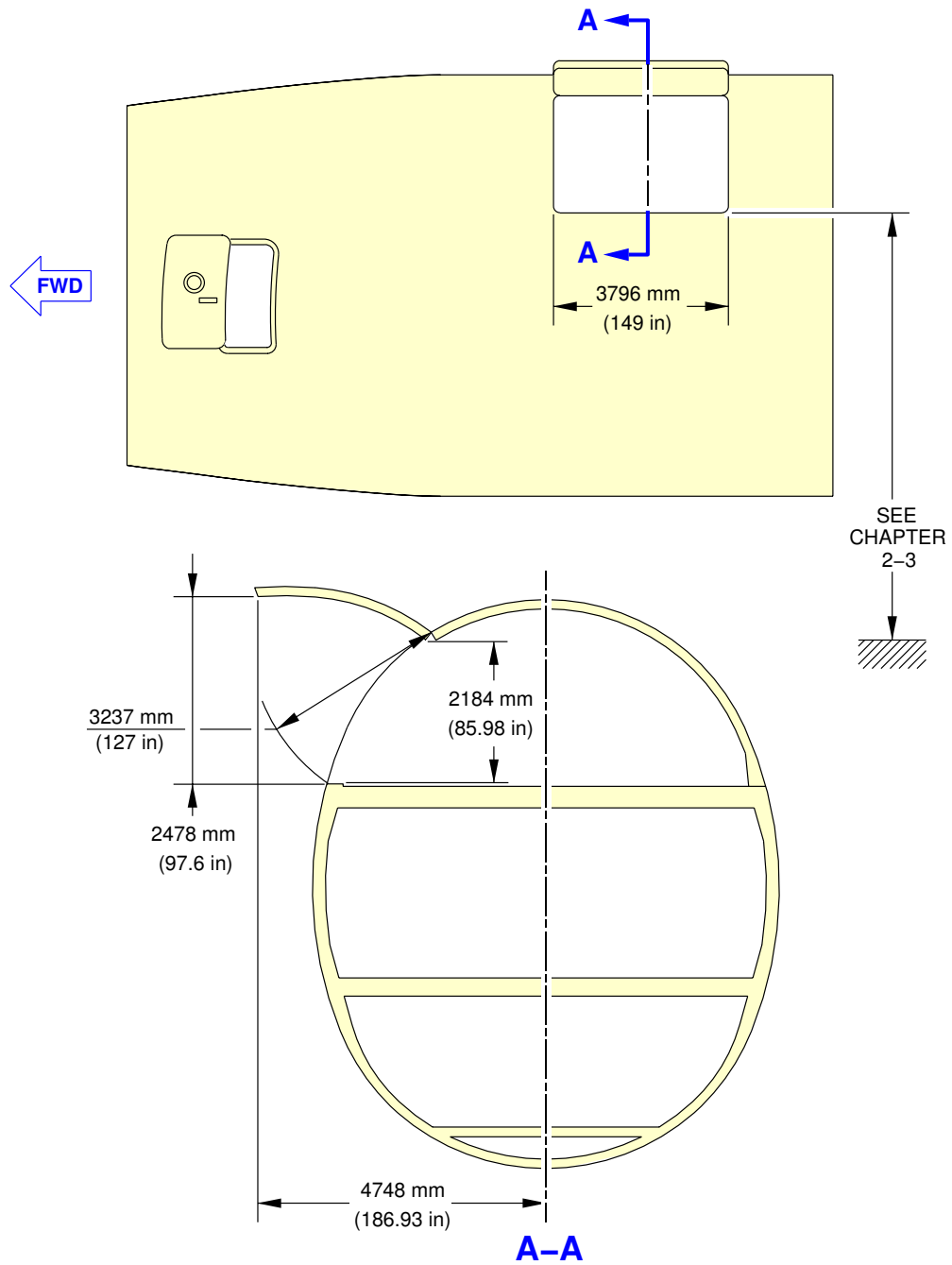
AIRPLANE CHARACTERISTICS

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

Forward Cargo Compartment Doors - Freighter

1. This section gives forward cargo compartment doors clearances.

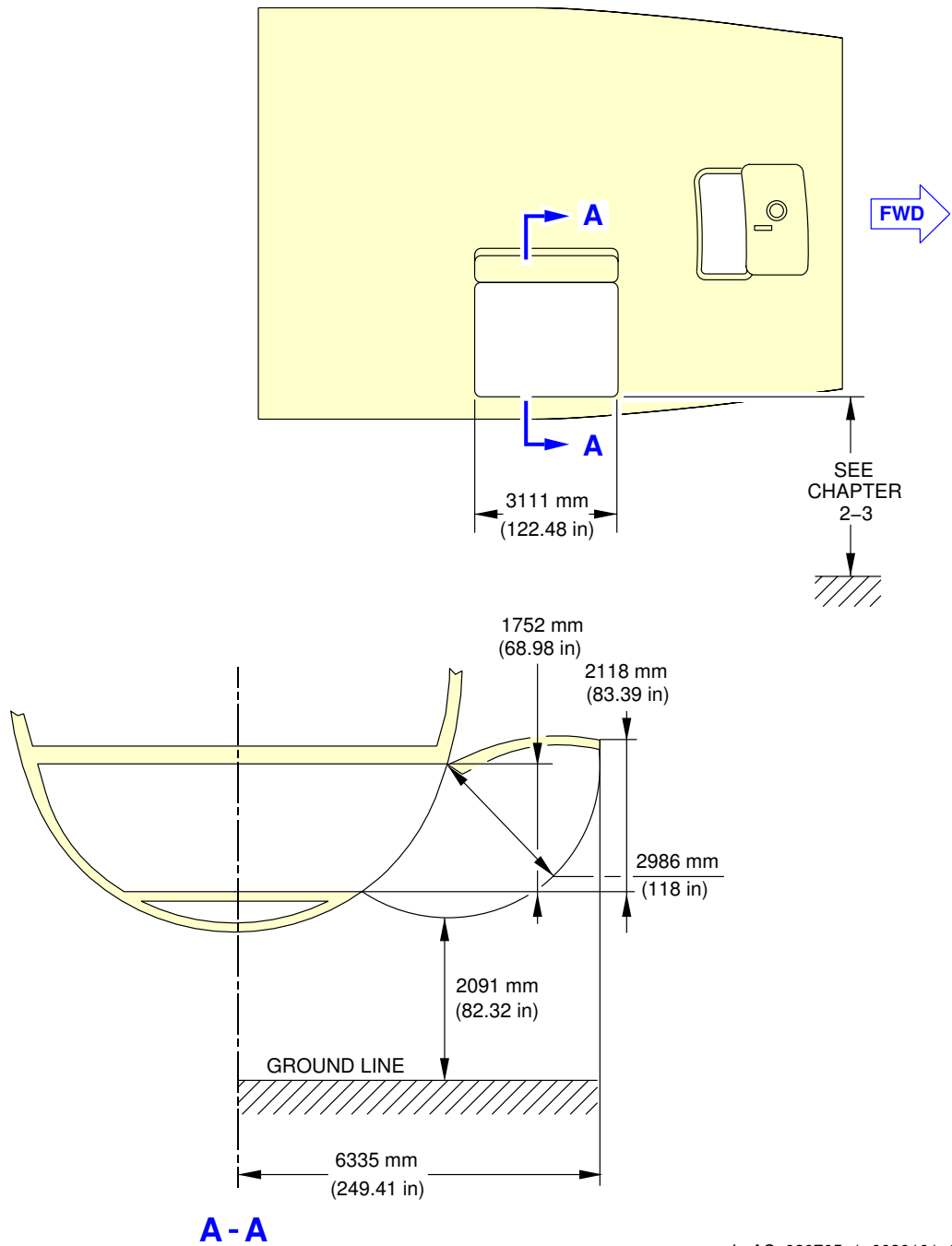
****ON A/C A380-800F Models**



L_AC_020705_1_0020101_01_01

Door Clearances
Upper Deck Cargo Door - A380-800F Models
FIGURE 2

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



L_AC_020705_1_0030101_01_01

Door Clearances
Lower Deck Forward Cargo Door - A380-800F Models
FIGURE 3



AIRPLANE CHARACTERISTICS

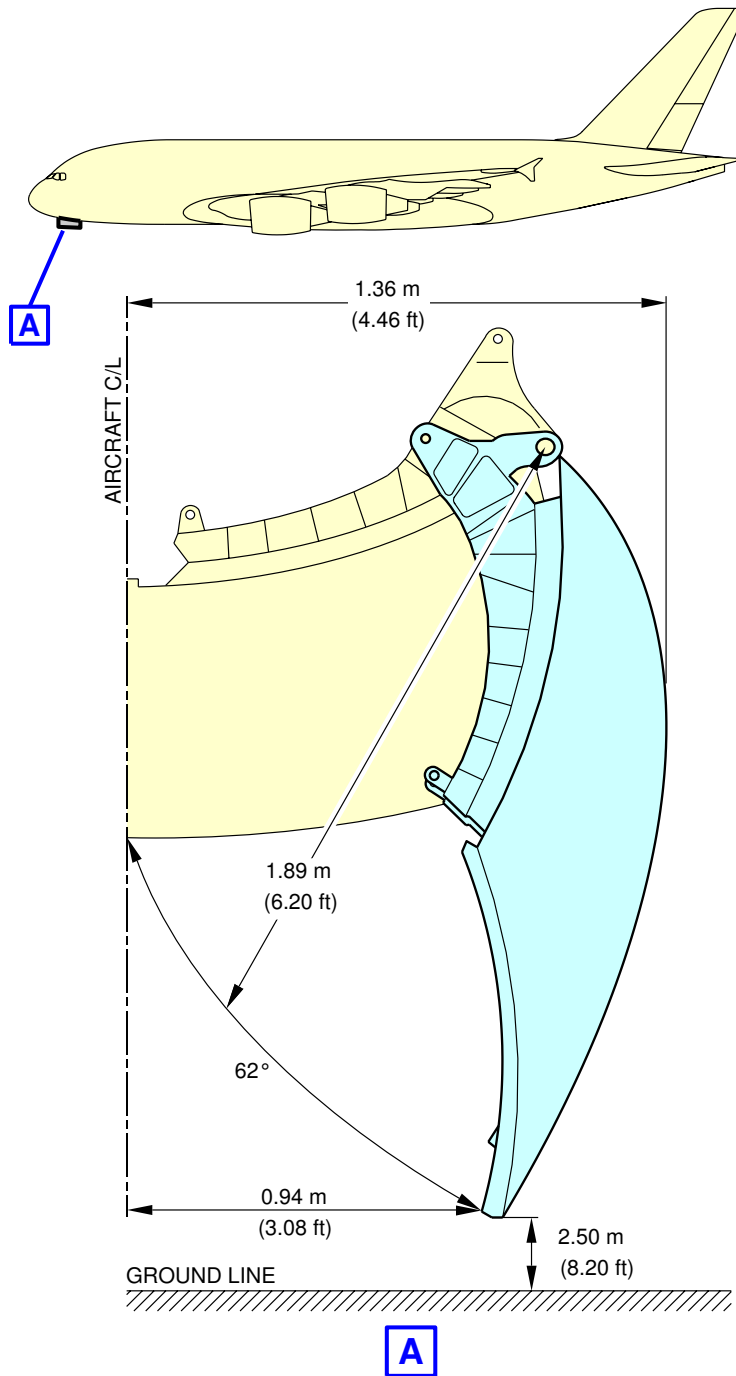
2-7-6 Nose Landing Gear Doors

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

Nose Landing Gear Doors

1. This section gives nose landing gear doors clearances.

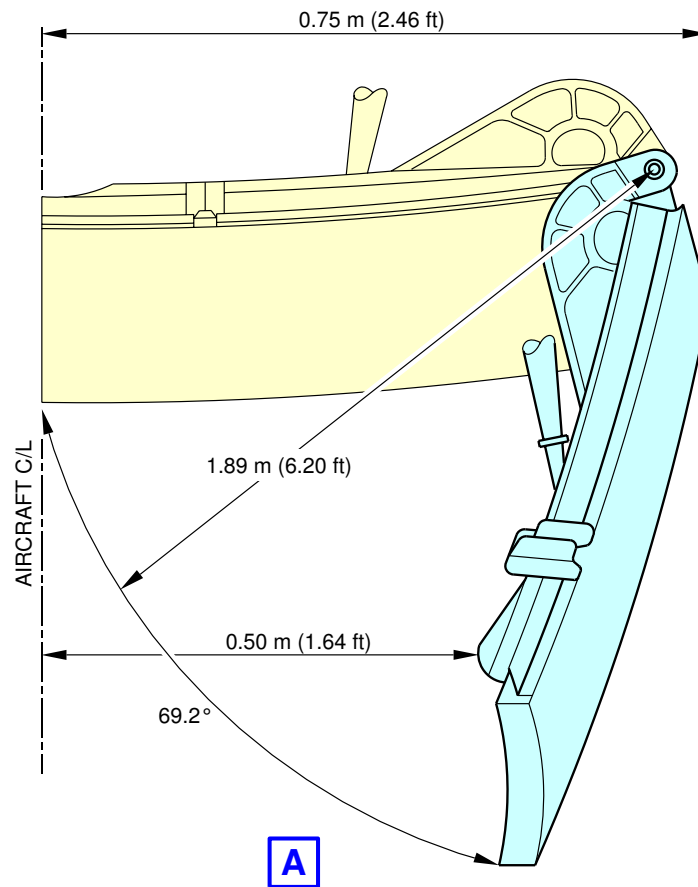
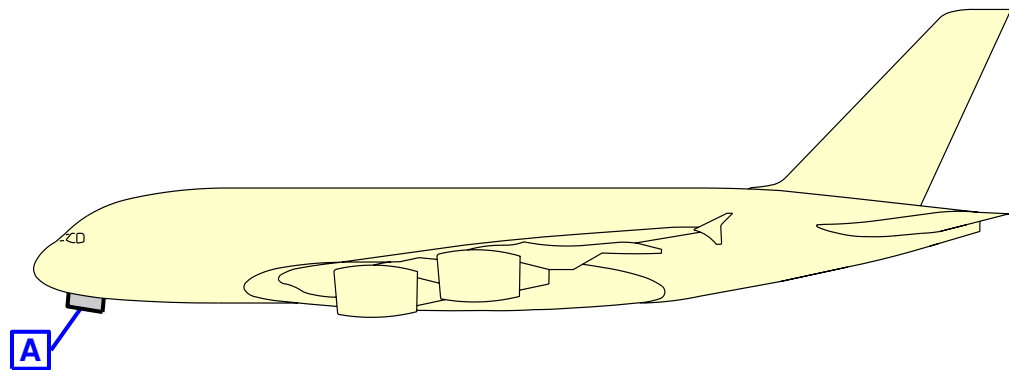
****ON A/C A380-800 Models A380-800F Models**



L_AC_020706_1_0010101_01_00

Door Clearances
Forward Nose Landing Gear Doors
FIGURE 1

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



L_AC_020706_1_0020101_01_00

Door Clearances
Aft Nose Landing Gear Doors
FIGURE 2



AIRPLANE CHARACTERISTICS

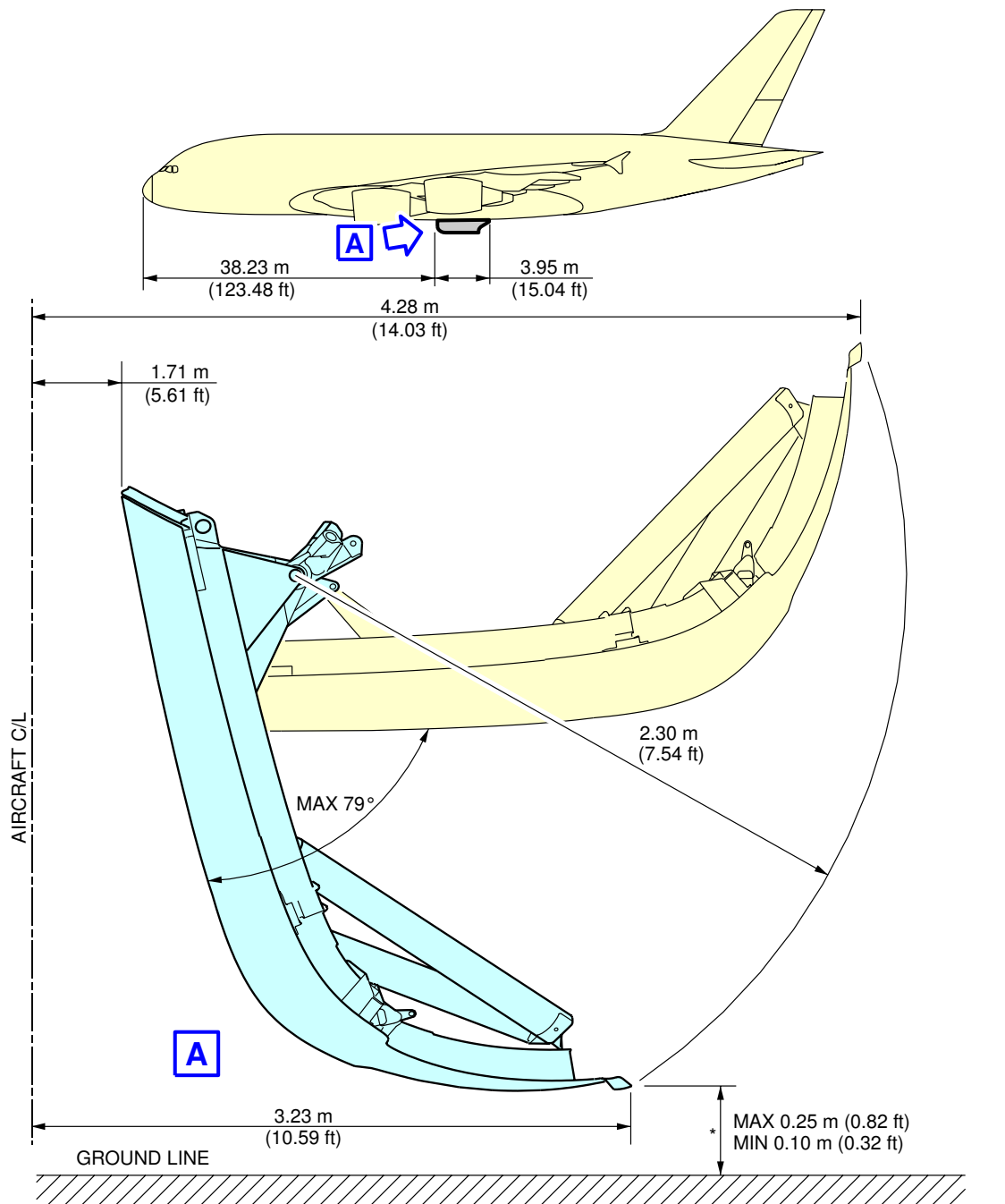
2-7-7 Wing Landing Gear Doors

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

Wing Landing Gear Doors

1. This section gives wing landing gear doors clearances.

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



* DEPENDING ON CG POSITION AND AIRCRAFT WEIGHT

L_AC_020707_1_0010101_01_00

Door Clearances
Wing Landing Gear Doors
FIGURE 1



AIRPLANE CHARACTERISTICS

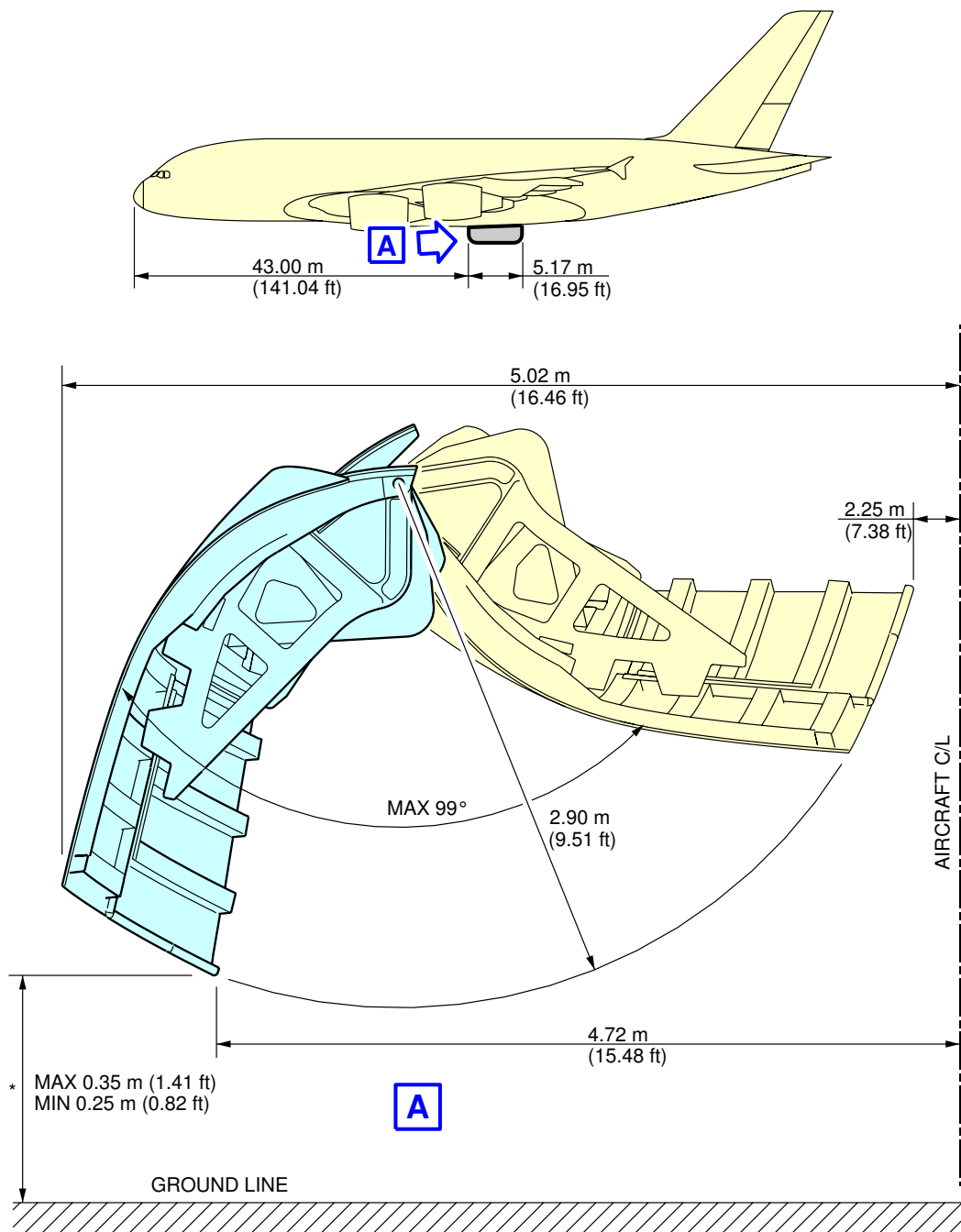
2-7-8 Body Landing Gear Doors

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

Body Landing Gear Doors

1. This section gives body landing gear doors clearances.

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

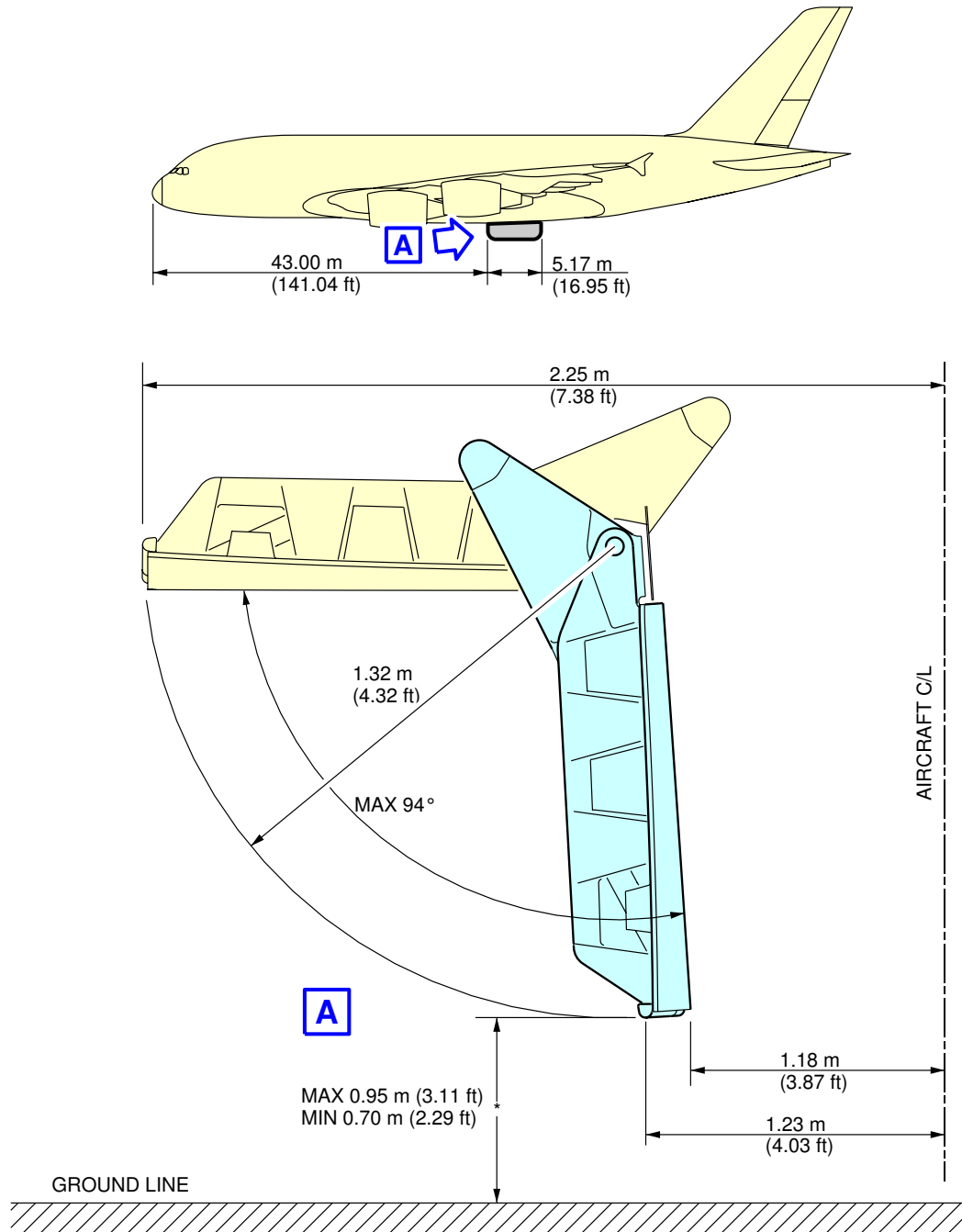


* DEPENDING ON CG POSITION AND AIRCRAFT WEIGHT

L_AC_020708_1_0010101_01_00

Door Clearances
Body Landing Gear Doors (Sheet 1)
FIGURE 1

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



* DEPENDING ON CG POSITION AND AIRCRAFT WEIGHT L_AC_020708_1_0020101_01_00

Door Clearances
Body Landing Gear Doors (Sheet 2)
FIGURE 2



AIRPLANE CHARACTERISTICS

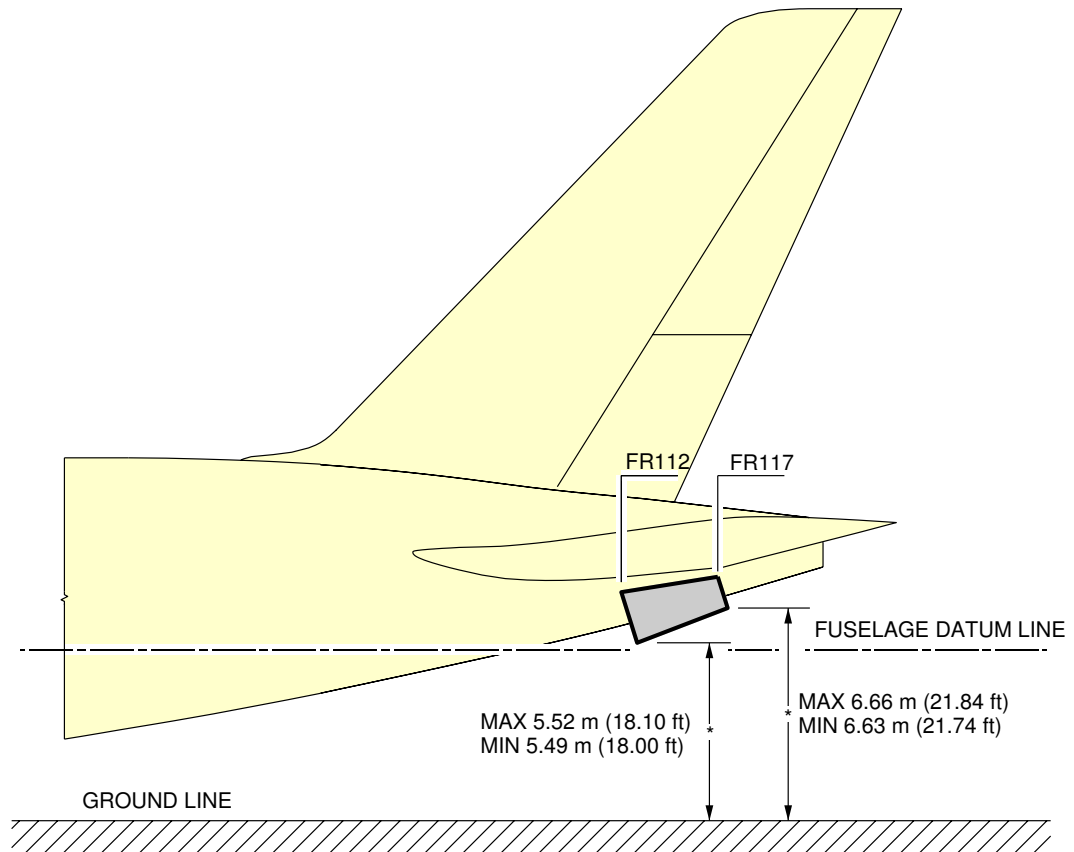
2-7-9 APU Doors

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

APU Doors

1. This section gives APU doors clearances.

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



* DEPENDING ON CG POSITION AND AIRCRAFT WEIGHT

L_AC_020709_1_0010101_01_00

Door Clearances
APU Doors
FIGURE 1



AIRPLANE CHARACTERISTICS

AIRPLANE PERFORMANCE

3-1-0 General Information

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

General Information

1. Standard day temperatures for the altitudes shown are tabulated below :

Standard day temperatures for the altitudes			
Altitude		Standard Day Temperature	
FEET	METERS	° F	° C
0	0	59.0	15.0
2000	610	51.9	11.6
4000	1220	44.7	7.1
6000	1830	37.6	3.1
8000	2440	30.5	-0.8



AIRPLANE CHARACTERISTICS

3-2-0 Payload / Range

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

Payload /Range

1. Payload / Range



AIRPLANE CHARACTERISTICS

3-2-1 ISA Conditions

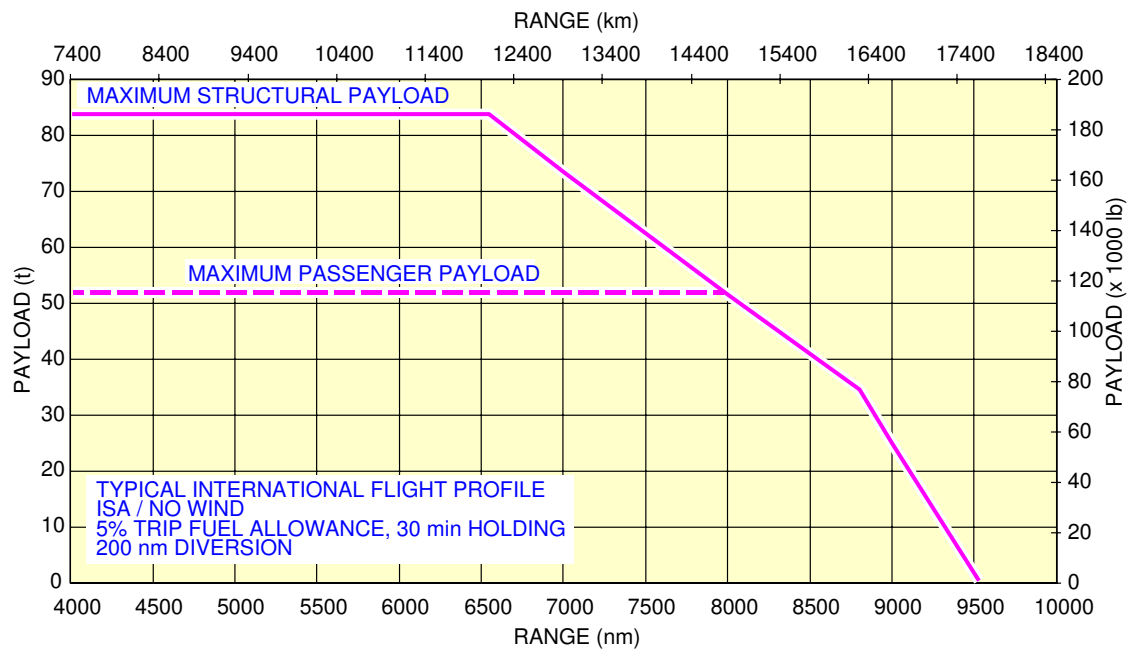
****ON A/C A380-800 Models**

Payload/Range - Pax

1. This section gives the payload/range at ISA conditions.

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

NOTE: THESE CURVES ARE GIVEN FOR INFORMATION ONLY.
THE APPROVED VALUES ARE STATED IN THE "OPERATING MANUALS"
SPECIFIC TO THE AIRLINE OPERATING THE AIRCRAFT.



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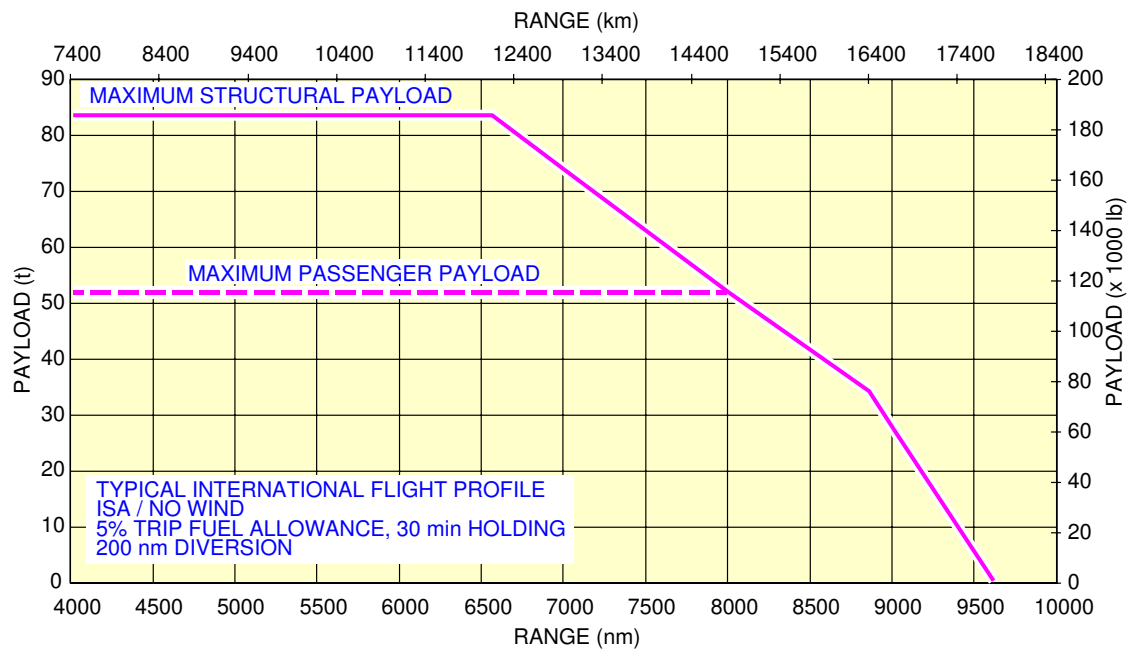
Payload/Range
ISA Conditions - TRENT 900 Engines
FIGURE 1



AIRPLANE CHARACTERISTICS

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

NOTE: THESE CURVES ARE GIVEN FOR INFORMATION ONLY.
THE APPROVED VALUES ARE STATED IN THE "OPERATING MANUALS"
SPECIFIC TO THE AIRLINE OPERATING THE AIRCRAFT.



L_AC_030201_1_0080101_01_00

Payload/Range
ISA Conditions - GP 7200 Engines
FIGURE 2



AIRPLANE CHARACTERISTICS

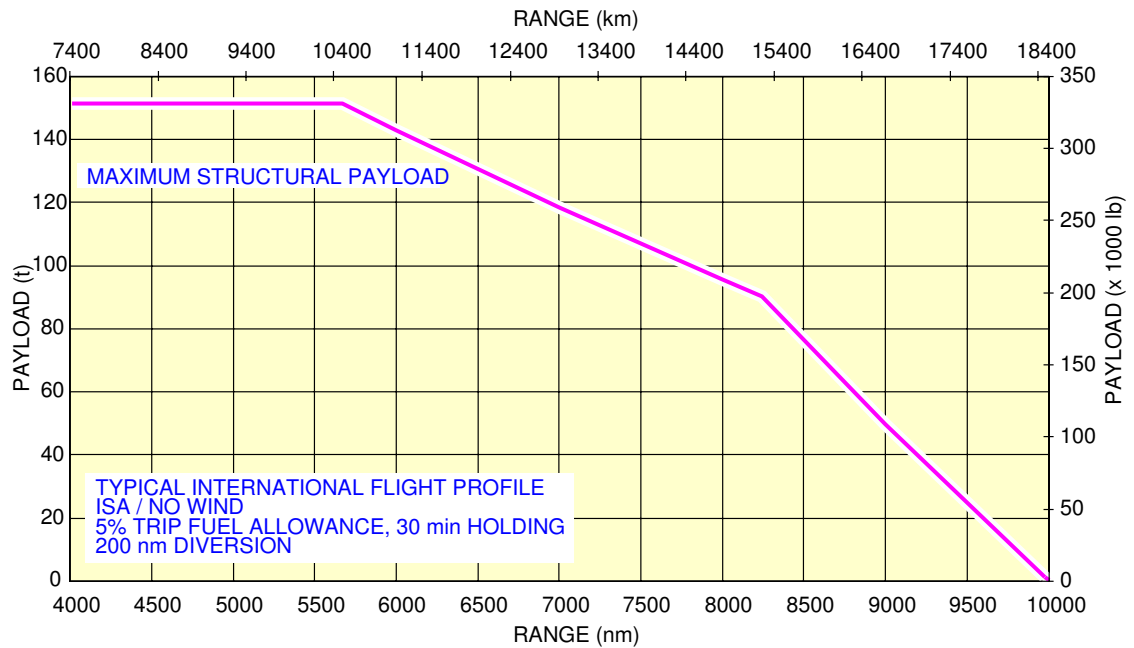
****ON A/C A380-800F Models**

Payload/Range - Freighter

1. This section gives the payload/range at ISA conditions.

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

NOTE: THESE CURVES ARE GIVEN FOR INFORMATION ONLY.
THE APPROVED VALUES ARE STATED IN THE "OPERATING MANUALS"
SPECIFIC TO THE AIRLINE OPERATING THE AIRCRAFT.

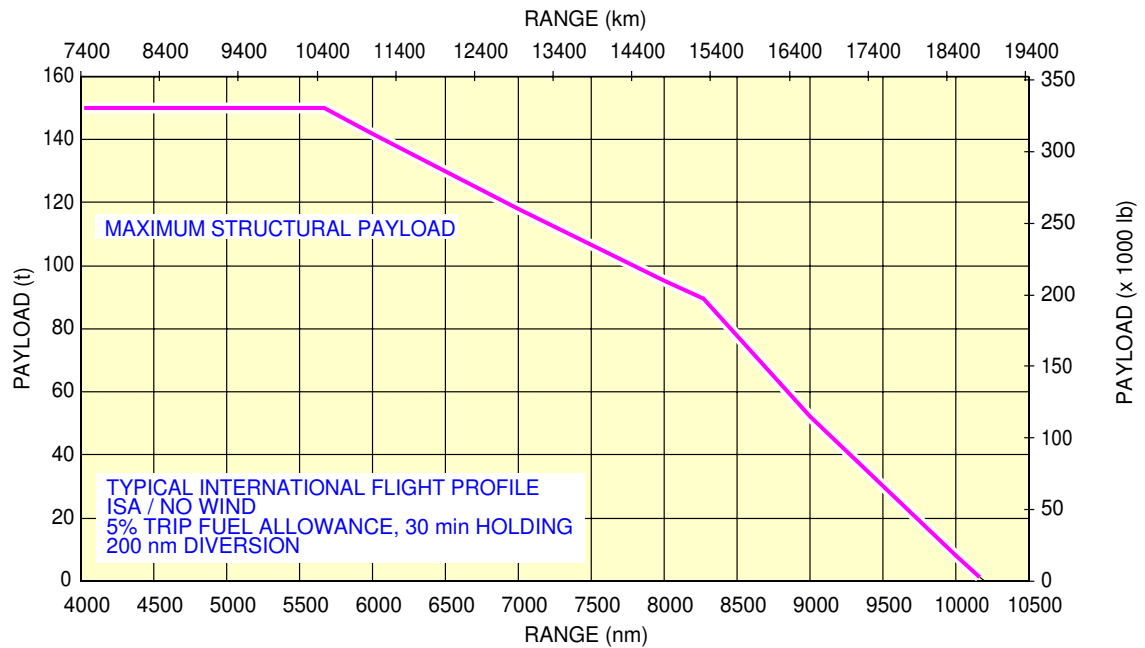


L_AC_030201_1_0060101_01_00

Payload/Range
ISA Conditions - TRENT 900 Engines
FIGURE 3

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

NOTE: THESE CURVES ARE GIVEN FOR INFORMATION ONLY.
THE APPROVED VALUES ARE STATED IN THE "OPERATING MANUALS"
SPECIFIC TO THE AIRLINE OPERATING THE AIRCRAFT.



L_AC_030201_1_0090101_01_00

Payload/Range
ISA Conditions - GP 7200 Engines
FIGURE 4



AIRPLANE CHARACTERISTICS

3-3-0 Take Off Weight Limitation

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

Take Off Weight Limitation

1. Take Off Weight Limitation



AIRPLANE CHARACTERISTICS

3-3-1 ISA Conditions

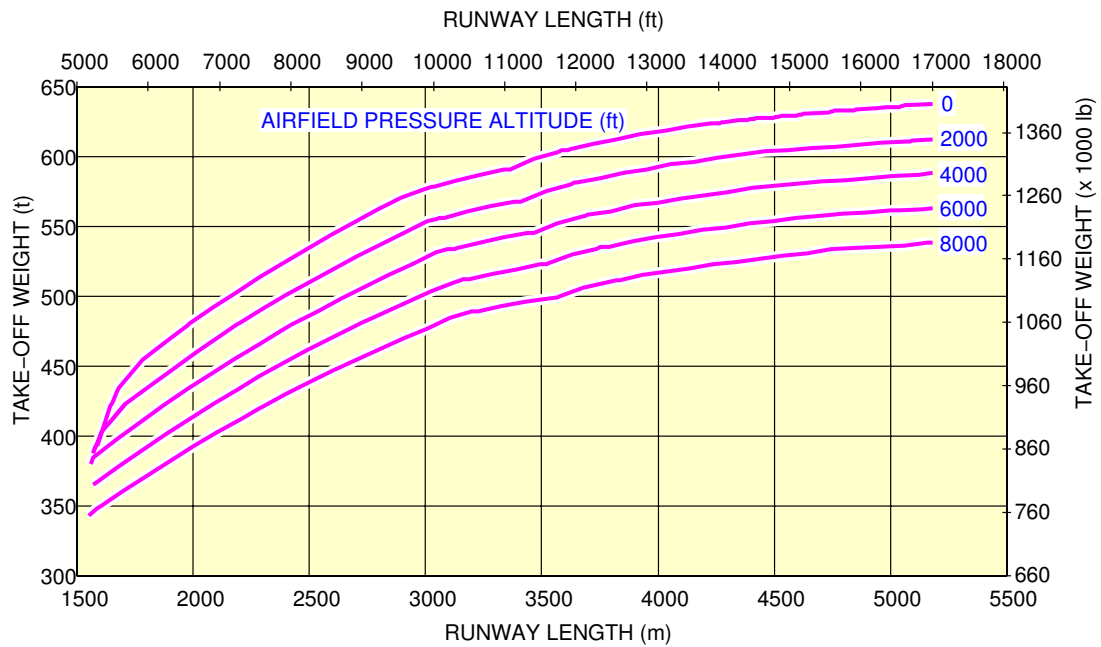
****ON A/C A380-800 Models**

Take Off Weight Limitation - Pax

1. This section gives the take-off weight limitation at ISA conditions.

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

NOTE: THESE CURVES ARE GIVEN FOR INFORMATION ONLY.
THE APPROVED VALUES ARE STATED IN THE "OPERATING MANUALS"
SPECIFIC TO THE AIRLINE OPERATING THE AIRCRAFT.

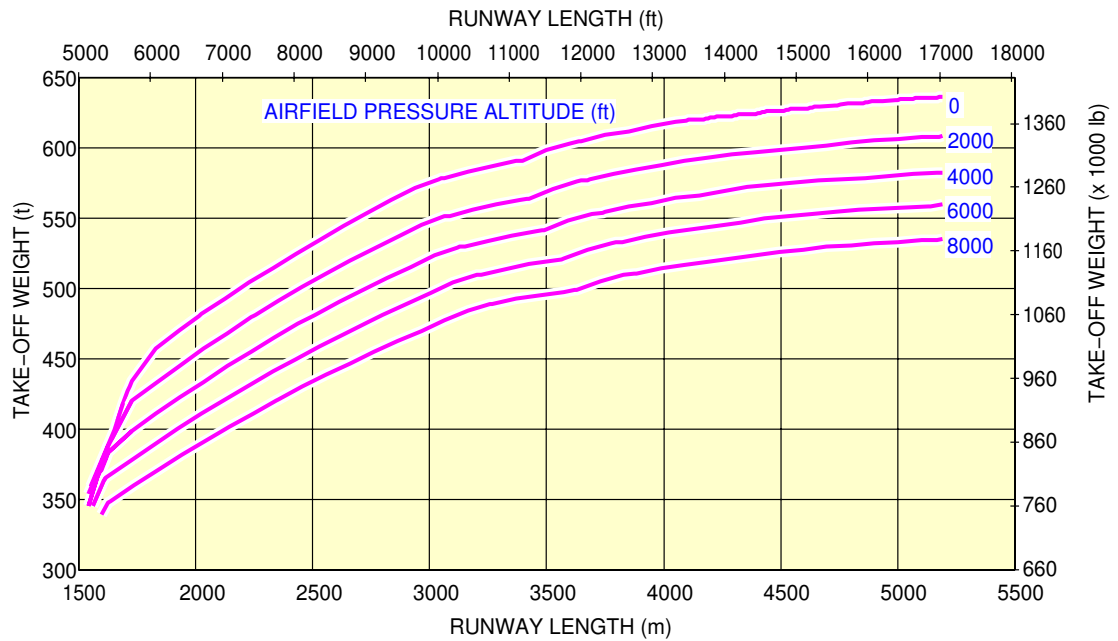


L_AC_030301_1_0010101_01_00

Take-Off Weight Limitation
ISA Conditions - TRENT 900 Engines
FIGURE 1

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

NOTE: THESE CURVES ARE GIVEN FOR INFORMATION ONLY.
THE APPROVED VALUES ARE STATED IN THE "OPERATING MANUALS"
SPECIFIC TO THE AIRLINE OPERATING THE AIRCRAFT.



L_AC_030301_1_0080101_01_00

Take-Off Weight Limitation
ISA Conditions - GP 7200 Engines
FIGURE 2



AIRPLANE CHARACTERISTICS

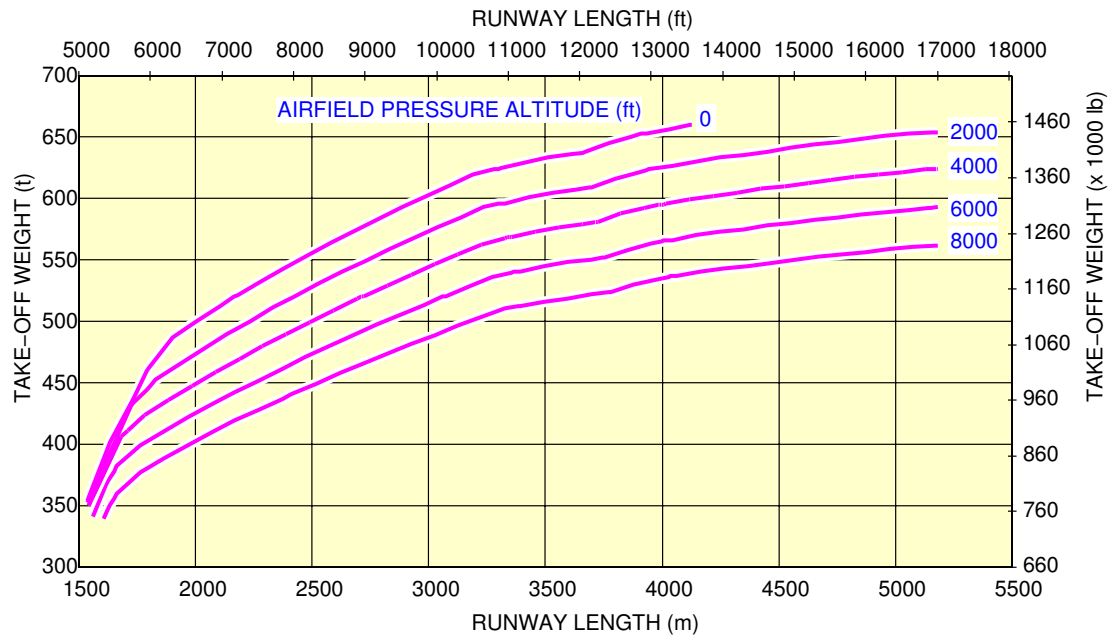
****ON A/C A380-800F Models**

Take-Off Weight Limitation - Freighter

1. This section gives the take-off weight limitation at ISA conditions.

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

NOTE: THESE CURVES ARE GIVEN FOR INFORMATION ONLY.
THE APPROVED VALUES ARE STATED IN THE "OPERATING MANUALS"
SPECIFIC TO THE AIRLINE OPERATING THE AIRCRAFT.

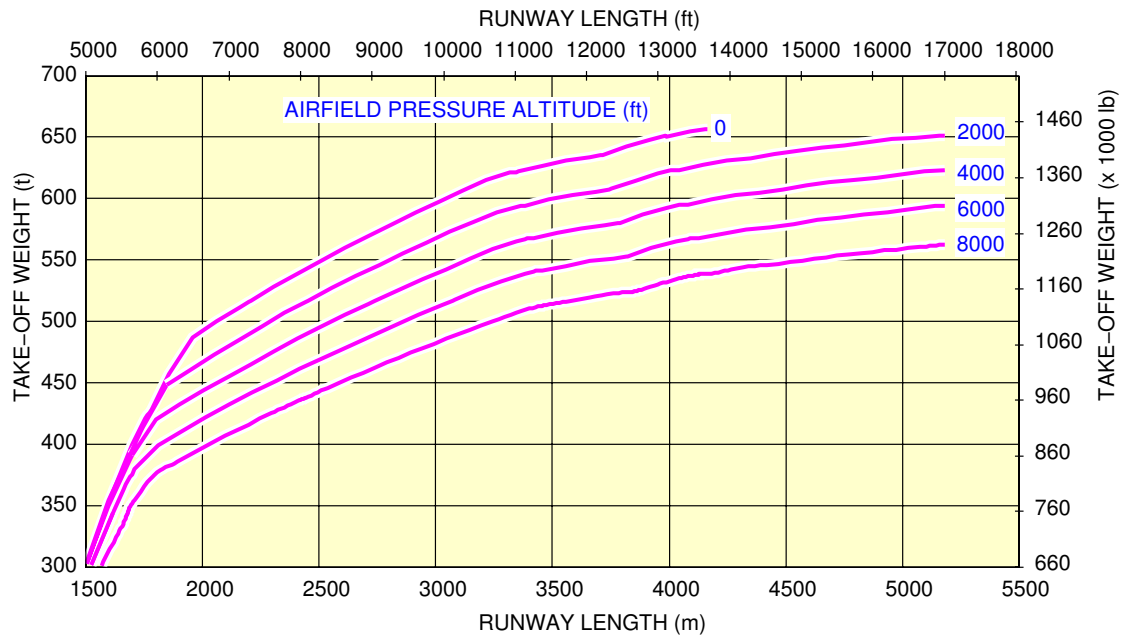


L_AC_030301_1_0060101_01_00

Take-Off Weight Limitation
ISA Conditions - TRENT 900 Engines
FIGURE 3

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

NOTE: THESE CURVES ARE GIVEN FOR INFORMATION ONLY.
THE APPROVED VALUES ARE STATED IN THE "OPERATING MANUALS"
SPECIFIC TO THE AIRLINE OPERATING THE AIRCRAFT.



L_AC_030301_1_0090101_01_00

Take-Off Weight Limitation
ISA Conditions - GP 7200 Engines
FIGURE 4



AIRPLANE CHARACTERISTICS

3-3-2 ISA + 15 ° C (59 ° F)

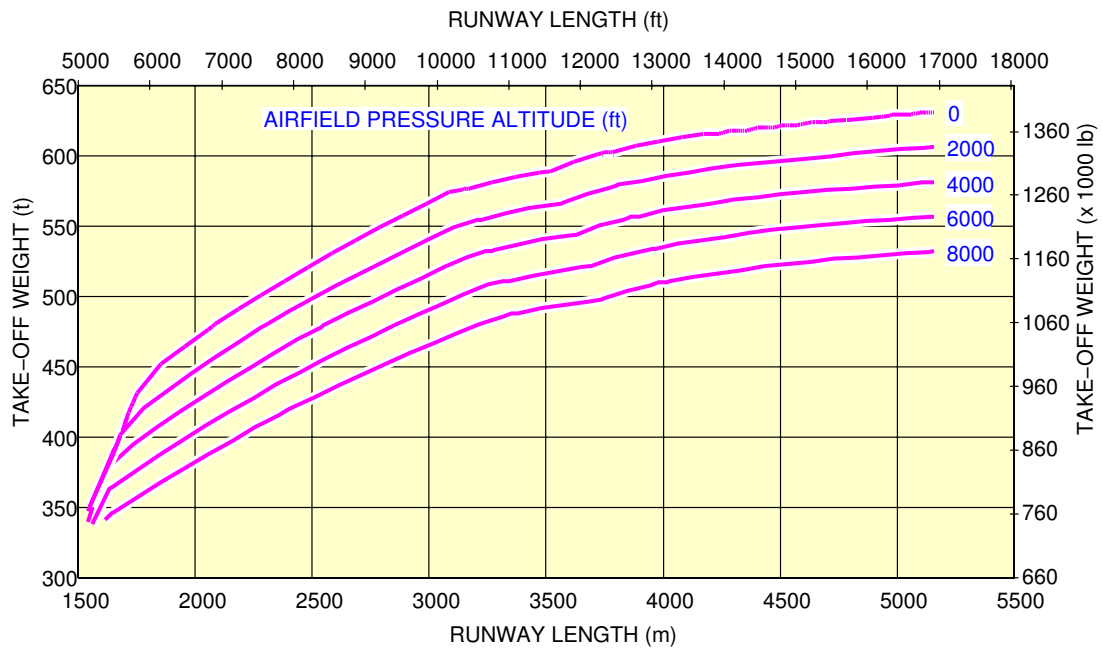
****ON A/C A380-800 Models**

ISA + 15 ° C (59 ° F) - Pax

1. This section gives the take-off weight limitation at ISA +15 ° C (59 ° F) conditions.

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

NOTE: THESE CURVES ARE GIVEN FOR INFORMATION ONLY.
THE APPROVED VALUES ARE STATED IN THE "OPERATING MANUALS"
SPECIFIC TO THE AIRLINE OPERATING THE AIRCRAFT.

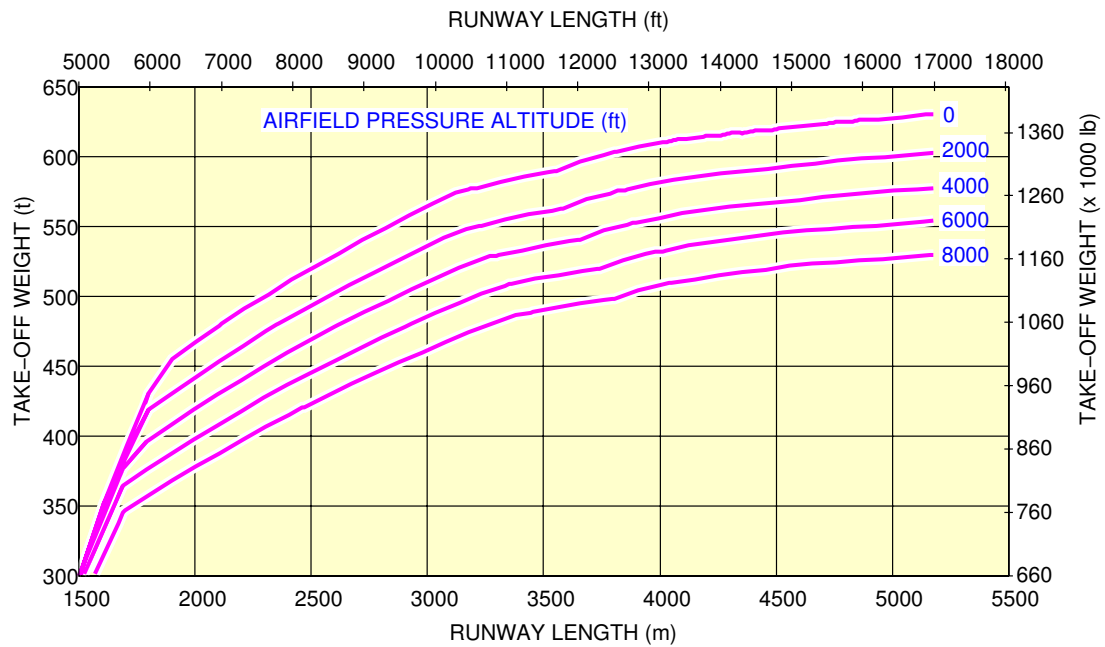


L_AC_030302_1_0010101_01_00

Take-Off Weight Limitation
ISA + 15 °C (59 °F) - TRENT 900 Engines
FIGURE 1

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

NOTE: THESE CURVES ARE GIVEN FOR INFORMATION ONLY.
THE APPROVED VALUES ARE STATED IN THE "OPERATING MANUALS"
SPECIFIC TO THE AIRLINE OPERATING THE AIRCRAFT.



L_AC_030302_1_0080101_01_00

Take-Off Weight Limitation
ISA + 15 °C (59 °F) - GP 7200 Engines
FIGURE 2



AIRPLANE CHARACTERISTICS

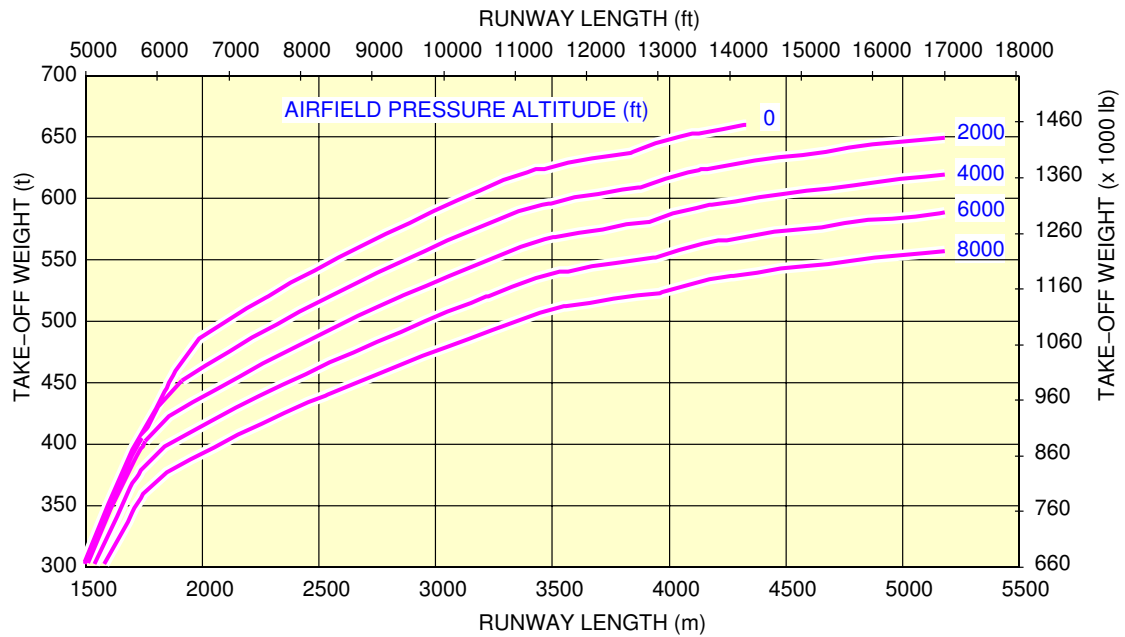
****ON A/C A380-800F Models**

ISA + 15 °C (59 °F) - Freighter

1. This section gives the take-off weight limitation at ISA +15 °C (59 °F) conditions.

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

NOTE: THESE CURVES ARE GIVEN FOR INFORMATION ONLY.
THE APPROVED VALUES ARE STATED IN THE "OPERATING MANUALS"
SPECIFIC TO THE AIRLINE OPERATING THE AIRCRAFT.

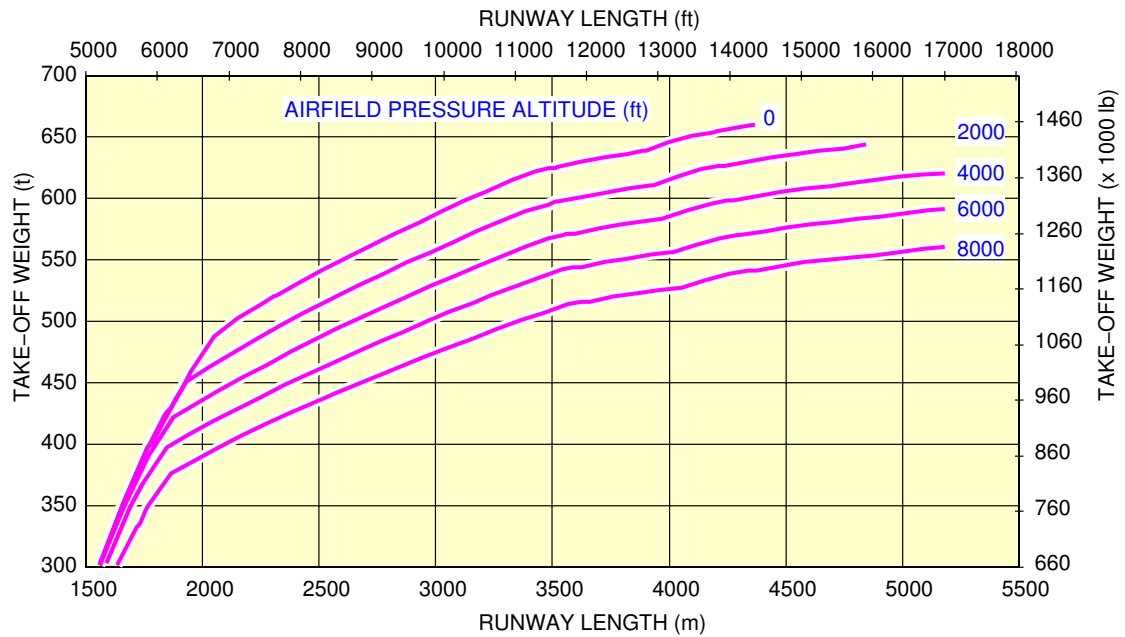


L_AC_030302_1_0060101_01_00

Take-Off Weight Limitation
ISA + 15 °C (59 °F) - TRENT 900 Engines
FIGURE 3

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

NOTE: THESE CURVES ARE GIVEN FOR INFORMATION ONLY.
THE APPROVED VALUES ARE STATED IN THE "OPERATING MANUALS"
SPECIFIC TO THE AIRLINE OPERATING THE AIRCRAFT.



L_AC_030302_1_0090101_01_00

Take-Off Weight Limitation
ISA + 15 °C (59 °F) - GP 7200 Engines
FIGURE 4



AIRPLANE CHARACTERISTICS

3-4-0 Landing Field Length

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

Landing Field Length

1. Landing Field Length



AIRPLANE CHARACTERISTICS

3-4-1 Landing Field Length

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

Landing Field Length - Pax

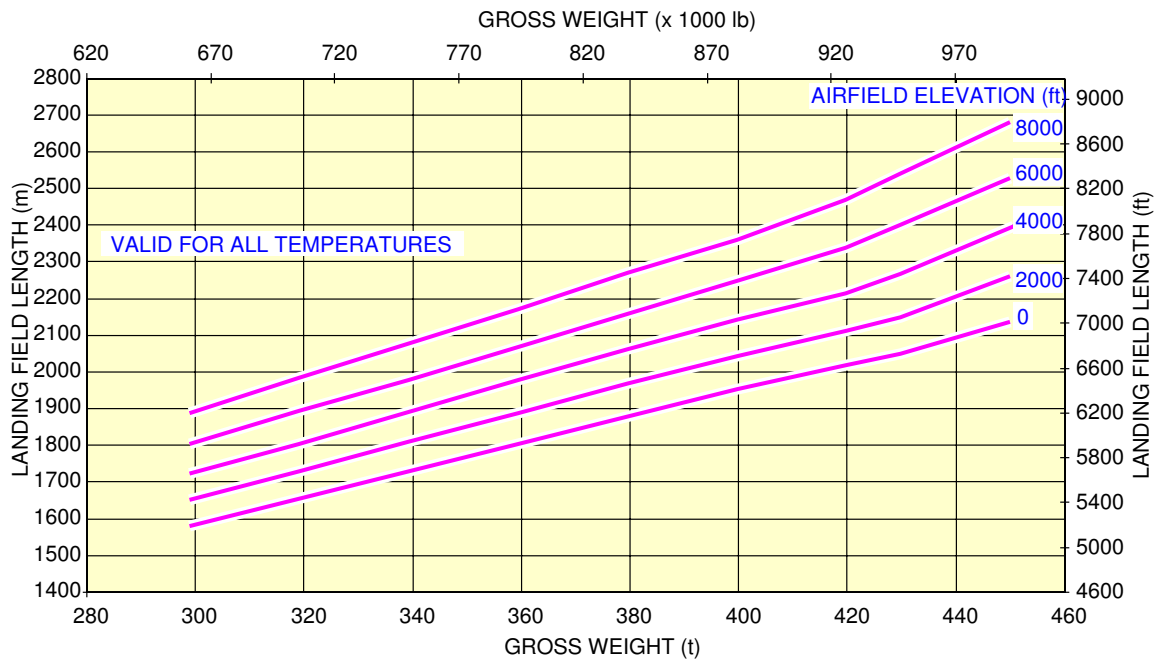
1. This section gives the landing field length.



AIRPLANE CHARACTERISTICS

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

NOTE: THESE CURVES ARE GIVEN FOR INFORMATION ONLY.
THE APPROVED VALUES ARE STATED IN THE "OPERATING MANUALS"
SPECIFIC TO THE AIRLINE OPERATING THE AIRCRAFT.



L_AC_030401_1_0010101_01_01

Landing Field Length
Landing Field Length - A380-800 Models
FIGURE 1



AIRPLANE CHARACTERISTICS

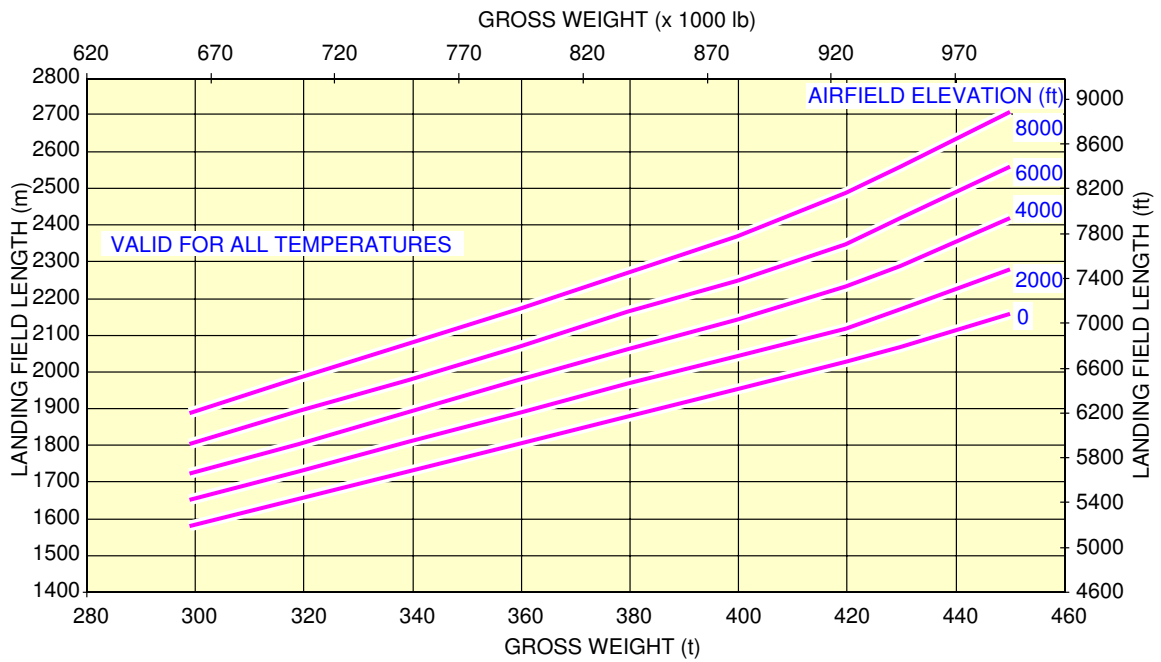
****ON A/C A380-800F Models**

Landing Field Length - Freighter

1. This section gives the landing field length.

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

NOTE: THESE CURVES ARE GIVEN FOR INFORMATION ONLY.
THE APPROVED VALUES ARE STATED IN THE "OPERATING MANUALS"
SPECIFIC TO THE AIRLINE OPERATING THE AIRCRAFT.



L_AC_030401_1_0030101_01_00

Landing Field Length
Landing Field Length - A380-800F Models
FIGURE 2



AIRPLANE CHARACTERISTICS

3-5-0 Final Approach Speed

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

Final Approach Speed

1. Final Approach Speed



AIRPLANE CHARACTERISTICS

3-5-1 Final Approach Speed

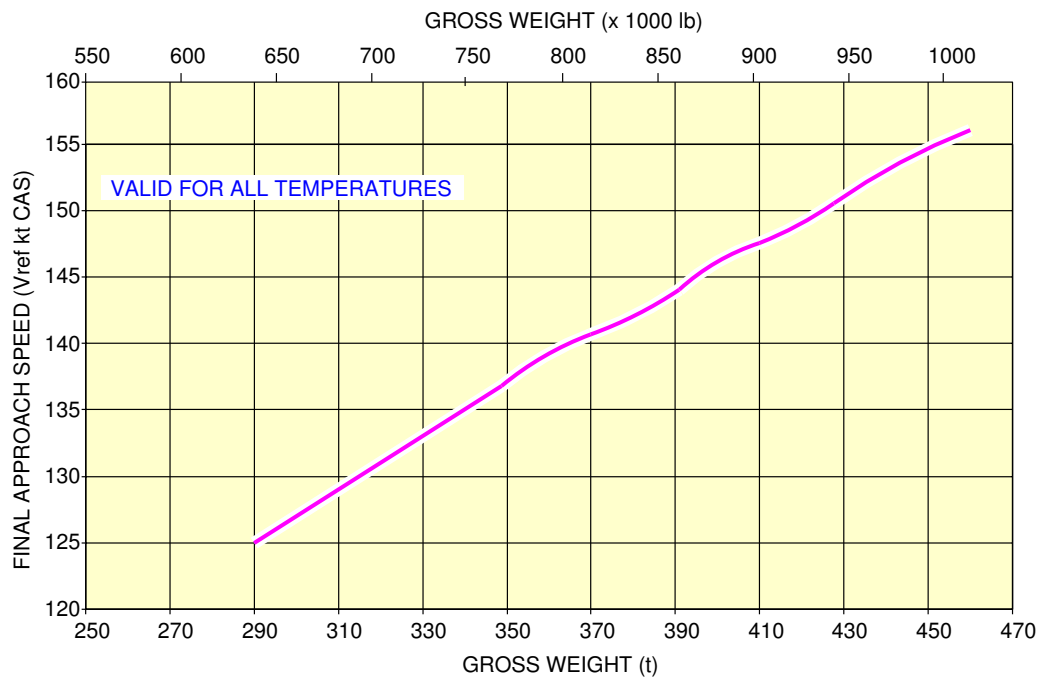
****ON A/C A380-800 Models**

Final Approach Speed - Pax

1. This section gives the final approach speed.

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

NOTE: THESE CURVES ARE GIVEN FOR INFORMATION ONLY.
THE APPROVED VALUES ARE STATED IN THE "OPERATING MANUALS"
SPECIFIC TO THE AIRLINE OPERATING THE AIRCRAFT.



L_AC_030501_1_0010101_01_00

Final Approach Speed (CG=29%)
A380-800 Models
FIGURE 1



AIRPLANE CHARACTERISTICS

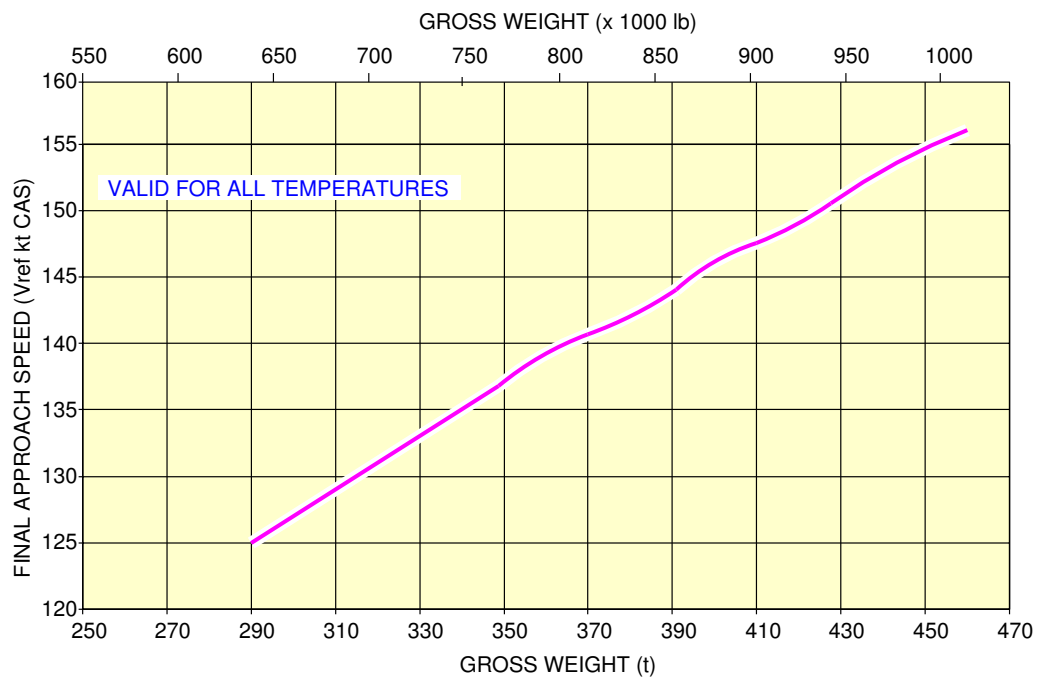
****ON A/C A380-800F Models**

Final Approach Speed - Freighter

1. This section gives the final approach speed.

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

NOTE: THESE CURVES ARE GIVEN FOR INFORMATION ONLY.
THE APPROVED VALUES ARE STATED IN THE "OPERATING MANUALS"
SPECIFIC TO THE AIRLINE OPERATING THE AIRCRAFT.



L_AC_030501_1_0030101_01_00

Final Approach Speed (CG=29%)
A380-800F Models
FIGURE 2



AIRPLANE CHARACTERISTICS

GROUND MANEUVERING

4-1-0 General Information

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

General

1. This section provides airplane turning capability and maneuvering characteristics.

For ease of presentation, this data has been determined from the theoretical limits imposed by the geometry of the aircraft, and where noted, provides for a normal allowance for tire slippage. As such, it reflects the turning capability of the aircraft in favorable operating circumstances. This data should only be used as guidelines for the method of determination of such parameters and for the maneuvering characteristics of this aircraft type.

In the ground operating mode, varying airline practices may demand that more conservative turning procedures be adopted to avoid excessive tire wear and reduce possible maintenance problems. Airline operating techniques will vary in the level of performance, over a wide range of operating circumstances throughout the world. Variations from standard aircraft operating patterns may be necessary to satisfy physical constraints within the maneuvering area, such as adverse grades, limited area or high risk of jet blast damage. For these reasons, ground maneuvering requirements should be coordinated with the using airlines prior to layout planning.



AIRPLANE CHARACTERISTICS

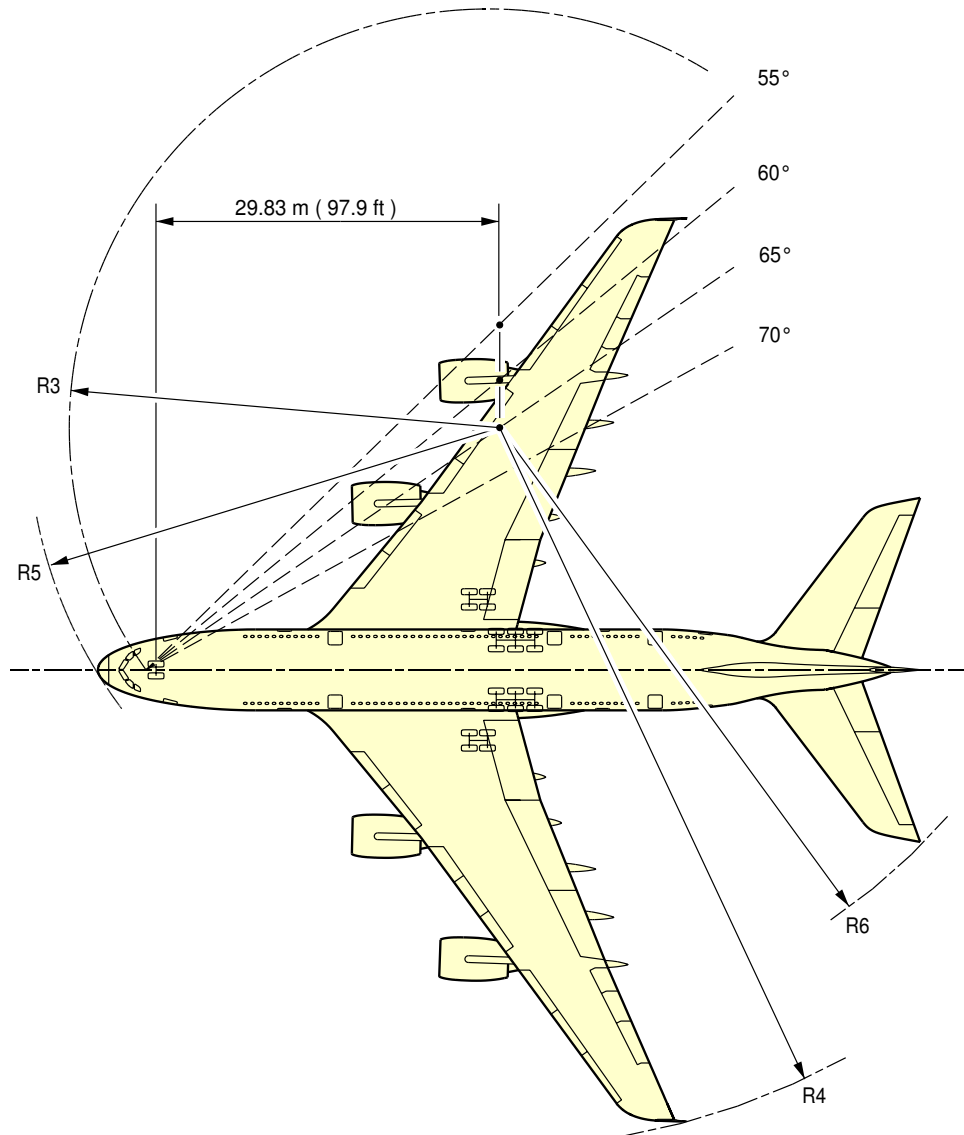
4-2-0 Turning Radii

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

Turning Radii

1. This section gives the turning radii.

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



NOTE: SEE PAGE 2 FOR DIMENSIONS

L_AC_040200_1_0010101_01_00

Turning Radii
Turning Radii (Sheet 1)
FIGURE 1



AIRPLANE CHARACTERISTICS

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

A380-800/800F TURNING RADII							
TYPE OF TURN	STEERING ANGLE	EFFECTIVE STEERING ANGLE		R3	R4	R5	R6
2	20°	17.9°	m	100.16	135.45	101.01	115.87
			ft	328.6	444.4	331.4	380.1
2	25°	22.7°	m	78.86	113.14	80.12	94.90
			ft	258.7	371.2	262.9	311.4
2	30°	27.5°	m	65.69	98.90	67.33	81.91
			ft	215.5	324.5	220.9	268.7
2	35°	32.1°	m	56.84	88.97	58.83	73.13
			ft	186.5	291.9	193.0	239.9
2	40°	36.6°	m	50.59	81.61	52.89	66.84
			ft	166.0	267.8	173.5	219.3
2	45°	41.0°	m	46.02	75.94	48.61	62.16
			ft	151.0	249.1	159.5	203.9
2	50°	45.1°	m	42.61	71.43	45.45	58.57
			ft	139.8	234.4	149.1	192.2
1	55°	51.2°	m	40.13	67.02	43.22	55.43
			ft	131.6	219.9	141.8	181.9
1	60°	57.3°	m	37.64	62.60	40.98	52.29
			ft	123.5	205.4	134.5	171.5
1	65°	63.4°	m	35.15	58.18	38.75	49.15
			ft	115.3	190.9	127.1	161.2
1	70°	69.5°	m	32.66	53.76	36.52	46.01
			ft	107.2	176.4	119.8	150.9

NOTE:

TYPE 1 TURNS USE :

ASYMMETRIC THRUST – BOTH ENGINES ON THE INSIDE OF THE TURN TO BE AT IDLE THRUST
DIFFERENTIAL BRAKING – BRAKING APPLIED TO THE WING GEAR WHEELS ON THE INSIDE OF THE TURN.

TYPE 2 TURNS USE :

SYMMETRIC THRUST AND NO BRAKING.

L_AC_040200_1_0020101_01_00

Turning Radii
Turning Radii (Sheet 2)
FIGURE 2



AIRPLANE CHARACTERISTICS

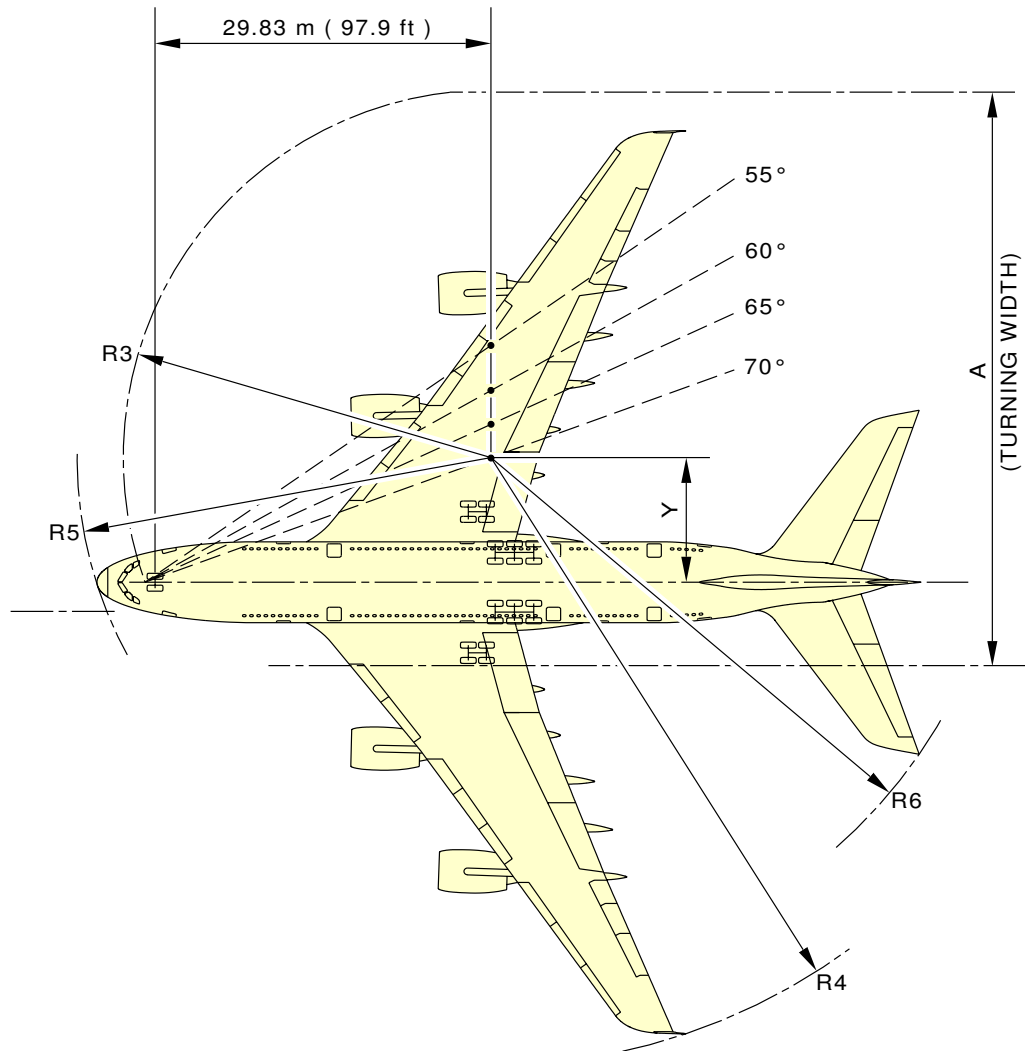
4-3-0 Minimum Turning Radii

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

Minimum Turning Radii

1. This section gives the minimum turning radii.

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



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

L_AC_040300_1_0010101_01_01

Minimum Turning Radii
FIGURE 1



AIRPLANE CHARACTERISTICS

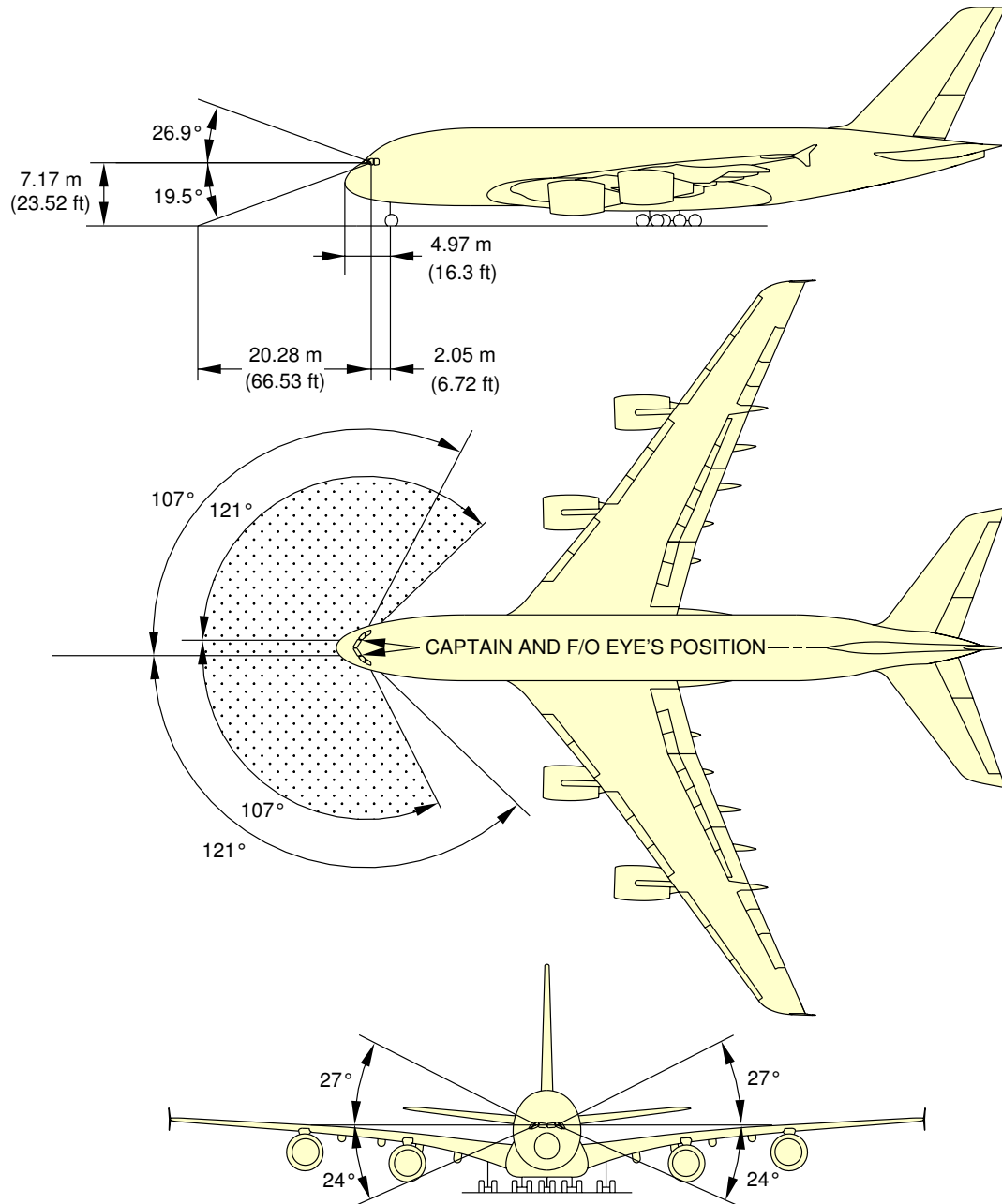
4-4-0 Visibility from Cockpit in Static Position

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

Visibility from Cockpit in Static Position

1. This section gives the visibility from cockpit in static position.

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



L_AC_040400_1_0010101_01_00

Visibility from Cockpit in Static Position
FIGURE 1



AIRPLANE CHARACTERISTICS

4-5-0 Runway and Taxiway Turn Paths

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

Runway and Taxiway Turn Paths

1. Runway and Taxiway Turn Paths



AIRPLANE CHARACTERISTICS

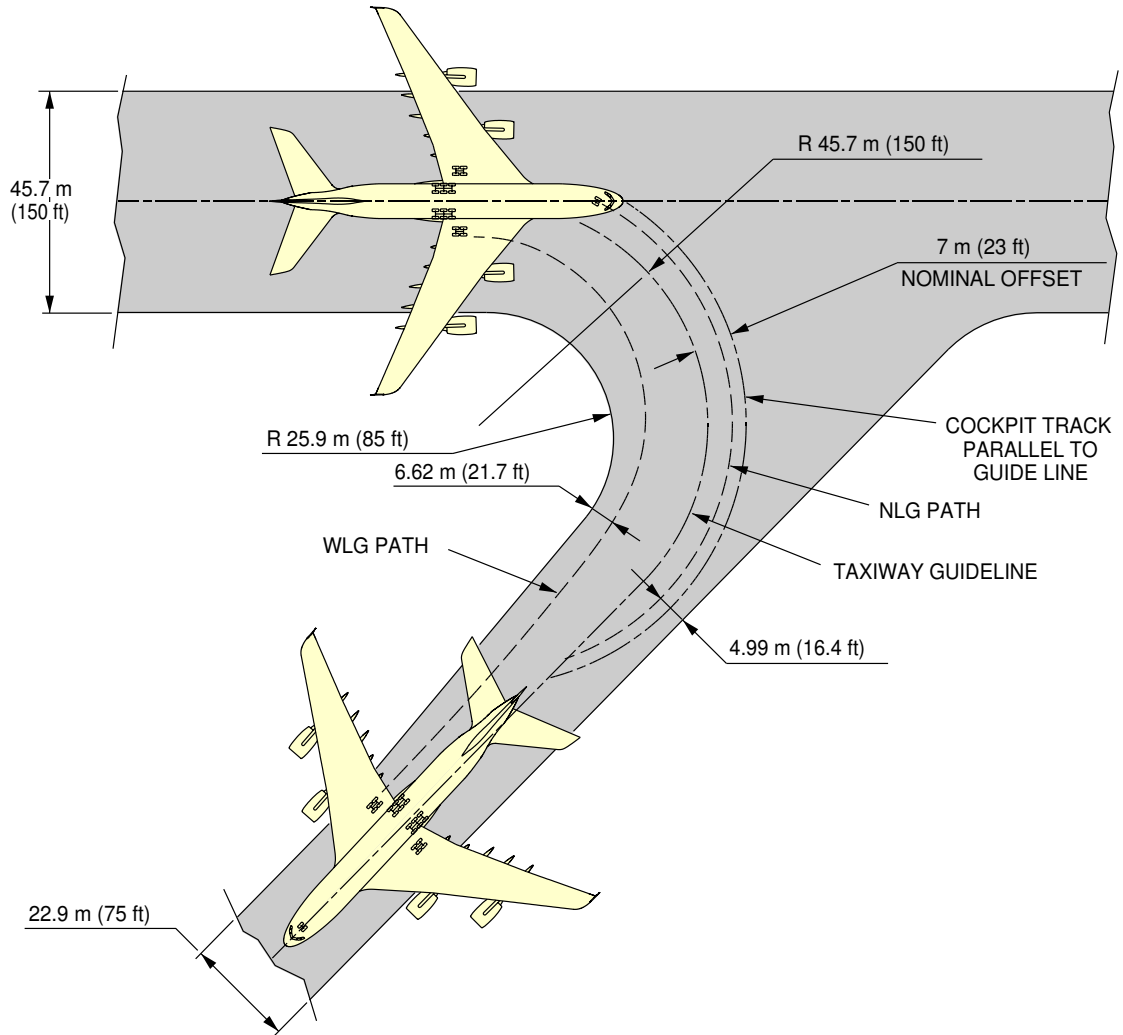
4-5-1 135° Turn - Runway to Taxiway

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

135° Turn - Runway to Taxiway

1. This section gives the 135° turn – runway to taxiway.

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

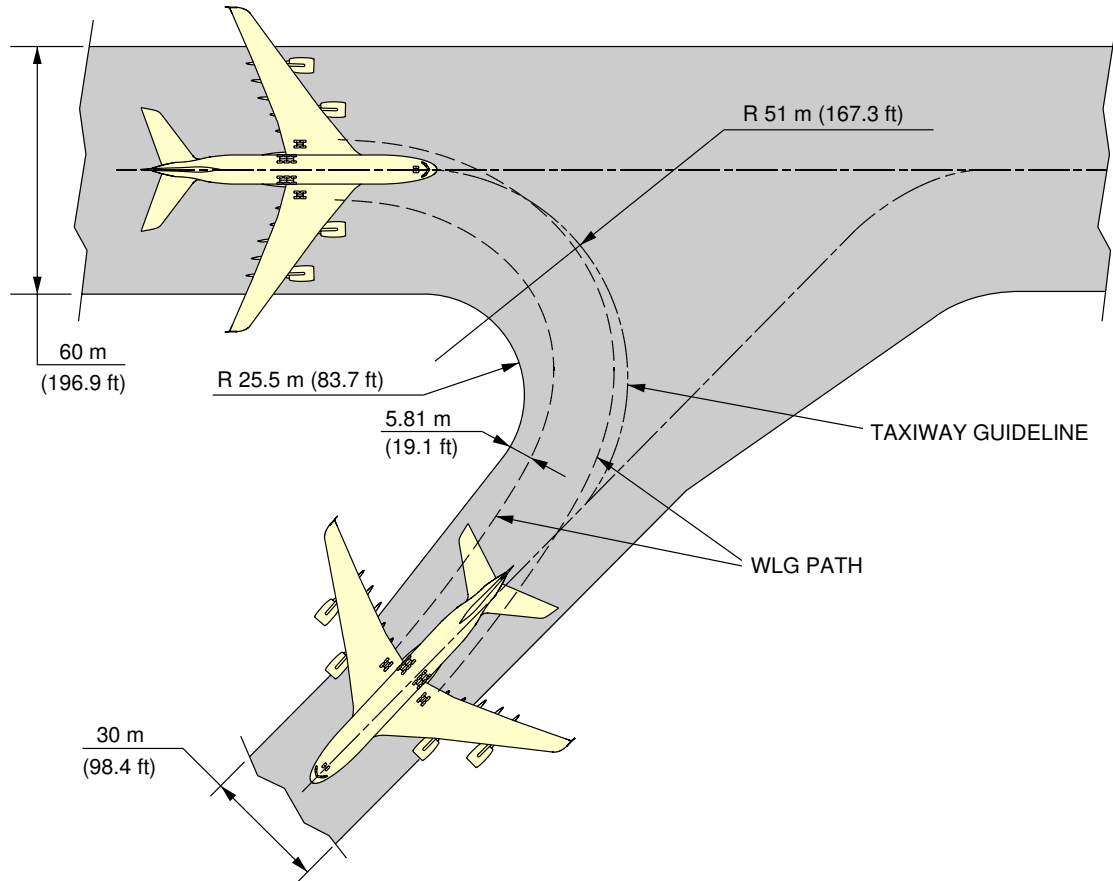


NOTE: FAA GROUP V JUDGEMENTAL OVERSTEER METHOD

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135° Turn – Runway to Taxiway
135° Turn – Runway to Taxiway (Sheet 1)
FIGURE 1

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



NOTE: FAA GROUP VI COCKPIT TRACKS CENTRELINE METHOD

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135° Turn – Runway to Taxiway
135° Turn – Runway to Taxiway (Sheet 2)
FIGURE 2



AIRPLANE CHARACTERISTICS

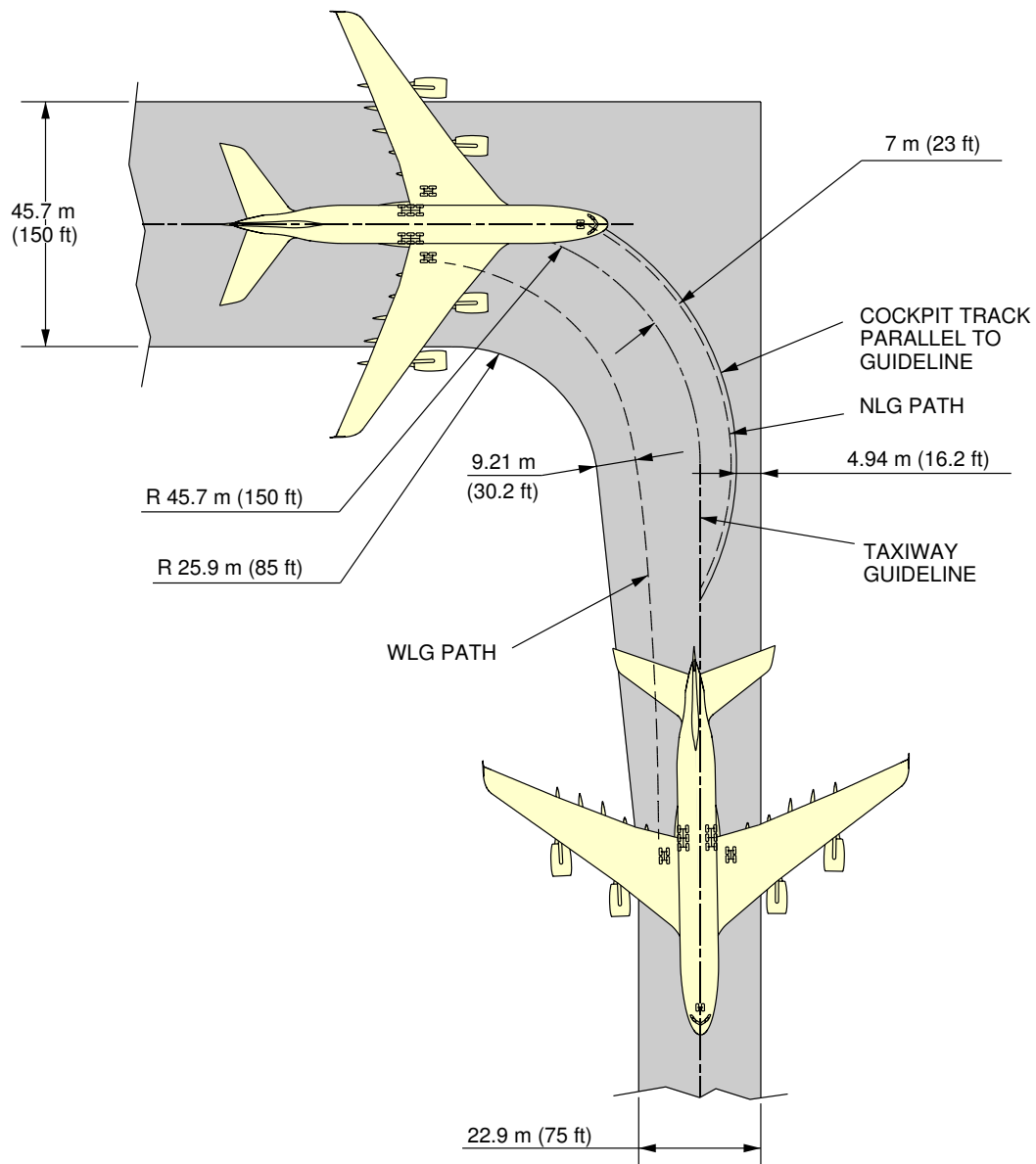
4-5-2 90 ° Turn - Runway to Taxiway

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

90 ° Turn - Runway to Taxiway

1. This section gives the 90 ° turn – runway to taxiway.

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

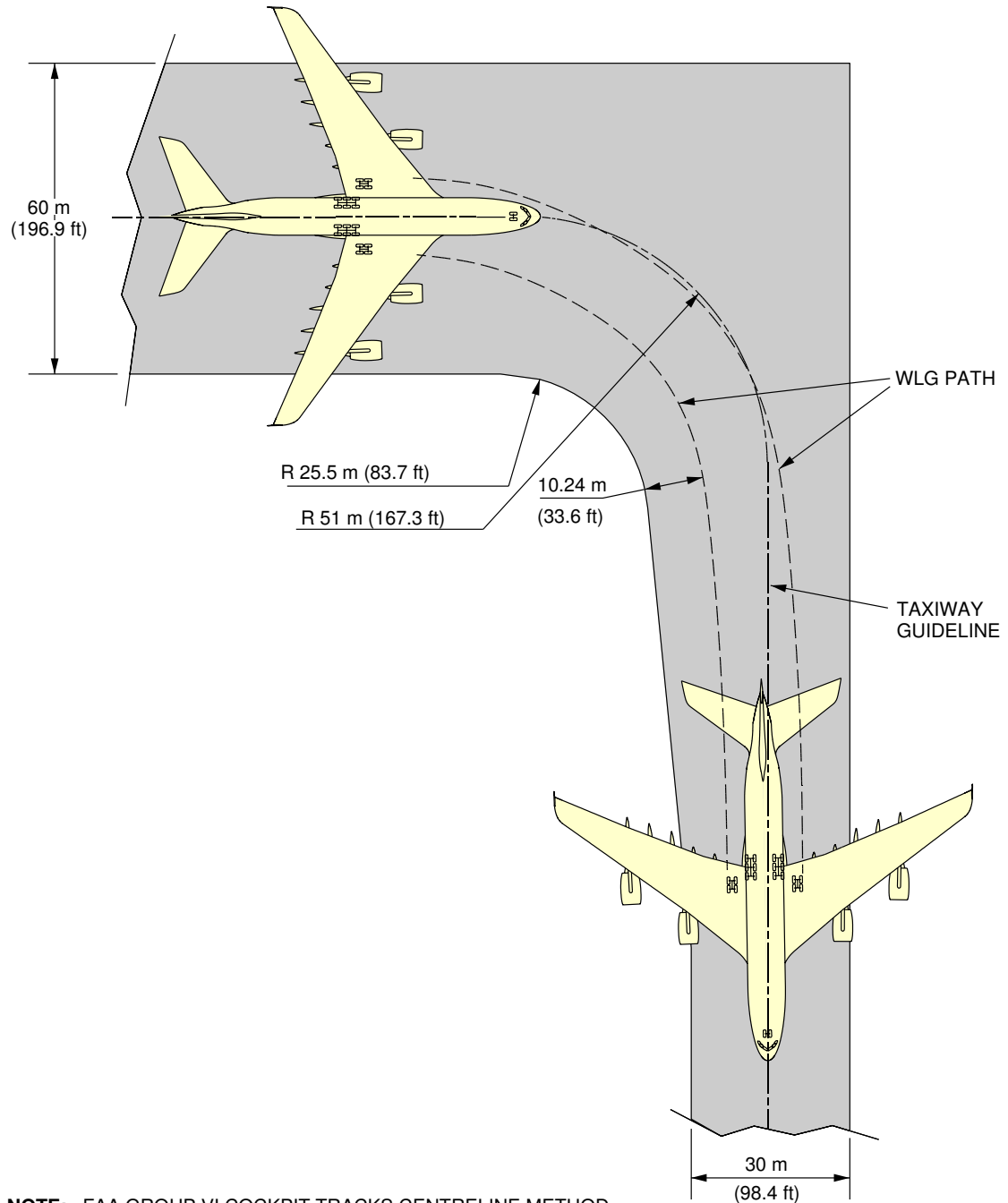


NOTE: FAA GROUP V JUDGEMENTAL OVERSTEER METHOD

L_AC_040502_1_0010101_01_00

90° Turn – Runway to Taxiway
 90° Turn – Runway to Taxiway (Sheet 1)
 FIGURE 1

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



NOTE: FAA GROUP VI COCKPIT TRACKS CENTRELINE METHOD

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90° Turn – Runway to Taxiway
 90° Turn – Runway to Taxiway (Sheet 2)
FIGURE 2



AIRPLANE CHARACTERISTICS

4-5-3 180 ° Turn on a Runway

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

180 ° Turn on a Runway

1. This section gives the 180 ° turn on a runway.

Diagram illustrating the dimensions and clearances of a yellow aircraft (likely a transport aircraft) within a grey tunnel structure. The aircraft is shown in profile, facing right.

Dimensions and Clearances:

- Overall Tunnel Width:** 60.0 m (196.9 ft)
- Clearance from Tunnel Wall to Wingtip:** 51.0 m (167.3 ft)
- Radius of Wingtip Clearance:** R54.0 m (177.1 ft)
- Radius of Fuselage Clearance:** R36.6 m (119.9 ft)
- Radius of Tail Clearance:** R46.0 m (150.9 ft)
- Clearance from Tunnel Wall to Tail:** 16.8 m (55.0 ft)
- Clearance from Tunnel Wall to Fuselage:** 4.5 m (14.8 ft)
- Clearance from Tunnel Wall to Wing:** 0.7 m (2.2 ft)
- Clearance from Tunnel Wall to Tail:** 4.5 m (14.8 ft)
- Clearance from Tunnel Wall to Wing:** 23.2 m (76.2 ft)
- Clearance from Tunnel Wall to Tail:** 31.2 m (102.4 ft)

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4-5-3



AIRPLANE CHARACTERISTICS

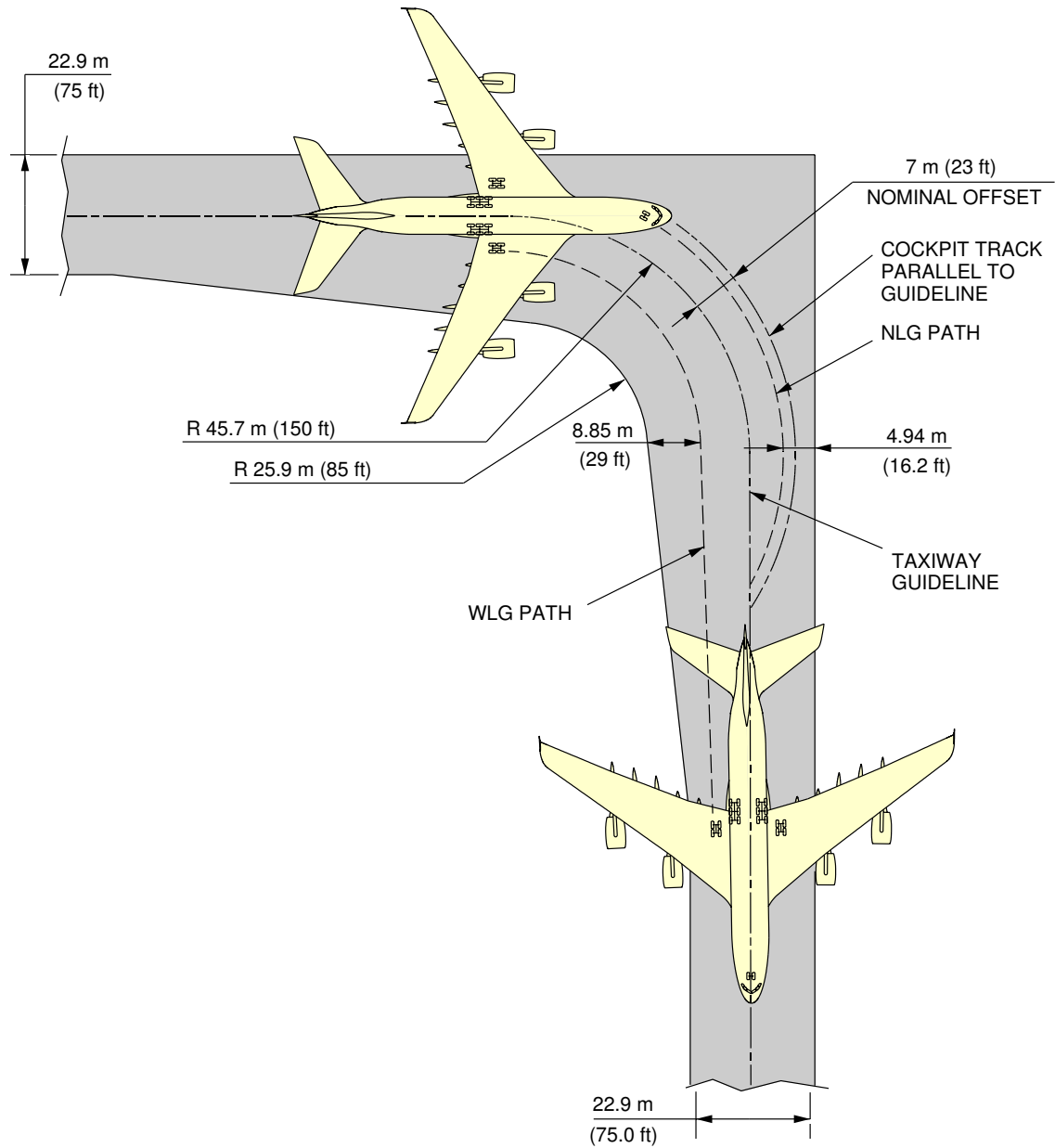
4-5-4 90° Turn - Taxiway to Taxiway

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

90° Turn - Taxiway to Taxiway

1. This section gives the 90° turn - taxiway to taxiway.

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

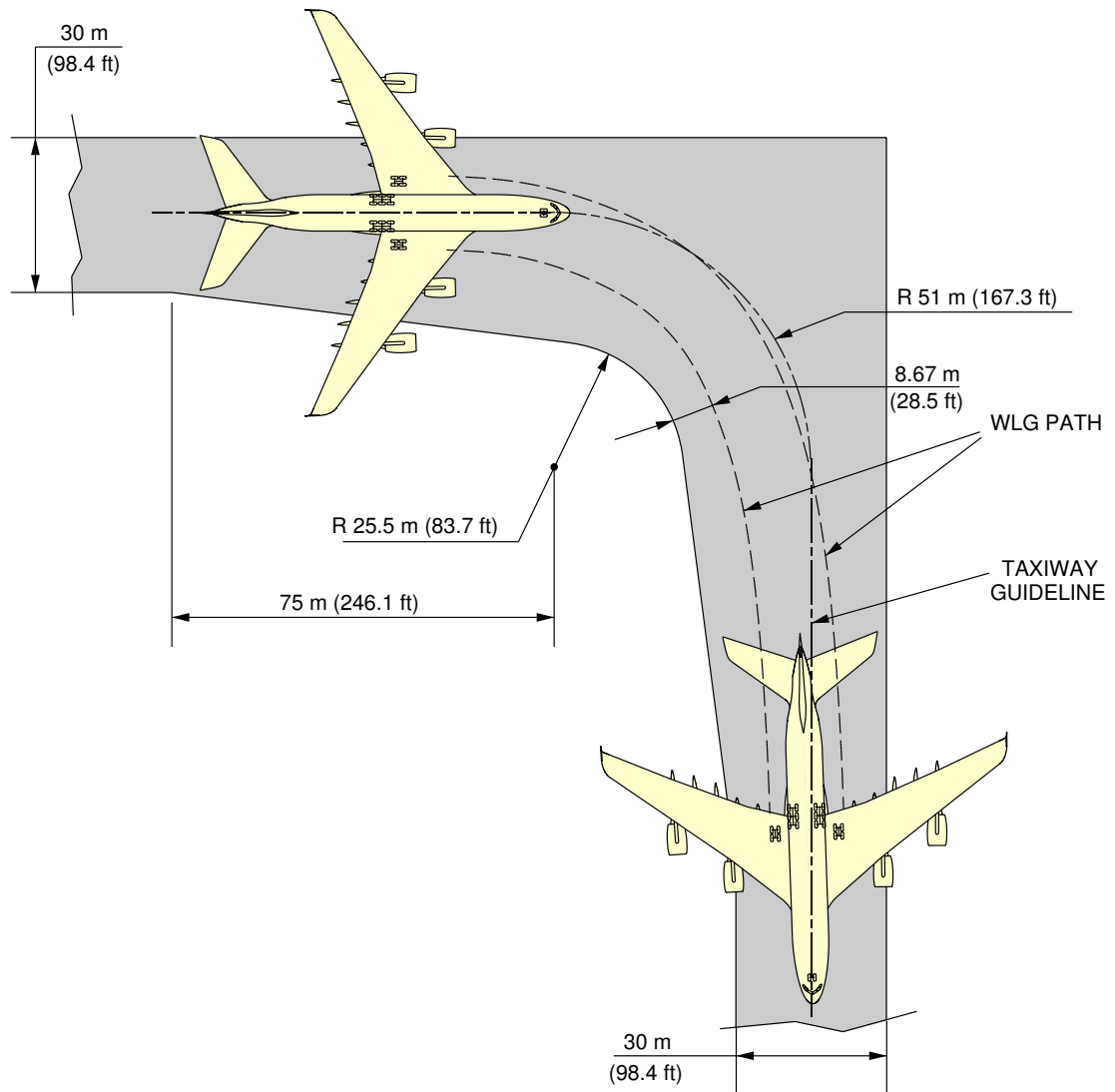


NOTE: FAA GROUP V JUDGEMENTAL OVERSTEER METHOD

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90° Turn – Taxiway to Taxiway
 90° Turn – Taxiway to Taxiway (Sheet 1)
 FIGURE 1

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



NOTE: FAA GROUP VI COCKPIT TRACKS CENTRELINE METHOD

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90° Turn – Taxiway to Taxiway
 90° Turn – Taxiway to Taxiway (Sheet 2)
 FIGURE 2



AIRPLANE CHARACTERISTICS

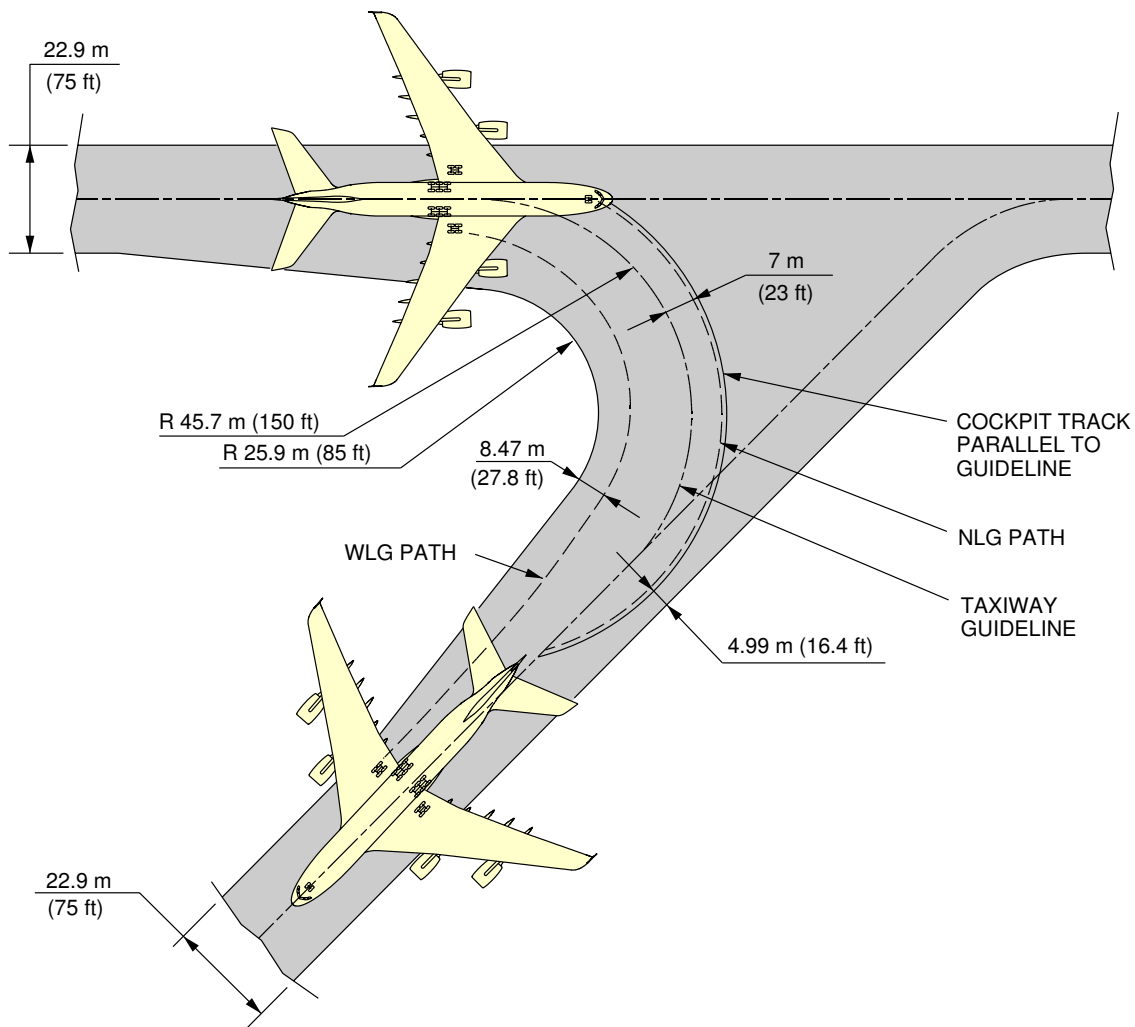
4-5-5 135 ° Turn - Taxiway to Taxiway

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

135 ° Turn - Taxiway to Taxiway

1. This section gives the 135 ° turn - taxiway to taxiway.

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

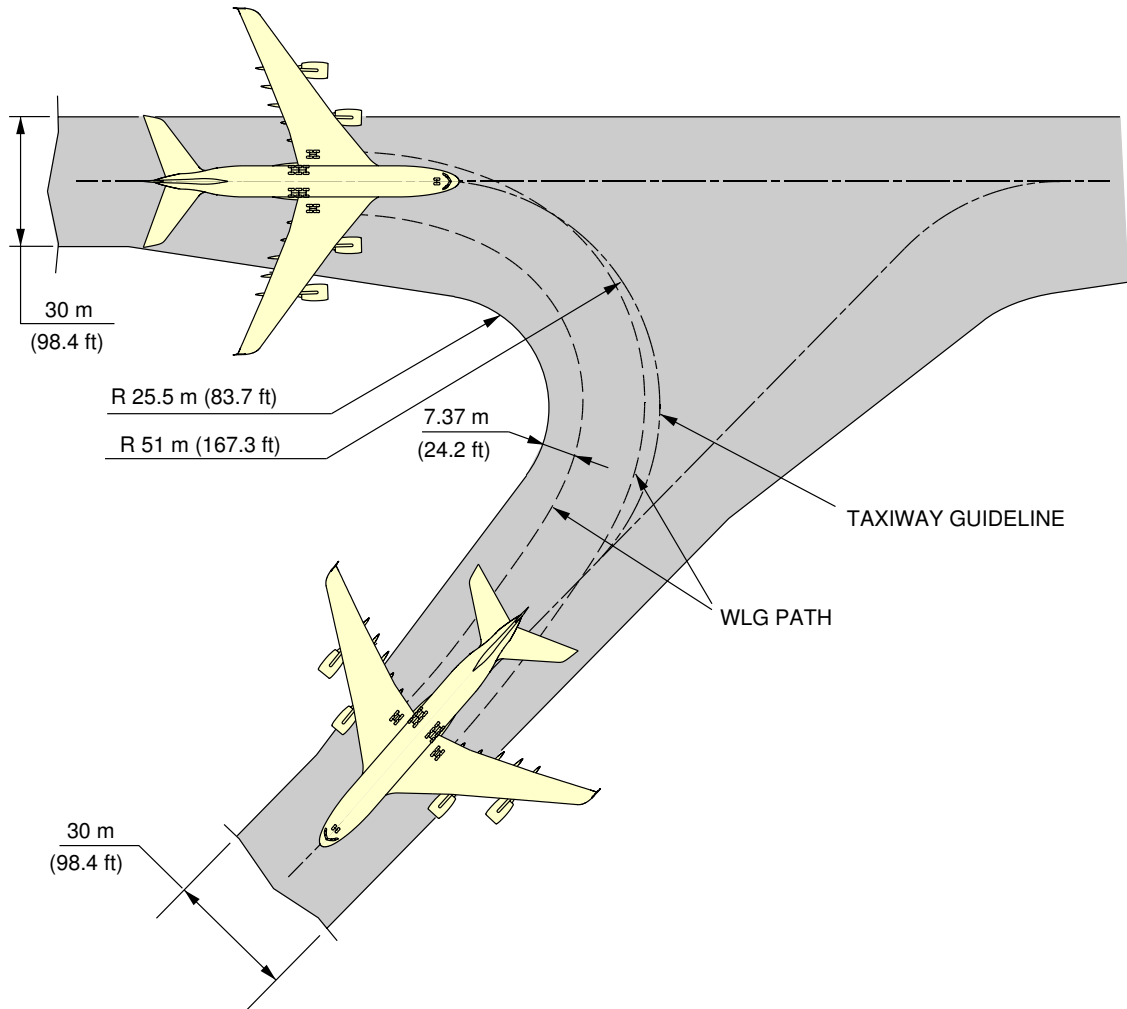


NOTE: FAA GROUP V JUDGEMENTAL OVERSTEER METHOD

L_AC_040505_1_0010101_01_00

135° Turn – Taxiway to Taxiway
 135° Turn – Taxiway to Taxiway (Sheet 1)
 FIGURE 1

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



NOTE: FAA GROUP VI COCKPIT TRACKS CENTRELINE METHOD

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135° Turn – Taxiway to Taxiway
135° Turn – Taxiway to Taxiway (Sheet 2)
FIGURE 2



AIRPLANE CHARACTERISTICS

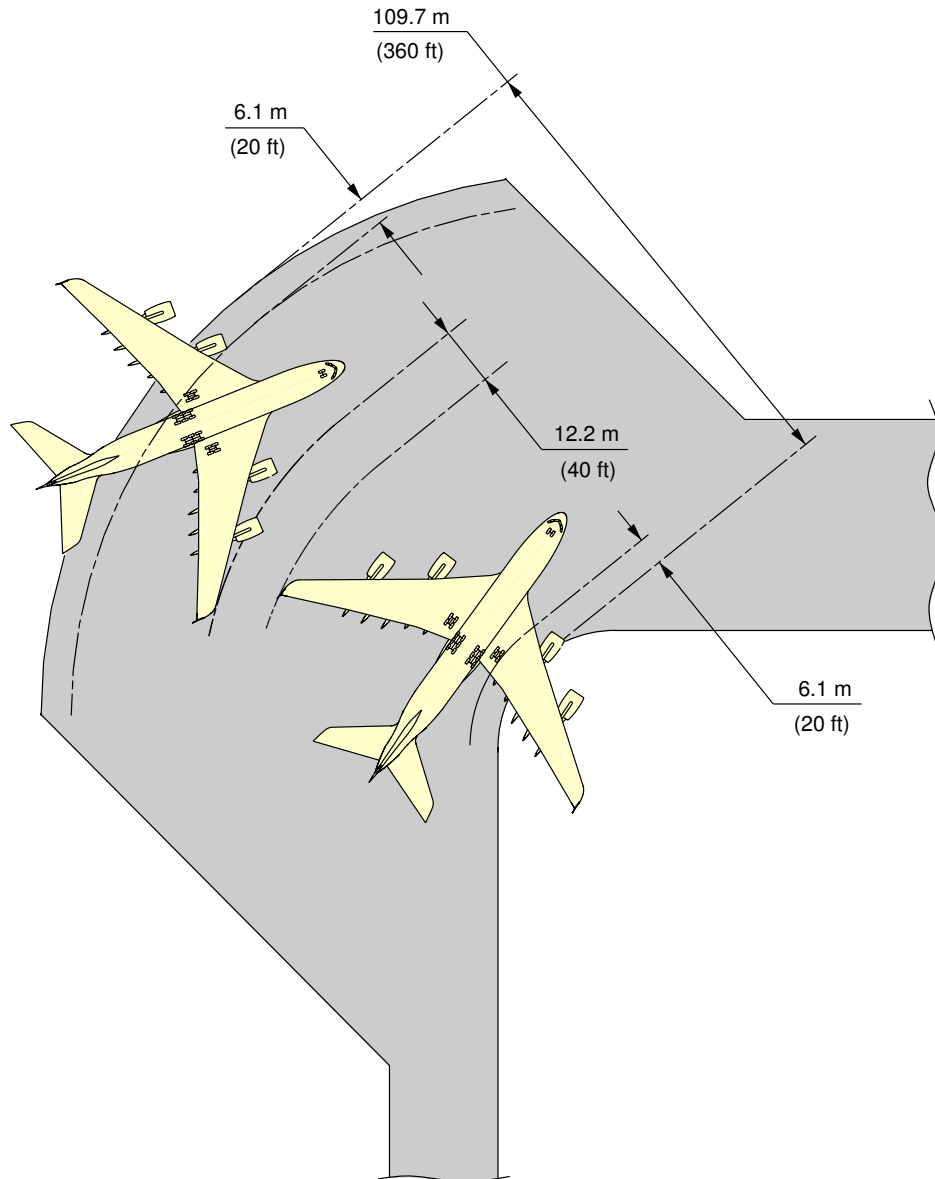
4-6-0 Runway Holding Bay (Apron)

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

Runway Holding Bay (Apron)

1. This section gives the runway holding bay (Apron).

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



NOTE: COORDINATE WITH USING AIRLINE FOR SPECIFIC PLANNED OPERATING PROCEDURE

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Runway Holding Bay (Apron)
FIGURE 1



AIRPLANE CHARACTERISTICS

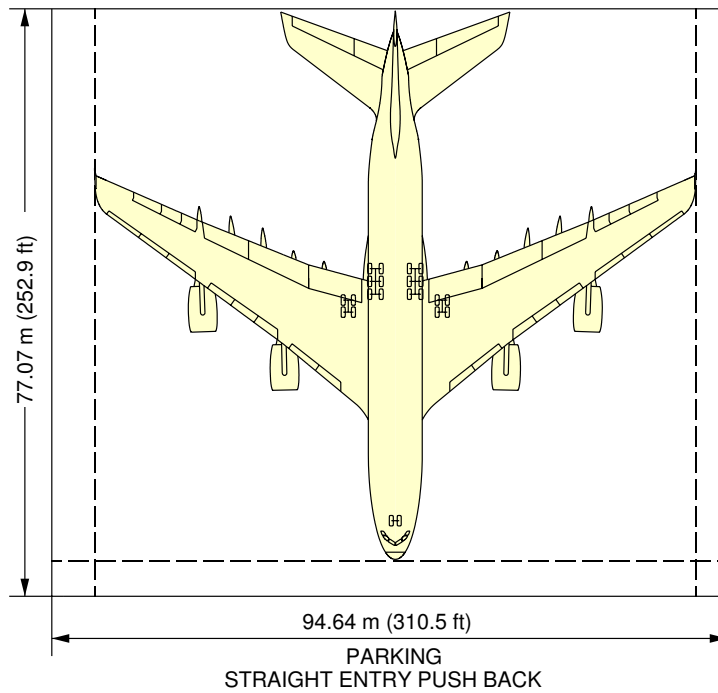
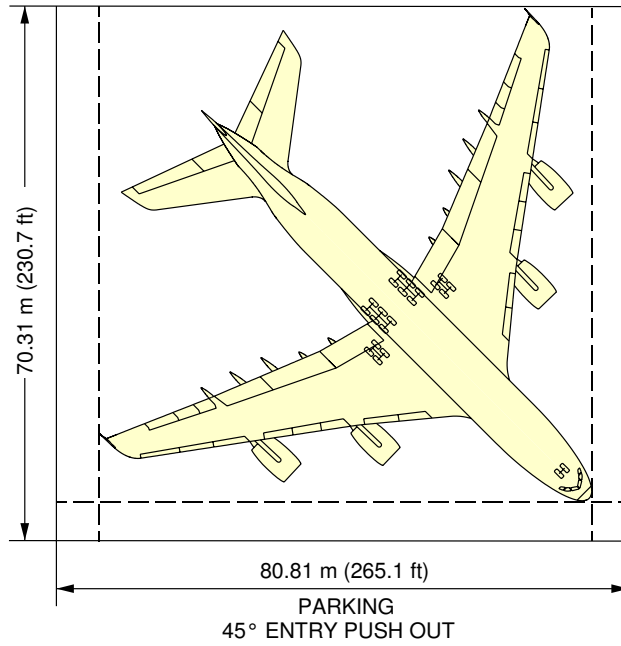
4-7-0 Airplane Parking

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

Airplane Parking

1. The following figures and charts show the rectangular space required for parking against the terminal building :
 - A. Steering Geometry
 - B. Minimum Parking Space Requirements

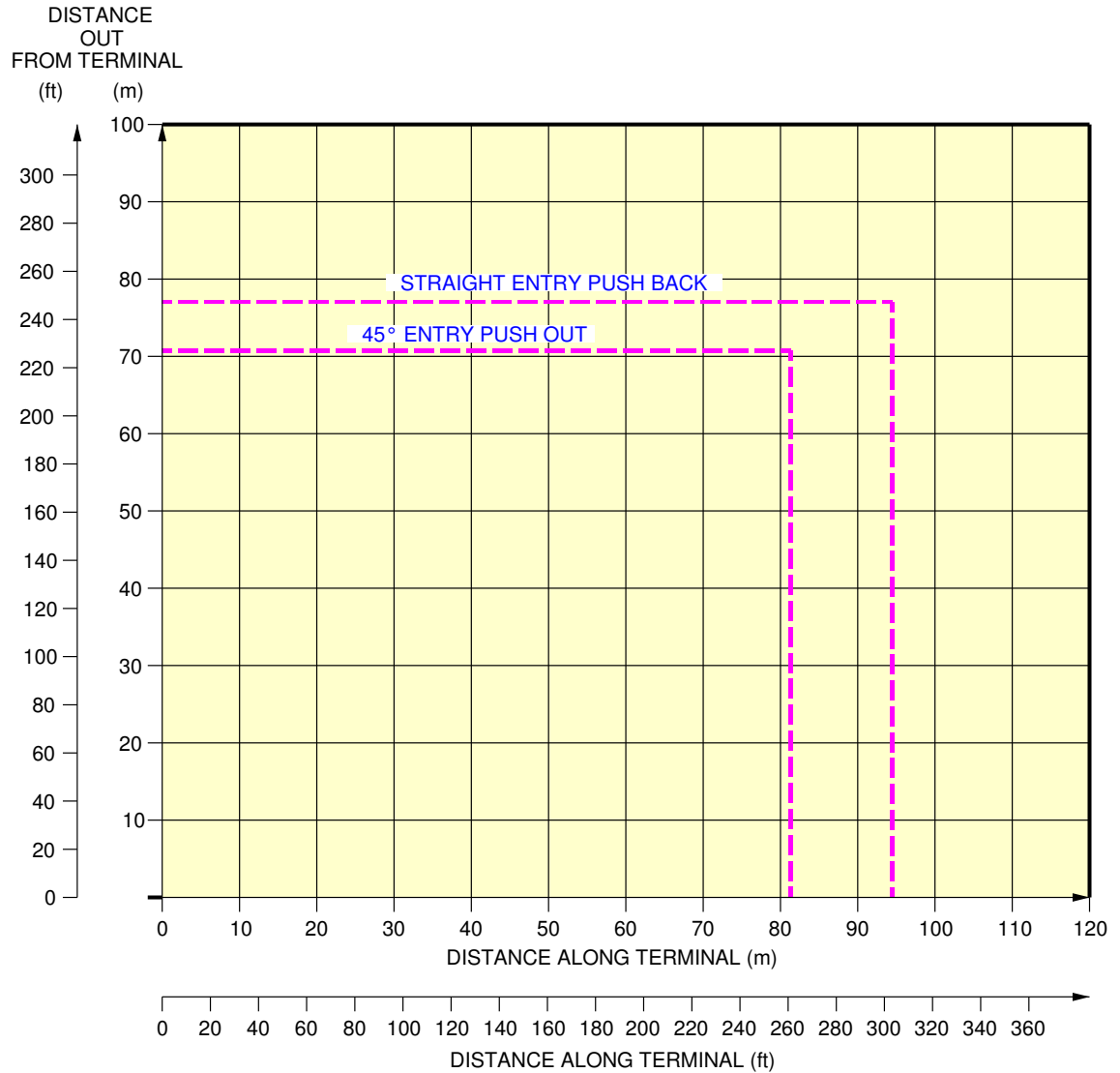
****ON A/C A380-800 Models A380-800F Models**



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Airplane Parking
Steering Geometry
FIGURE 1

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



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Airplane Parking
Minimum Parking Space Requirements
FIGURE 2



AIRPLANE CHARACTERISTICS

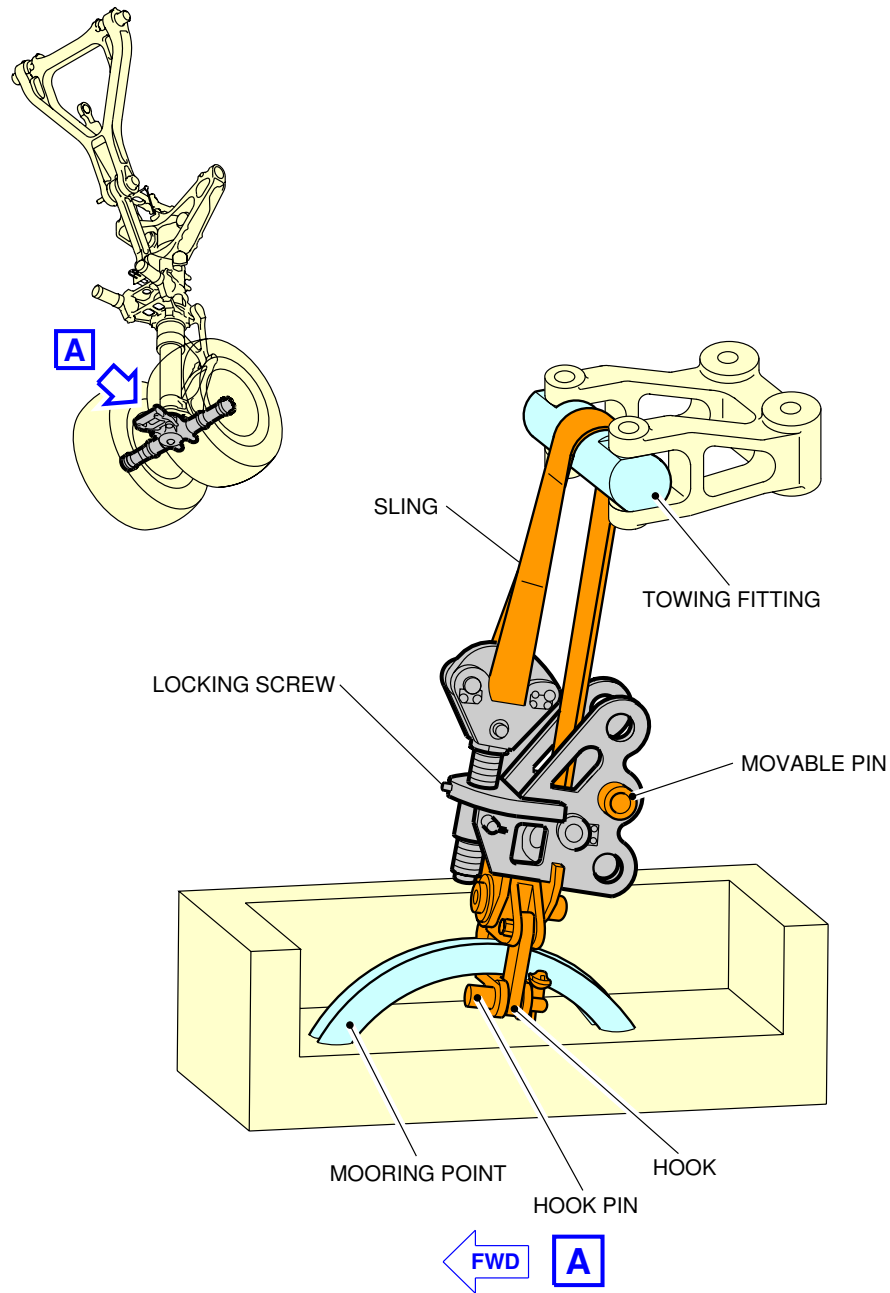
4-8-0 Airplane Mooring

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

General

1. This section provides information on airplane mooring.

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



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Airplane Mooring
FIGURE 1



AIRPLANE CHARACTERISTICS

TERMINAL SERVICING

5-1-0 Airplane Servicing Arrangements

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

Airplane Servicing Arrangements

1. This section provides typical ramp layouts, showing the various GSE items in position during typical turn-round scenarios.

These ramp layouts show typical arrangements only. Each operator will have its own specific requirements/regulations for the positioning and operation on the ramp.

For each ramp layout, the associated typical turn-round time is given in a Chart in the section 5-2 for passenger aircraft and section 5-3 for cargo aircraft.



AIRPLANE CHARACTERISTICS

5-1-1 Typical Ramp Layout - Two Bridges - Standard Servicing Via Main Deck and Upper Deck

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

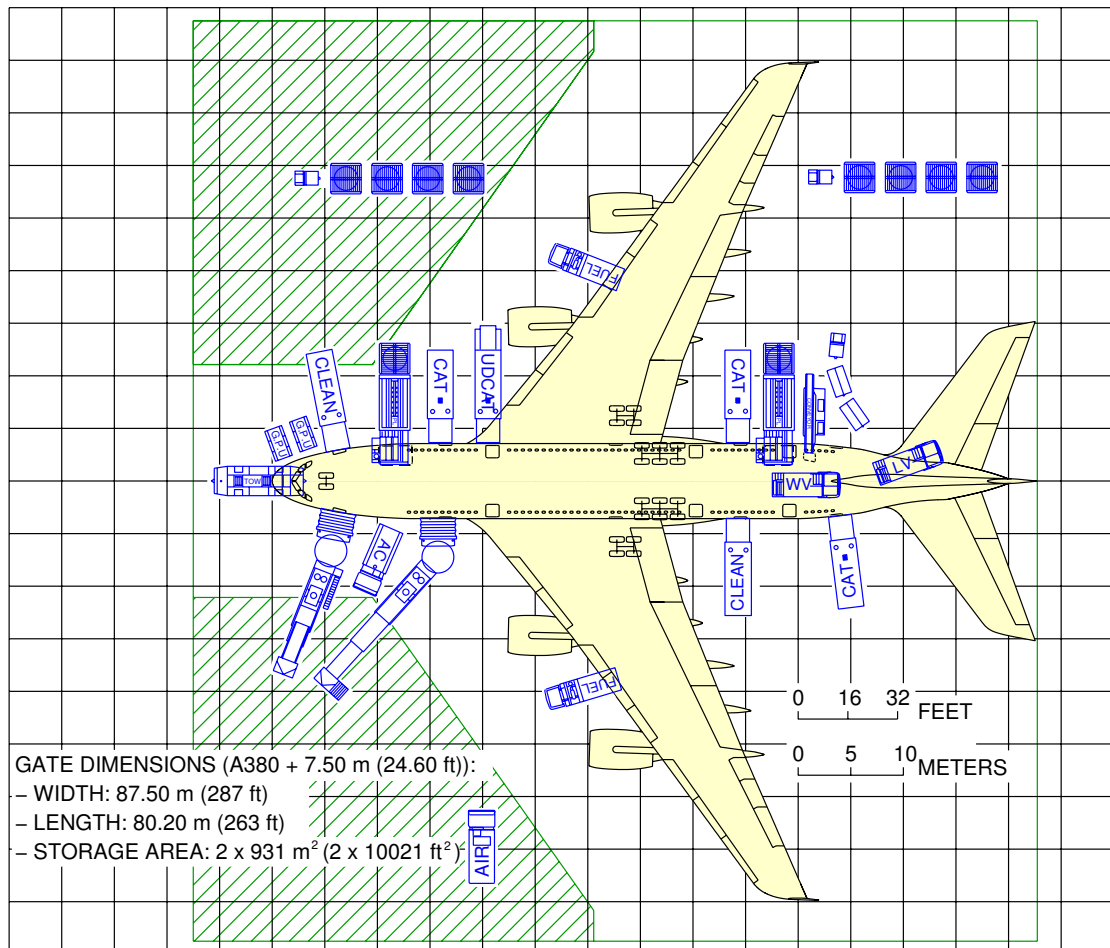
Typical Ramp Layout - Two Bridges - Standard Servicing

1. This section gives the typical ramp layout - two bridges - servicing via main deck and upper deck.

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

AC: AIR COND UNIT
 AIR: AIR START UNIT
 CAT: CATERING VEHICLE
 CLEAN: CLEANING VEHICLE
 CONVEYOR: CONVEYOR BELT
 FUEL: FUEL HYDRANT DISPENSER

GPU: GROUND POWER UNIT
 LV: LAVATORY VEHICLE
 PL: PALLET/CONTAINER LOADER
 TOW: TOWING TRACTOR
 UDCAT: UPPER DECK CATERING VEHICLE
 WV: POTABLE WATER VEHICLE



RL28/B1A/800/STD

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Baseline Ramp Layout – Two Bridges
 Servicing Via Main and Upper Decks
 FIGURE 1



AIRPLANE CHARACTERISTICS

5-1-2 Typical Ramp Layout - Two Bridges - Servicing Via Main Deck

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

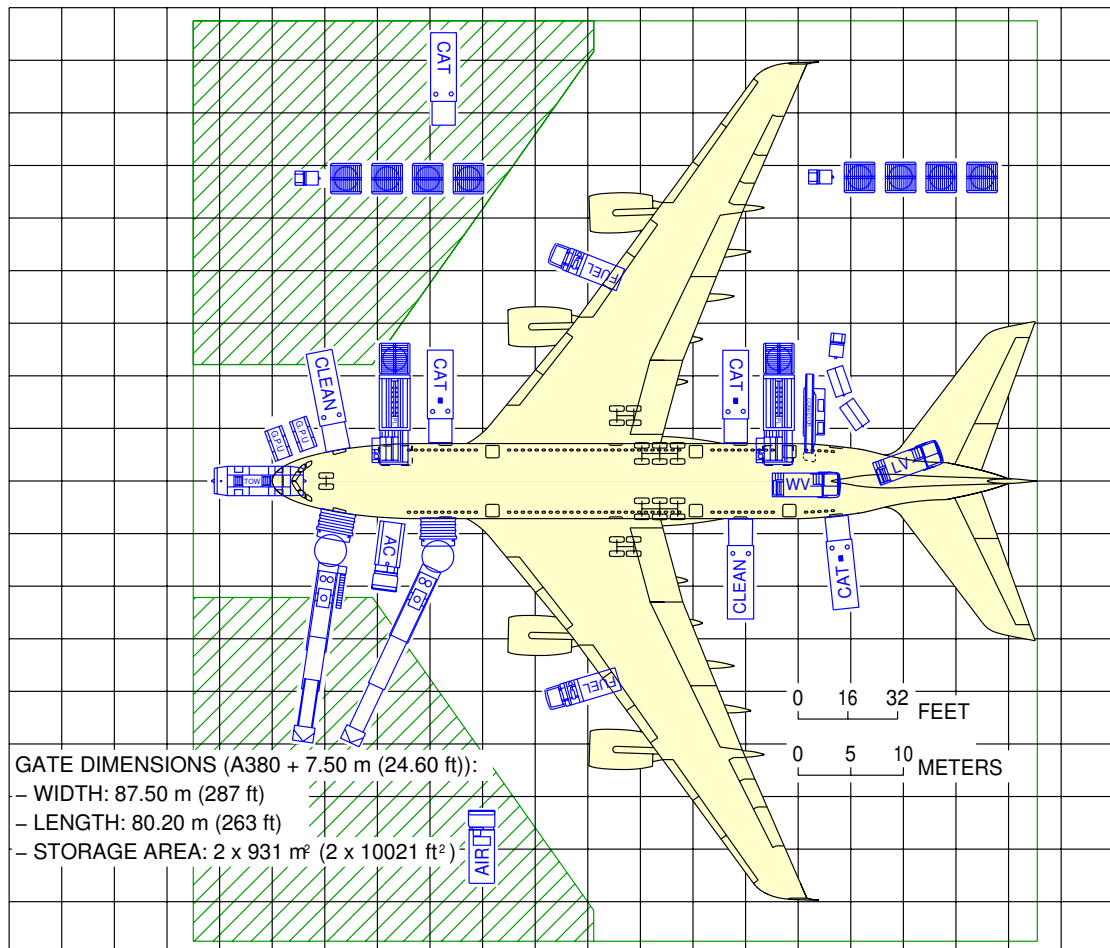
Typical Ramp Layout - Two Bridges - Servicing Via Main Deck

1. This section gives the typical ramp layout - two bridges - servicing via main deck.

**ON A/C A380-800 Models

AC: AIR COND UNIT
 AIR: AIR START UNIT
 CAT: CATERING VEHICLE
 CLEAN: CLEANING VEHICLE
 CONVEYOR: CONVEYOR BELT
 FUEL: FUEL HYDRANT DISPENSER

GPU: GROUND POWER UNIT
 LV: LAVATORY VEHICLE
 PL: PALLET/CONTAINER LOADER
 TOW: TOWING TRACTOR
 WV: POTABLE WATER VEHICLE



RL01/B1A/800/STD

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Typical Ramp Layout – Two Bridges
 Servicing Via Main Deck
 FIGURE 1



AIRPLANE CHARACTERISTICS

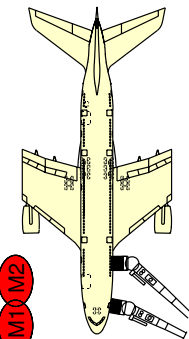
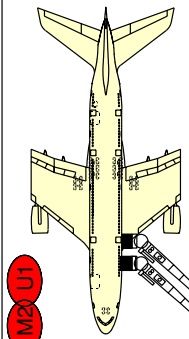
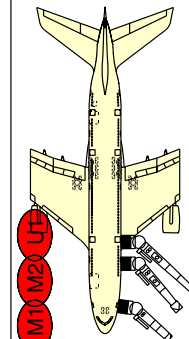
5-1-3 Opportunities of Direct Upper Deck Access for Airport and Airlines

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

Opportunities of Direct Upper Deck Access for Airport and Airlines

1. This section gives the opportunities of direct upper deck access for airport and airlines.

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

OPPORTUNITIES OF DIRECT UPPER DECK (UD) ACCESS FOR AIRPORTS & AIRLINES		SCENARIOS
PRODUCT & SERVICE DIFFERENTIATION	TURN-ROUND TIME (TRT)	
BASELINE	BASELINE	
HIGH	SIMILAR TO BASELINE MD ACCESS	
VERY HIGH	SIMILAR TO BASELINE MD ACCESS	
BENEFITS REALISED DEPEND LARGELY ON CABIN LAYOUT & BOARDING PROCEDURES		

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Opportunities of Direct Upper Deck Access
for Airport and Airlines
FIGURE 1



AIRPLANE CHARACTERISTICS

5-1-4 Baseline Ramp Layout

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

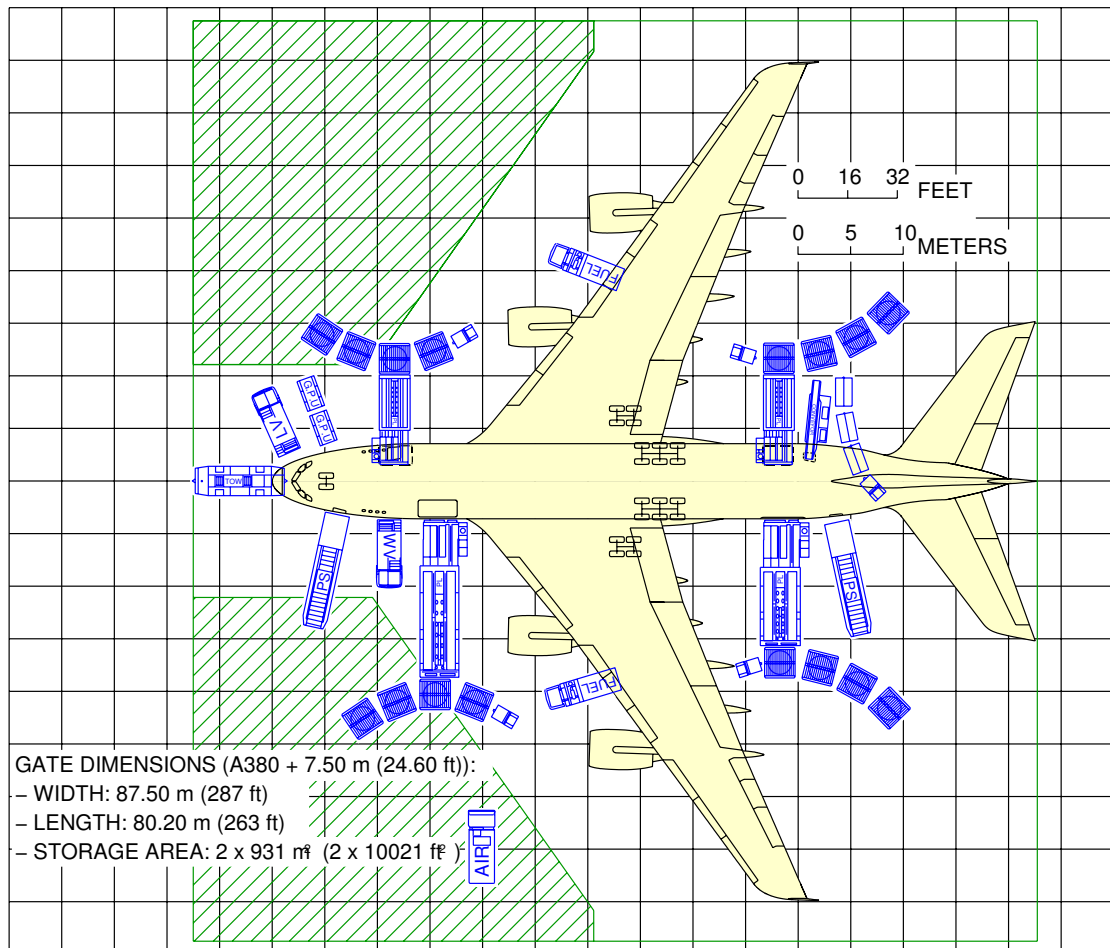
Baseline Ramp Layout

1. This section gives the typical ramp layout - cargo aircraft servicing.

**ON A/C A380-800F Models

AC: AIR COND UNIT
 AIR: AIR START UNIT
 CONVEYOR: CONVEYOR BELT
 FUEL: FUEL HYDRANT DISPENSER
 GPU: GROUND POWER UNIT

LV: LAVATORY VEHICLE
 PL: PALLET/CONTAINER LOADER
 PS: PASSENGER STAIRS
 TOW: TOWING TRACTOR
 WV: POTABLE WATER VEHICLE



RL04/B1/800F/STD

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Baseline Ramp Layout
 FIGURE 1

5-2-0 Terminal Operation - Passenger Aircraft

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

Terminal Operation - Passenger Aircraft

1. This section provides typical turn-round time charts showing the typical times for ramp activities during aircraft turn-round.

Actual times may vary due to each operator's specific practice and operating conditions.

For each turn-round time chart, the associated typical ramp layout is given in section 5-1.

2. ASSUMED TURN-ROUND TIME PARAMETERS

A. PASSENGER BOARDING/DEBOARDING (PB/D) → 100% (555 pax) passenger exchange :

- Doors (type A - 42" wide) used : M1L and M2L (main deck) and U1R (upper deck).
- PB/D rate : boarding = 15 pax/min / deboarding = 25 pax/min
- Last Pax Seating Allowance (LPS) = + 4 min
- 60" stair flow rate : up-flow = 14 pax/min / down-flow = 18 pax/min

B. CARGO → Full LD-3 exchange (22 + 16) LD-3 and bulk exchange of 2 000 kg (4 409 lb) :

- LD-3 off-loading/loading times : off-loading = 1.4 min/LD-3 / loading = 1.7 min/LD-3
- Pallet loading times : off-loading = 2.5 min/pallet / loading = 2.9 min/pallet
- bulk off-loading/loading times : off-loading = 9.2 min/t / loading = 10.5 min/t

C. REFUELLING → Block fuel for Nominal Range through 4 nozzles :

- 261 200 liters (67 364 US gallons) at 40 psi (48 min)
- dispenser positioning or removal = 3 min (fuel truck change) / if any = 5 min

D. CLEANING → Full cleaning :

- Crew adapted to match catering time

E. CATERING → Full catering :

- average truck capacity = 30 Full Size Trolley Equivalent (FSTE)
- simultaneous catering and PB/D = not represented
- inbound/outbound FSTE = mixed in the same truck
- FSTE exchange time :

- (1) dedicated door-galley = 1.5 min/FSTE
- (2) cart circulation (1 seat zone) = + 0.5 min/FSTE
- (3) cart circulation (> 1 seat zone) = + 1.0 min/FSTE
- (4) via lift :
 - dedicated door to single lift = 2.0 min/FSTE

F. GROUND HANDLING/SERVICING

- start of operations :
 - (1) bridges = $t_0 = 0$
 - (2) others = $t_0 + 1$ min
 - vehicle positioning/removal = 2 min (fuel truck excluded)
 - upper deck vehicle positioning/removal = 3 min
 - clearance between GSE = 0.5 m (20 in)
 - Ground Power Unit (GPU) = up to 4×90 kVA
 - air conditioning = two carts
 - potable water (standard/option) = 1 700/2 500 liters (495/660 US gal) at 60 l/min (23 US gal/min).
 - waste water = discharge and rinsing
 - dollies per tractor = 4 to 6



AIRPLANE CHARACTERISTICS

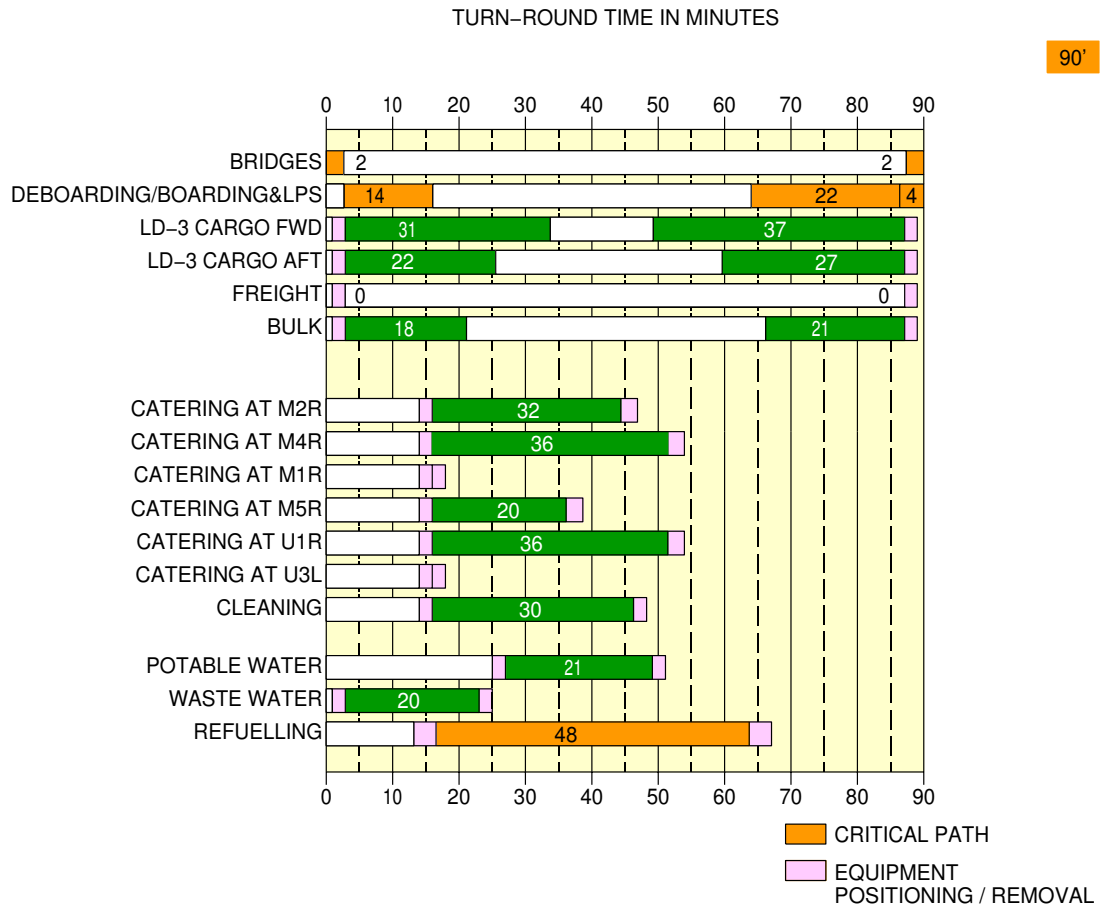
5-2-1 Typical Turn-Round Time - Two Bridges - Standard Servicing Via Main Deck and Upper Deck

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

Typical Turn-Round Time - Two Bridges - Standard Servicing Via Main Deck and Upper Decks

1. Typical Turn-Round Time - Two Bridges - Servicing via Main Deck and Upper Decks

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



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Typical Turn-Round Time – Two Bridges
Servicing Via Main and Upper Decks
FIGURE 1



AIRPLANE CHARACTERISTICS

5-2-2 Typical Turn-Round Time - Two Bridges - Servicing Via Main Deck

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

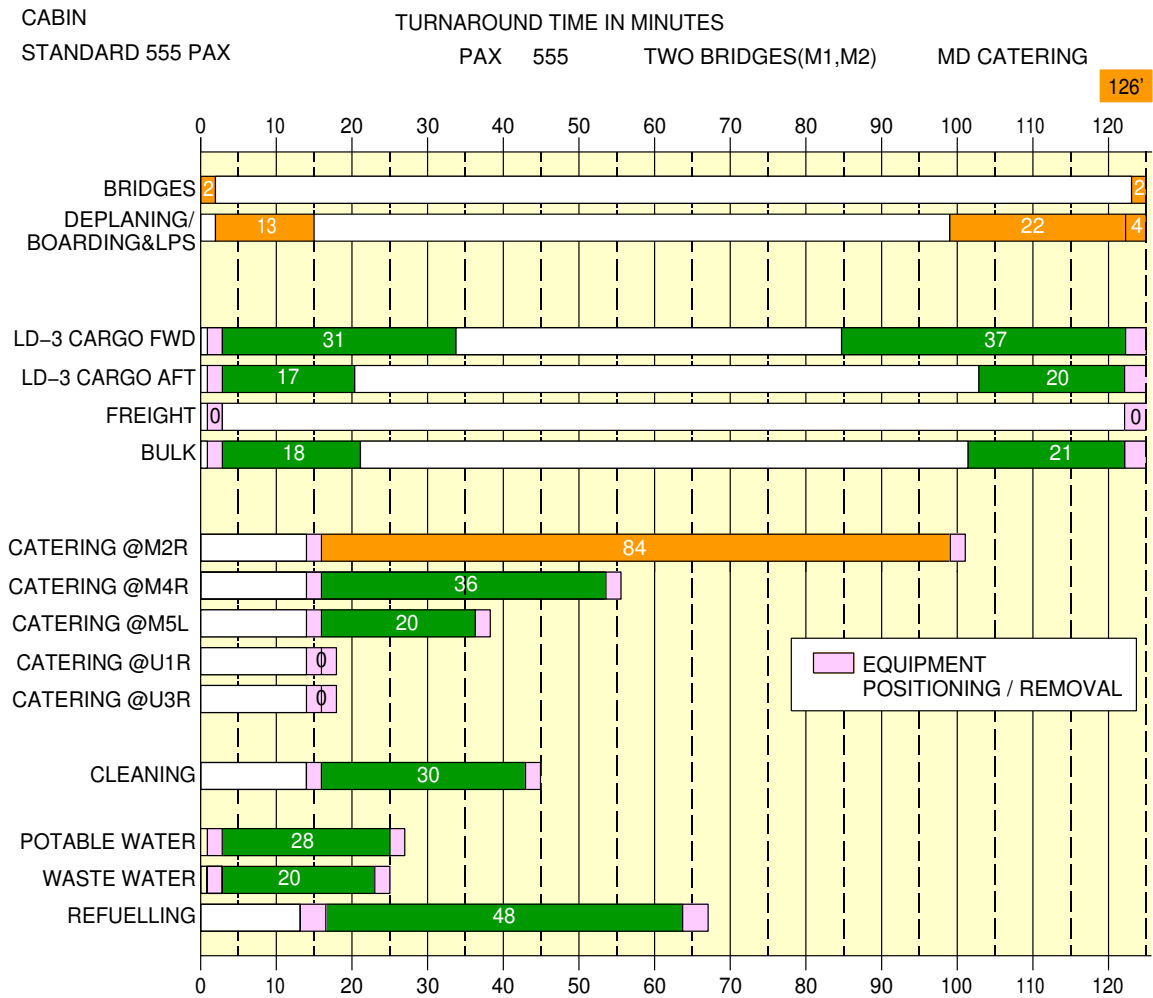
Typical Turn-Round Time - Two Bridges - Servicing Via Main Deck

1. Typical Turn-Round Time - Two Bridges - Servicing via Main Deck



AIRPLANE CHARACTERISTICS

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



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Typical Turn-Round Time – Two Bridges
Servicing Via Main Deck
FIGURE 1



AIRPLANE CHARACTERISTICS

5-3-0 Terminal Operation - Cargo Aircraft

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

Terminal Operation - Cargo Aircraft

1. Terminal Operation - Cargo Aircraft



AIRPLANE CHARACTERISTICS

5-3-1 Typical Turn-Round Time

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

Typical Turn-Round Time

1. The A380-800F can achieve turn-round times of 120 ± 20 minutes depending on ULD layouts on the three decks.

NOTE : These values are similar to other wide-body freighter aircraft in similar operating conditions.



AIRPLANE CHARACTERISTICS

5-4-0 Ground Service Connections

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

Ground Service Connections

1. Ground Service Connections



AIRPLANE CHARACTERISTICS

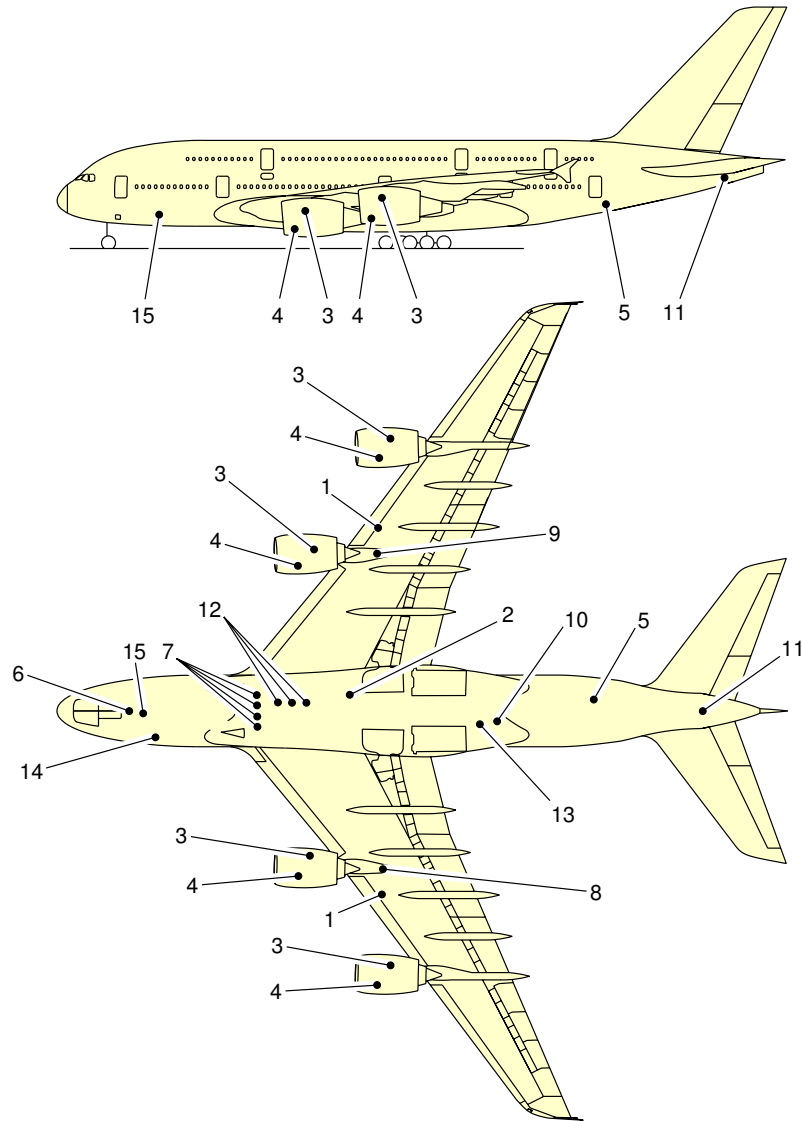
5-4-1 Ground Service Connections Layout

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

Ground Service Connections Layout - Pax

1. This section gives the ground service connections layout.

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



- 1 – PRESSURE REFUEL CONNECTORS
- 2 – HYDRAULIC RESERVOIR SERVICING PANEL
(RESERVOIR FILLING AND RESERVOIR PRESSURISATION)
- 3 – ENGINE OIL FILLING
- 4 – VF GENERATOR OIL FILLING
- 5 – TOILET AND WASTE SERVICE PANEL
- 6 – GROUND ELECTRICAL POWER
- 7 – LOW PRESSURE PRECONDITIONED AIR

- 8 – YELLOW HYDRAULIC GROUND CONNECTOR
- 9 – GREEN HYDRAULIC GROUND CONNECTOR
- 10 – POTABLE WATER SERVICE PANEL
- 11 – APU OIL FILLING
- 12 – HIGH PRESSURE AIR ENGINE START
- 13 – REFUEL/DEFUEL CONTROL PANEL
- 14 – OXYGEN SYSTEM
- 15 – POTABLE WATER DRAIN PANEL

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Ground Service Connections
Ground Service Connections Layout - A380-800 Models
FIGURE 1



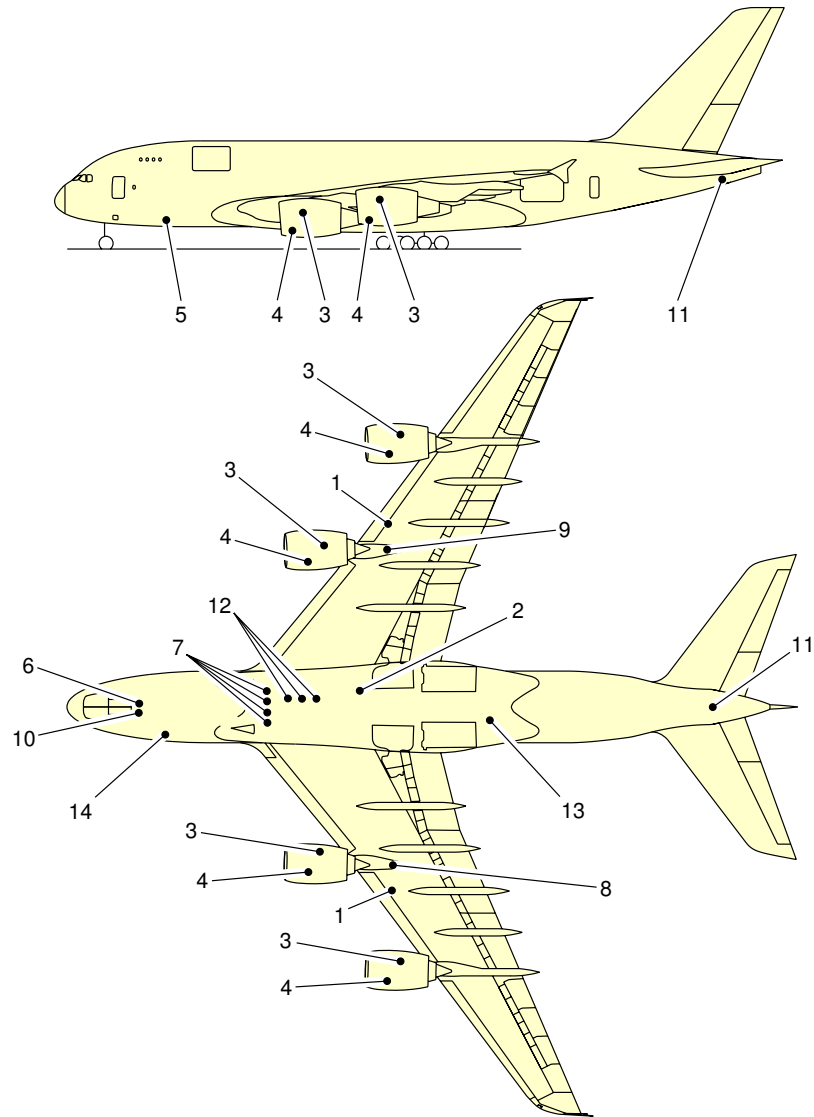
AIRPLANE CHARACTERISTICS

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

Ground Service Connections Layout - Freighter

1. This section gives the ground service connections layout.

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



- 1 – PRESSURE REFUEL CONNECTORS
- 2 – HYDRAULIC RESERVOIR SERVICING PANEL
(RESERVOIR FILLING AND RESERVOIR PRESSURISATION)
- 3 – ENGINE OIL FILLING
- 4 – VF GENERATOR OIL FILLING
- 5 – TOILET AND WASTE SERVICE PANEL
- 6 – GROUND ELECTRICAL POWER
- 7 – LOW PRESSURE PRECONDITIONED AIR

- 8 – YELLOW HYDRAULIC GROUND CONNECTOR
- 9 – GREEN HYDRAULIC GROUND CONNECTOR
- 10 – POTABLE WATER SERVICE PANEL
- 11 – APU OIL FILLING
- 12 – HIGH PRESSURE AIR ENGINE START
- 13 – REFUEL/DEFUEL CONTROL PANEL
- 14 – OXYGEN SYSTEM

DB1A

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Ground Service Connections
Ground Service Connections Layout - A380-800F Models
FIGURE 2

5-4-2 Grounding Points

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

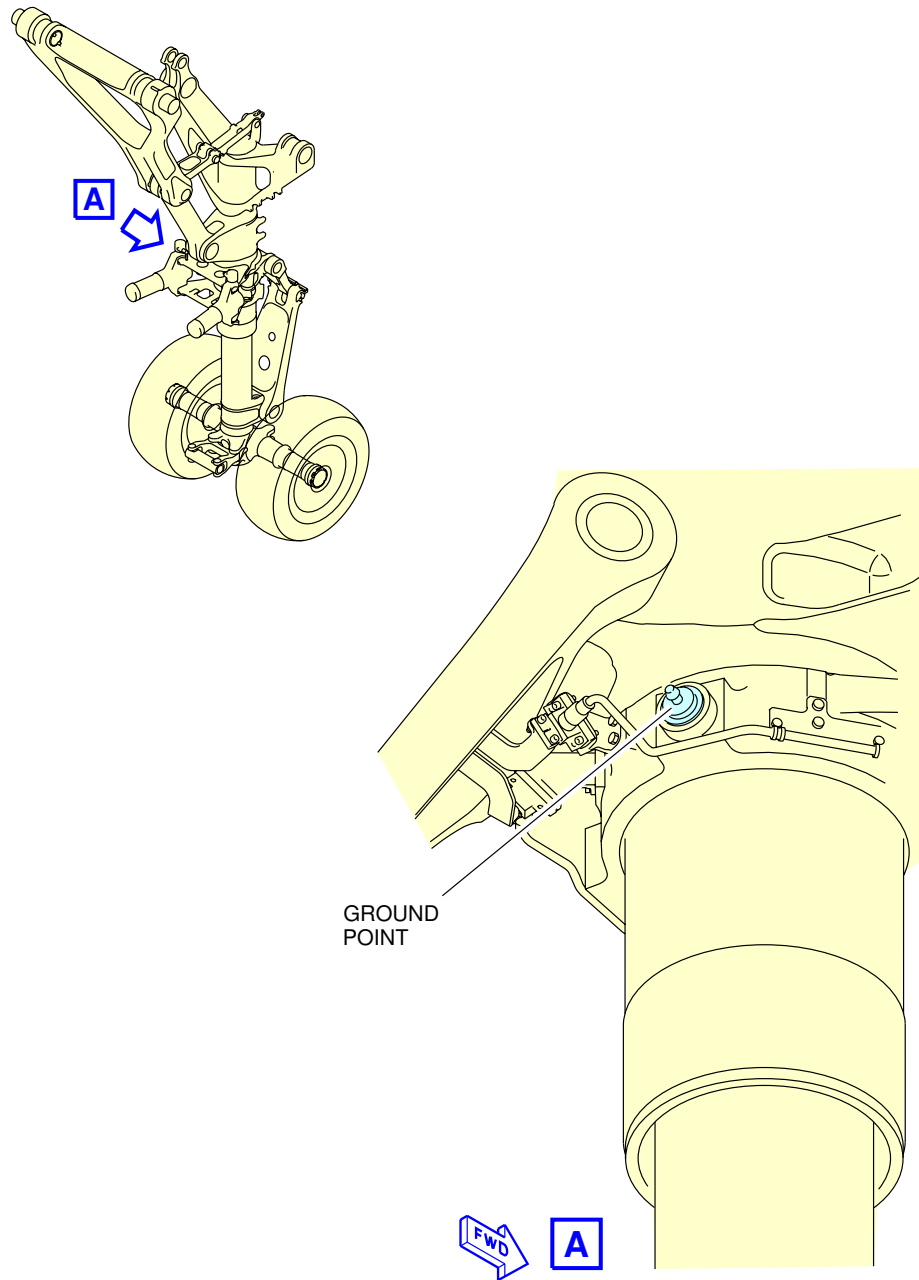
Grounding Points

1. Grounding Points

	DISTANCE: Meters (ft)		
	AFT OF NOSE	FROM AIRPLANE CENTERLINE	MEAN HEIGHT FROM GROUND
On Nose Landing Gear	5.713 (18.7)	0.182 (0.6) On the RH side	1.385 (4.5)
On left Wing Gear leg	34.207 (112.2)	5.949 (19.5)	1.237 (4.0)
On right Wing Gear leg	34.207 (112.2)	5.949 (19.5)	1.237 (4.0)
On left Body Gear leg (Outboard)	37.158 (121.9)	2.852 (9.4)	1.379 (4.5)
On left Body Gear leg (Inboard)	37.158 (121.9)	2.412 (7.9)	1.379 (4.5)
On right Body Gear leg (Outboard)	37.158 (121.9)	2.852 (9.4)	1.379 (4.5)
On right Body Gear leg (Inboard)	37.158 (121.9)	2.412 (7.9)	1.379 (4.5)

- A. The grounding stud on each landing gear is designed for use with a clip-on connector, such as an Appleton TGR.
- B. The grounding studs are used to connect the airplane to approved ground connection on the ramp or in the hangar for:
 - (1) refuel/defuel operations
 - (2) maintenance operations
 - (3) bad weather conditions.

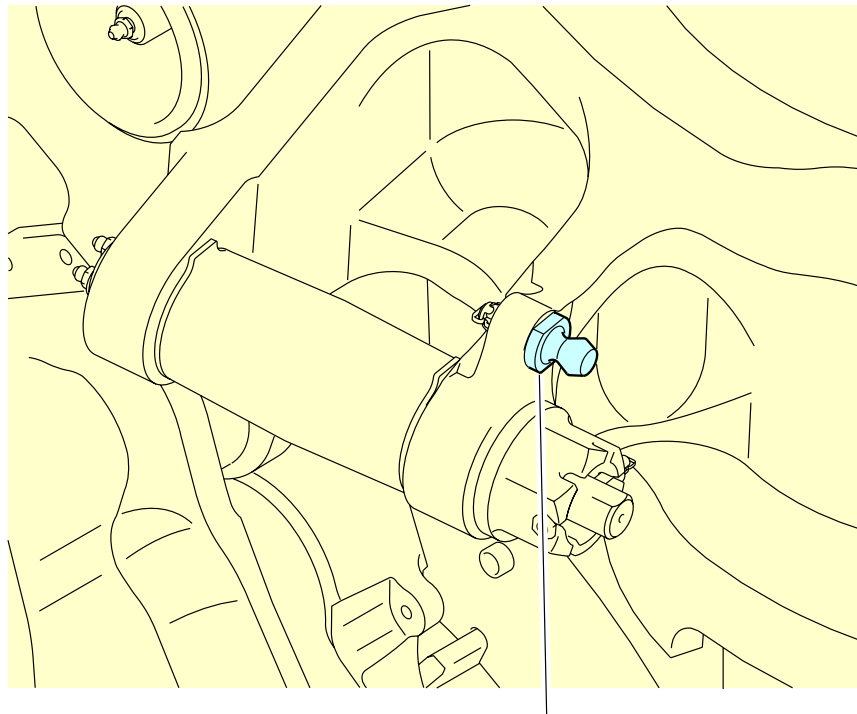
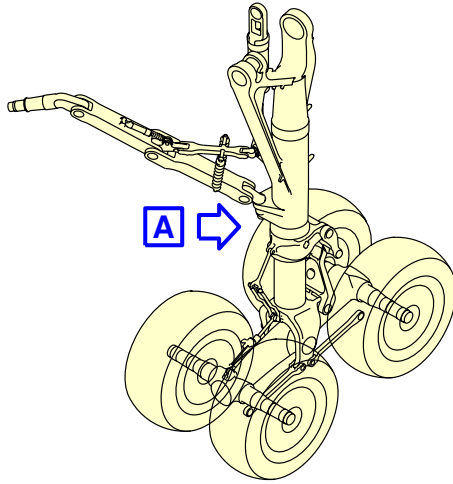
****ON A/C A380-800 Models A380-800F Models**



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Ground Points NLG
FIGURE 1

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

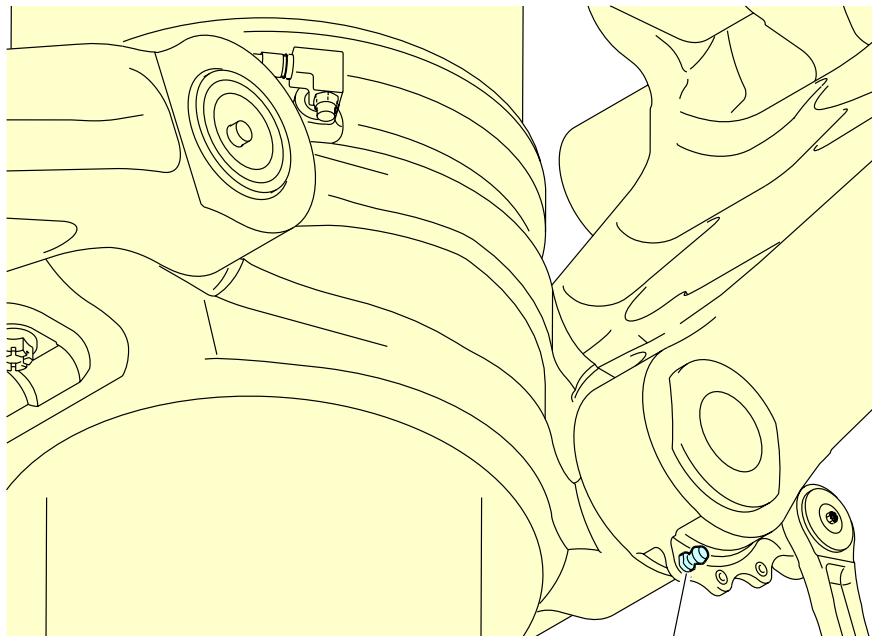
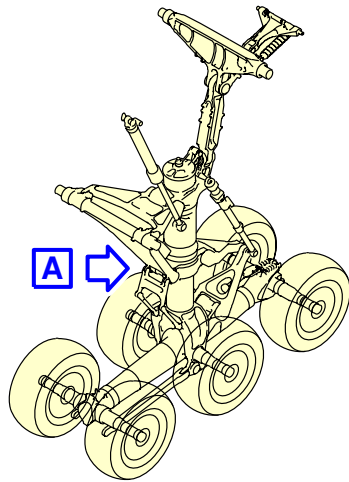


GROUND POINT

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Ground Point WLG
FIGURE 2

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



GROUND
POINTS
(RIGHT ONE SHOWN LEFT ONE SIMILAR)

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Ground Points BLG
FIGURE 3

5-4-3 Hydraulic System

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

Hydraulic System

1. Door Location

	DISTANCE : Meters (ft)			
	AFT OF NOSE	FROM AIRPLANE CENTERLINE		MEAN HEIGHT FROM GROUND
		R SIDE	L SIDE	
– Green hydraulic ground connectors : (Access door 469FL)	34.67 (113.7)		14.90 (48.88)	5.08 (16.66)
– Yellow hydraulic ground connector : (Access door 479FL)	34.67 (113.7)	14.90 (48.88)		5.08 (16.66)
– Hydraulic Reservoir Servicing Panel : (Access door 197CB)	31.89 (104.63)		2.34 (7.67)	1.71 (5.61)

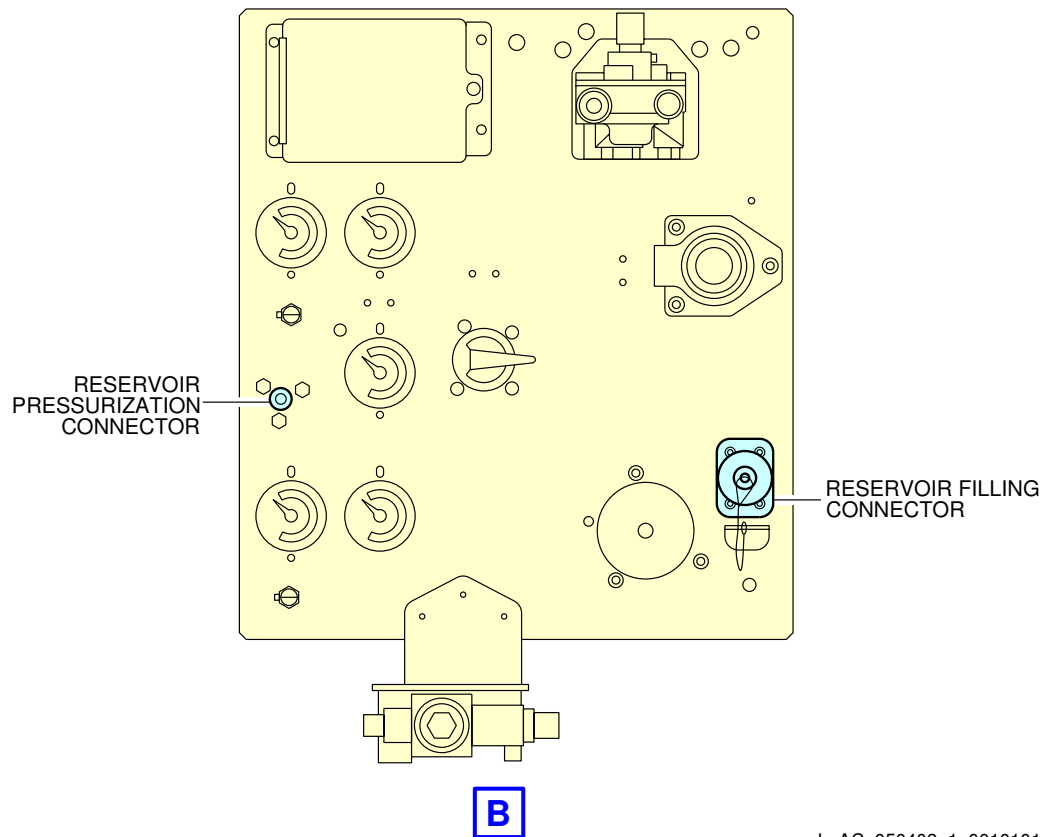
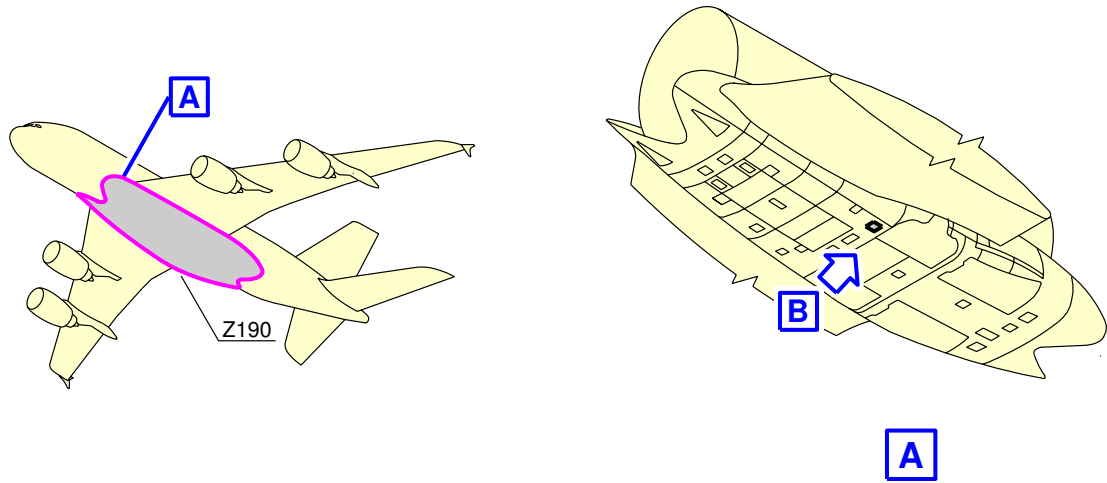
A. Reservoir Pressurization

(1) One connector ETRTO V0.09.6, 1/4 in.

B. Reservoir Filling

(1) One connector AE96993E, 1/4 in.

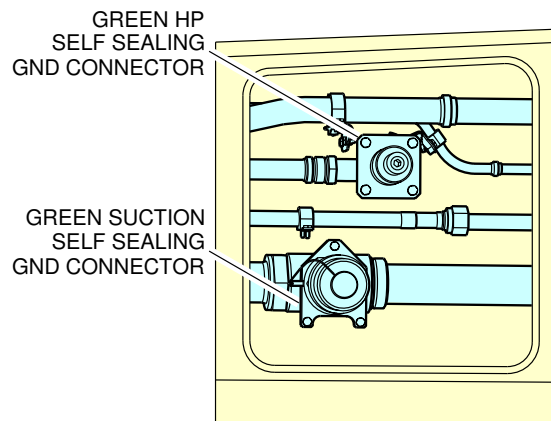
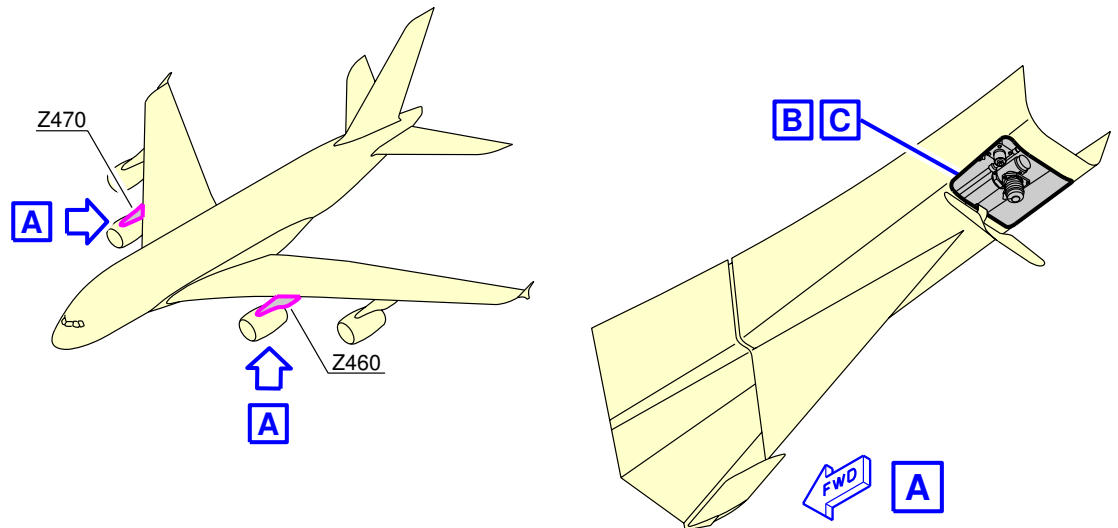
****ON A/C A380-800 Models A380-800F Models**



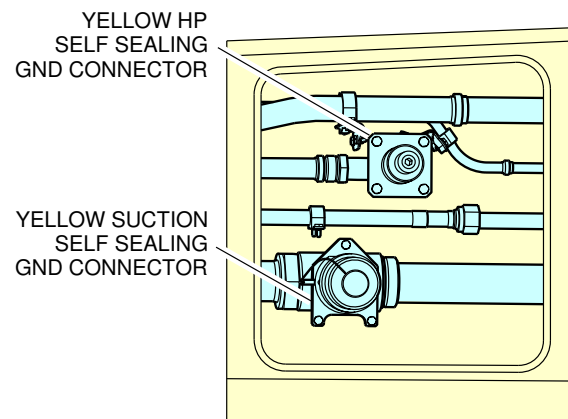
L_AC_050403_1_0010101_01_00

Ground Service Connections
Hydraulic Reservoir Servicing Panel
FIGURE 1

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



B
FOR LH PYLON



C
FOR RH PYLON

L_AC_050403_1_0020101_01_00

Ground Service Connections
Hydraulic Ground Connections
FIGURE 2

5-4-4 Electrical System****ON A/C A380-800 Models**Electrical System - Pax

1. Electrical System

	DISTANCE : Meters (ft)			
	AFT OF NOSE	FROM AIRPLANE CENTERLINE		MEAN HEIGHT FROM GROUND
		R SIDE	L SIDE	
– Right side access door : 134AR	5.99 (19.65)	0.45 (1.47)		2.59 (8.49)
– Left side access door : 133AL	5.99 (19.65)		0.45 (1.47)	2.59 (8.49)

A. External Power Receptacles :

(1) four standard ISO R461 receptacles - 90 KVA each.

B. Power supply :

(1) three phase, 115V, 400 Hz.

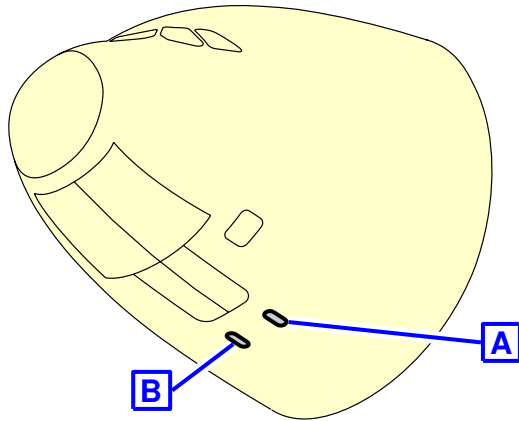
C. Electrical connectors for servicing :

(1) AC outlets : HUBBEL 5258

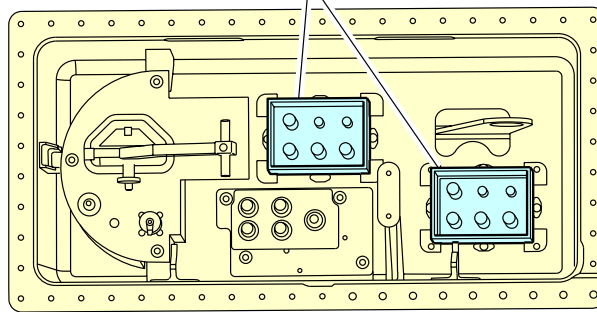
(2) DC outlets : HUBBEL 7472

(3) Vacuum cleaner outlets : HUBBEL 5258

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

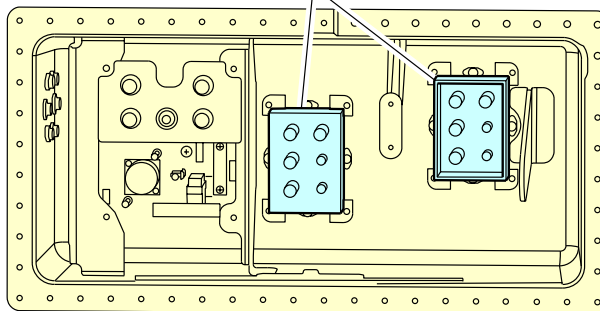


EXTERNAL POWER RECEPTABLES



A

EXTERNAL POWER RECEPTABLES



B

L_AC_050404_1_0010101_01_00

Ground Service Connections
Electrical Service Panel - A380-800 Models
FIGURE 1

****ON A/C A380-800F Models**Electrical System - Freighter

1. Electrical System

	DISTANCE : Meters (ft)			
	AFT OF NOSE	FROM AIRPLANE CENTERLINE		MEAN HEIGHT FROM GROUND
		R SIDE	L SIDE	
– access door : TBD	5.99 (19.65)		0.45 (1.47)	2.59 (8.49)

A. External Power Receptacles :

(1) four standard ISO R461 receptacles - 90 KVA each.

B. Power supply :

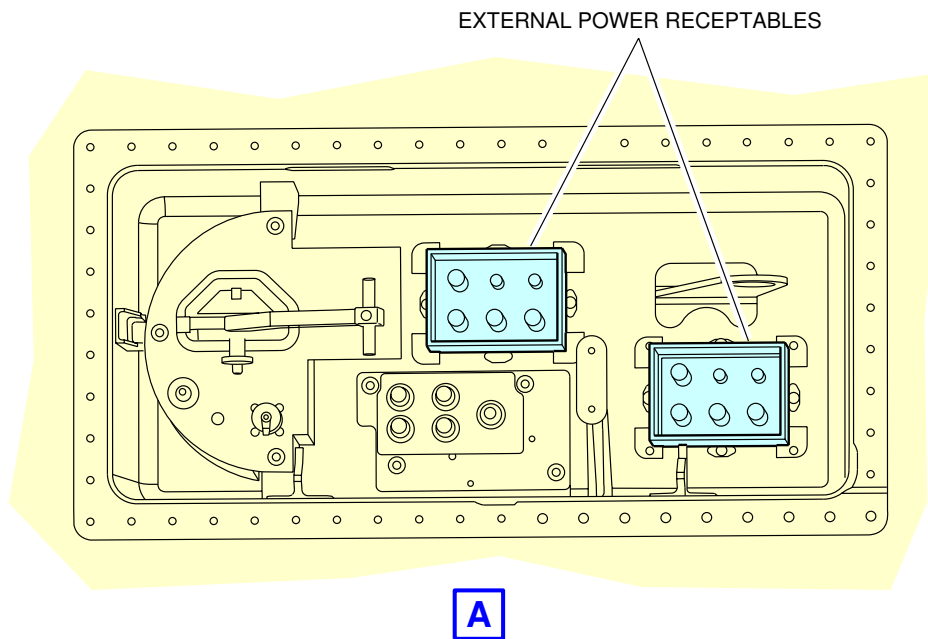
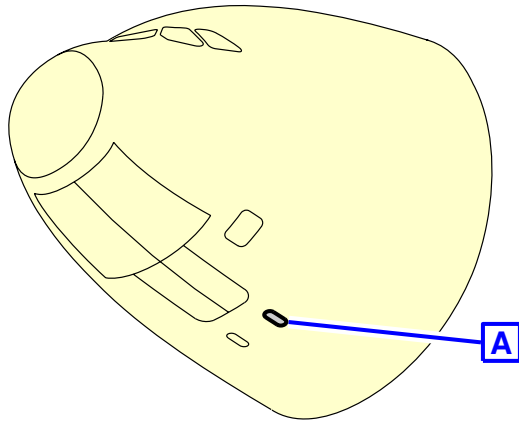
(1) three phase, 115V, 400 Hz.

C. Electrical connectors for servicing :

(1) AC outlets : HUBBEL 5258

(2) DC outlets : HUBBEL 7472

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



L_AC_050404_1_0030101_01_00

Ground Service Connections
Electrical Service Panel - A380-800F Models
FIGURE 2



AIRPLANE CHARACTERISTICS

5-4-5 Oxygen System

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

Oxygen System

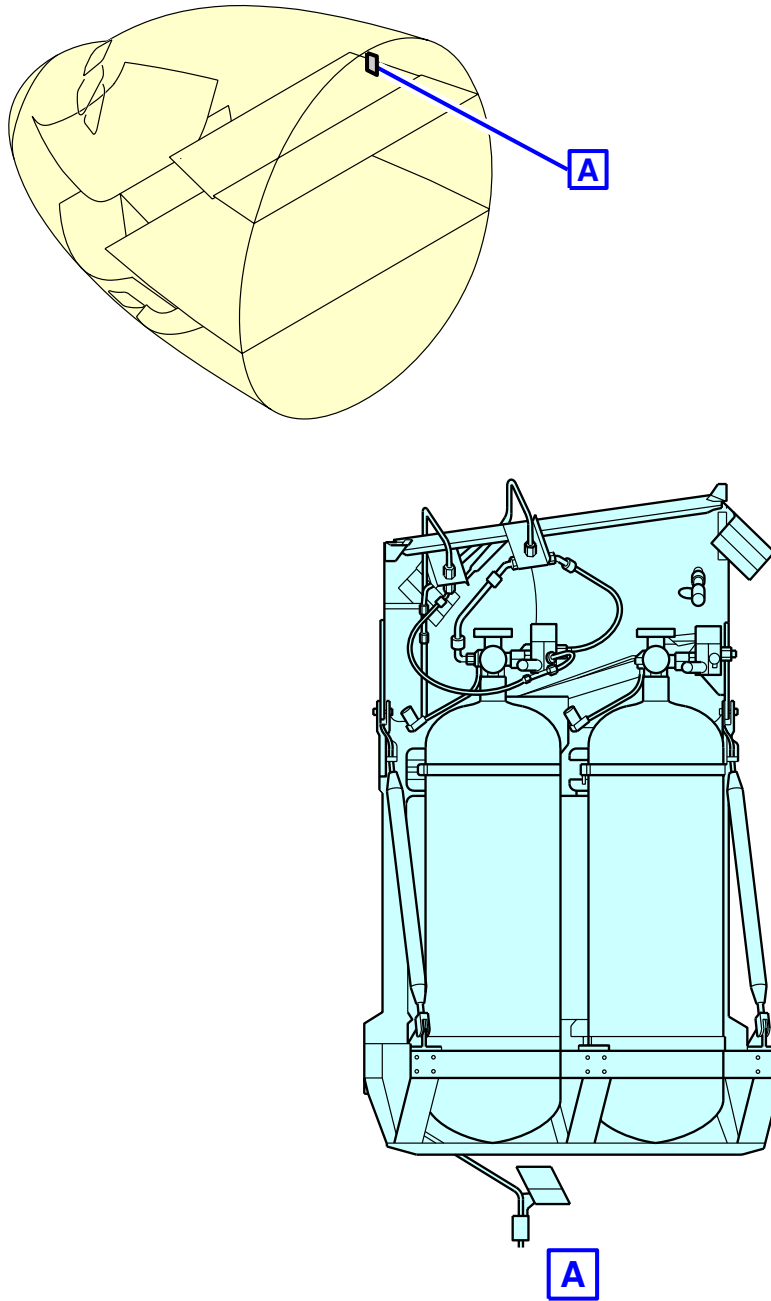
1. Door Location

NOTE : INTERNAL CHARGING CONNECTION PROVIDED

	DISTANCE : Meters (ft)			
	AFT OF NOSE	FROM AIRPLANE CENTERLINE		MEAN HEIGHT FROM GROUND
		R SIDE	L SIDE	
– Access door : 272AFZ	7.45 (24.44)	2.23 (7.32)		3.25 (10.66)

Zero, one or two service connections (external charging in the avionics compartment) MS22066 Std

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



L_AC_050405_1_0010101_01_00

Ground Service Connections
Oxygen System
FIGURE 1

5-4-6 Fuel System

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

Fuel System

1. Refuel/Defuel Control Panel

	DISTANCE : Meters (ft)			
	AFT OF NOSE	FROM AIRPLANE CENTERLINE		MEAN HEIGHT FROM GROUND
		R SIDE	L SIDE	
– Refuel/Defuel control panel : (Access door 199KB)	48 (159.48)	0.68 (2.23)		1.98 (6.50)

2. Refuel/Defuel Connectors

	DISTANCE : Meters (ft)			
	AFT OF NOSE	FROM AIRPLANE CENTERLINE		MEAN HEIGHT FROM GROUND
		R SIDE	L SIDE	
– refuel/defuel coupling, left: (Access door 522GB)	31.89 (104.62)		17.97 (58.95)	5.94 (19.49)
– refuel/defuel coupling, right: (Access door 622GB)	31.89 (104.62)	17.97 (58.95)		5.94 (19.49)

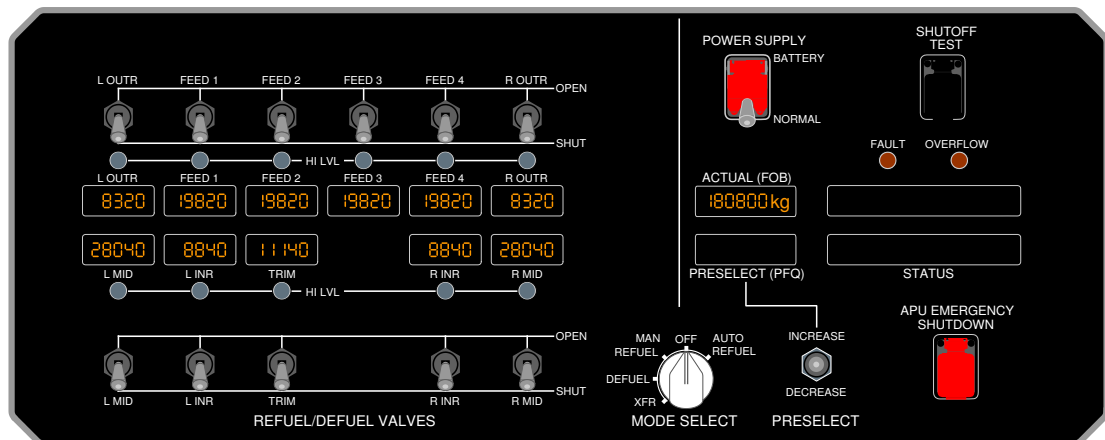
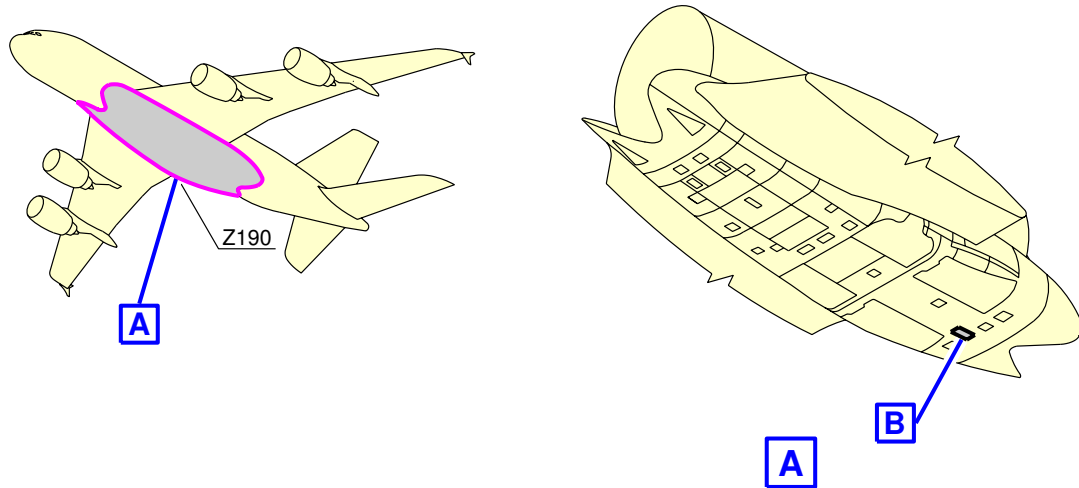
A. Refuel/Defuel couplings :

- (1) Standard ISO R45, 2.5 in., two per wing

B. Refuel pressure :

- (1) Max. pressure : 3.45 bar (50 psi)

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



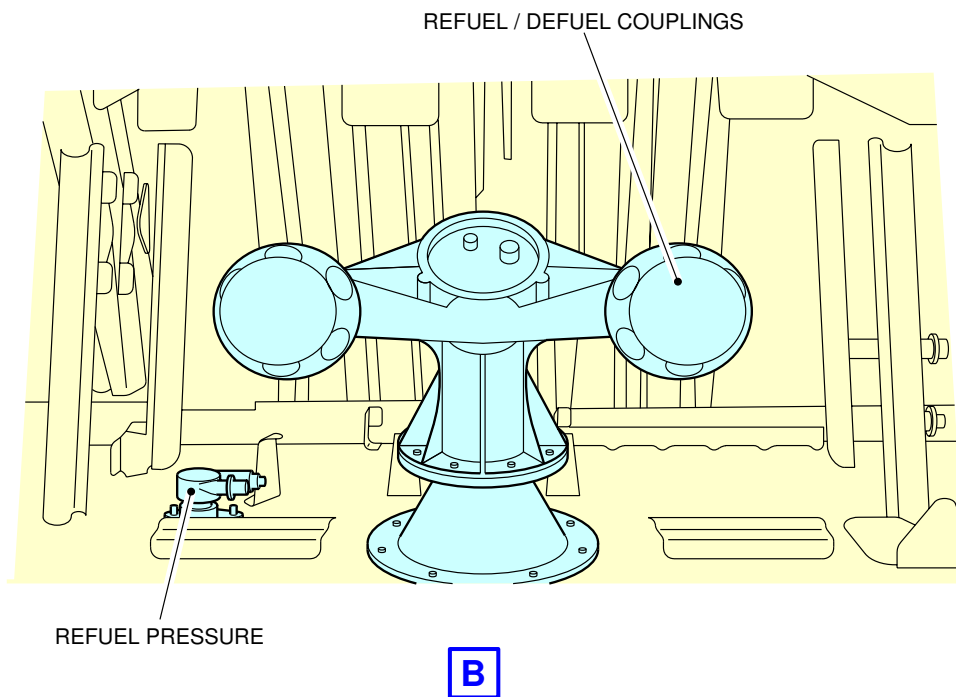
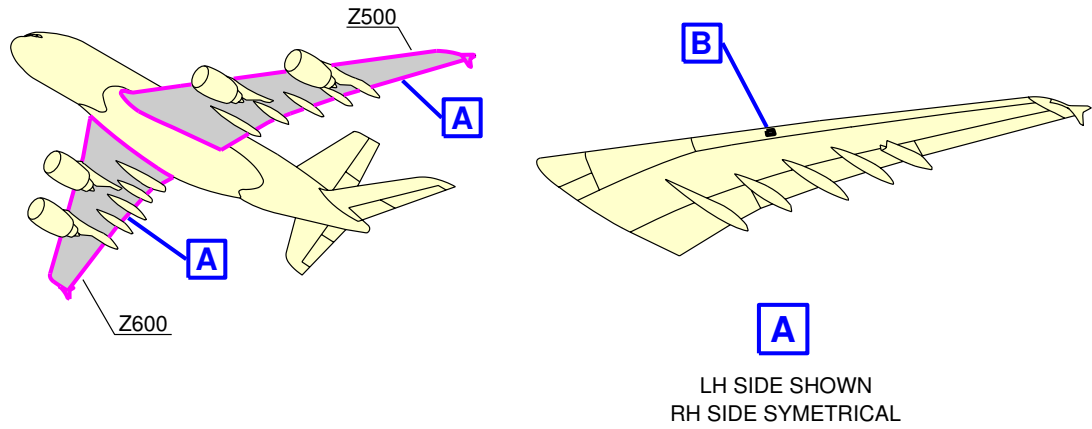
42QU

B

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Ground Service Connections
Refuel/Defuel Control Panel
FIGURE 1

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



L_AC_050406_1_0020101_01_00

Ground Service Connections
Pressure Refuel Connections
FIGURE 2

5-4-7 Pneumatic System

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

Pneumatic System

1. Low Pressure Connectors

	DISTANCE : Meters (ft)			
		FROM AIRPLANE CENTERLINE		
	AFT OF NOSE	R SIDE	L SIDE	MEAN HEIGHT FROM GROUND
access doors 191GB	21.85 (71.69)		1.24 (4.07)	2.08 (6.82)
access doors 191JB	22.36 (73.36)		1.76 (5.77)	2.08 (6.82)
access doors 191HB	21.85 (71.69)	1.24 (4.07)		2.08 (6.82))
access doors 191KB	22.36 (73.36)	1.76 (5.77)		2.08 (6.82)

A. Connectors :

(1) Four standard MS33562 (ISO1034), 8 in.

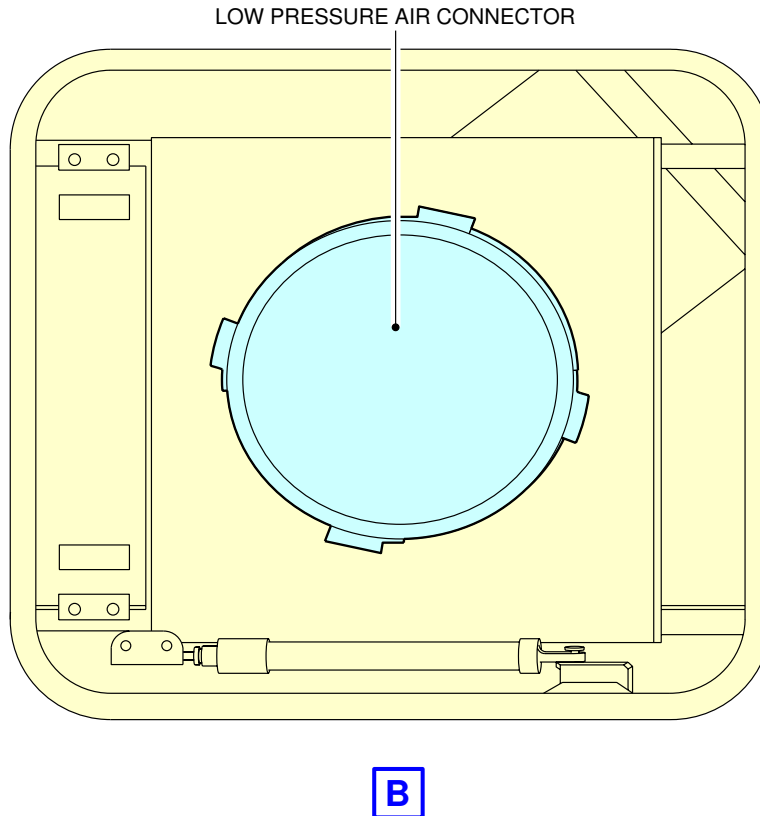
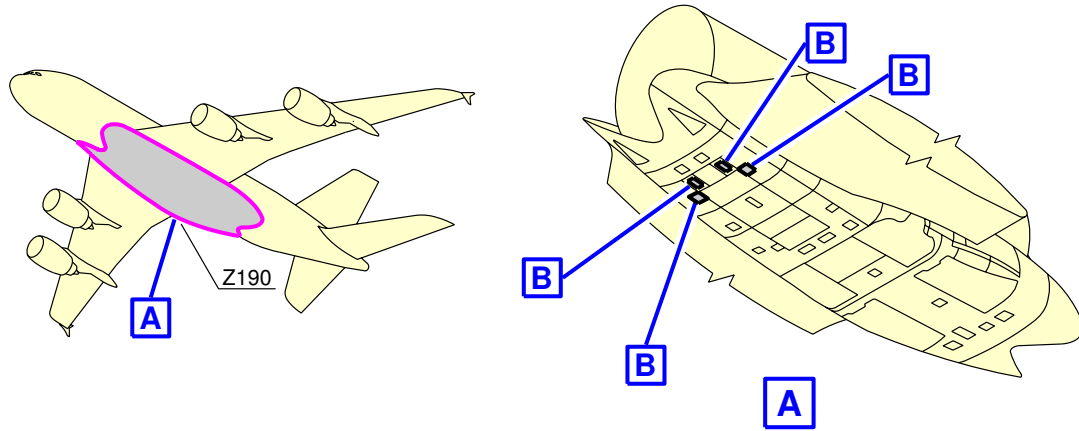
2. High Pressure Connectors

	DISTANCE : Meters (ft)			
		FROM AIRPLANE CENTERLINE		
	AFT OF NOSE	R SIDE	L SIDE	MEAN HEIGHT FROM GROUND
– access doors 193BB	25.37 (83.23)		0.2 (0.66)	1.78 (5.84)

A. Connectors :

(1) Three standard MS33740 (ISO2026), 3 in.

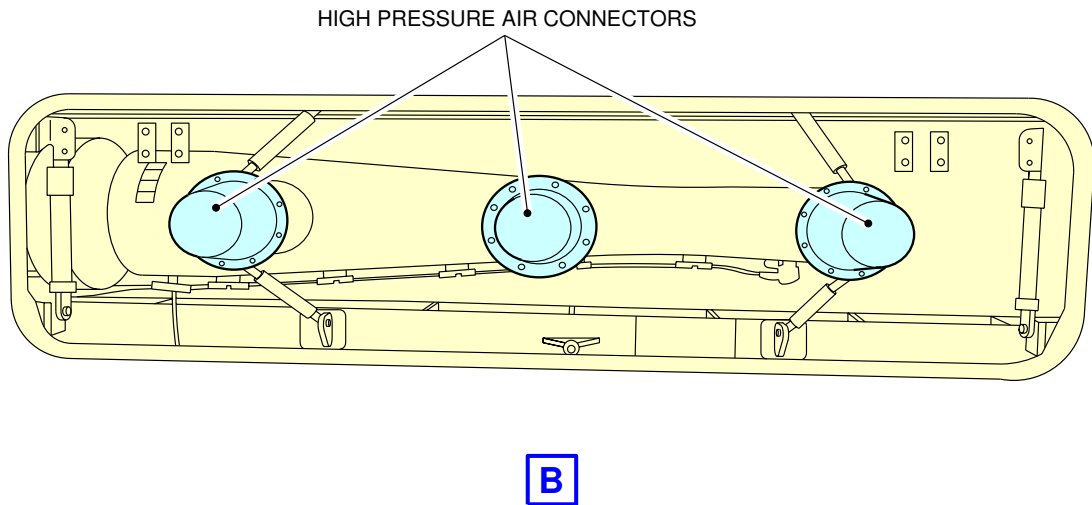
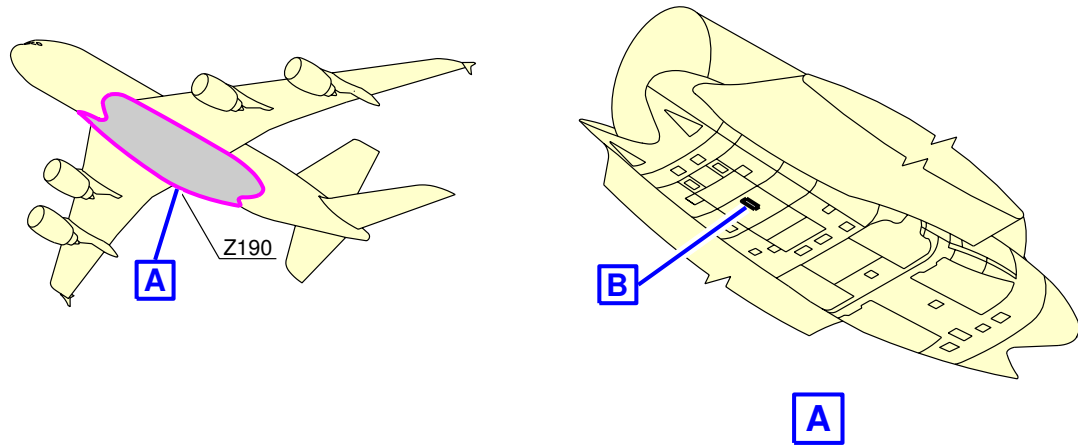
****ON A/C A380-800 Models A380-800F Models**



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Ground Service Connections
Low Pressure Preconditioned Air
FIGURE 1

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



L_AC_050407_1_0020101_01_00

Ground Service Connections
High Pressure Preconditioned Air
FIGURE 2

5-4-8 Potable Water System

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

Potable Water System - Pax

1. Potable Water System

	DISTANCE : Meters (ft)			
	AFT OF NOSE	FROM AIRPLANE CENTERLINE		MEAN HEIGHT FROM GROUND
		R SIDE	L SIDE	
- Potable water ground service panel: access door 199NB	43.67 (143.27)		0.37 (1.21)	2.18 (7.15)
- Potable water drain panel: access door 133BL	9.83 (32.25)		0.3 (0.98)	2.74 (8.99)

A. Connectors :

- (1) Fill/Drain Nipple, 3/4 in.

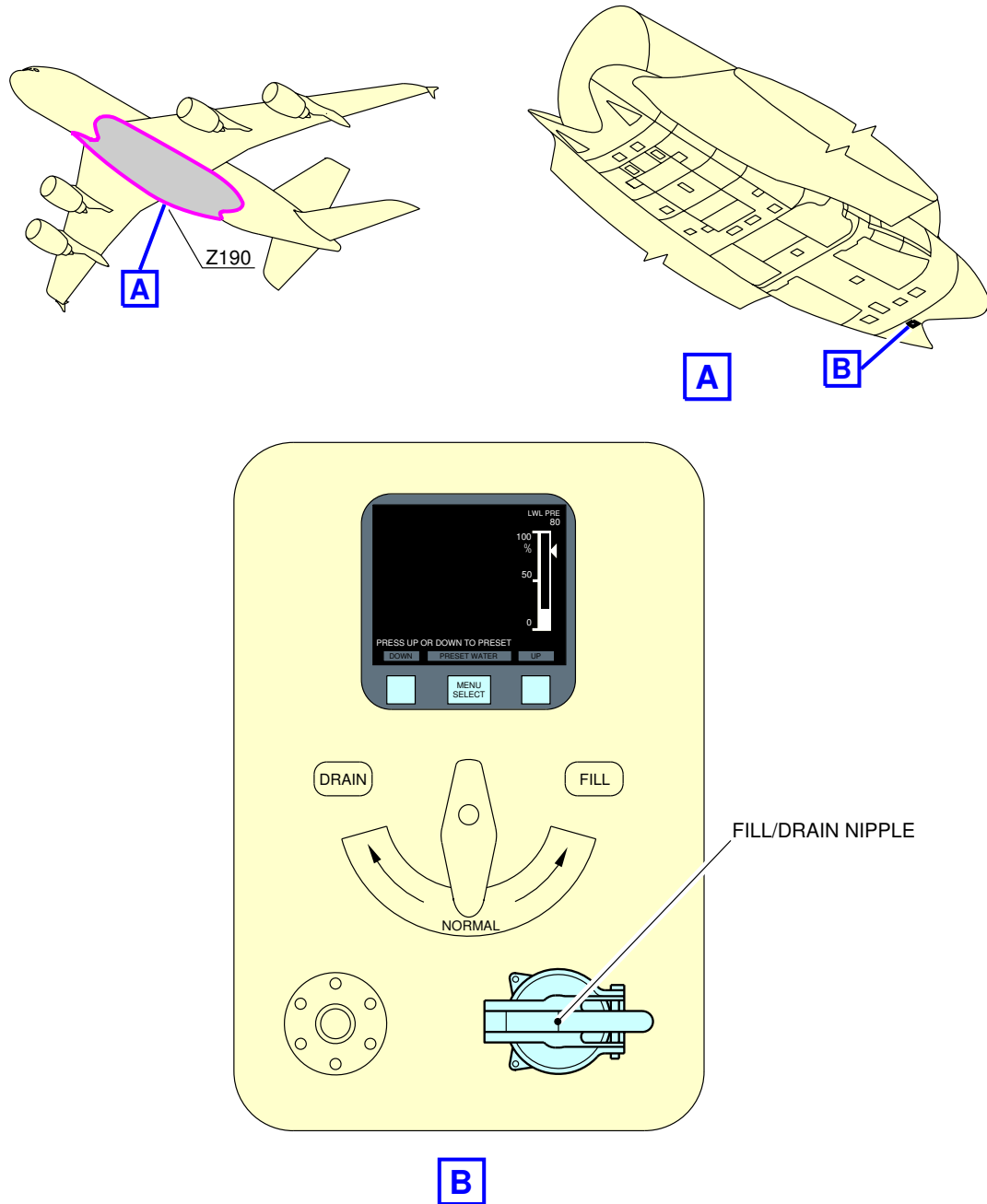
B. Capacity :

- (1) Standard configuration - six tanks : 1700 l (449 USgal)
- (2) Optional : 2266 l (598 USgal)

C. Filling pressure :

- (1) Max Filling Pressure: 8.6 bar (125 psi)

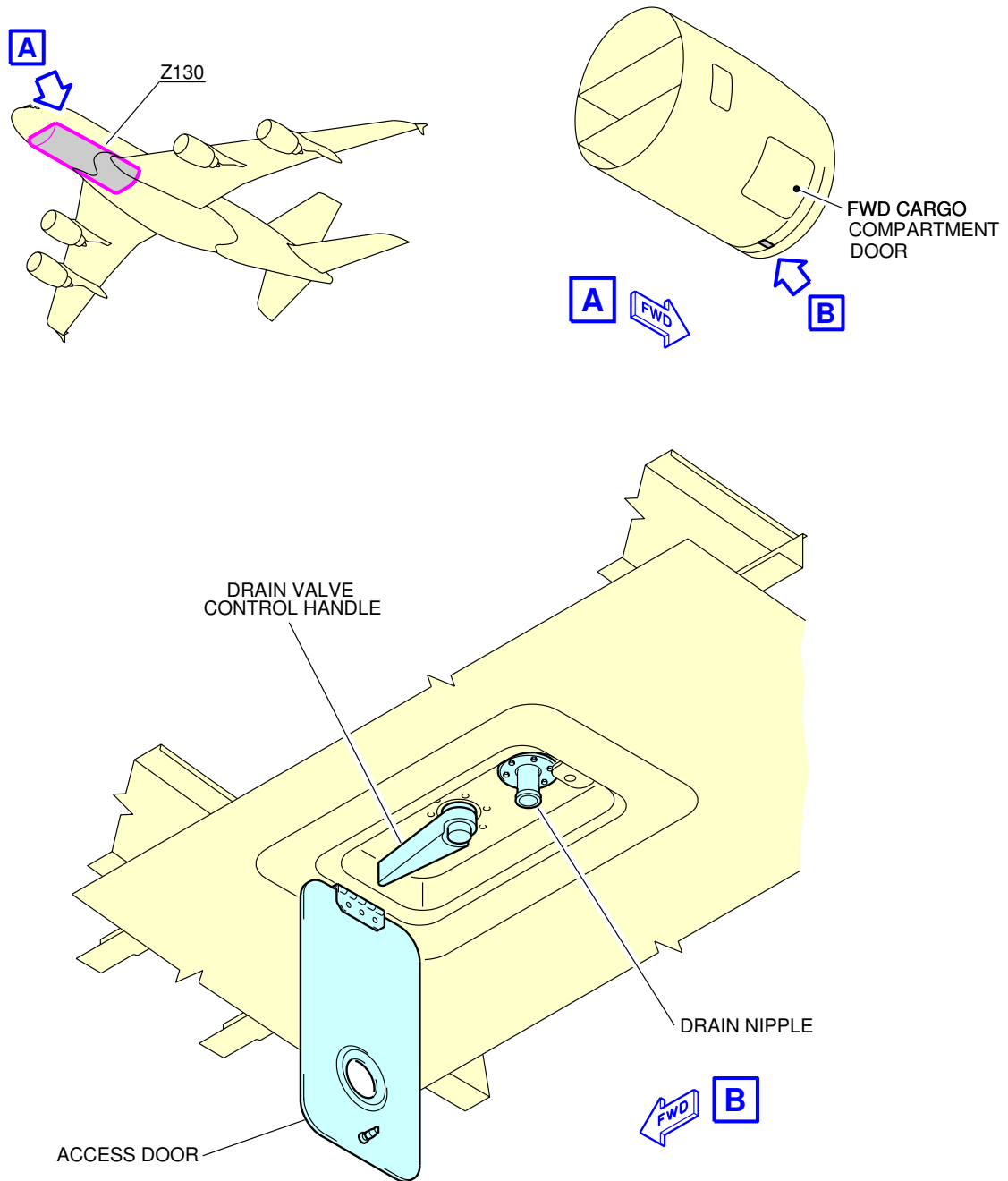
****ON A/C A380-800 Models**



L_AC_050408_1_0010101_01_00

Ground Service Connections
Potable Water Ground Service Panel - A380-800 Models
FIGURE 1

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



L_AC_050408_1_0040101_01_00

Ground Service Connections
Potable Water Drain Panel - A380-800 Models
FIGURE 2

****ON A/C A380-800F Models**Potable Water System - Freighter

1. Potable Water System

	DISTANCE : Meters (ft)			
	AFT OF NOSE	FROM AIRPLANE CENTERLINE		MEAN HEIGHT FROM GROUND
		R SIDE	L SIDE	
- access door TBD	5.99 (19.65)	0.45 (1.48)		2.59 (8.50)

A. Connectors :

(1) Fill/Drain Nipple, 3/4 in.

B. Capacity :

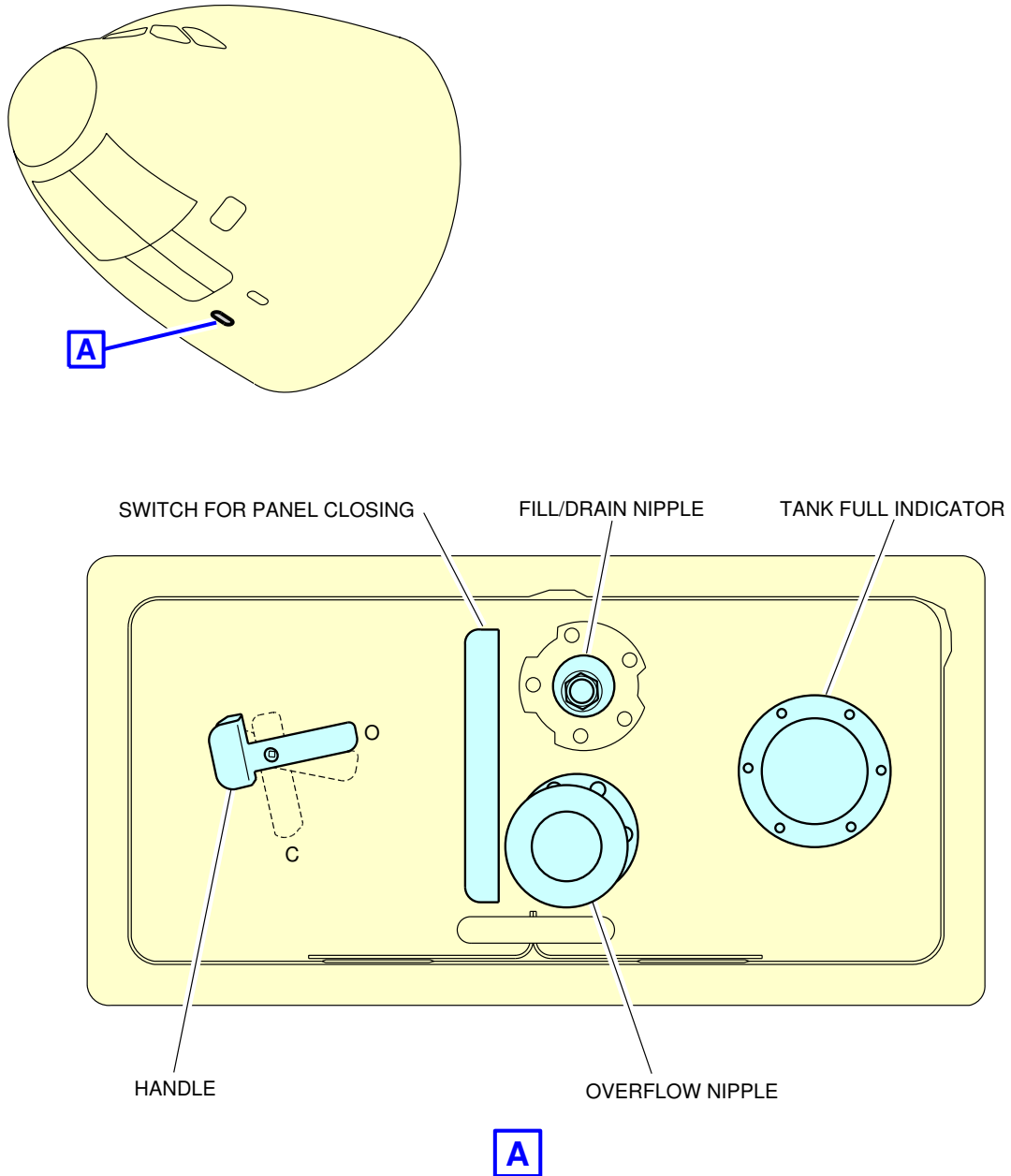
(1) Standard configuration - one tank : 80 l (21 USgal)

(2) Option available for reservoir of 160 l (42 USgal)

C. Filling pressure :

(1) Max Filling Pressure: 8.6 bar (125 psi)

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



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Ground Service Connections
Potable Water Ground Service Panel - A380-800F Models
FIGURE 3

5-4-9 Oil System

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

Engine Oil Servicing

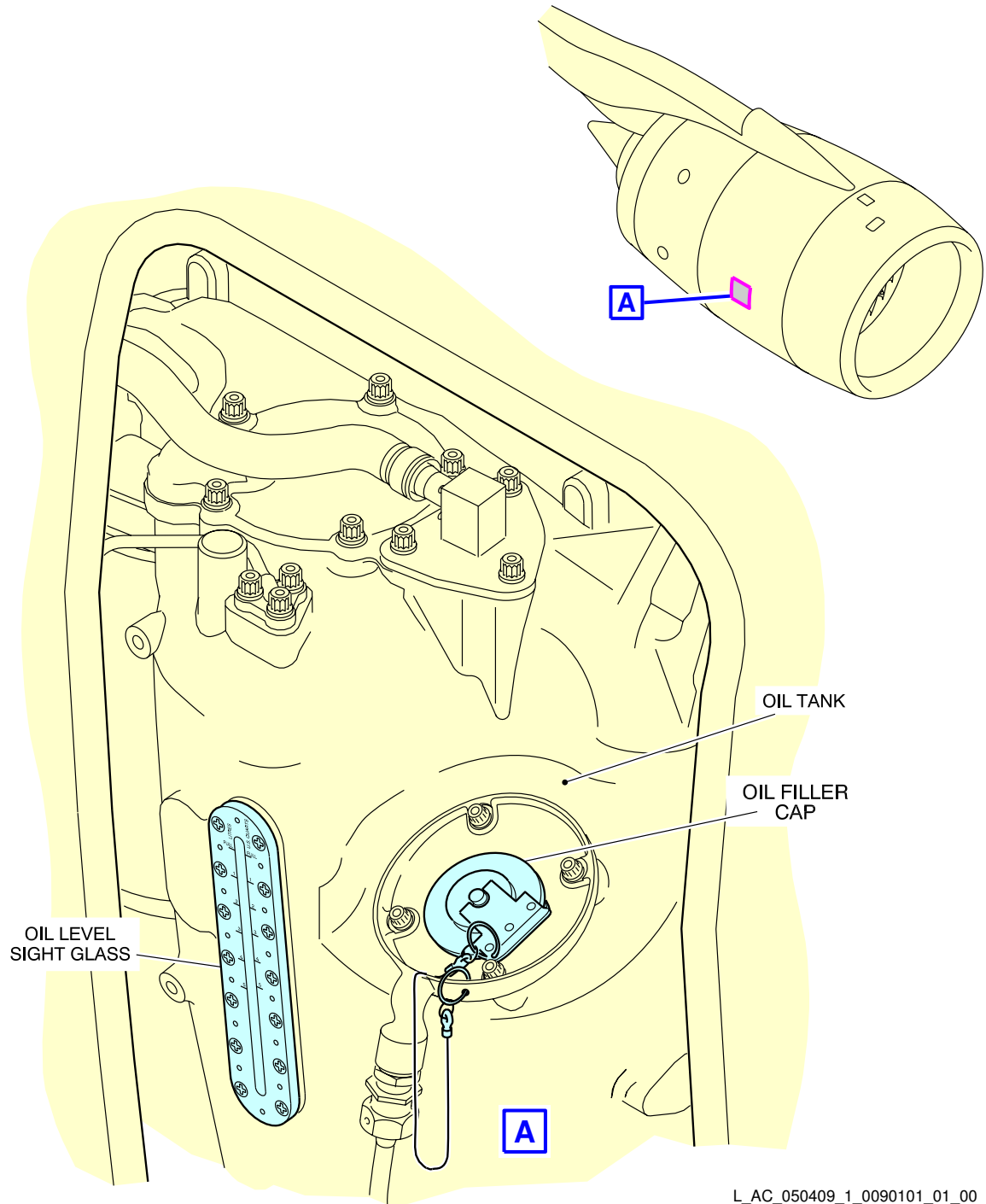
1. Engine Oil Servicing (TRENT900 Engines)

	DISTANCE : Meters (ft)			
	AFT OF NOSE	FROM AIRPLANE CENTERLINE		MEAN HEIGHT FROM GROUND
		R SIDE	L SIDE	
– Engine 1 (access door 416BR)	32.65 (107.12)		23.58 (77.36)	4.24 (13.91)
– Engine 2 (access door 426BR)	24.98 (81.96)		12.74 (41.79)	3.08 (10.10)
– Engine 3 (access door 436BR)	24.98 (81.96)	16.61 (54.49)		3.08 (10.10)
– Engine 4 (access door 446BR)	32.65 (107.12)	27.45 (90.05)		4.24 (13.91)

2. Engine Oil Servicing (GP7200 Engines)

	DISTANCE : Meters (ft)			
	AFT OF NOSE	FROM AIRPLANE CENTERLINE		MEAN HEIGHT FROM GROUND
		R SIDE	L SIDE	
– Engine 1 (access door 415CL)	33.03 (108.37)		27.42 (89.96)	4.4 (14.44)
– Engine 2 (access door 425CL)	25.35 (83.17)		16.62 (54.53)	3.13 (10.27)
– Engine 3 (access door 435CL)	25.35 (83.17)	12.78 (41.93)		3.13 (10.27)
– Engine 4 (access door 445CL)	33.03 (108.37)	23.62 (77.49)		4.4 (14.44)

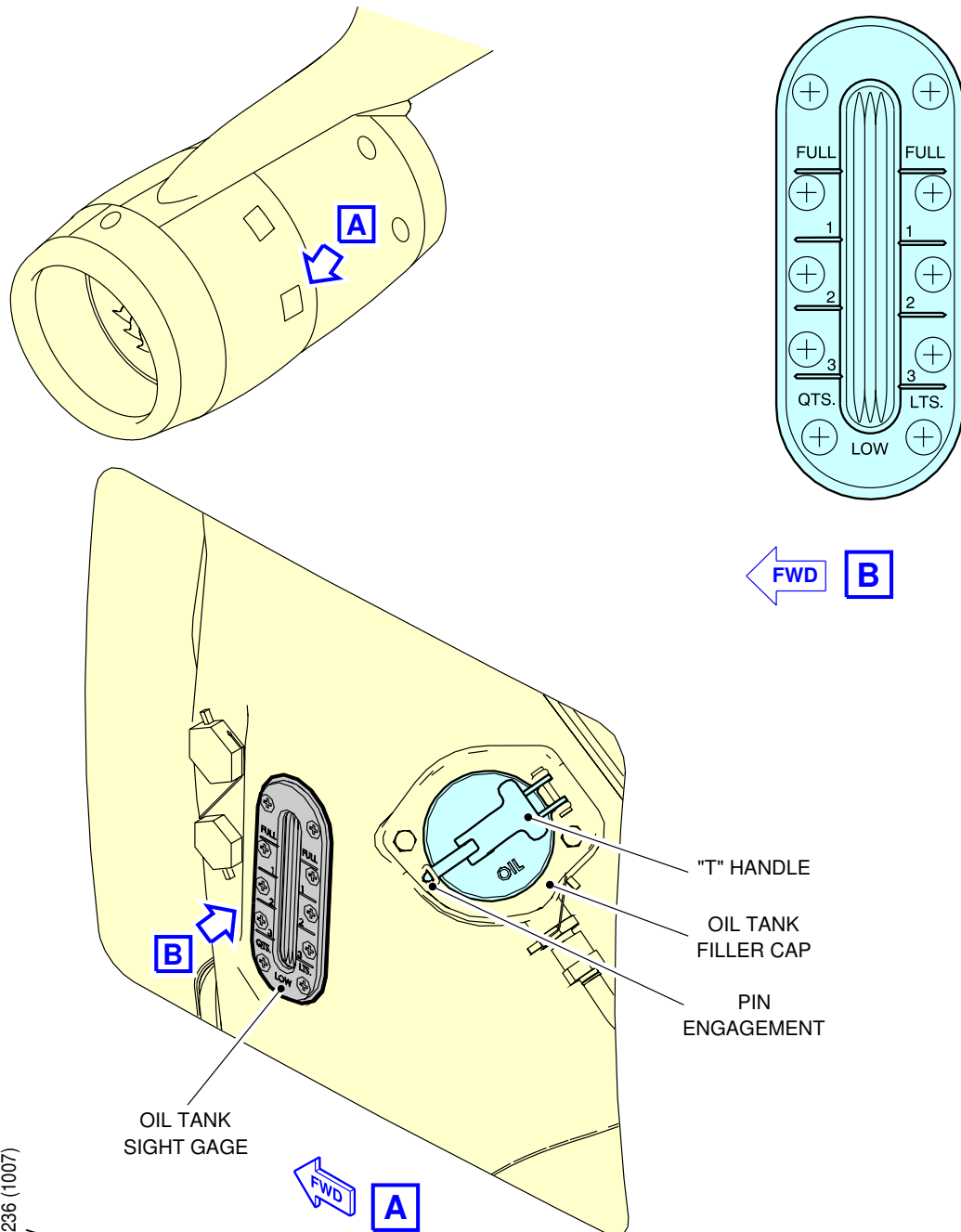
****ON A/C A380-800 Models A380-800F Models**



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Ground Service Connections
Engine Oil Servicing - TRENT 900 Engines
FIGURE 1

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



E-00236 (1007)
PW V

L_AC_050409_1_0100101_01_01

Ground Service Connections
Engine Oil Servicing - GP 7200 Engines
FIGURE 2

****ON A/C A380-800 Models A380-800F Models**
VFG Oil Servicing
1. VFG oil servicing (TRENT900 Engines)

	DISTANCE : Meters (ft)			
	AFT OF NOSE	FROM AIRPLANE CENTERLINE		MEAN HEIGHT FROM GROUND
		R SIDE	L SIDE	
– Engine 1 (access door 415CL)	33.17 (108.83)		26.14 (85.76)	2.56 (8.39)
– Engine 2 (access door 425CL)	25.57 (83.89)		15.31 (50.22)	1.33 (4.36)
– Engine 3 (access door 435CL)	25.57 (83.89)	13.93 (45.70)		1.33 (4.36)
– Engine 4 (access door 445CL)	33.17 (108.83)	24.90 (81.69)		2.56 (8.39)

2. VFG oil servicing (GP7200 Engines)

	DISTANCE : Meters (ft)			
	AFT OF NOSE	FROM AIRPLANE CENTERLINE		MEAN HEIGHT FROM GROUND
		R SIDE	L SIDE	
– Engine 1	34.49 (113.16)		25.43 (83.43)	2.63 (8.63)
– Engine 2	26.81 (87.96)		14.63 (48.00)	1.36 (4.46)
– Engine 3	26.81 (87.96)	14.63 (48.00)		1.36 (4.46)
– Engine 4	34.49 (113.16)	25.43 (83.43)		2.63 (8.63)

For VFG (GP7200 Engines), open:

- Fan Exhaust Cowl (engine 1 - 4)
- Thrust Reverser Cowl (engine 2 -3)

Diagram illustrating the oil change procedure for the outboard motor. The motor is tilted forward (FWD) as indicated by the blue arrow labeled 'A'. The oil drain plug (1) is removed, and oil flows out through the drain plug (2) into a container (3). The oil level is checked using a dipstick (4) and the oil level is adjusted using the oil level indicator (5). The oil level indicator shows the oil level between the ADD and OIL marks. The oil level is checked again after the oil has drained. The oil level is adjusted if necessary. The oil level is checked again after the oil has drained. The oil level is adjusted if necessary. The oil level is checked again after the oil has drained. The oil level is adjusted if necessary.

DISCONNECT WHEN ONLY DROPS COME OUT SLOWLY

OIL LEVEL

OVERFULL

ADD OIL

FWD

A

B

L_AC_050409_1_0110101_01_01

Ground Service Connections
VFG Oil Servicing - TRENT 900 Engines
FIGURE 3

The diagram illustrates the oil change procedure for a generator set, divided into three main sections: A, B, and C.

Section A: Shows the removal of the oil drain plug (1) from the generator set (2). The plug is shown being removed from the case drain plug (3).

Section B: Shows the oil level check using a dipstick (3) and the addition of oil (4) to the correct level. The dipstick has markings for 'OVERFILL', 'OIL LEVEL', and 'ADD OIL'. The oil level is indicated by the 'OIL LEVEL' mark.

Section C: Shows the reinstallation of the oil drain plug (5) and the removal of the dipstick (3). The dipstick is shown being removed from the oil fill port (4). The oil drain plug (5) is shown being reinstalled into the case drain plug (3).

Additional labels include 'CASE DRAIN PLUG' and 'DISCONNECT WHEN ONLY DROPS COME OUT SLOWLY'.

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Ground Service Connections
VFG Oil Servicing - GP 7200 Engines
FIGURE 4

****ON A/C A380-800 Models A380-800F Models**
Starter Oil Servicing

1. Starter Oil Servicing (TRENT900 Engines)

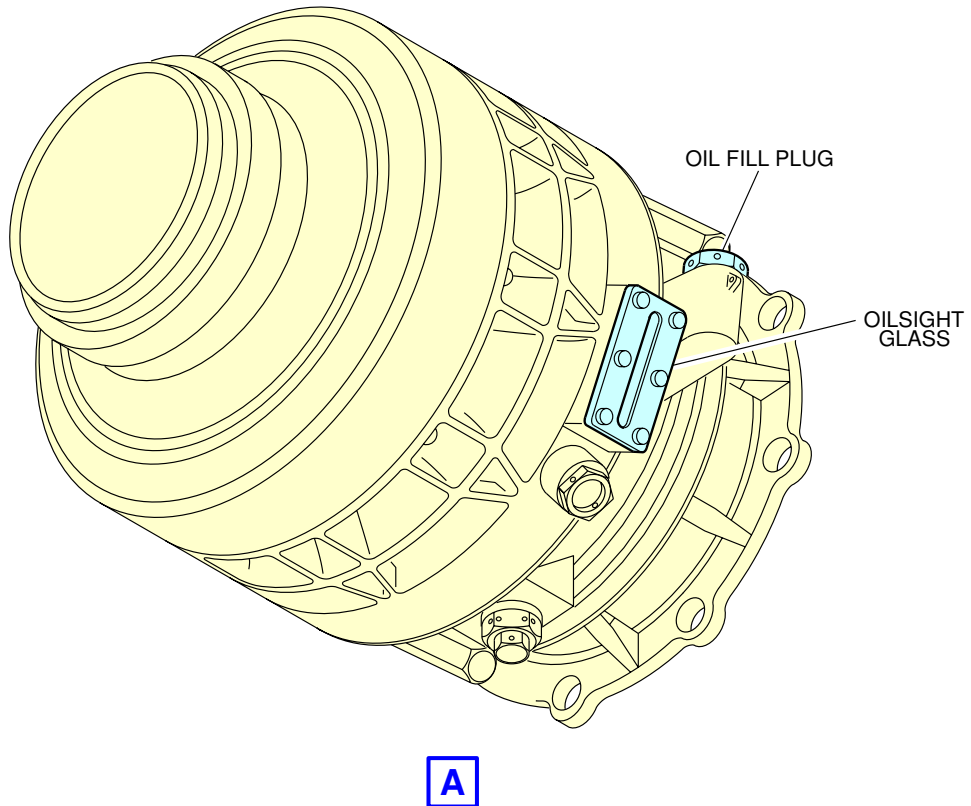
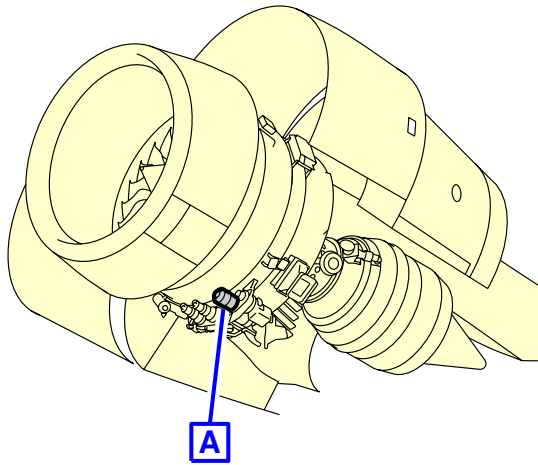
	DISTANCE : Meters (ft)			
	AFT OF NOSE	FROM AIRPLANE CENTERLINE		MEAN HEIGHT FROM GROUND
		R SIDE	L SIDE	
– Engine 1	39.78 (130.51)		25.78 (84.57)	2.59 (8.49)
– Engine 2	32.15 (105.49)		14.94 (49.01)	1.39 (4.56)
– Engine 3	32.15 (105.49)	14.42 (47.30)		1.39 (4.56)
– Engine 4	39.78 (130.51)	25.25 (82.84)		2.59 (8.49)

2. Starter Oil Servicing (GP7200 Engines)

	DISTANCE : Meters (ft)			
	AFT OF NOSE	FROM AIRPLANE CENTERLINE		MEAN HEIGHT FROM GROUND
		R SIDE	L SIDE	
– Engine 1	40.42 (132.61)		27.34 (89.70)	3.35 (10.99)
– Engine 2	32.74 (107.41)		16.55 (54.30)	2.47 (8.10)
– Engine 3	32.74 (107.41)	12.71 (41.70)		2.47 (8.10)
– Engine 4	40.42 (132.61)	23.53 (77.20)		3.35 (10.99)

For access to Starter Oil Servicing, open Fan Cowl

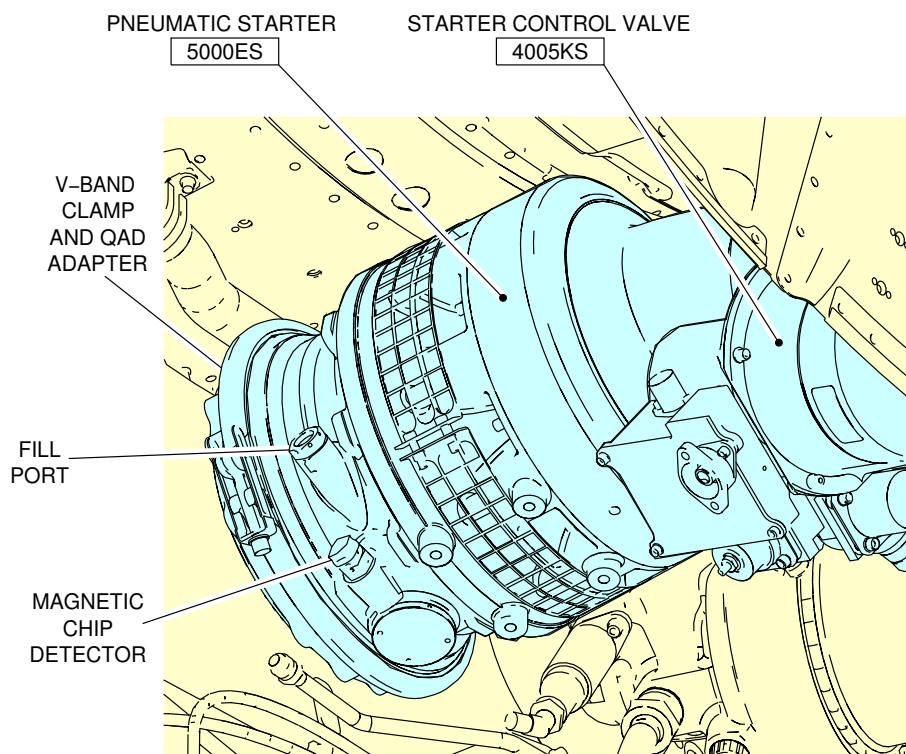
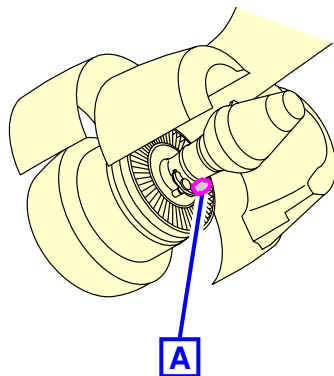
****ON A/C A380-800 Models A380-800F Models**



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Ground Service Connections
Starter Oil Servicing - TRENT 900 Engines
FIGURE 5

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



E-00549 (0308)
PW V

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Ground Service Connections
Starter Oil Servicing - GP 7200 Engines
FIGURE 6



AIRPLANE CHARACTERISTICS

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

APU Oil Servicing

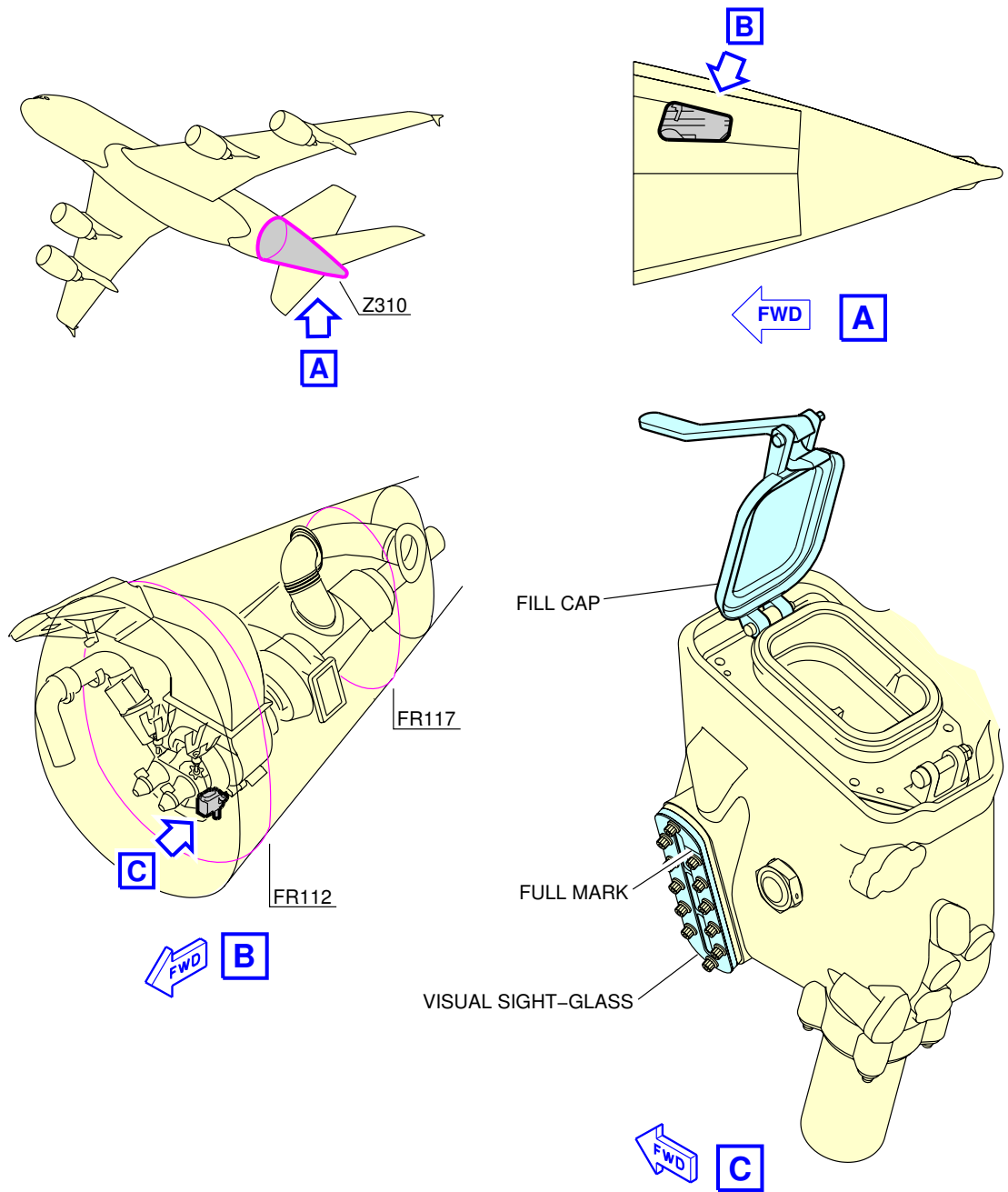
1. APU Oil

	DISTANCE : Meters (ft)			
	AFT OF NOSE	FROM AIRPLANE CENTERLINE		MEAN HEIGHT FROM GROUND
		R SIDE	L SIDE	
– access doors : 315AL, 315AR	67.55 (221.62)		0.44 (1.44)	6.83 (22.40)

A. Capacity :

(1) 18.13L (4.35 USgal)

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



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Ground Service Connections
APU Oil Servicing
FIGURE 7

5-4-10 Vacuum Toilet System****ON A/C A380-800 Models**Vacuum Toilet System - Pax**1. Waste Water System**

	DISTANCE : Meters (ft)			
	AFT OF NOSE	FROM AIRPLANE CENTERLINE		MEAN HEIGHT FROM GROUND
		R SIDE	L SIDE	
– access door 171AL	53.31 (174.90)		0.26 (0.85)	3.40 (11.15)

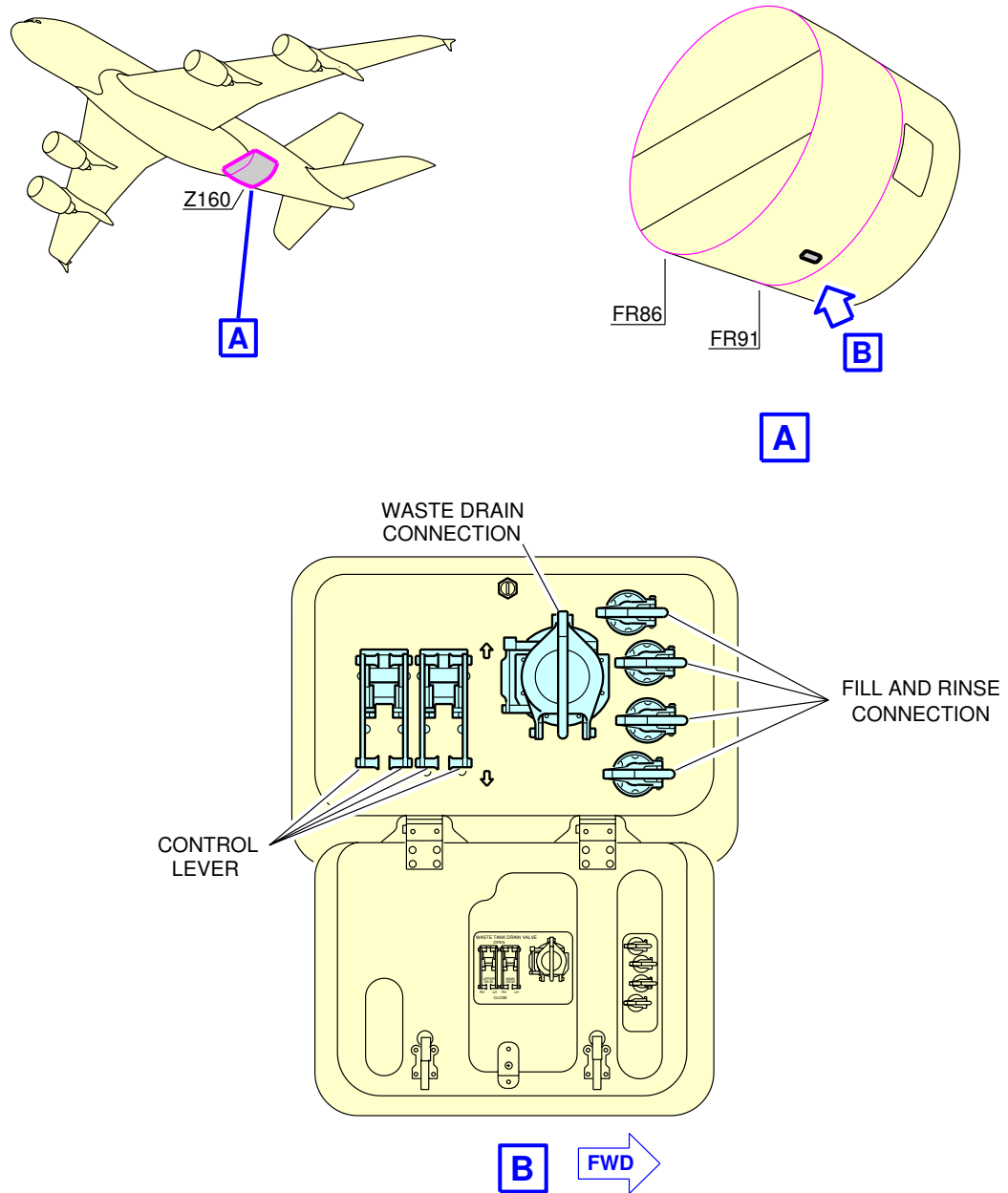
A. Connectors :

(1) flushing and filling : 1 in.

(2) draining : 4 in.

B. Capacity : 2100 l**C. Operating pressure for the waste tank rinsing process: 50 psi (max 125 psi)****D. Flow rate : 40 l/min**

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



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Ground Service Connections
Vacuum Toilet System - A380-800 Models
FIGURE 1

****ON A/C A380-800F Models**Vacuum Toilet System - Freighter

1. Waste Water System

	DISTANCE : Meters (ft)			
	AFT OF NOSE	FROM AIRPLANE CENTERLINE		MEAN HEIGHT FROM GROUND
		R SIDE	L SIDE	
– access door TBD	11.11 (36.45)		2.48 (8.14 ft)	3.51 (11.52)

A. Connectors :

(1) flushing and filling : 1 in.

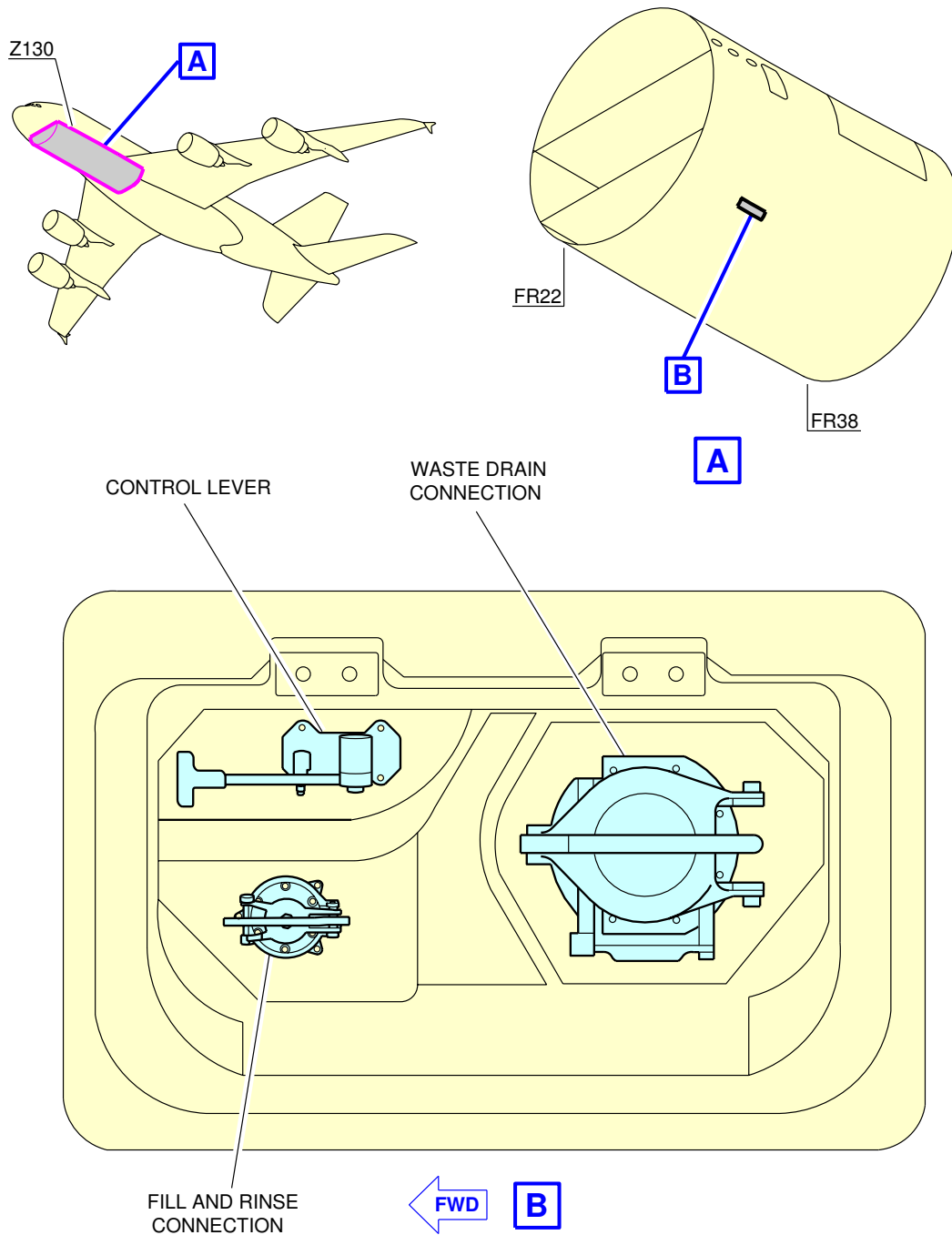
(2) draining : 4 in.

B. Capacity : 80 l

C. Operating pressure for the waste tank rinsing process: 50 psi (max 125 psi)

D. Flow rate : 40 l/min

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



L_AC_050410_1_0020101_01_00

Ground Service Connections
Vacuum Toilet System - A380-800F Models
FIGURE 2



AIRPLANE CHARACTERISTICS

5-5-0 Engine Starting Pneumatic Requirements

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

Engine Starting Pneumatic Requirements

1. Engine Starting Pneumatic Requirements



AIRPLANE CHARACTERISTICS

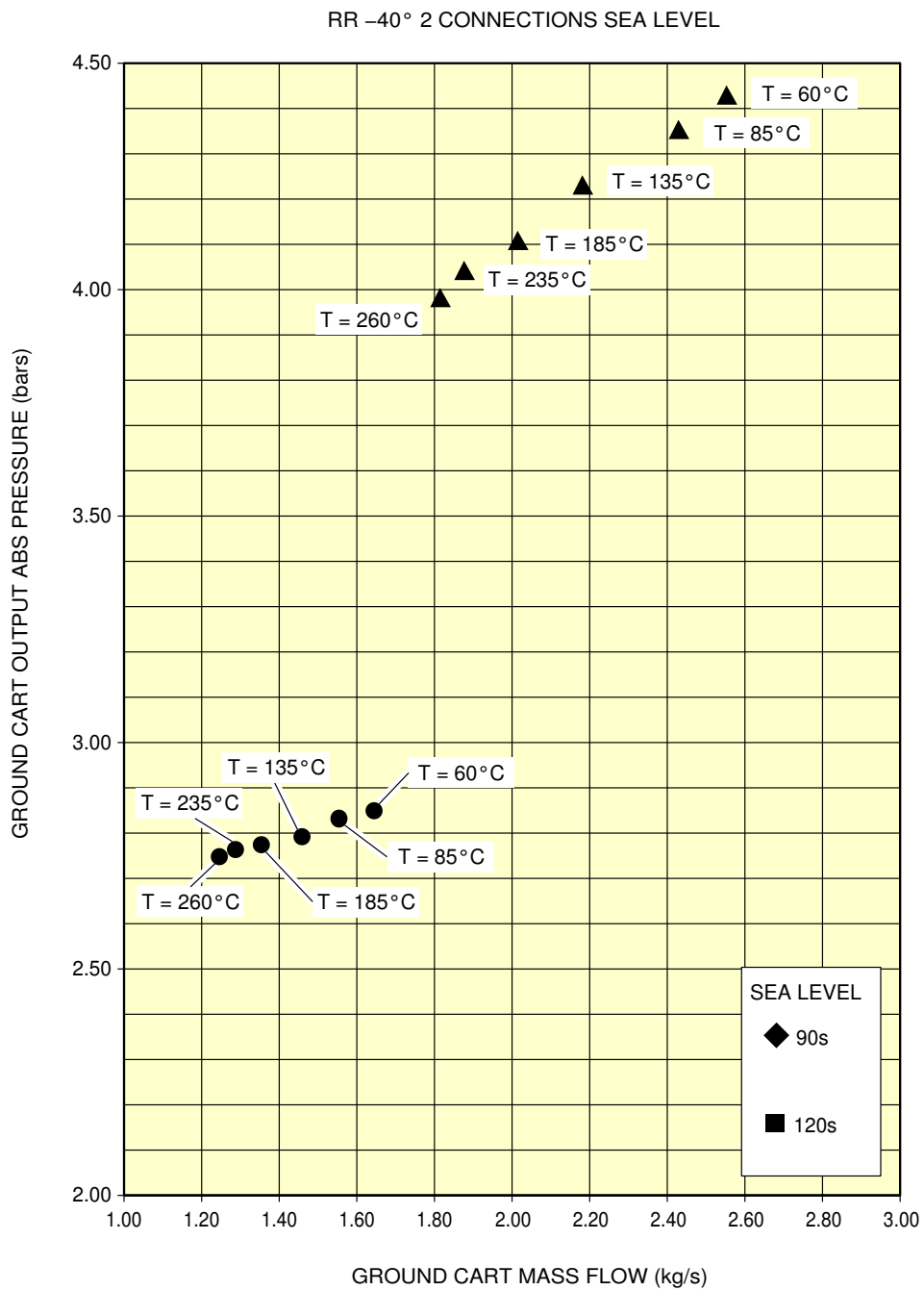
5-5-1 Outside Air Temperature = -40 °C (-40 °F)

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

Outside Air Temperature = -40 °C (-40 °F)

1. This section provides the engine starting pneumatic requirements for an ambient temperature of -40 °C (-40 °F).

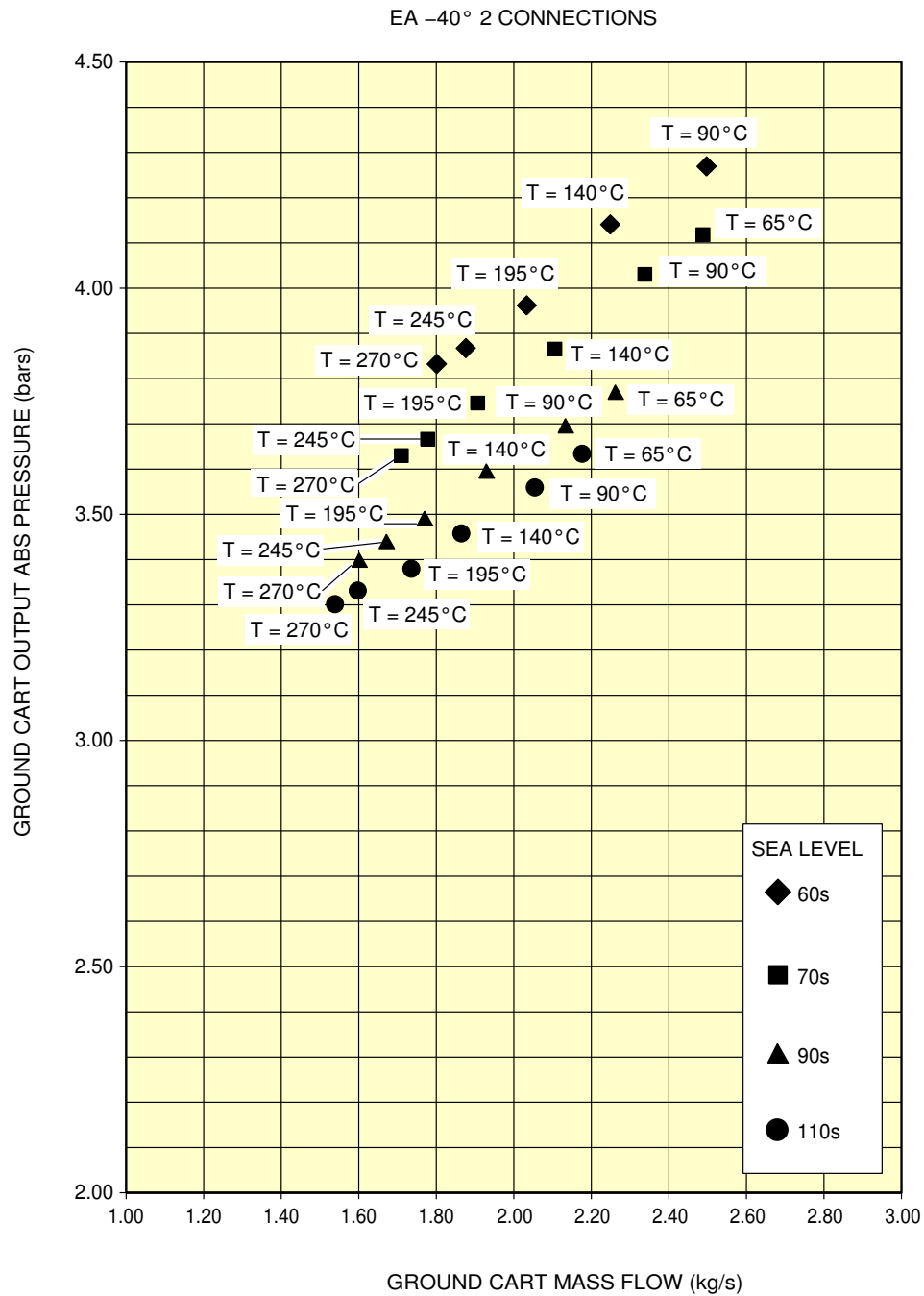
****ON A/C A380-800 Models A380-800F Models**



L_AC_050501_1_0010101_01_00

Engine Starting Pneumatic Requirements (two high pressure ground carts)
Ambient Temperature -40 °C (-40 °F), sea level - TRENT 900 Engines
FIGURE 1

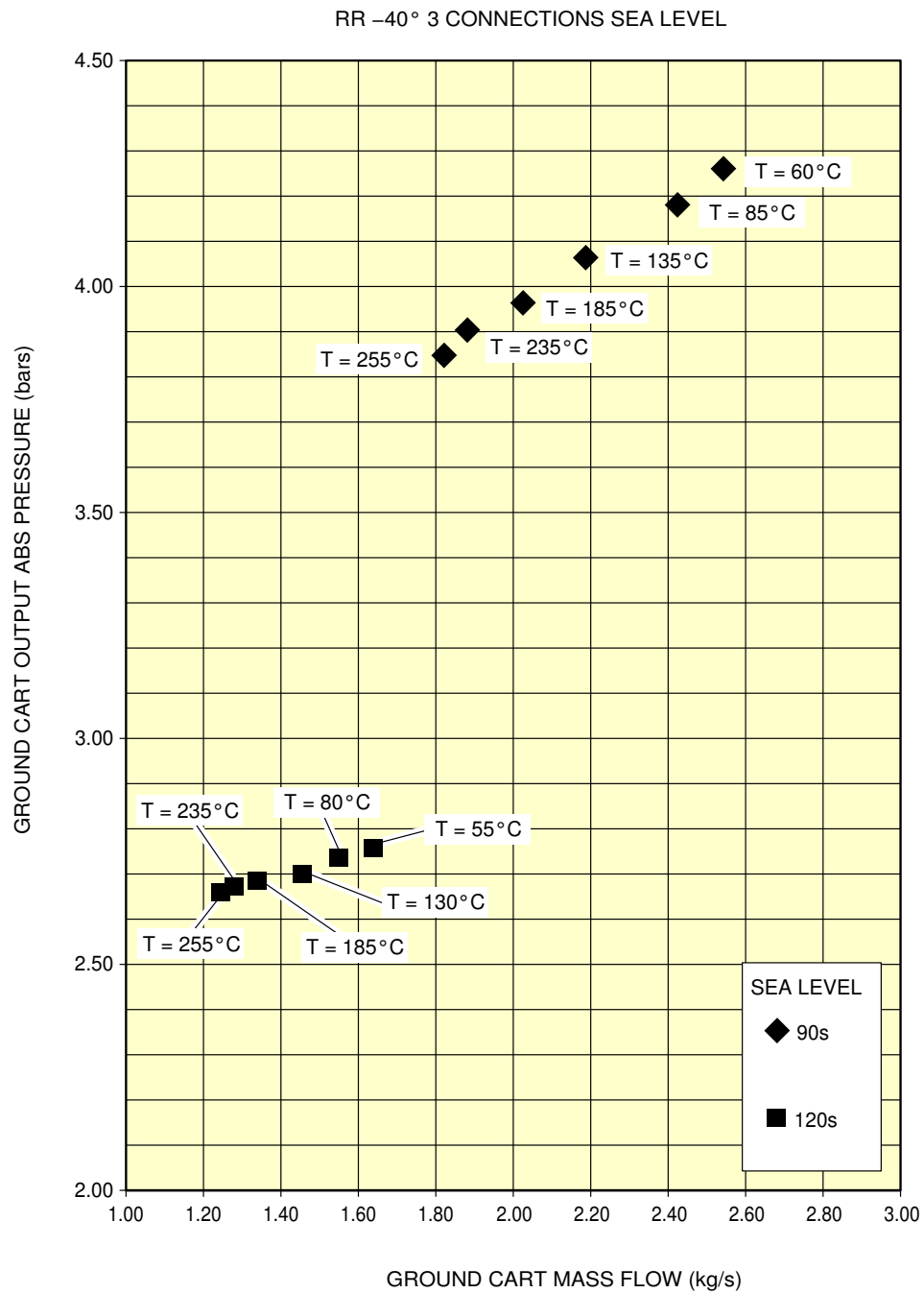
****ON A/C A380-800 Models A380-800F Models**



L_AC_050501_1_0020101_01_00

Engine Starting Pneumatic Requirements (two high pressure ground carts)
Ambient Temperature -40 °C (-40 °F), sea level - GP 7200 Engines
FIGURE 2

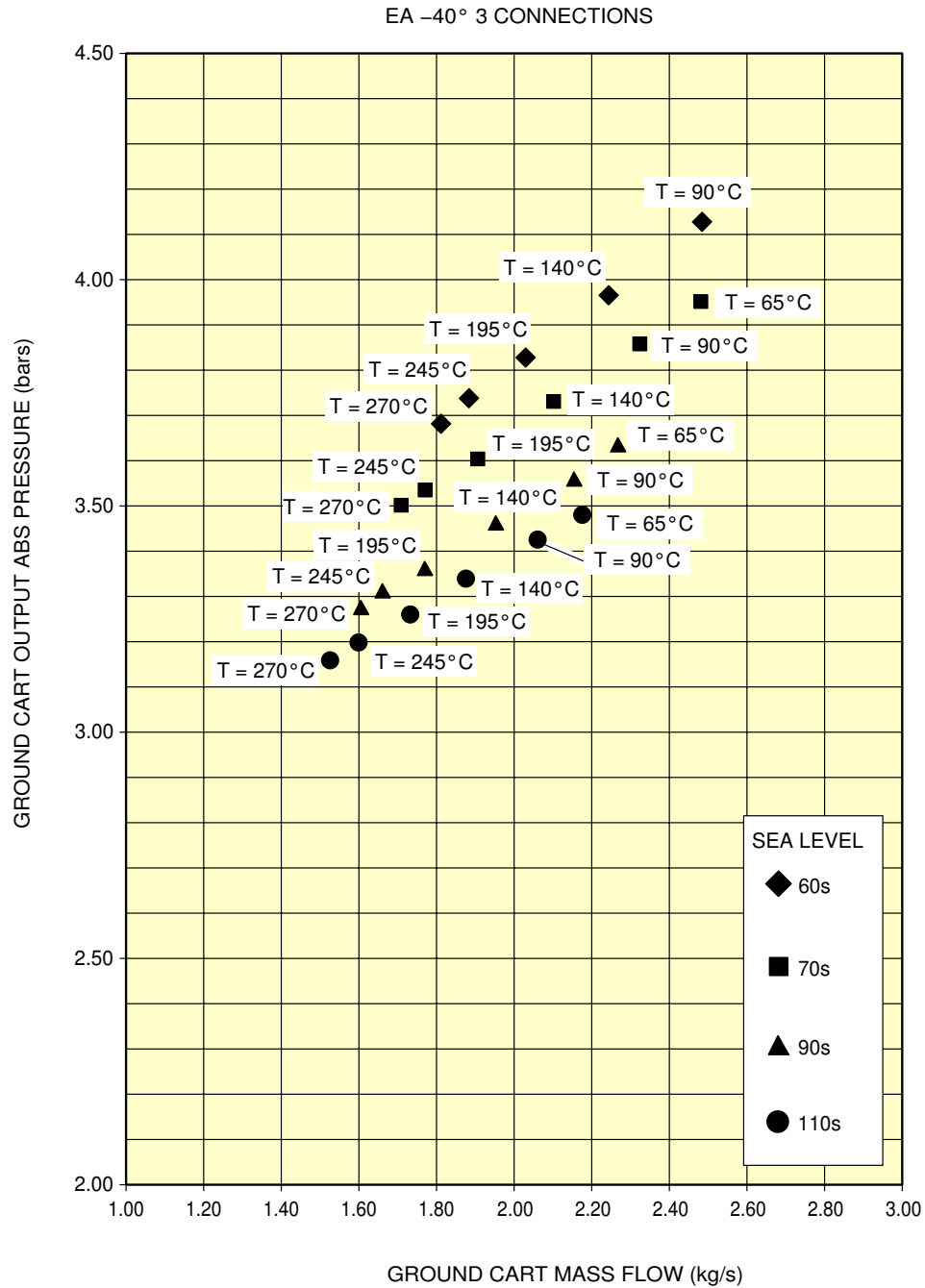
****ON A/C A380-800 Models A380-800F Models**



L_AC_050501_1_0030101_01_00

Engine Starting Pneumatic Requirements (three high pressure ground carts)
Ambient Temperature -40° C (-40° F), Sea Level - TRENT 900 Engines
FIGURE 3

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



L_AC_050501_1_0040101_01_00

Engine Starting Pneumatic Requirements (three high pressure ground carts)
Ambient Temperature -40° C (-40° F), Sea Level - GP 7200 Engines
FIGURE 4



AIRPLANE CHARACTERISTICS

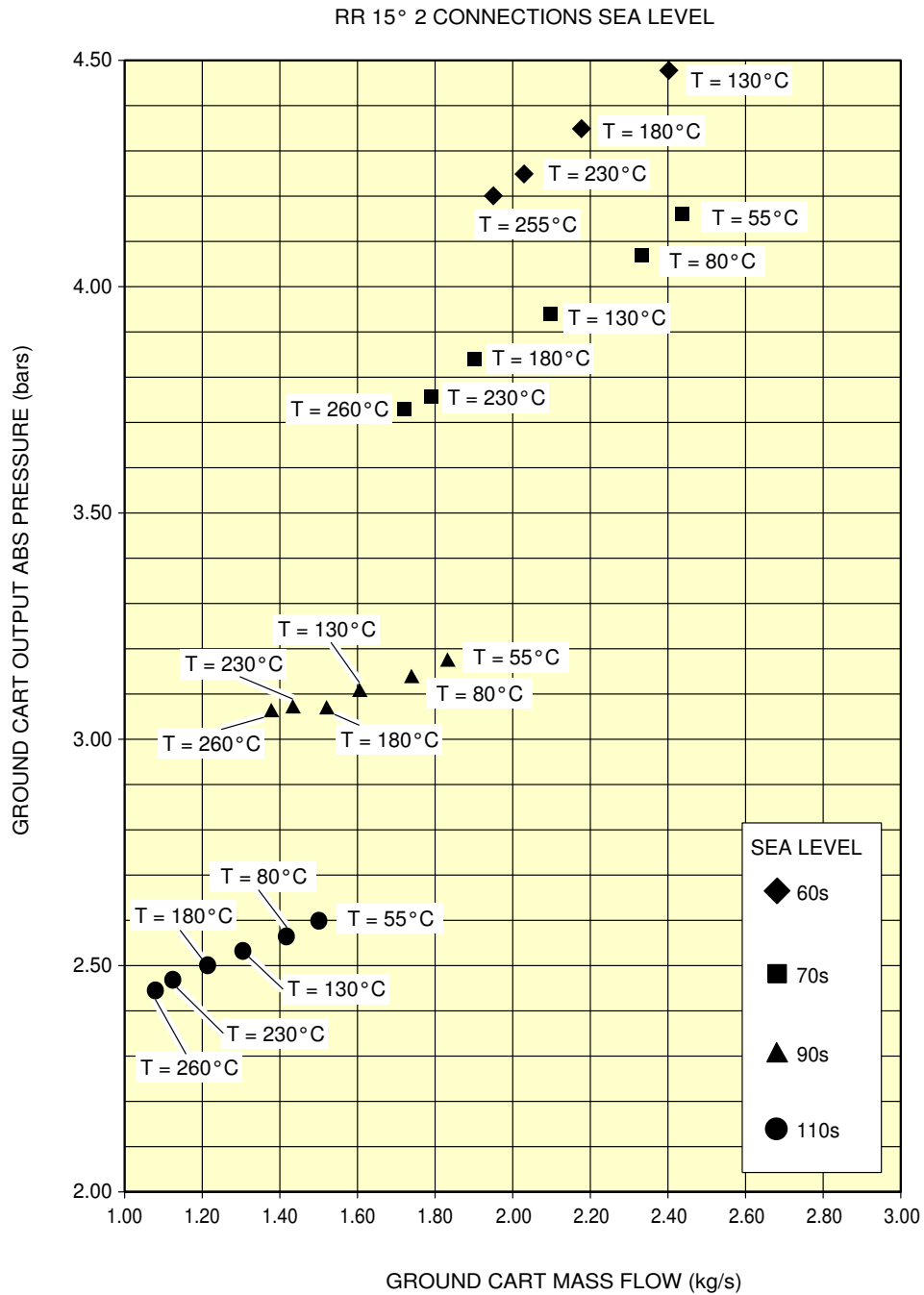
5-5-2 Outside Air Temperature = 15 °C (59 °F)

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

Outside Air Temperature = 15 °C (59 °F)

1. This section provides the engine starting pneumatic requirements for an ambient temperature of +15 °C (+59.0 °F)

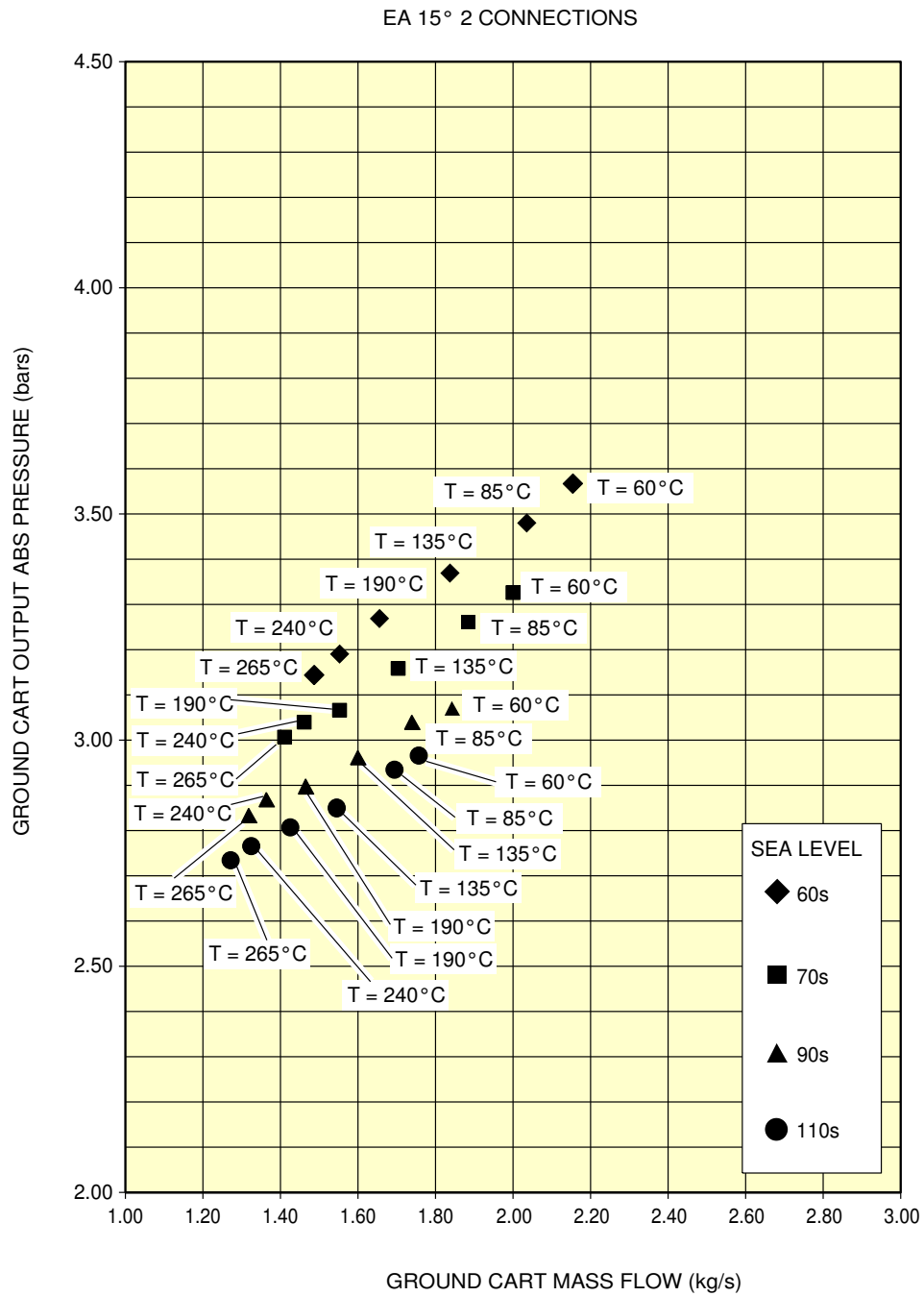
****ON A/C A380-800 Models A380-800F Models**



L_AC_050502_1_0010101_01_00

Engine Starting Pneumatic Requirements (two high pressure ground carts)
Ambient Temperature +15 °C (+59 °F), Sea Level - TRENT 900 Engines
FIGURE 1

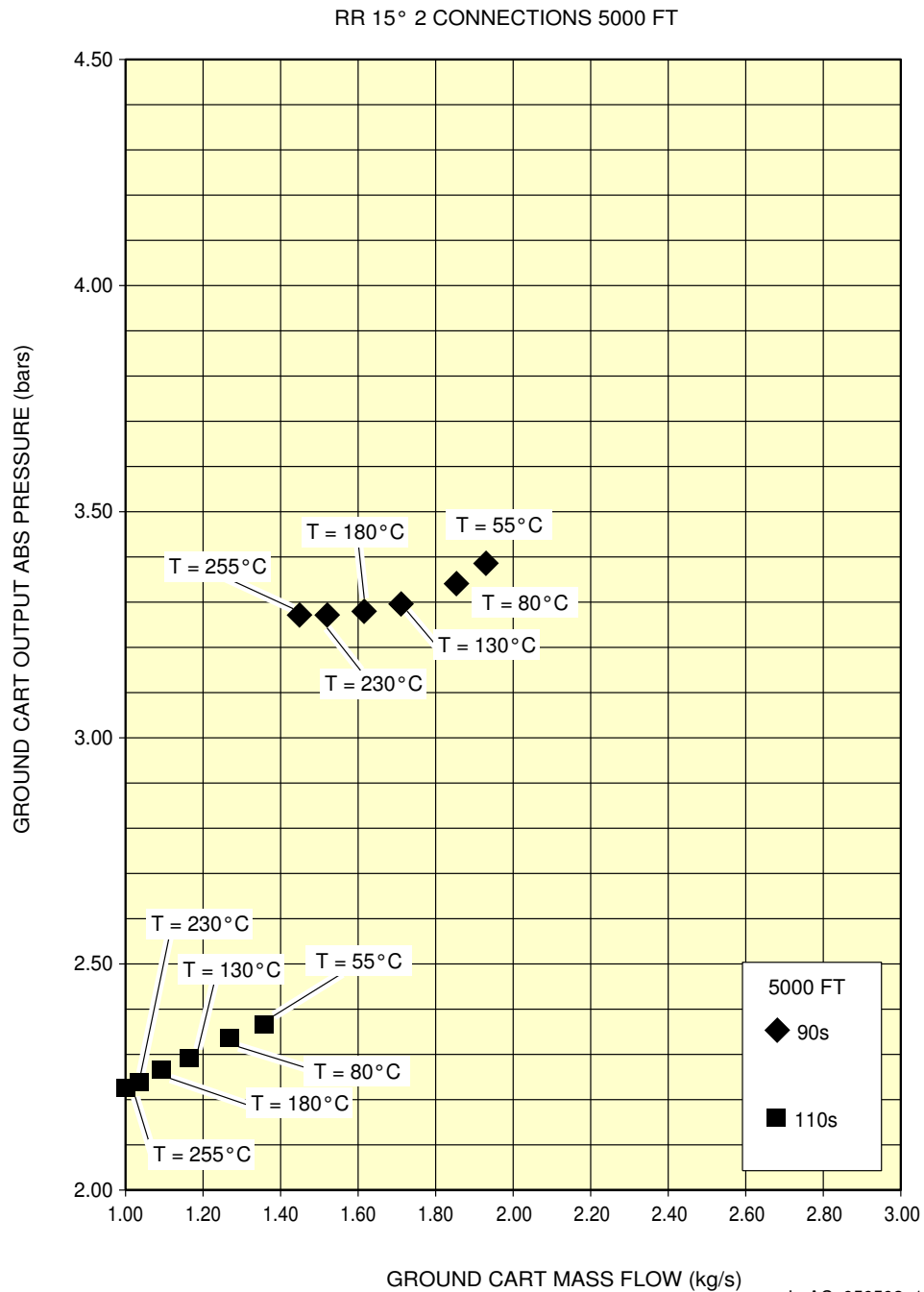
****ON A/C A380-800 Models A380-800F Models**



L_AC_050502_1_0020101_01_00

Engine Starting Pneumatic Requirements (two high pressure ground carts)
Ambient Temperature +15° C (+59° F), Sea Level - GP 7200 Engines
FIGURE 2

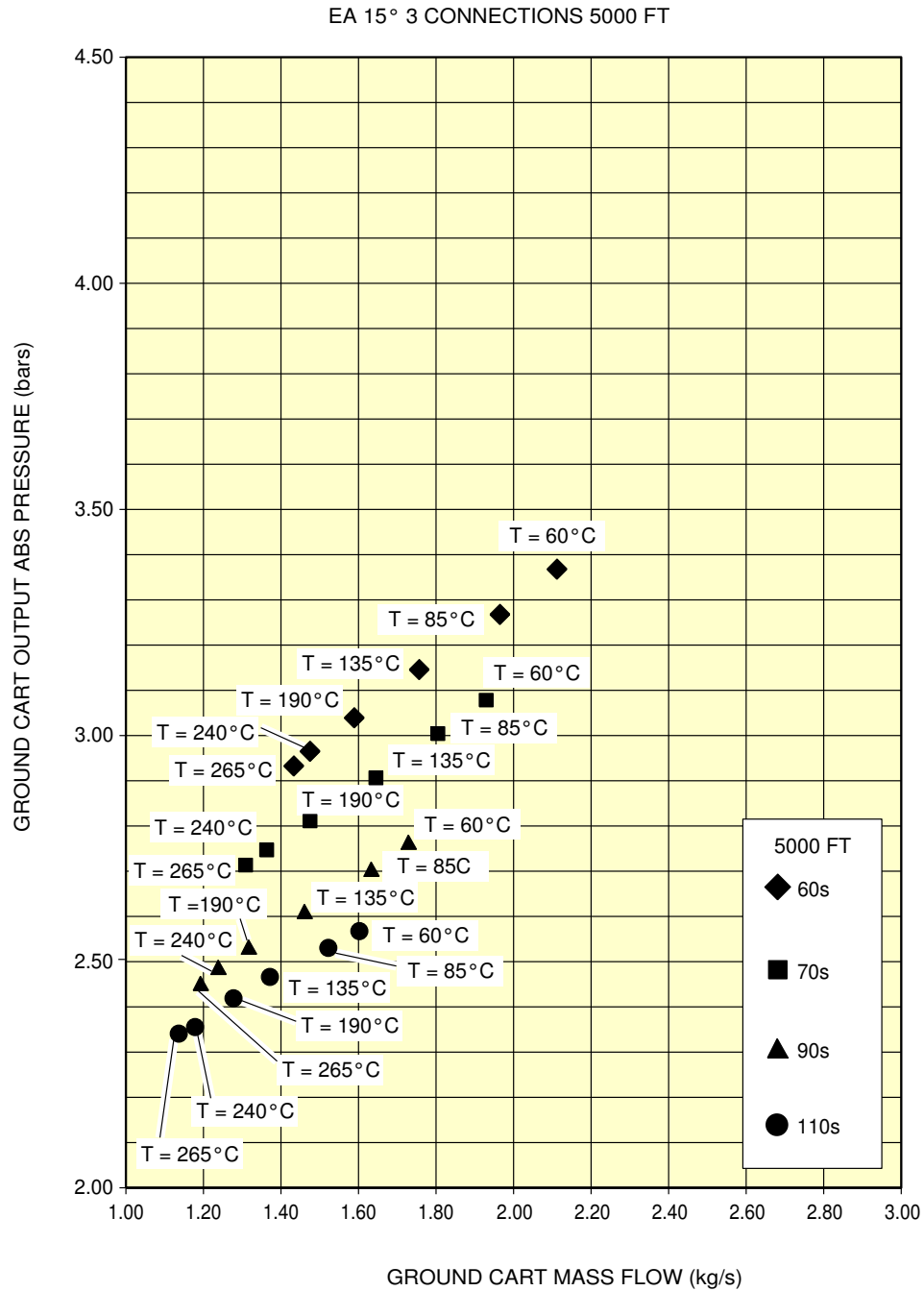
****ON A/C A380-800 Models A380-800F Models**



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Engine Starting Pneumatic Requirements (two high pressure ground carts)
Ambient Temperature +15° C (+59° F), 5000FT Level - TRENT 900 Engines
FIGURE 3

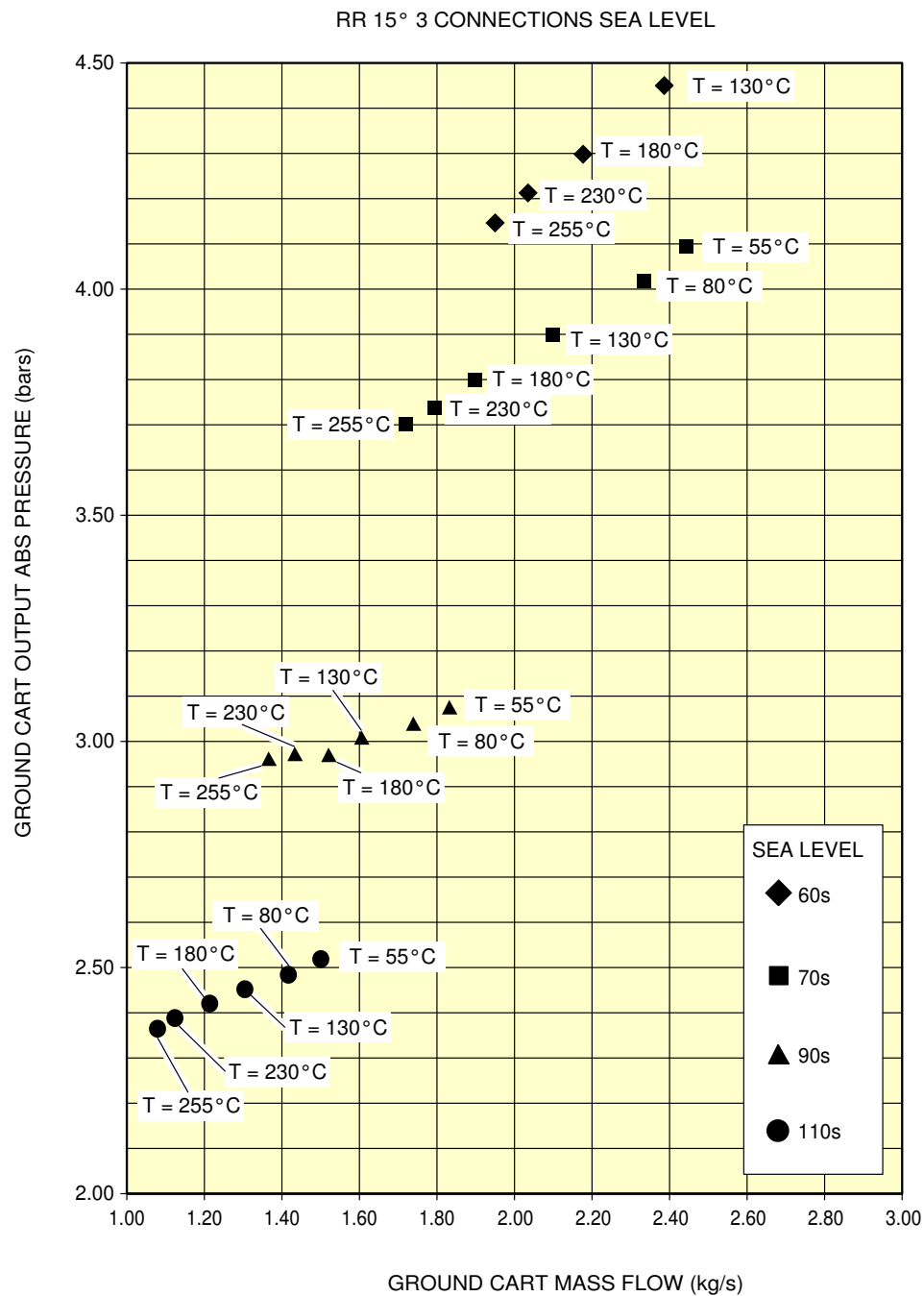
****ON A/C A380-800 Models A380-800F Models**



L_AC_050502_1_0040101_01_00

Engine Starting Pneumatic Requirements (two high pressure ground carts)
Ambient Temperature +15 °C (+59 °F), 5000FT Level - GP 7200 Engines
FIGURE 4

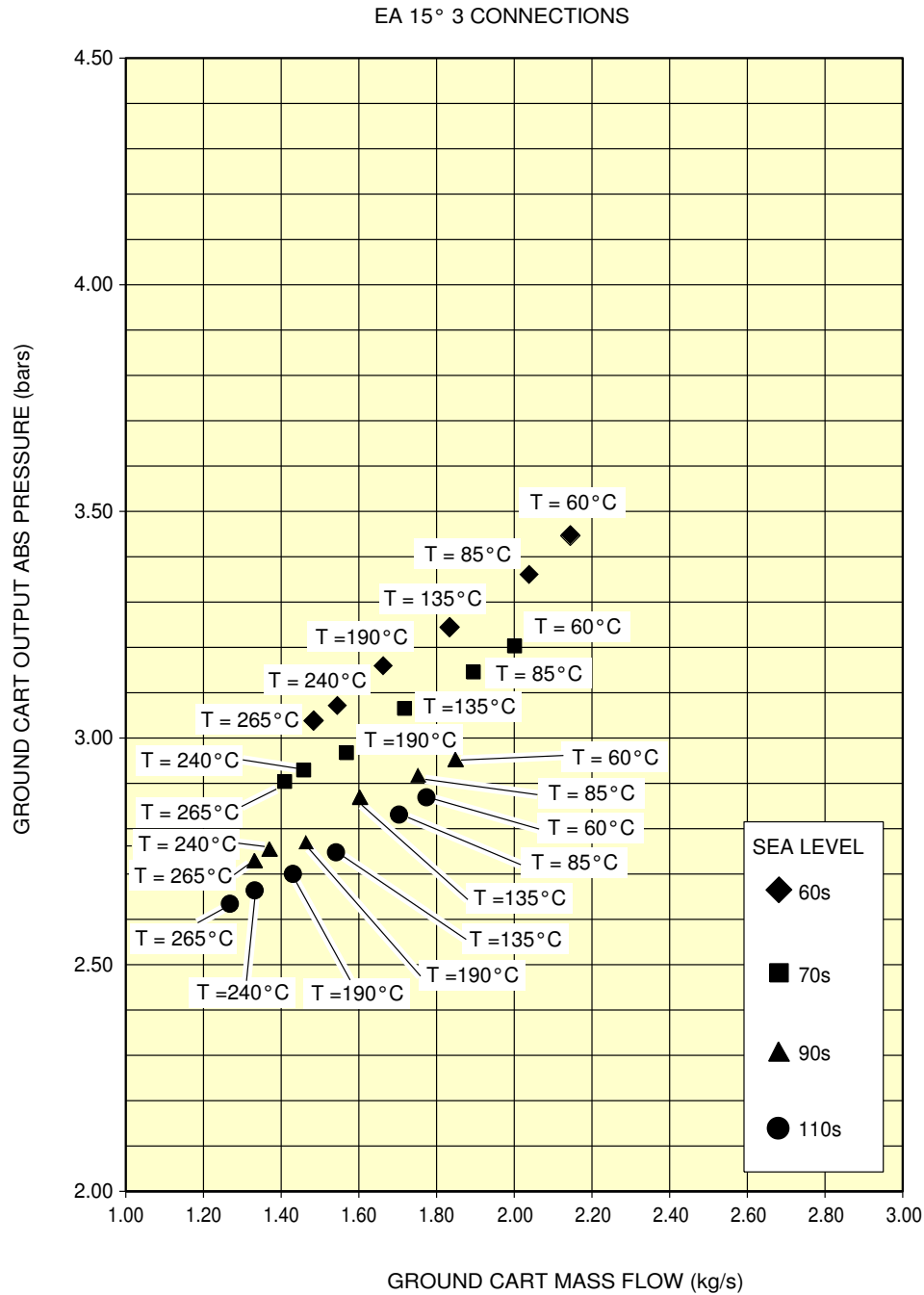
****ON A/C A380-800 Models A380-800F Models**



L_AC_050502_1_0050101_01_00

Engine Starting Pneumatic Requirements (three high pressure ground carts)
Ambient Temperature +15 °C (+59 °F), Sea Level - TRENT 900 Engines
FIGURE 5

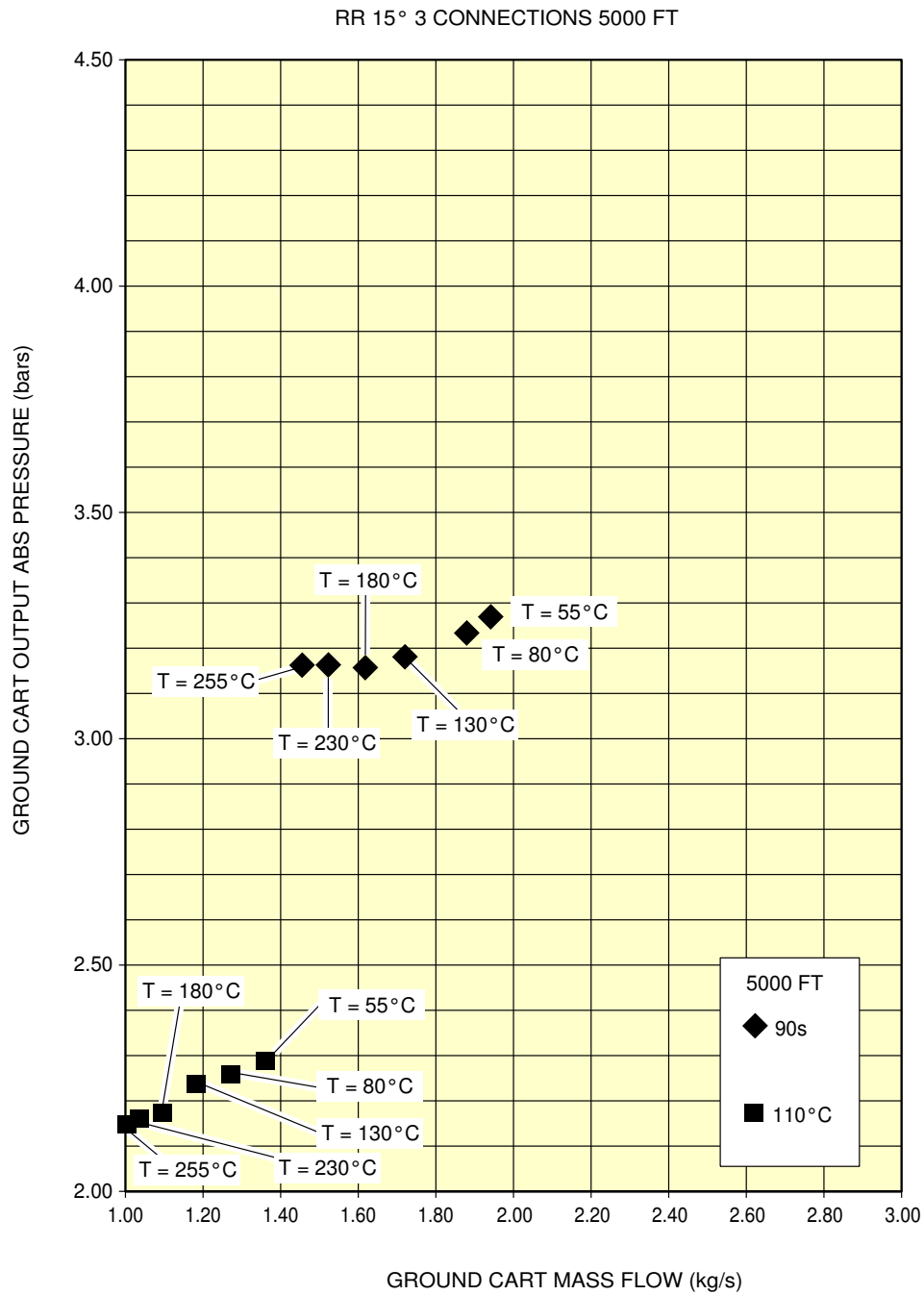
****ON A/C A380-800 Models A380-800F Models**



L_AC_050502_1_0060101_01_00

Engine Starting Pneumatic Requirements (three high pressure ground carts)
Ambient Temperature +15° C (+59° F), Sea Level - GP 7200 Engines
FIGURE 6

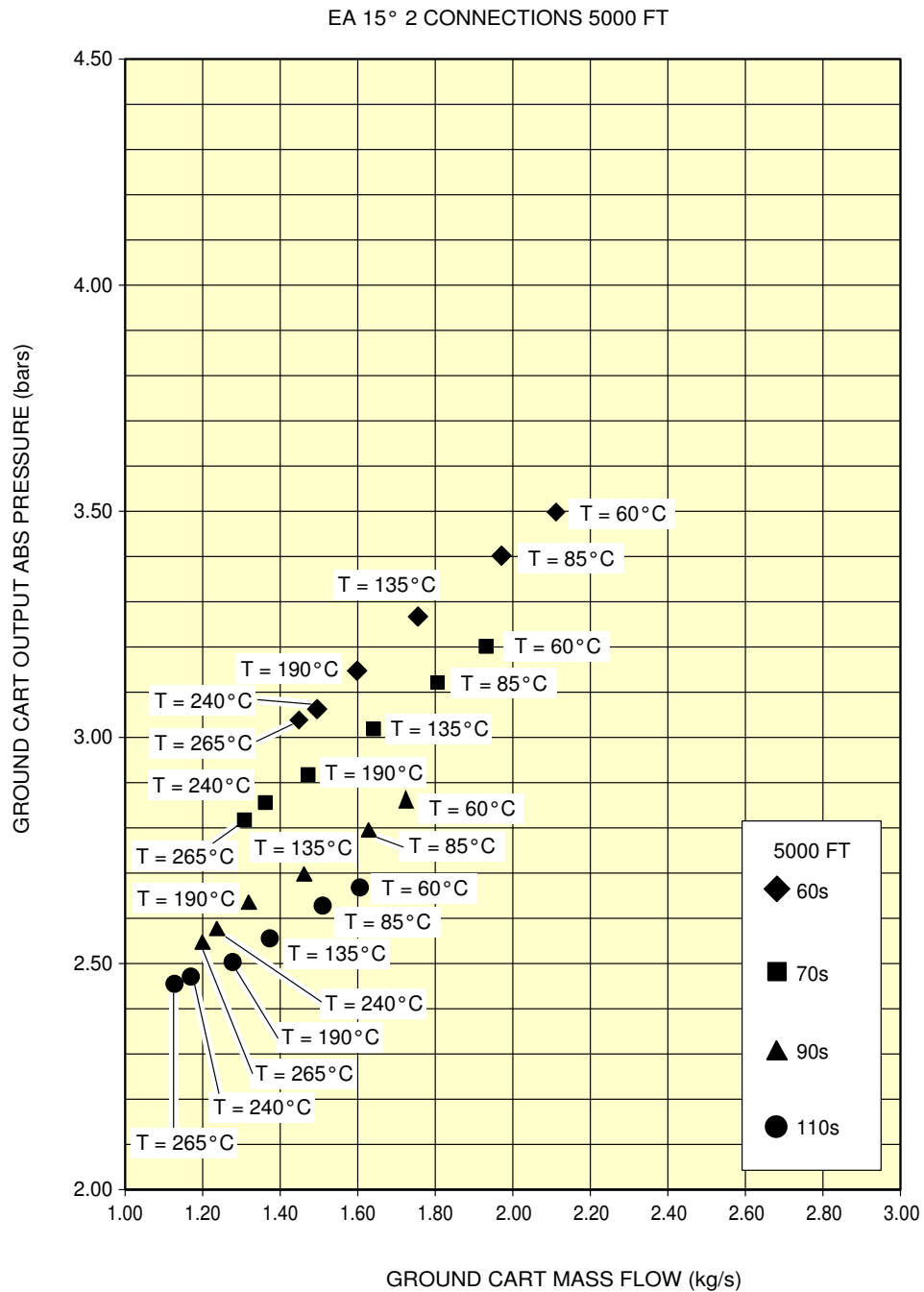
****ON A/C A380-800 Models A380-800F Models**



L_AC_050502_1_0070101_01_00

Engine Starting Pneumatic Requirements (three high pressure ground carts)
Ambient Temperature +15° C (+59° F), 5000FT Level - TRENT 900 Engines
FIGURE 7

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



L_AC_050502_1_0080101_01_00

Engine Starting Pneumatic Requirements (three high pressure ground carts)
Ambient Temperature +15 °C (+59 °F), 5000FT Level - GP 7200 Engines
FIGURE 8



AIRPLANE CHARACTERISTICS

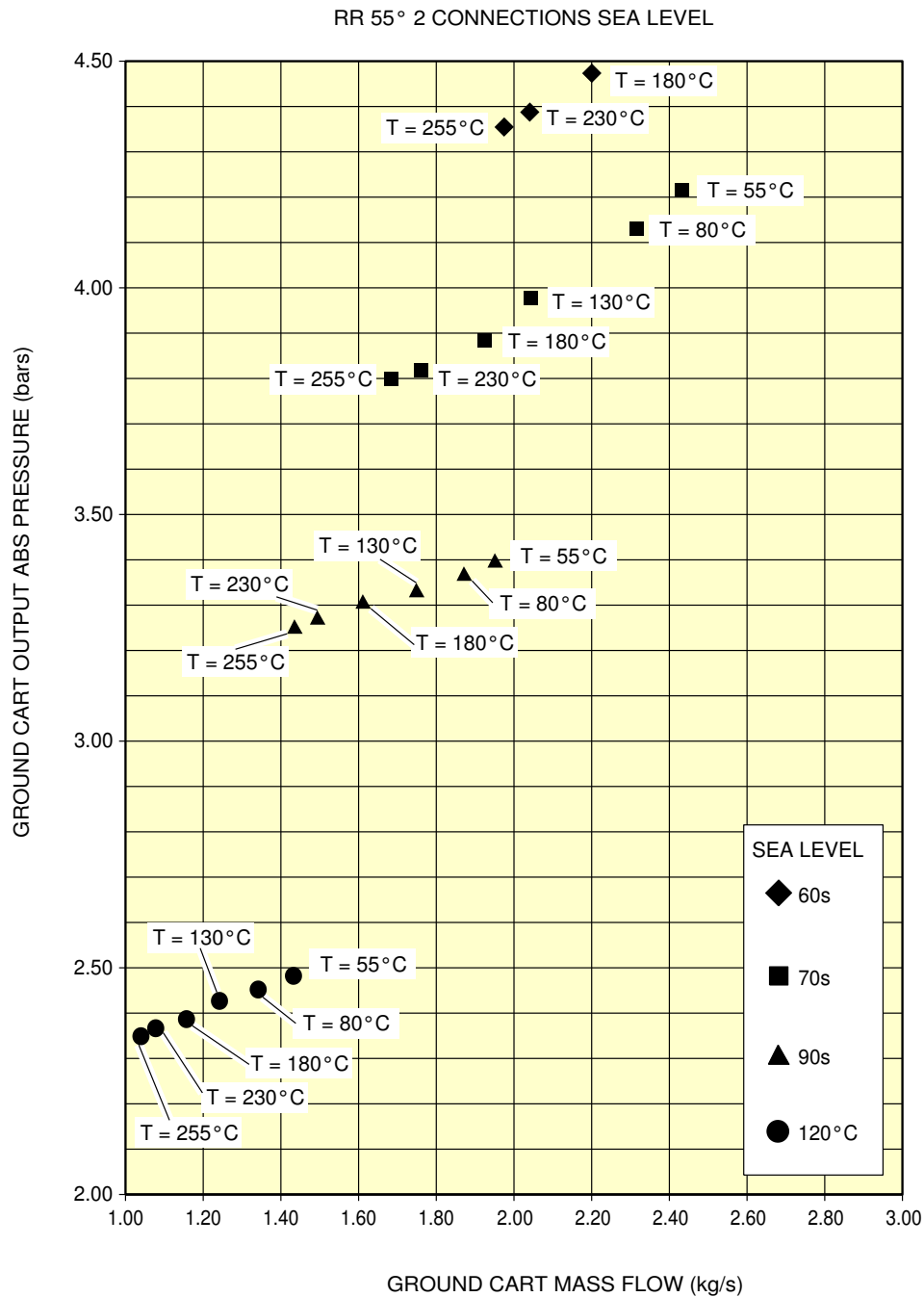
5-5-3 Outside Air Temperature = 50 °C (122 °F)

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

Outside Air Temperature = 50 °C (122 °F)

1. This section provides the engine starting pneumatic requirements for an ambient temperature of +55 °C (+131.0 °F).

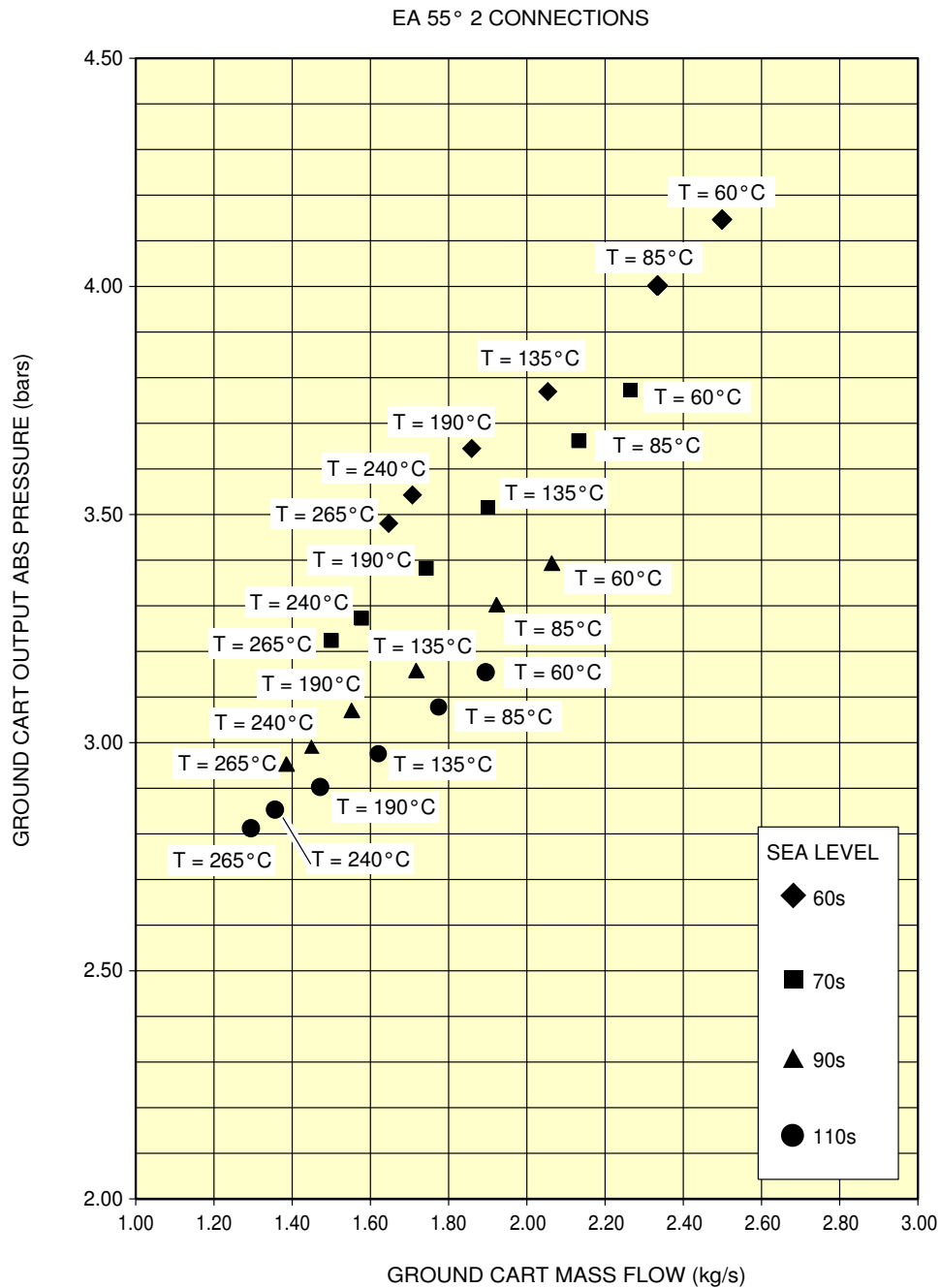
****ON A/C A380-800 Models A380-800F Models**



L_AC_050503_1_0010101_01_00

Engine Starting Pneumatic Requirements (two high pressure ground carts)
Ambient Temperature +55 °C (+131 °F), Sea Level - TRENT 900 Engines
FIGURE 1

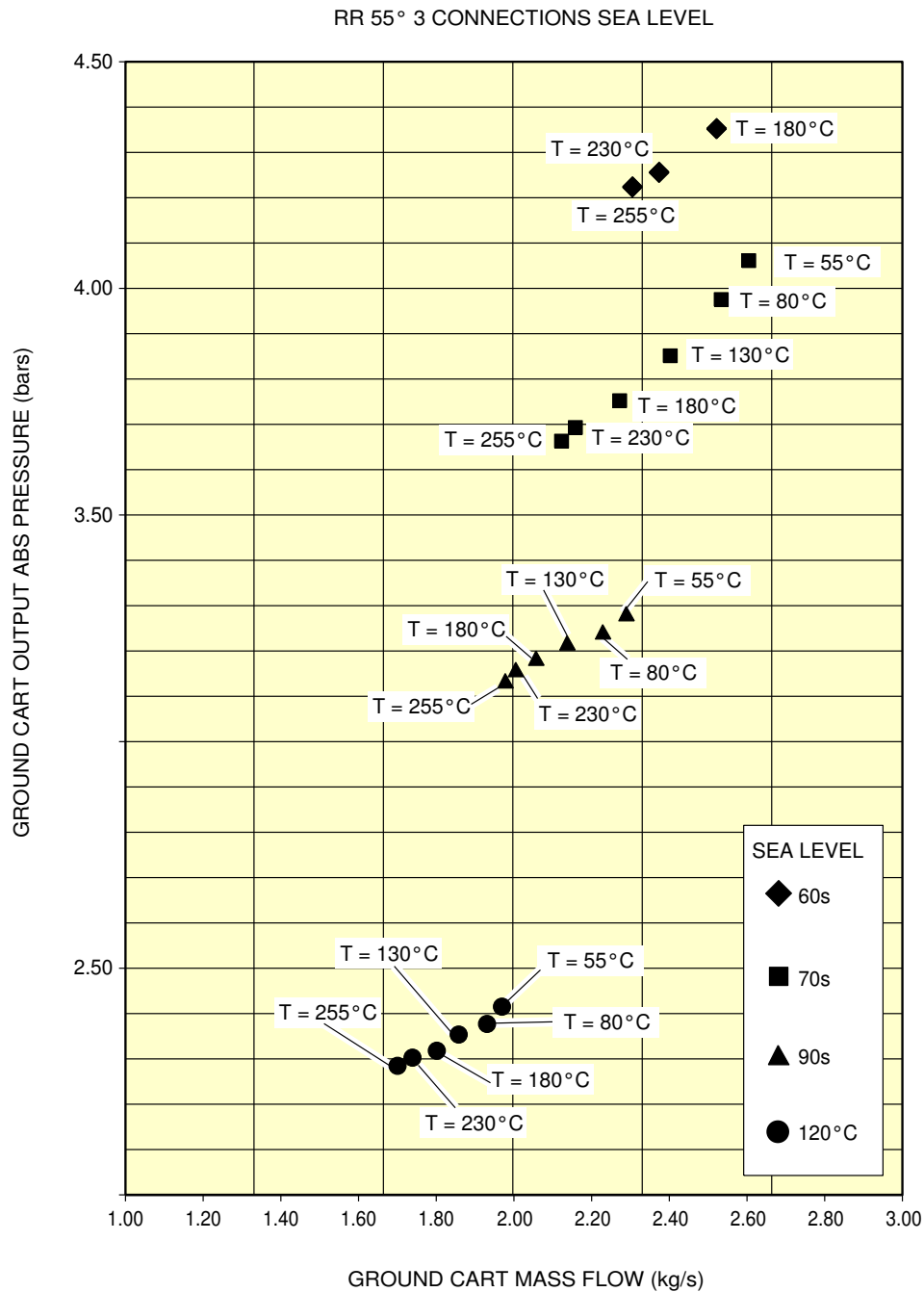
****ON A/C A380-800 Models A380-800F Models**



L_AC_050503_1_0020101_01_00

Engine Starting Pneumatic Requirements (two high pressure ground carts)
Ambient Temperature +55° C (+131° F), Sea Level - GP 7200 Engines
FIGURE 2

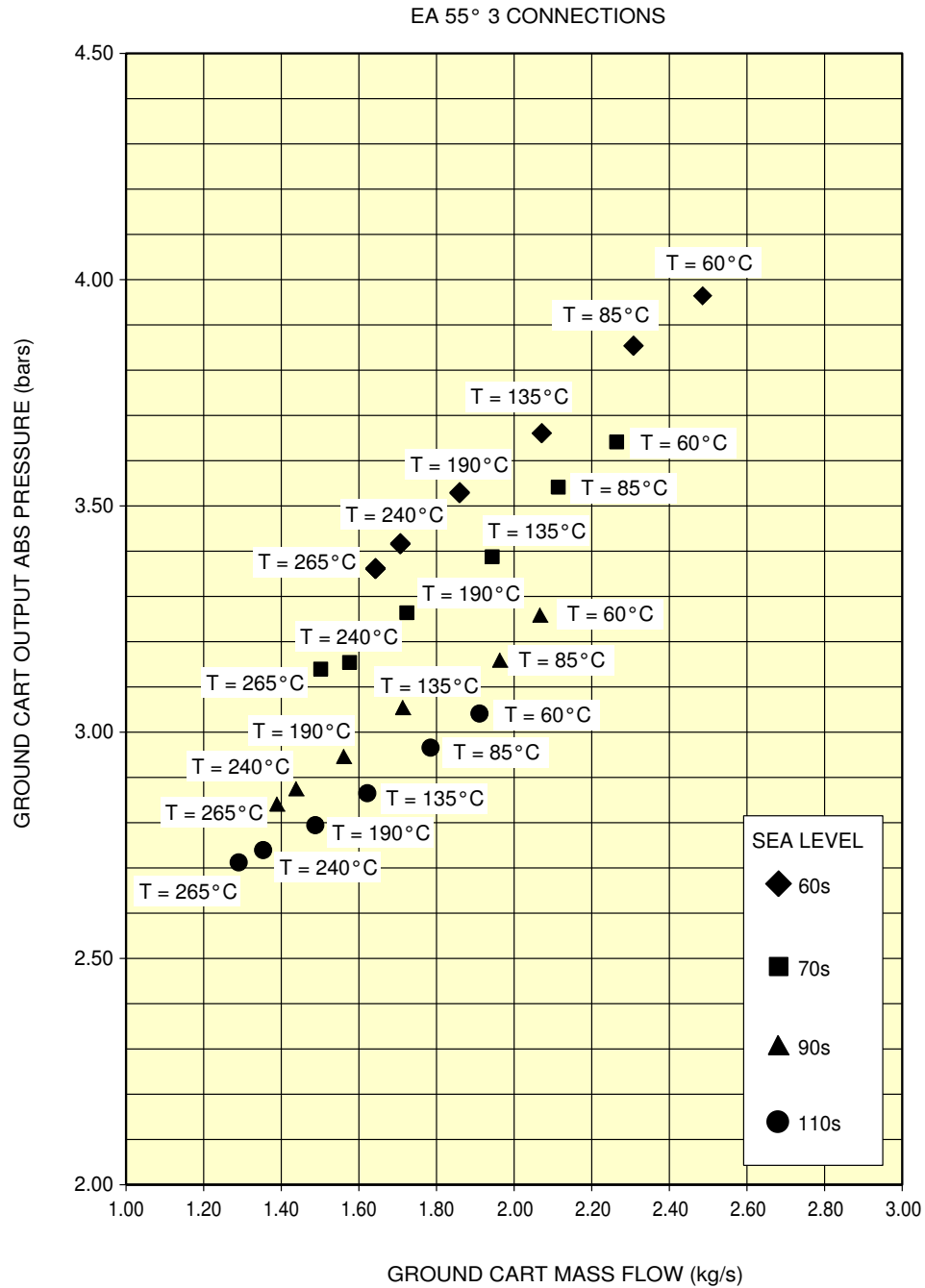
****ON A/C A380-800 Models A380-800F Models**



L_AC_050503_1_0030101_01_00

Engine Starting Pneumatic Requirements (three high pressure ground carts)
Ambient Temperature +55°C (+131°F), Sea Level - TRENT 900 Engines
FIGURE 3

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



L_AC_050503_1_0040101_01_00

Engine Starting Pneumatic Requirements (three high pressure ground carts)
Ambient Temperature +55 °C (+131 °F), Sea Level - GP 7200 Engines
FIGURE 4



AIRPLANE CHARACTERISTICS

5-6-0 Ground Pneumatic Power Requirements

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

Ground Pneumatic Power Requirements

1. Ground Pneumatic Power Requirements



AIRPLANE CHARACTERISTICS

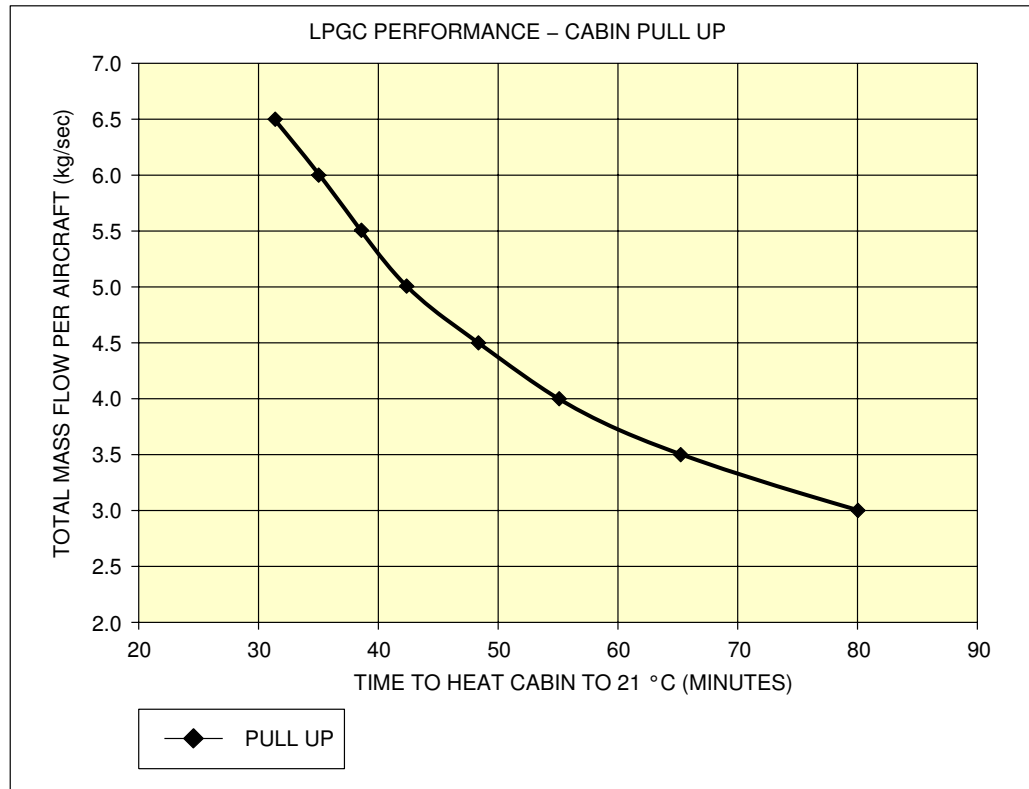
5-6-1 Heating

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

Heating

1. This section provides the ground pneumatic power requirements heating.

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



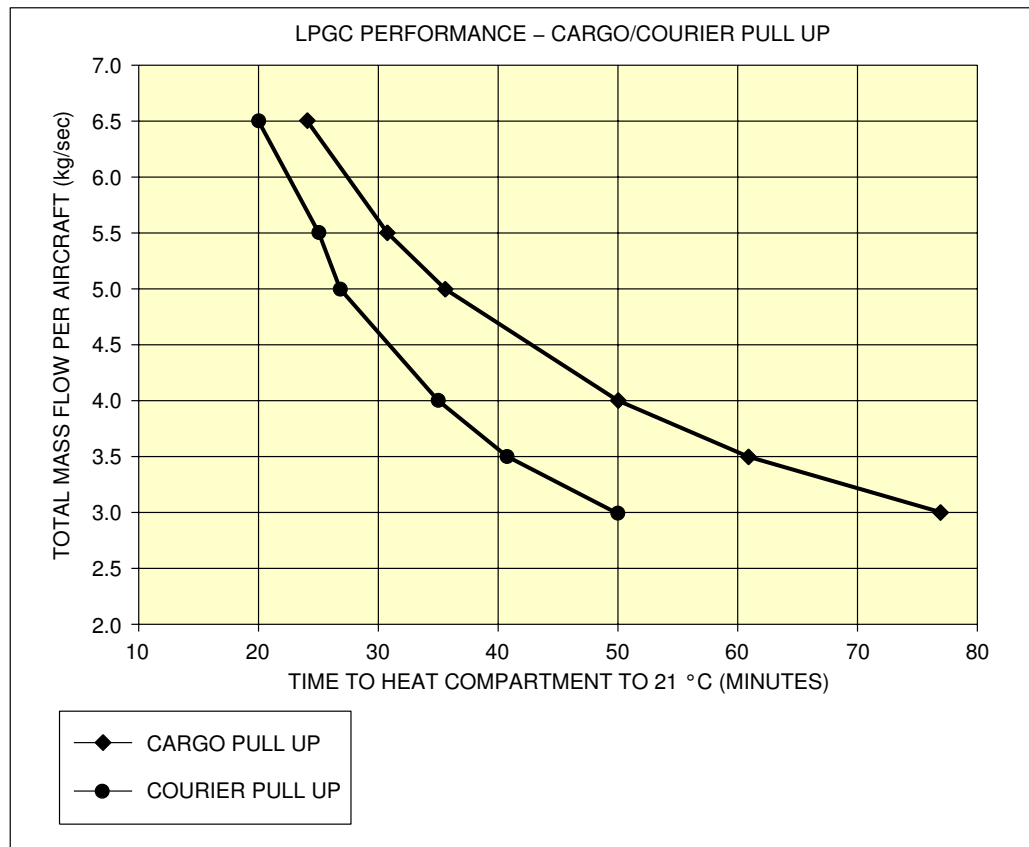
PULL UP: INITIAL CABIN TEMPERATURE AT -23 °C, HEAT UP TO 21 °C ON GROUND,
TEMPERATURE AT THE GROUND CONNECTION: 70 °C

TOTAL LPGC AIR FLOW	TIME TO HEAT CABIN TO 21 °C (69.8 °C) ON GROUND PULL UP
kg/sec	min
3.0	80
3.5	65
4.0	55
4.5	48
5.0	42.5
5.5	38
6.0	35
6.5	31.6

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Ground Pneumatic Power Requirements Heating
Ground Pneumatic Power Requirements Heating - A380-800 Models
FIGURE 1

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



INITIAL TEMPERATURE AT -23°C OAT, COURIER AND CARGO COMPARTMENT HEATING TO 21 °C, ASSUMED LPGC INLET TEMPERATURE 70°C.

TOTAL LPGC AIR FLOW [kg/sec]	PULL UP TIME [min]	
	CARGO	COURIER
3.0	77	50
3.5	61	41
4.0	50	35
5.0	36	27
5.5	31	25
6.5	24	20

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Ground Pneumatic Power Requirements Heating
Ground Pneumatic Power Requirements Heating - A380-800F Models
FIGURE 2



AIRPLANE CHARACTERISTICS

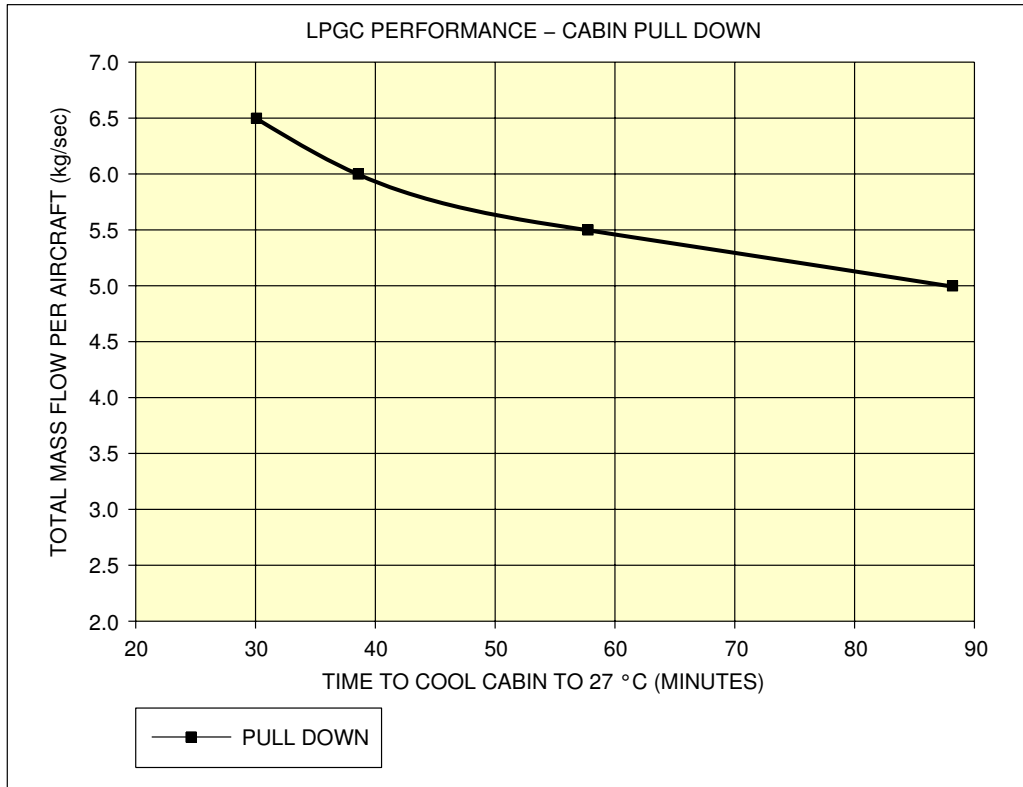
5-6-2 Cooling

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

Cooling

1. This section provides the ground pneumatic power requirements cooling.

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



SAME BOUNDARY CONDITIONS AS BEFORE

(IN ADDITION BLENDS DOWN FOR THE PULL DOWN CASE), HP AND LP FANS ON

PULL DOWN: INITIAL CABIN TEMPERATURE AT 38 °C, COOL DOWN TO 27 °C ON GROUND

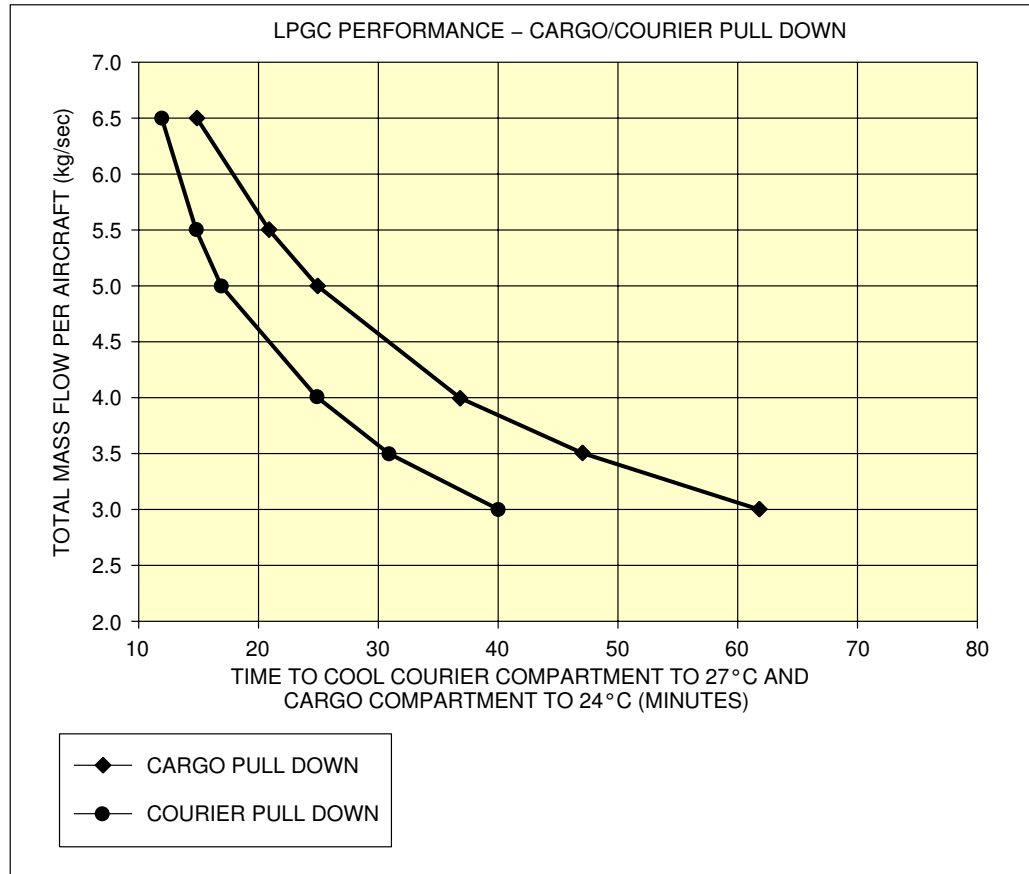
TEMPERATURE AT THE GROUND CONNECTION: 1.5 °C

TOTAL LPGC AIR FLOW	TIME TO COOL CABIN TO 27 °C (80.6 °C) ON GROUND PULL DOWN
kg/sec	min
3.0	—
3.5	—
4.0	—
4.5	—
5.0	87
5.5	58
6.0	38
6.5	30

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Ground Pneumatic Power Requirements Cooling
Ground Pneumatic Power Requirements Cooling - A380-800 Models
FIGURE 1

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



INITIAL TEMPERATURE AT 38°C OAT, COURIER COMPARTMENT COOL DOWN TO 27°C AND CARGO COMPARTMENT COOL DOWN TO 24°C, ASSUMED LPGC INLET TEMPERATURE 1.5°C

TOTAL LPGC AIR FLOW [kg/sec]	PULL DOWN TIME [min]	
	CARGO	COURIER
3.0	62	40
3.5	47	31
4.0	37	25
5.0	25	17
5.5	21	15
6.5	15	12

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Ground Pneumatic Power Requirements Cooling
 Ground Pneumatic Power Requirements Cooling - A380-800F Models
 FIGURE 2



AIRPLANE CHARACTERISTICS

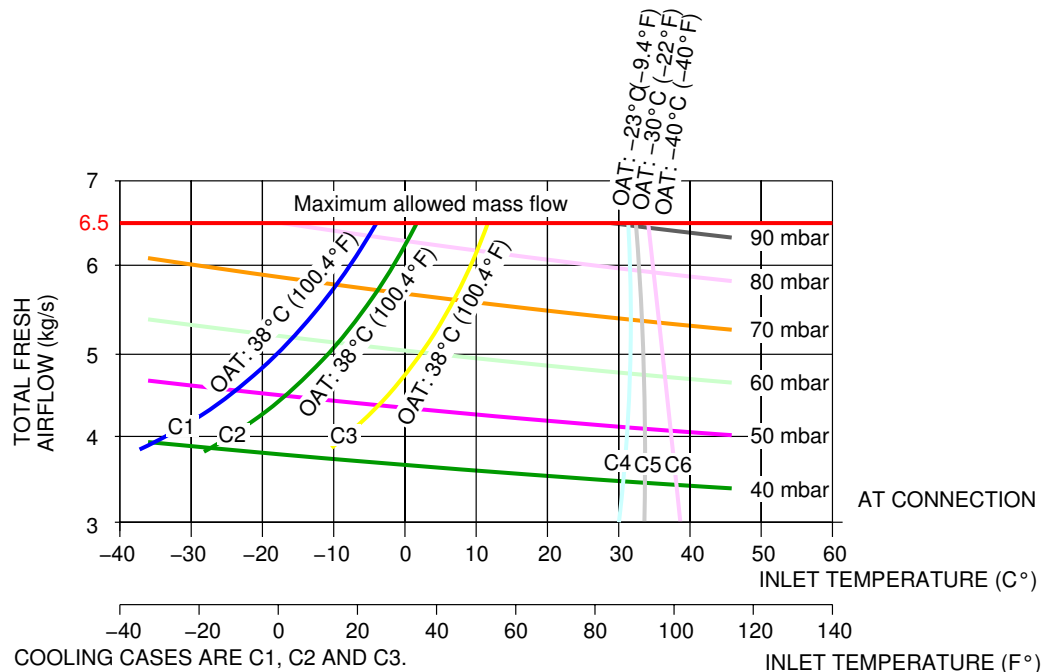
5-7-0 Preconditioned Airflow Requirements

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

Preconditioned Airflow Requirements

1. This section provides the preconditioned airflow requirements.

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



COOLING CASES ARE C1, C2 AND C3.

HEATING CASES ARE C4, C5 AND C6.

C1 CURVE ASSUMES:

- LPGC AIR AT 45% RH
- AIRCRAFT CONFIGURED IN STANDARD ZONES
- CABIN TEMPERATURE: 27°C (80.6°F)
- MAX. PASSENGER LOAD, 19 ATTENDANTS, 5 CREW MEMBERS
- HP RECIRCULATION: ON (HP FILTER CONDITION: NEW CARTRIDGE)
- SOLAR RADIATION IS INCLUDED IN CALCULATIONS
- IFE: ON
- VIDEO OPERATION 75%, PC OPERATION 13%
- BOTH AVIONIC VALVES OFF
- CARGO VALVES ON (CARGO FLOW SETTING NORMAL)

C2 CURVE ASSUMES:

- SAME CONDITIONS AS C1 BUT WITH IFE OFF VIDEO OPERATION 0% PC OPERATION 0%

C3 CURVE ASSUMES:

- SAME CONDITIONS AS C1 BUT WITHOUT PASSENGERS

C4, C5 AND C6 CURVES ASSUME:

- LPGC AIR AT 45% RH
- AIRCRAFT CONFIGURED IN STANDARD ZONES
- CABIN TEMPERATURE: 21°C (69.8°F)
- NO PASSENGER, 0 ATTENDANT, 0 CREW MEMBER
- HP RECIRCULATION: ON (HP FILTER CONDITION: NEW CARTRIDGE)
- SOLAR RADIATION IS NOT INCLUDED
- IFE: OFF
- VIDEO OPERATION 0%, PC OPERATION 0%
- CABIN LIGHTING OFF, GALLEY POWER OFF
- BOTH AVIONIC VALVES OFF
- CARGO VALVES OFF (CARGO FLOW SETTING NORMAL)

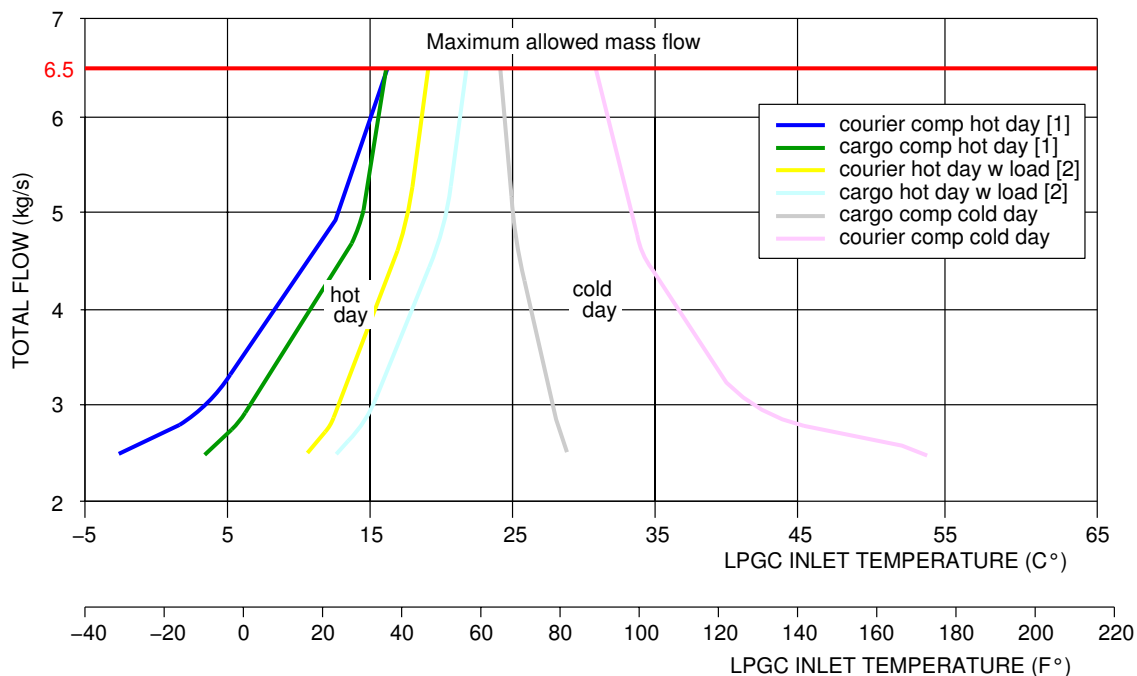
NOTE: IFE = IN-FLIGHT ENTERTAINMENT SYSTEM.

OAT = OUTSIDE AIR TEMPERATURE.

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Preconditioned Airflow Requirements
Preconditioned Airflow Requirements - A380-800 Models
FIGURE 1

**ON A/C A380-800F Models



COOLING CASES [1] ASSUMES:

- HOT DAY (ISA +23°)
- STANDARD AIRFLOW DISTRIBUTION
- STABILIZED CARGO COMPARTMENT TEMPERATURE 24°C, COURIER COMPARTMENT 27°C
- NO OCCUPANT LOAD, EMPTY CARGO COMPARTMENT
- NO HIGH PRESSURE RECIRCULATION, LOW PRESSURE RECIRC ON
- LOWER DECK CARGO: VENTILATION ONLY

COOLING CASE [2] WITH COMPARTMENT LOADS:

- SAME AS COOLING [1], BUT MAX COURIER LOAD AND 3kW TRANSPORT LOAD PER CARGO COMPARTMENT

HEATING CASE ASSUMES:

- COLD DAY (ISA -38°C)
- STANDARD AIRFLOW DISTRIBUTION
- STABILIZED CARGO AND COURIER COMPARTMENT TEMPERATURE 21°C
- NO OCCUPANT LOAD, EMPTY CARGO COMPARTMENT
- NO HIGH PRESSURE RECIRCULATION, LOW PRESSURE RECIRC ON
- LOWER DECK CARGO: VENTILATION ONLY

TOTAL FLOW LIMIT AT 6,5 KG/S DUE TO CPCS (CABIN PRESSURE CONTROL SYSTEM), MAX RESIDUAL PRESSURE 2MBAR WITH CLOSED DOORS

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Preconditioned Airflow Requirements
Preconditioned Airflow Requirements - A380-800F Models
FIGURE 2

5-8-0 Ground Towing Requirements

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

Ground Towing Requirements

1. This section provides information on aircraft Towing.

The A380-800/800F is designed with means for conventional towing or towbarless towing. Information on towbarless towing can be found in SIL 09-002 and chapter 9 of the Aircraft Maintenance Manual.

It is possible to tow or push the aircraft, at maximum ramp weight with engines at zero or up to idle thrust, using a towbar attached to the nose gear leg. The towbar fitting is installed at the front of the leg (optional towing fitting for towing from the rear of the NLG available).

The body gears have attachment points for towing or debogging (for details refer to chapter 7 of the Aircraft Recovery Manual).

NOTE : Information on aircraft towing procedures and corresponding aircraft limitations are given in chapter 9 of the Aircraft Maintenance Manual.

- A. Figure 1: Ground Towing Requirements A380-800 Models shows the chart to determine the towbar pull and tow tractor mass requirements as function of the following physical characteristics:

- Aircraft weight,
- Slope,
- Number of engines at idle.

The chart is based on the A380-800 engine type with the biggest idle thrust. The chart is therefore valid for all A380-800 models.

- B. Figure : Typical Tow Bar configuration 1 and Figure : Typical Tow Bar configuration 2 gives guidelines for the towbar.

2. Towbar design guidelines

The aircraft towbar shall respect the following norms:

- SAE AS 1614, "Main Line Aircraft TowBar Attach Fitting Interface",
- SAE ARP1915 Revision C, "Aircraft TowBar",
- ISO 8267-1, "Aircraft - Towbar attachment fitting - Interface requirements - Part 1: Main line aircraft",
- ISO 9667, "Aircraft ground support equipment - Towbars",
- IATA Airport Handling Manual AHM 958, "Functional Specification for an Aircraft Towbar".

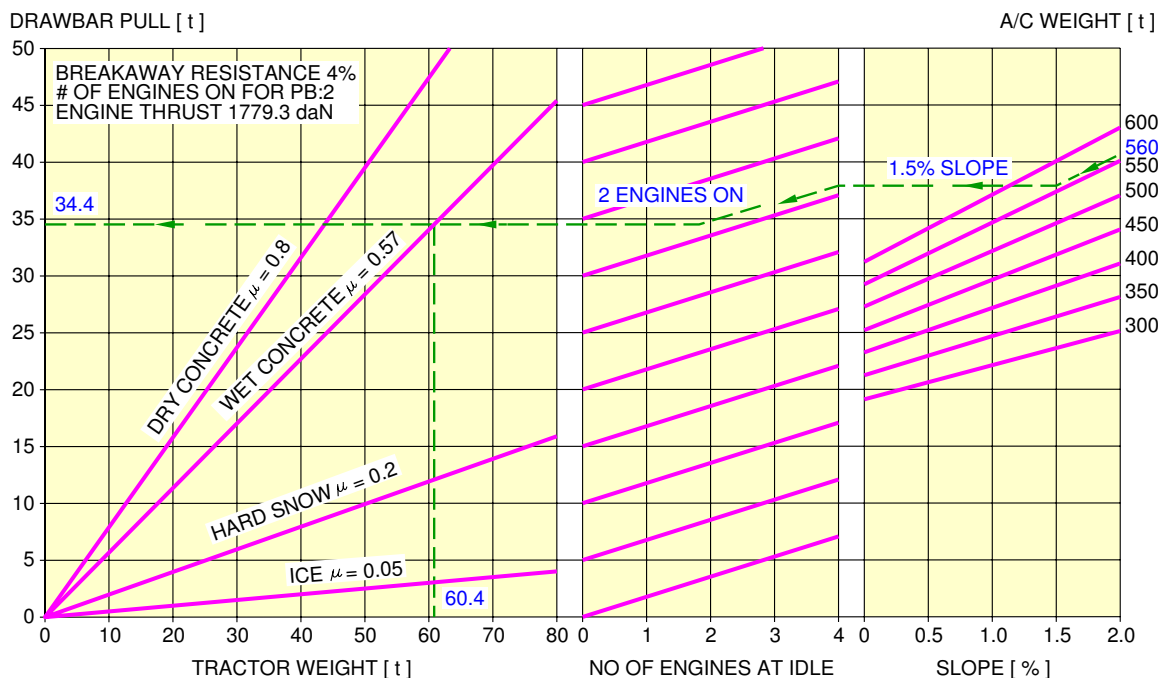
A standard type towbar should be equipped with a damping system to protect the nose gear against jerks and with towing shear pins:

- A traction shear pin calibrated at 62000 daN (139381.53 lbf),
- A torsion pin calibrated at 4800 m.daN (424778.76 lbf.in).

The towing head is designed according to SAE/AS 1614 (issue C) cat. V.

3. Maximum Extension of the NLG Shock Absorber.
 - Measure the dimension H between the two red marks on the left side of the NLG.
 - Make sure that the dimension H of the NLG is never more than 295 mm (11.6 in.) when you tow the aircraft (the compression of the shock absorber is 340 mm (13.4 in.)).

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



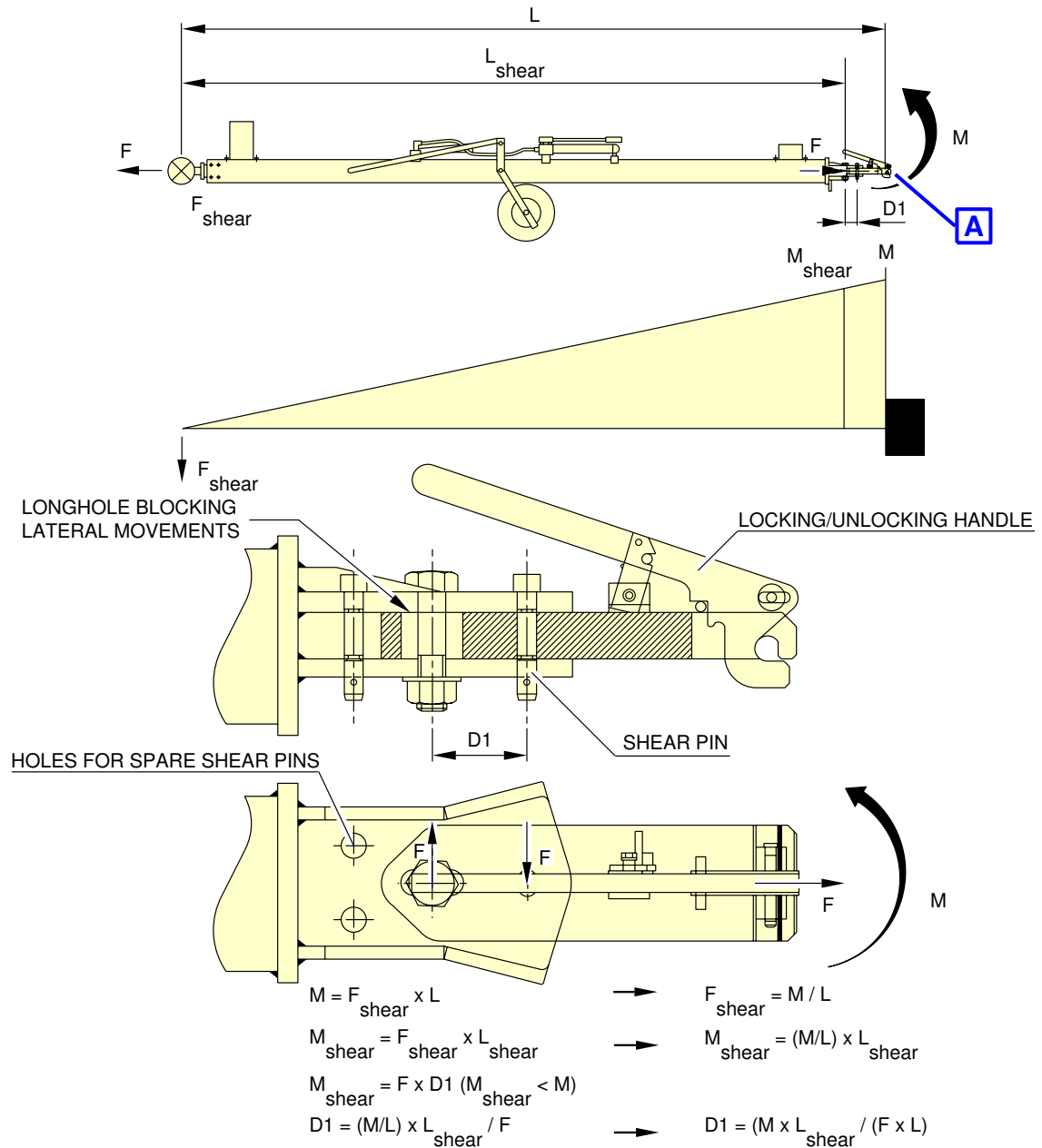
EXAMPLE HOW TO DETERMINE THE MASS REQUIREMENT TO TOW A A380 AT 560 t, AT 1.5% SLOPE, 2 ENGINES AT IDLE AND FOR WET TARMAC CONDITIONS:

- ON THE RIGHT HAND SIDE OF THE GRAPH, CHOOSE THE RELEVANT AIRCRAFT WEIGHT (560 t),
- FROM THIS POINT DRAW A PARALLEL LINE TO THE REQUIRED SLOPE PERCENTAGE (1.5%),
- FROM THE POINT OBTAINED DRAW A STRAIGHT HORIZONTAL LINE UNTIL No. OF ENGINES AT IDLE = 4,
- FROM THIS POINT DRAW A PARALLEL LINE TO THE REQUESTED NUMBER OF ENGINES (2),
- FROM THIS POINT DRAW A STRAIGHT HORIZONTAL LINE TO THE DRAWBAR PULL AXIS,
- THE Y-COORDINATE OBTAINED IS THE NECESSARY DRAWBAR PULL FOR THE TRACTOR (34.4 t),
- SEARCH THE INTERSECTION WITH THE "WET CONCRETE" LINE.
- THE OBTAINED X-COORDINATE IS THE RECOMMENDED MINIMUM TRACTOR WEIGHT (60.4 t).

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Ground Towing Requirements
Ground Towing Requirements A380-800 Models
FIGURE 1

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

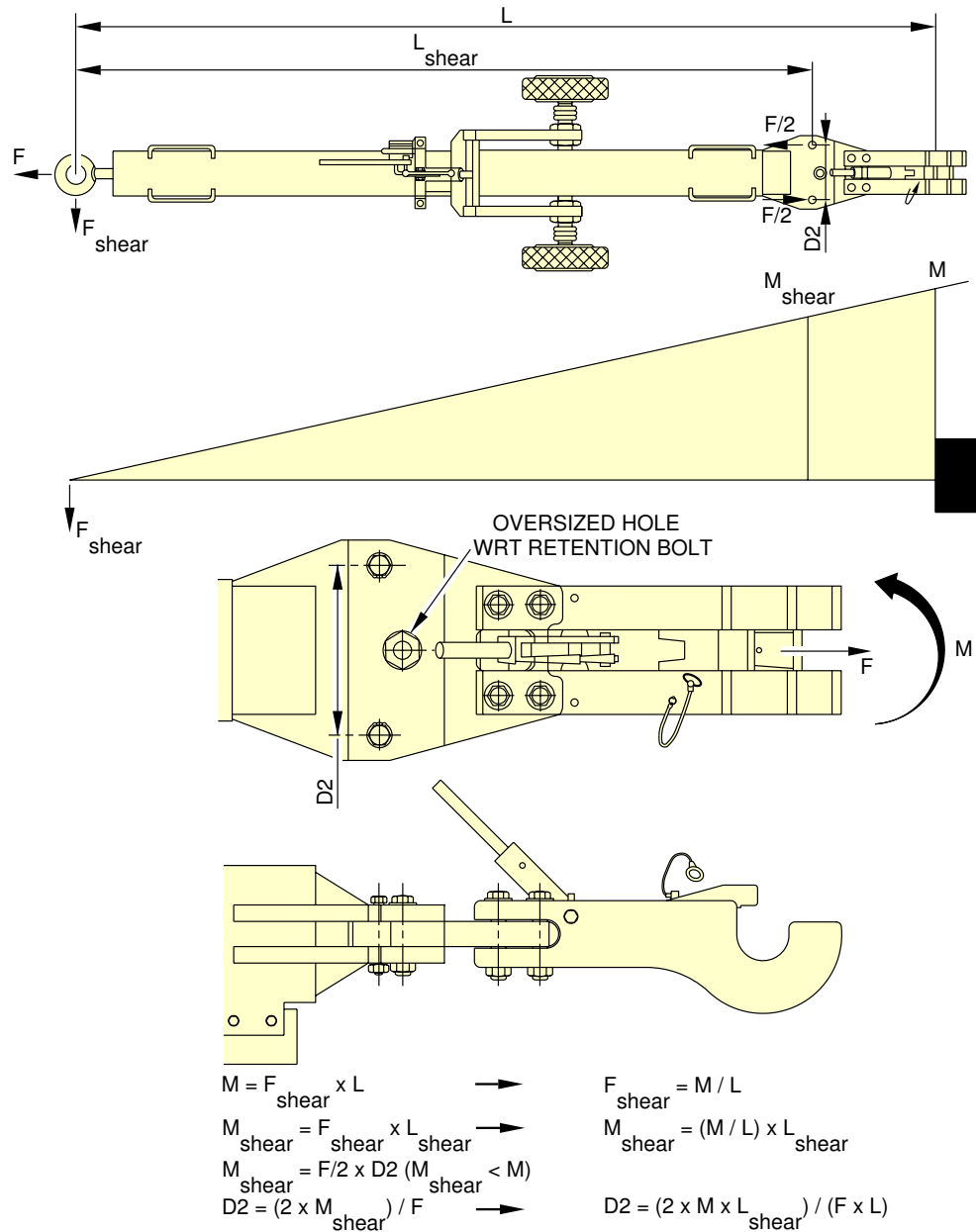


A

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Ground Towing Requirements
Typical Tow Bar configuration 1
FIGURE 2

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



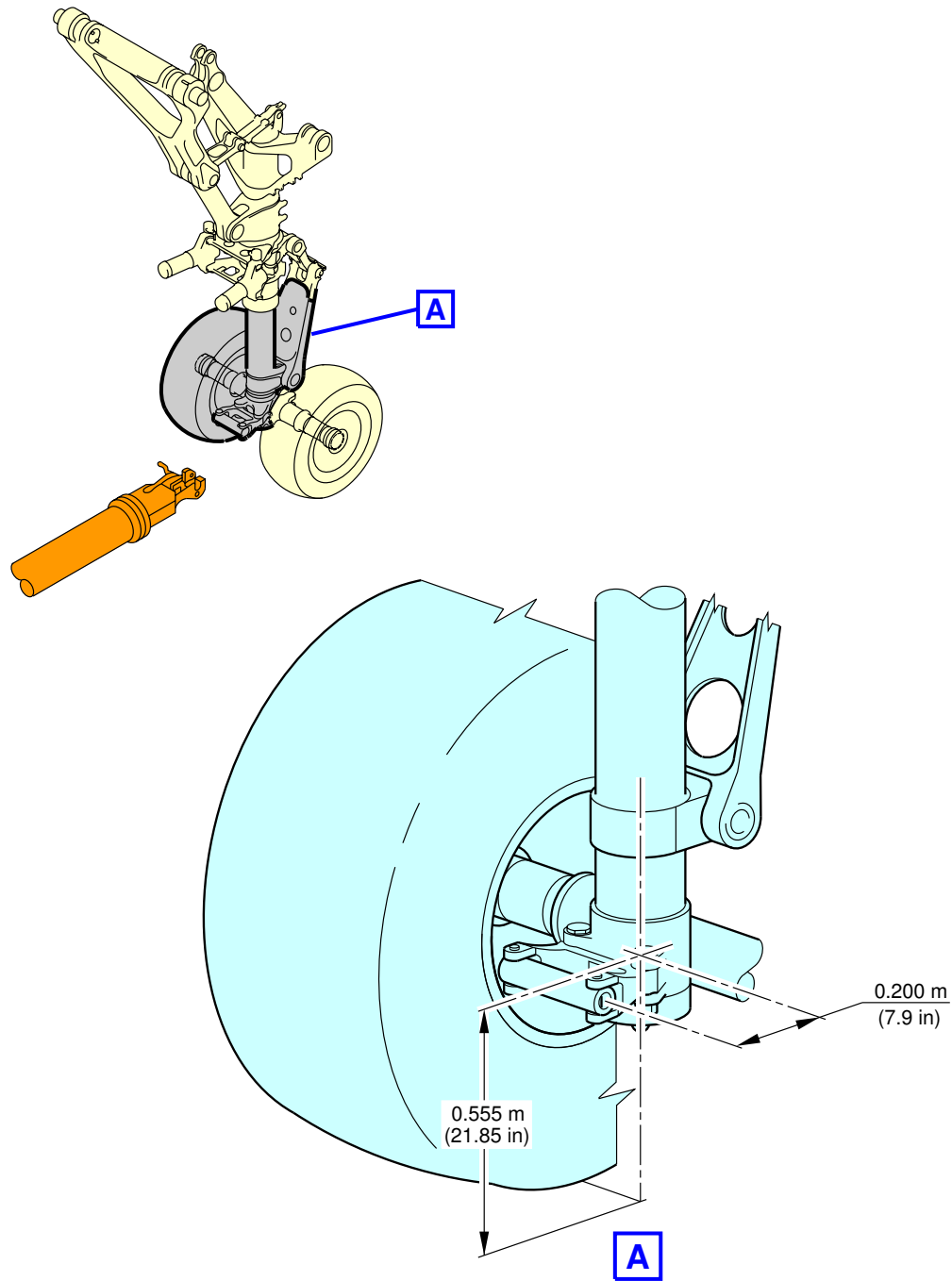
F [daN]	M [m.daN]	D1 [mm]	D2 [mm]
62000	4800	69.7	148.6

RESULTS FOR A TOWBAR LENGTH OF $L_{\text{shear}}/L = 0.90$

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Ground Towing Requirements
Typical Tow Bar configuration 2
FIGURE 3

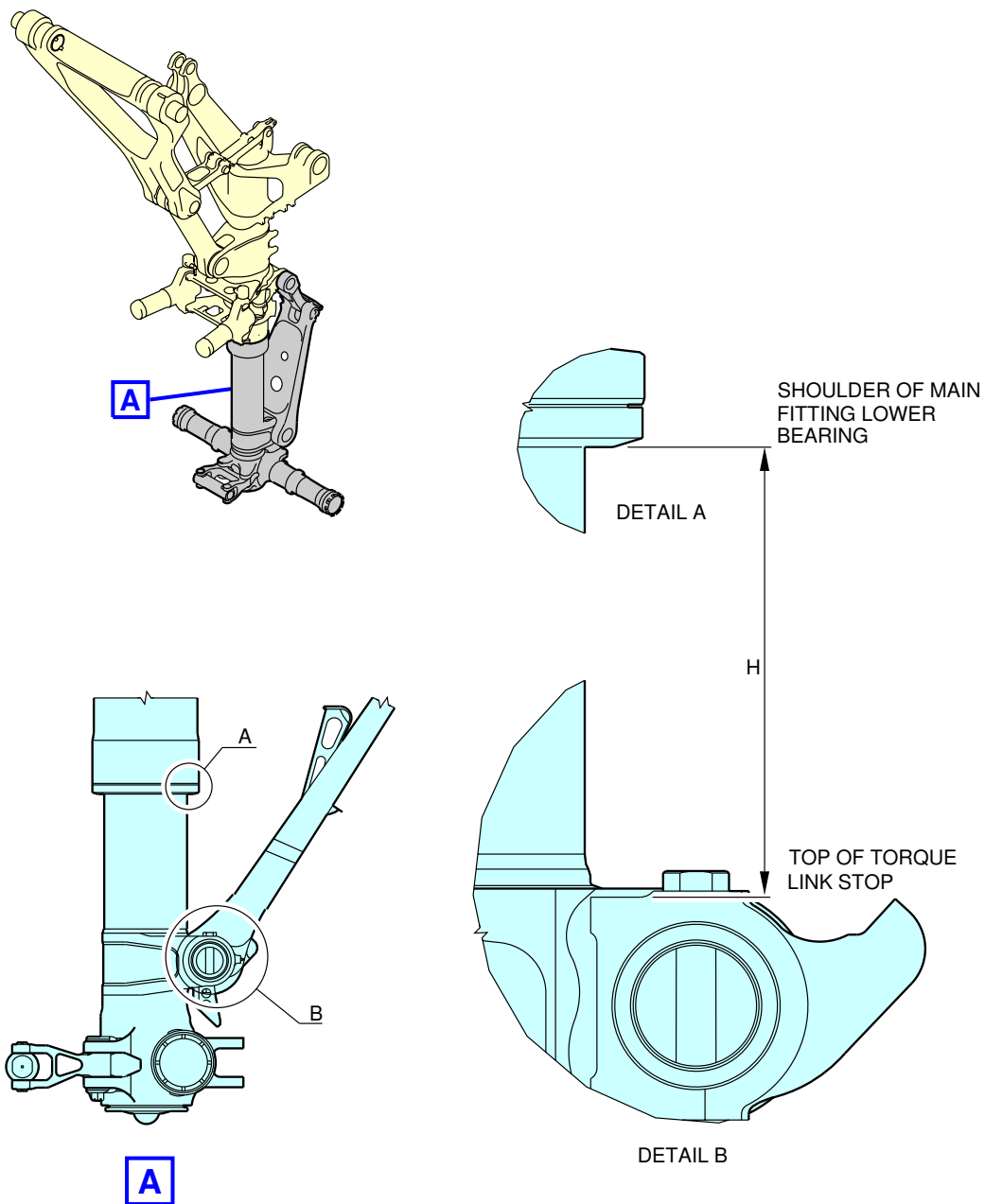
****ON A/C A380-800 Models A380-800F Models**



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Ground Towing Requirements
Nose Gear Towing Fittings
FIGURE 4

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



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Ground Towing Requirements
Maximum Extension of the NLG Shock Absorber
FIGURE 5

OPERATING CONDITIONS**6-1-0 Engine Exhaust Velocities and Temperatures******ON A/C A380-800 Models A380-800F Models**Engine Exhaust Velocities and Temperatures**1. General**

This section shows the estimated engine exhaust efflux velocity and temperature contours for Maximum Take-off, Breakaway and Idle conditions for the A380 engine models.

Contours are available for both Rolls-Royce's Trent 900 engine and the Engine Alliance's GP7200 engine.

The Maximum Take-off data are presented at the maximum thrust rating for all the A380 engine models, including the A380-800F Freighter version. Therefore, contours hereafter include contours of the A380-800 Passenger version.

The Breakaway data are presented at a rating corresponding to the minimum thrust level required to initiate movement of an A380-800F model at its maximum ramp weight from static position and on uphill ground.

The Idle data are directly provided by the engine manufacturers.

In the charts, longitudinal distances are measured from the inboard engine core nozzle exit station, while lateral distances are measured from the aircraft fuselage centreline.

A. Data from Rolls-Royce's Trent 900:

The estimated efflux data are presented at ISA+15 °C (30 °C), Sea Level Static and negligible wind conditions.

The analysis assumes that the core and bypass streams are fully mixed and calculates the jet behaviour in free, still air and therefore does not take into account effects such as on-wing installation, ground entrainment and ambient wind conditions.

Velocity contours are presented at 50 ft/s (15 m/s), 100 ft/s (30 m/s) and 150 ft/s (46 m/s), while temperature contours are presented at 104 °F (40 °C), 122 °F (50 °C) and 172 °F (60 °C).

B. Data from Engine Alliance's GP7200:



AIRPLANE CHARACTERISTICS

The estimated efflux data are presented at ISA+15 °C (30 °C), Sea Level Static with 20 kt headwind. It also assumed ground plane and proximity effects. Velocity contours are presented at 35 MPH (15 m/s), 65 MPH (30 m/s) and 105 MPH (46 m/s), while temperature contours are presented at 122 °F (50 °C), 212 °F (100 °C) and 392 °F (200 °C). Engine Alliance strongly recommends that jet blast studies using their contours include the effect of a 20-knot headwind.



AIRPLANE CHARACTERISTICS

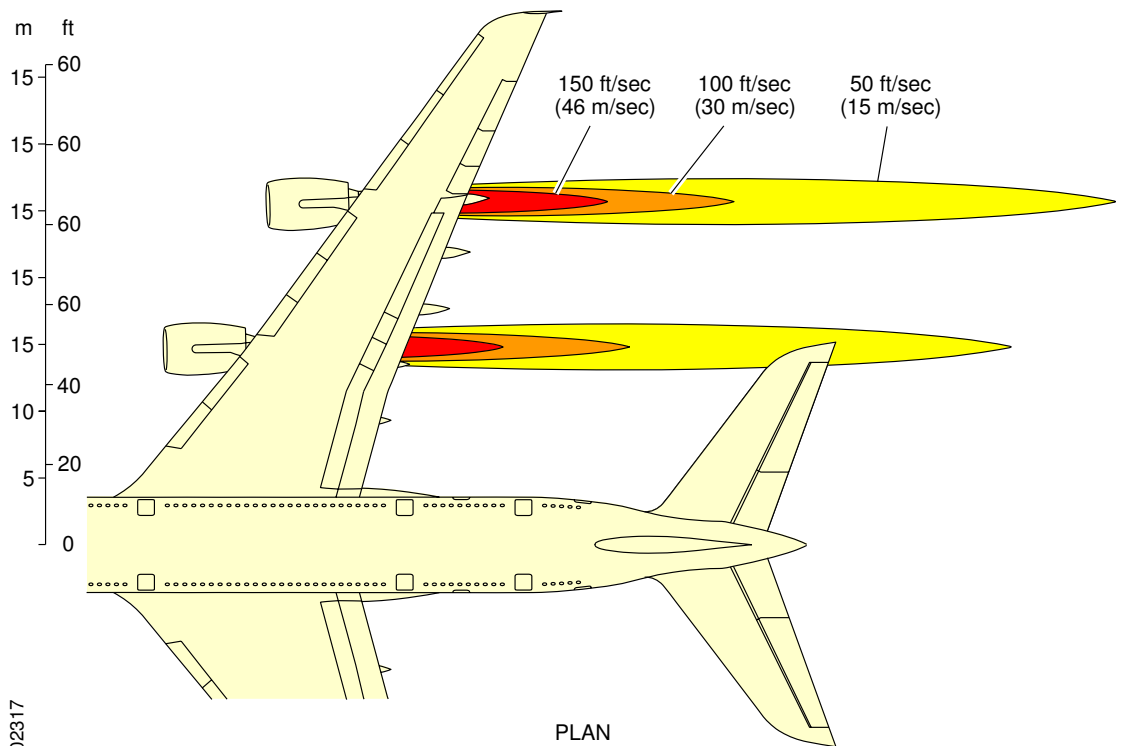
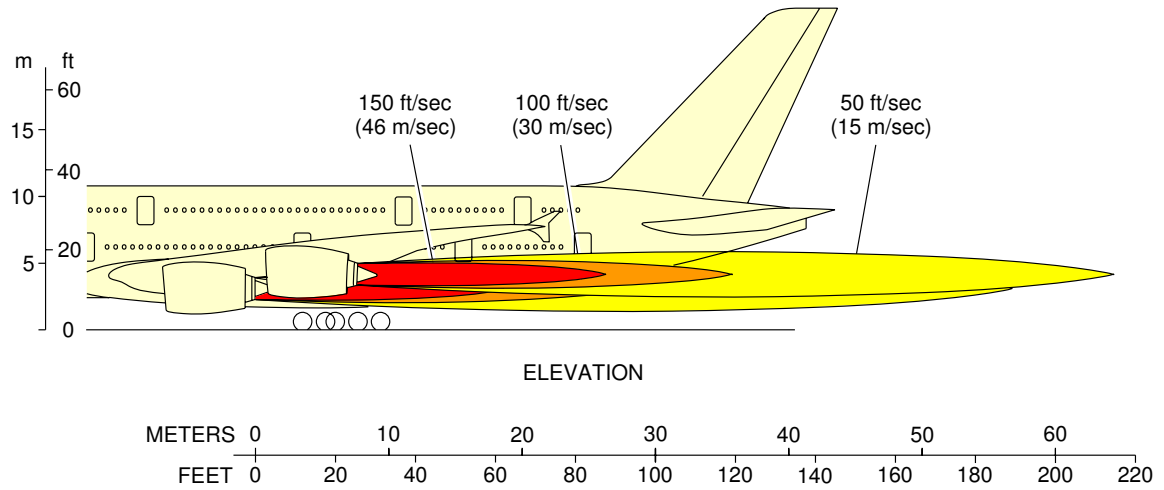
6-1-1 Engine Exhaust Velocities - Ground Idle Power

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

Engine Exhaust Velocities - Ground Idle Power

1. This section gives engine exhaust velocities at ground idle power.

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

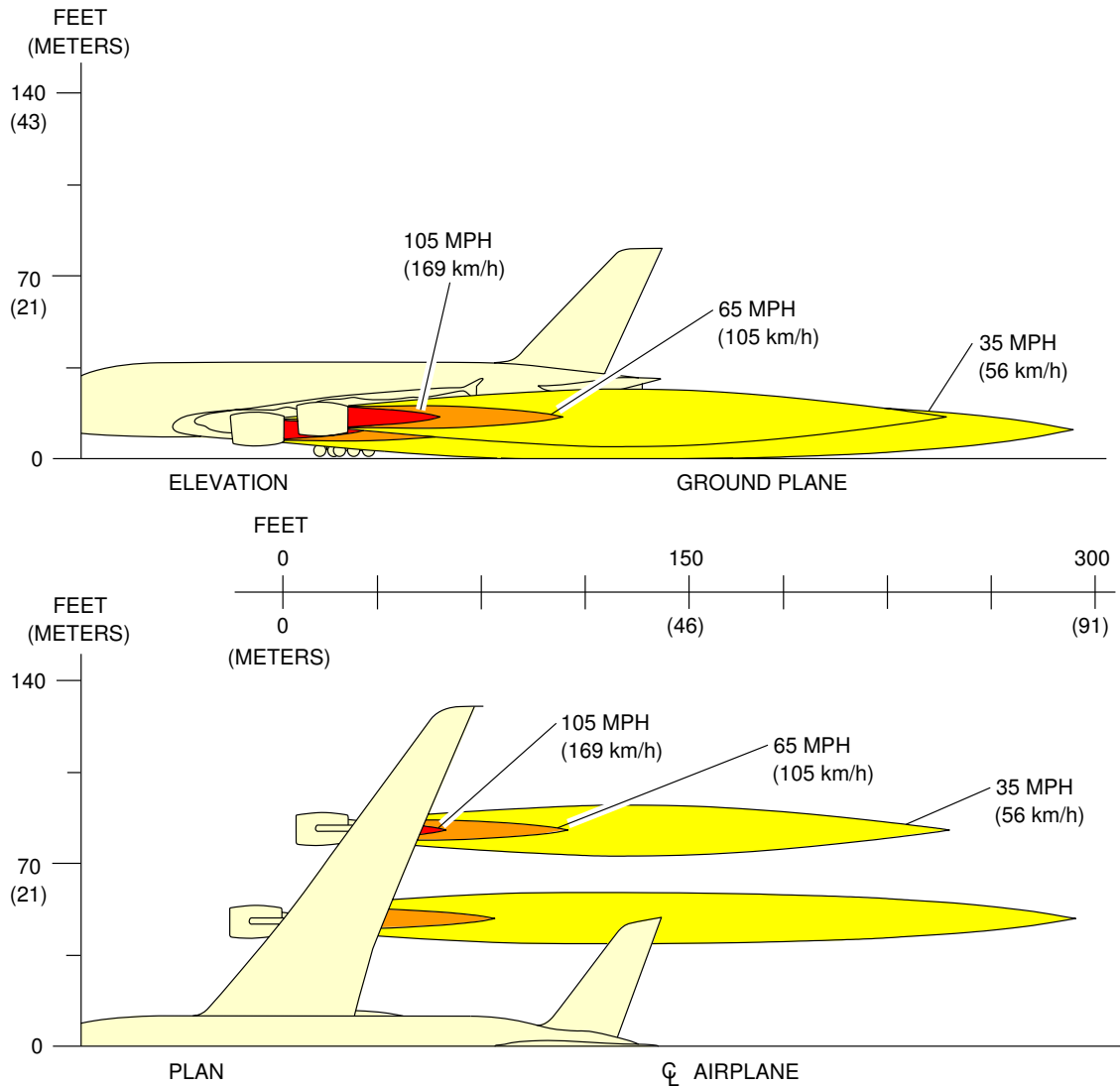


deh0002317

L_AC_060101_1_0010101_01_00

Engine Exhaust Velocities
Ground Idle Power - TRENT 900 Engines
FIGURE 1

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



NOTE: ALL VELOCITY VALUES ARE IN STATUE MILES PER HOUR.
 CONVERSION FACTOR
 1 MPH = 1.6 km/h
 DANGER (KEEP OUT) ZONES $\geq$ 35 MPH

L_AC_060101_1_0020101_01_01

Engine Exhaust Velocities
 Ground Idle Power - GP 7200 Engines
 FIGURE 2

E-00224 (0207)
 PW V



AIRPLANE CHARACTERISTICS

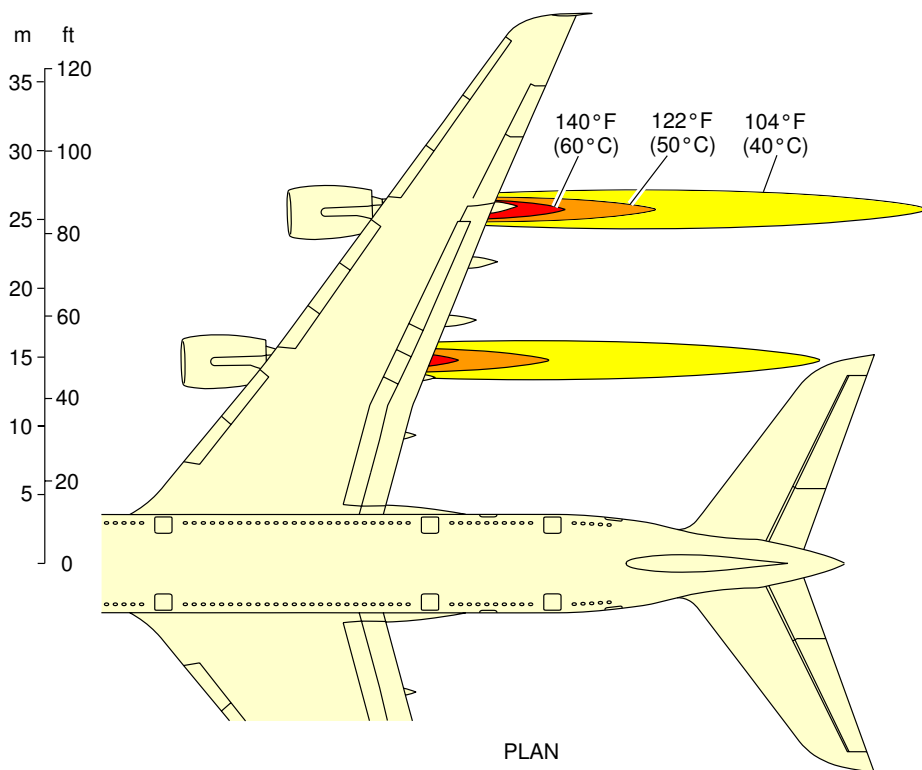
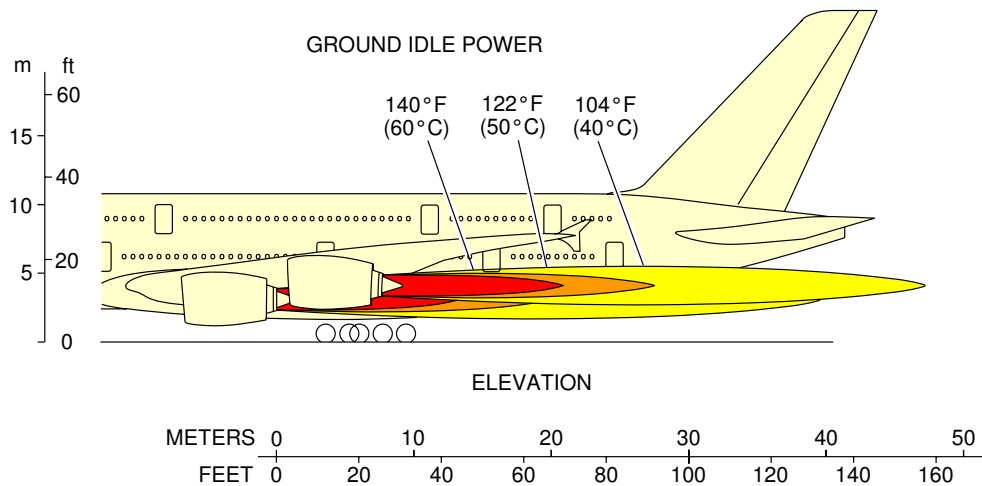
6-1-2 Engine Exhaust Temperatures - Ground Idle Power

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

Engine Exhaust Temperatures - Ground Idle Power

1. This section gives engine exhaust temperatures at ground idle power.

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

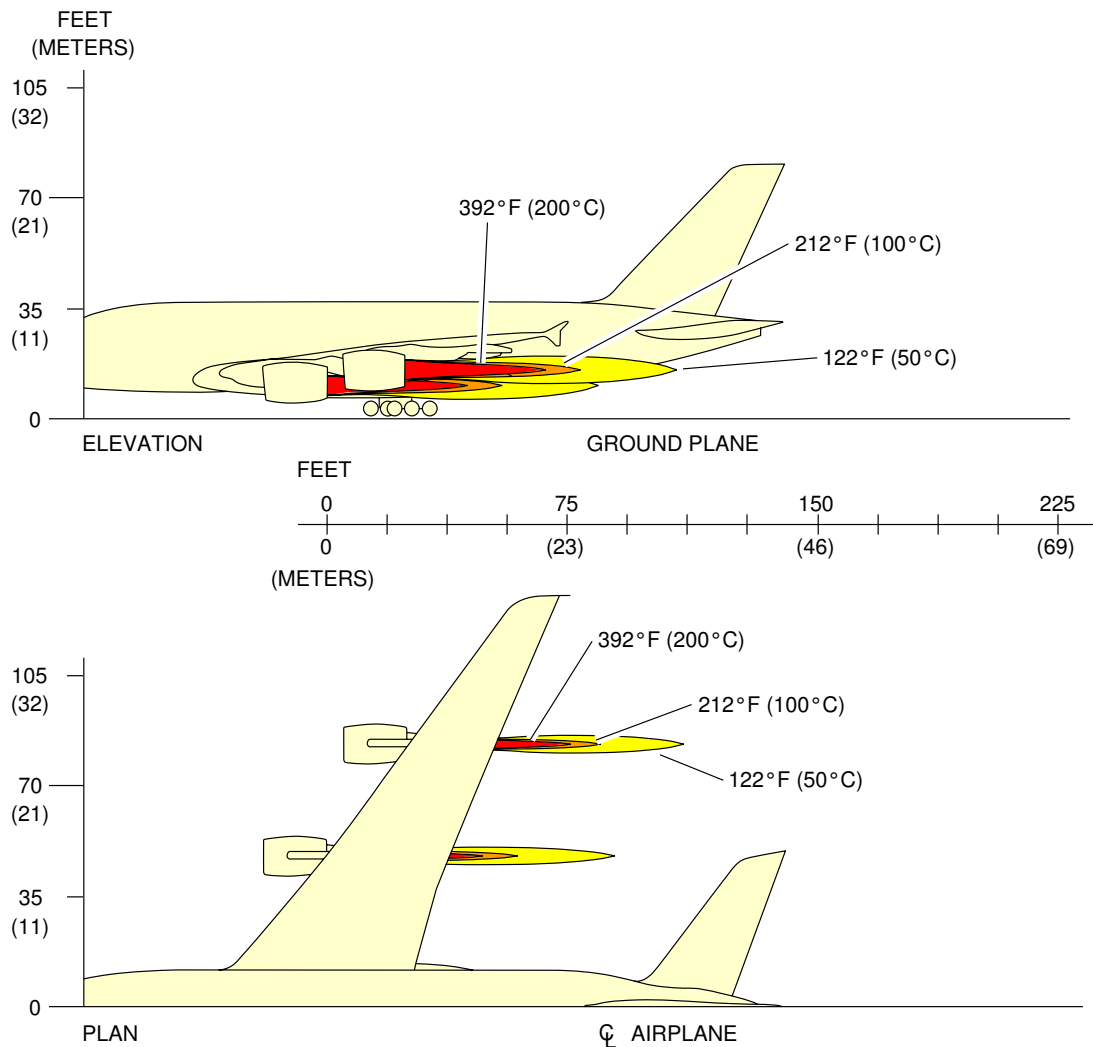


deh0002316

L_AC_060102_1_0010101_01_01

Engine Exhaust Temperatures
Ground Idle Power - TRENT 900 Engines
FIGURE 1

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



NOTE: ALL TEMPERATURES ARE IN FAHRENHEIT (CELSIUS).

E-00226 (0207)
PW V

L_AC_060102_1_0020101_01_01

Engine Exhaust Temperatures
Ground Idle Power - GP 7200 Engines
FIGURE 2



AIRPLANE CHARACTERISTICS

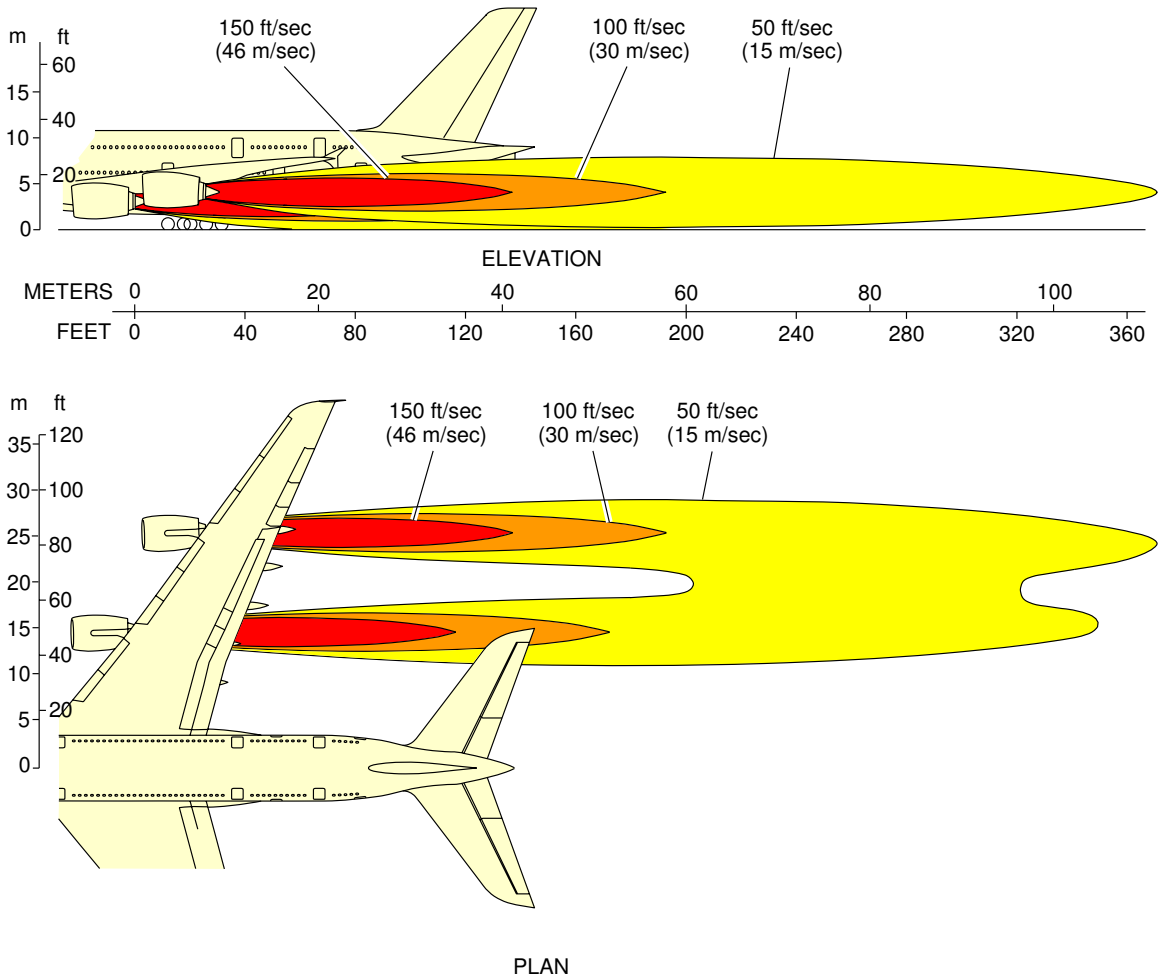
6-1-3 Engine Exhaust Velocities - Breakaway Power

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

Engine Exhaust Velocities - Breakaway Power

1. This section gives engine exhaust velocities at breakaway power.

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

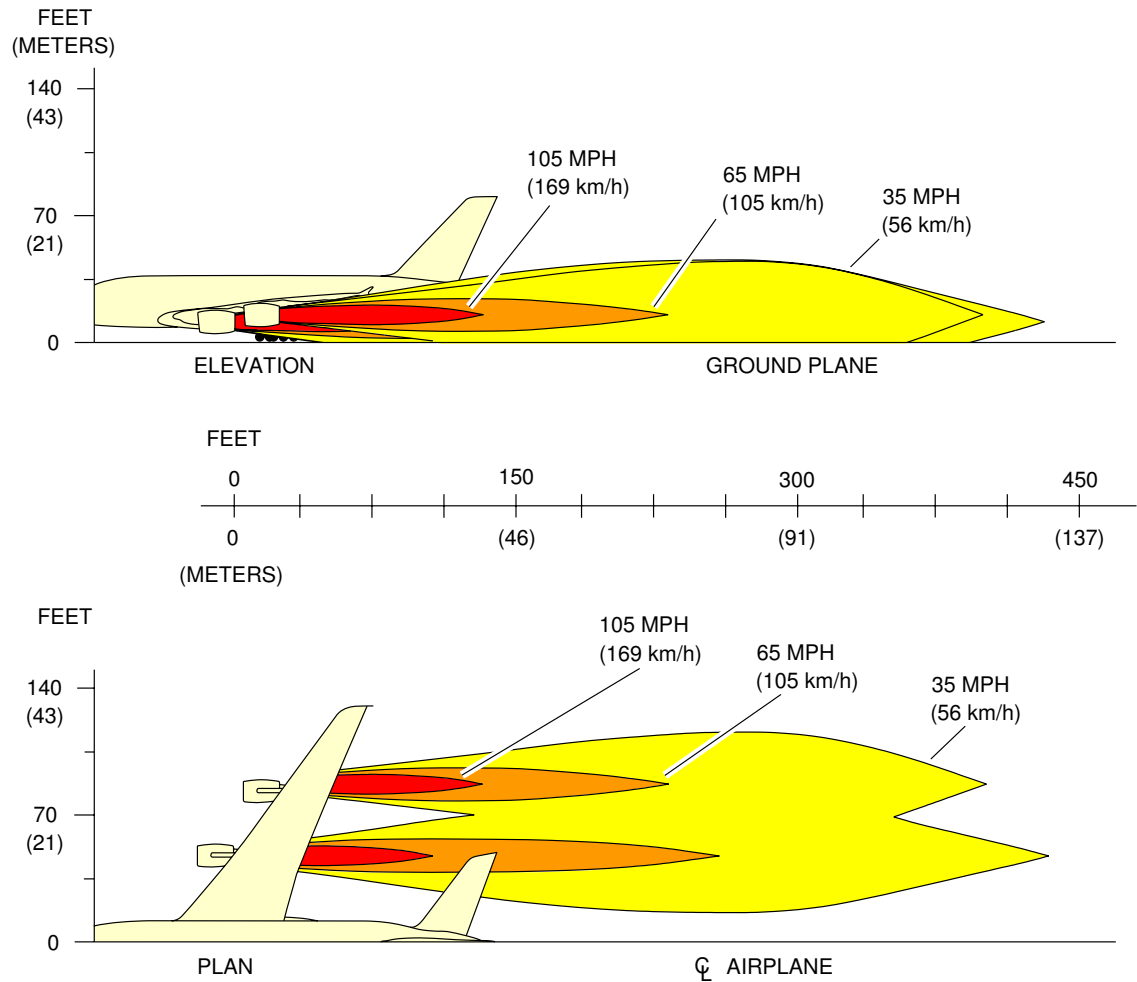


deh0002319

L_AC_060103_1_0010101_01_00

Engine Exhaust Velocities
Breakaway Power - TRENT 900 Engines
FIGURE 1

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



E-02200 (0207)
PW V

NOTE: ALL VELOCITY VALUES ARE IN STATUE MILES PER HOUR.
CONVERSION FACTOR
1 MPH = 1.6 km/h
DANGER (KEEP OUT) ZONES $\geq$ 35 MPH

L_AC_060103_1_0020101_01_01

Engine Exhaust Velocities
Breakaway Power - GP 7200 Engines
FIGURE 2



AIRPLANE CHARACTERISTICS

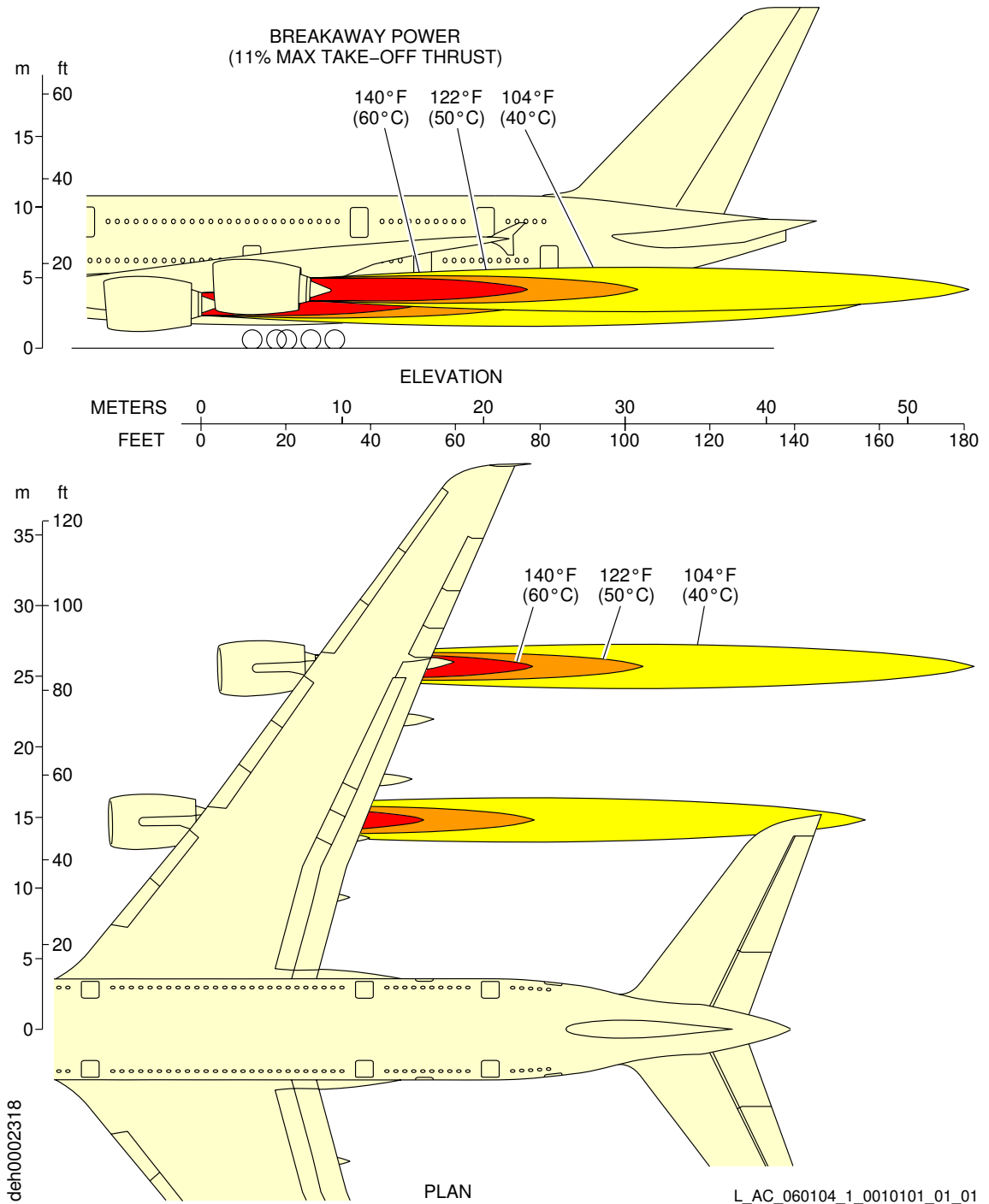
6-1-4 Engine Exhaust Temperatures - Breakaway Power

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

Engine Exhaust Temperatures - Breakaway Power

1. This section gives engine exhaust temperatures at breakaway power.

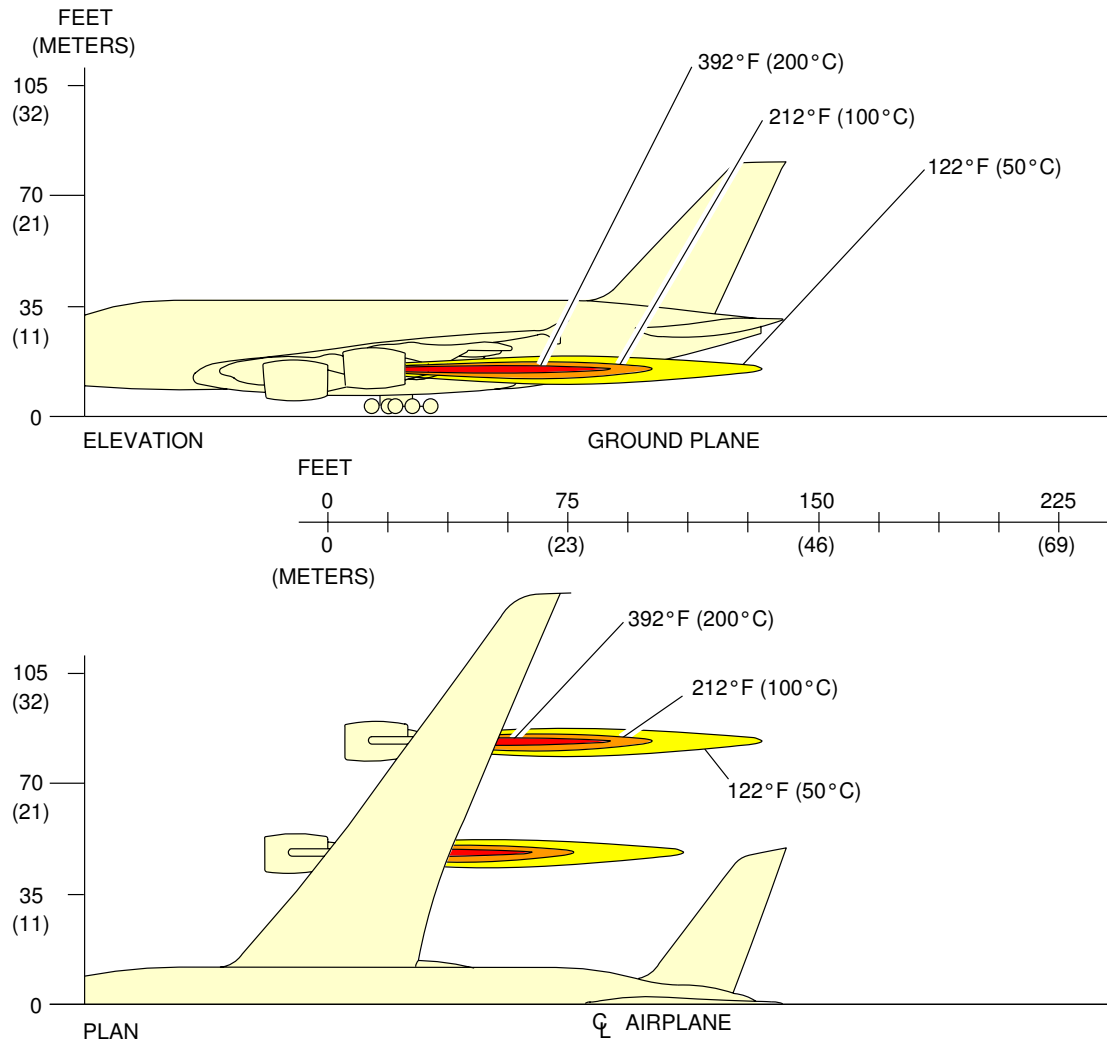
****ON A/C A380-800 Models A380-800F Models**



Engine Exhaust Temperatures
Breakaway Power - TRENT 900 Engines
FIGURE 1

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

E-02201 (0805)
PW V



NOTE : ALL TEMPERATURES ARE IN FAHRENHEIT (CELSIUS).

L_AC_060104_1_0020101_01_00

Engine Exhaust Temperatures
Breakaway Power - GP 7200 Engines
FIGURE 2



AIRPLANE CHARACTERISTICS

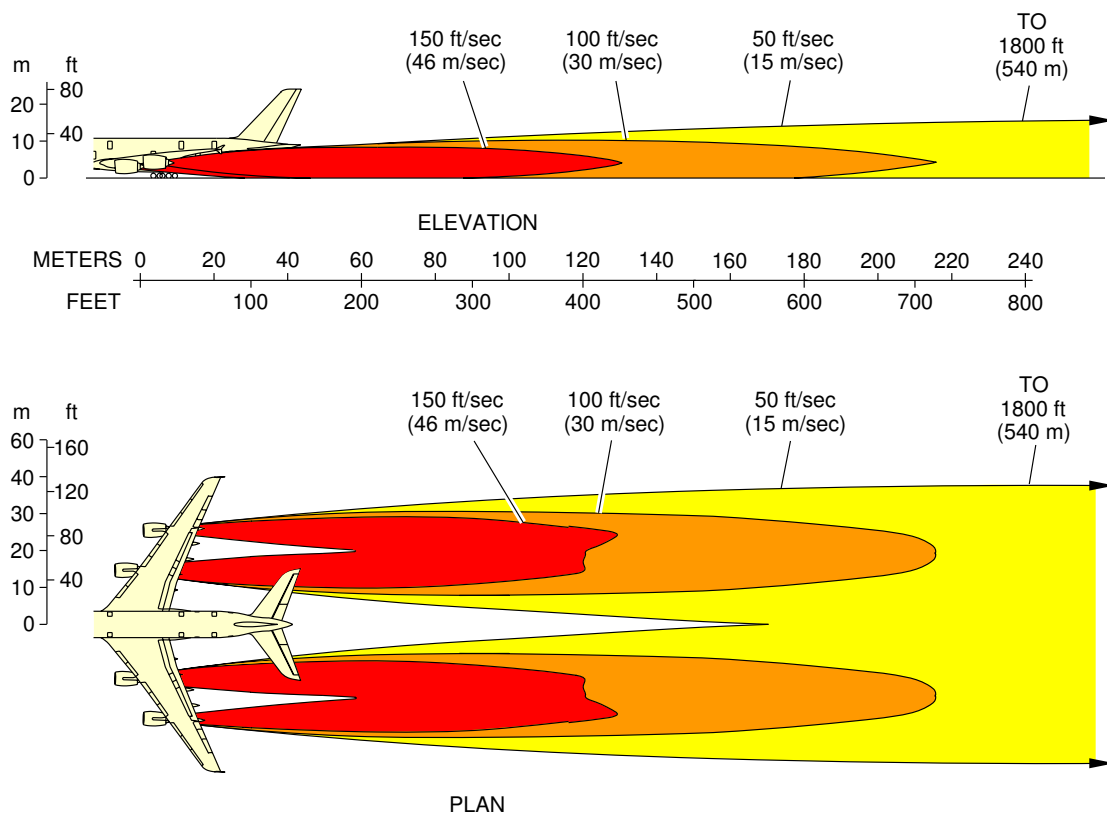
6-1-5 Engine Exhaust Velocities - Max Take-off Power

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

Engine Exhaust Velocities - Max Take-off Power

1. This section gives engine exhaust velocities at max take-off power.

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

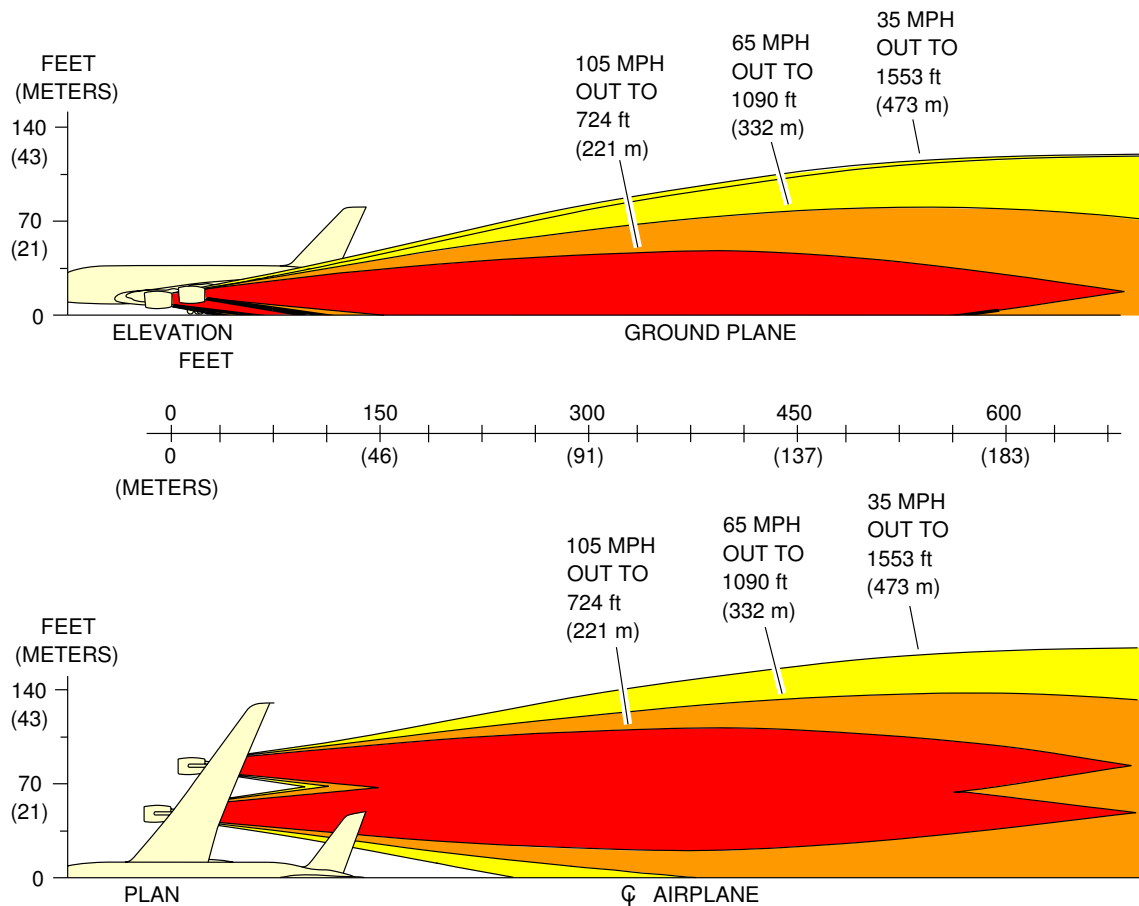


deh0002315

L_AC_060105_1_0010101_01_00

Engine Exhaust Velocities
Max. Take-Off Power - TRENT 900 Engines
FIGURE 1

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



E-00225 (0207)
PW V

NOTE: ALL VELOCITY VALUES ARE IN STATUE MILES PER HOUR.
CONVERSION FACTOR
1 MPH = 1.6 km/h
DANGER (KEEP OUT) ZONES $\geq$ 35 MPH

L_AC_060105_1_0020101_01_01

Engine Exhaust Velocities
Max. Take-Off Power - GP 7200 Engines
FIGURE 2



AIRPLANE CHARACTERISTICS

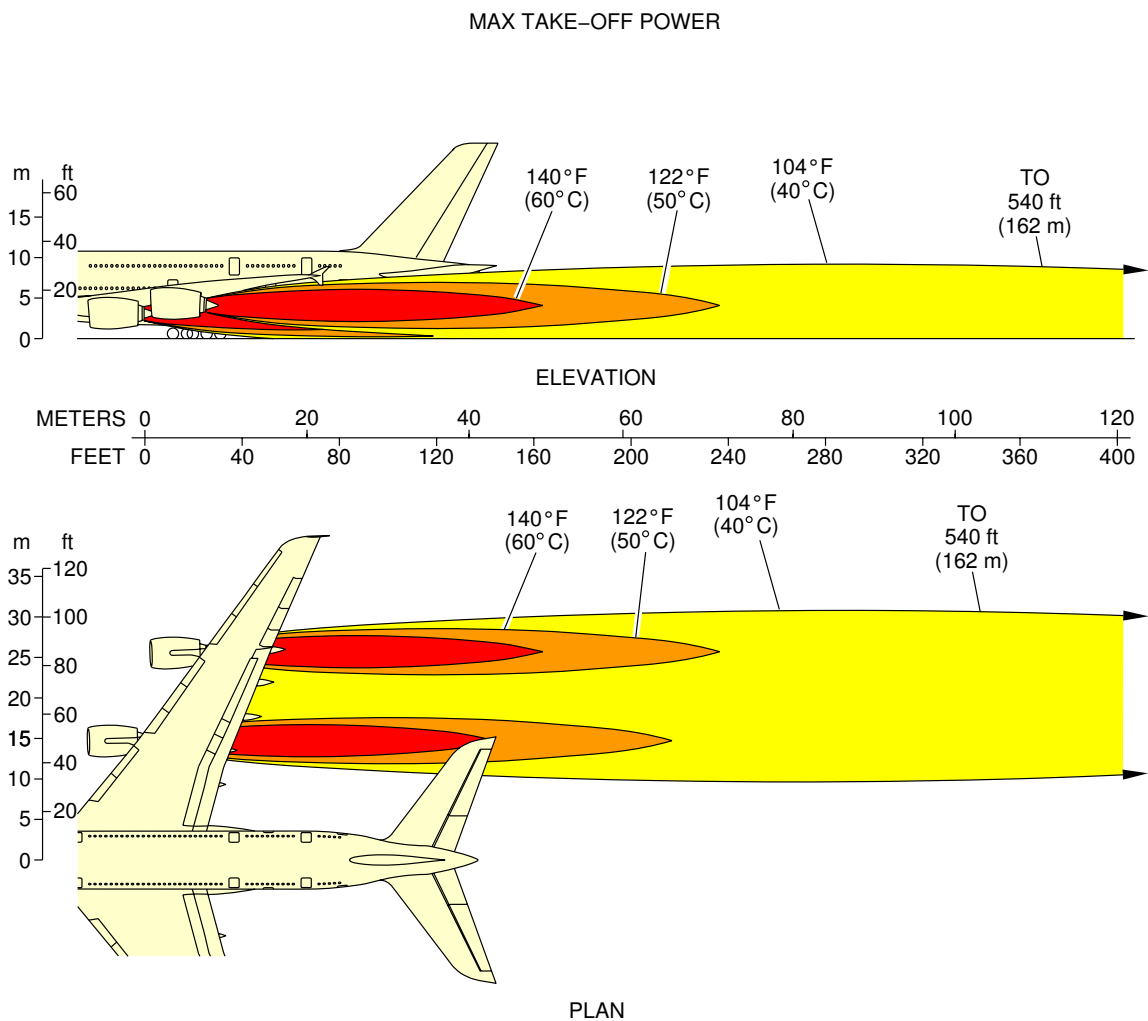
6-1-6 Engine Exhaust Temperatures - Max Take-off Power

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

Engine Exhaust Temperatures - Max Take-off Power

1. This section gives engine exhaust temperatures at max take-off power.

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



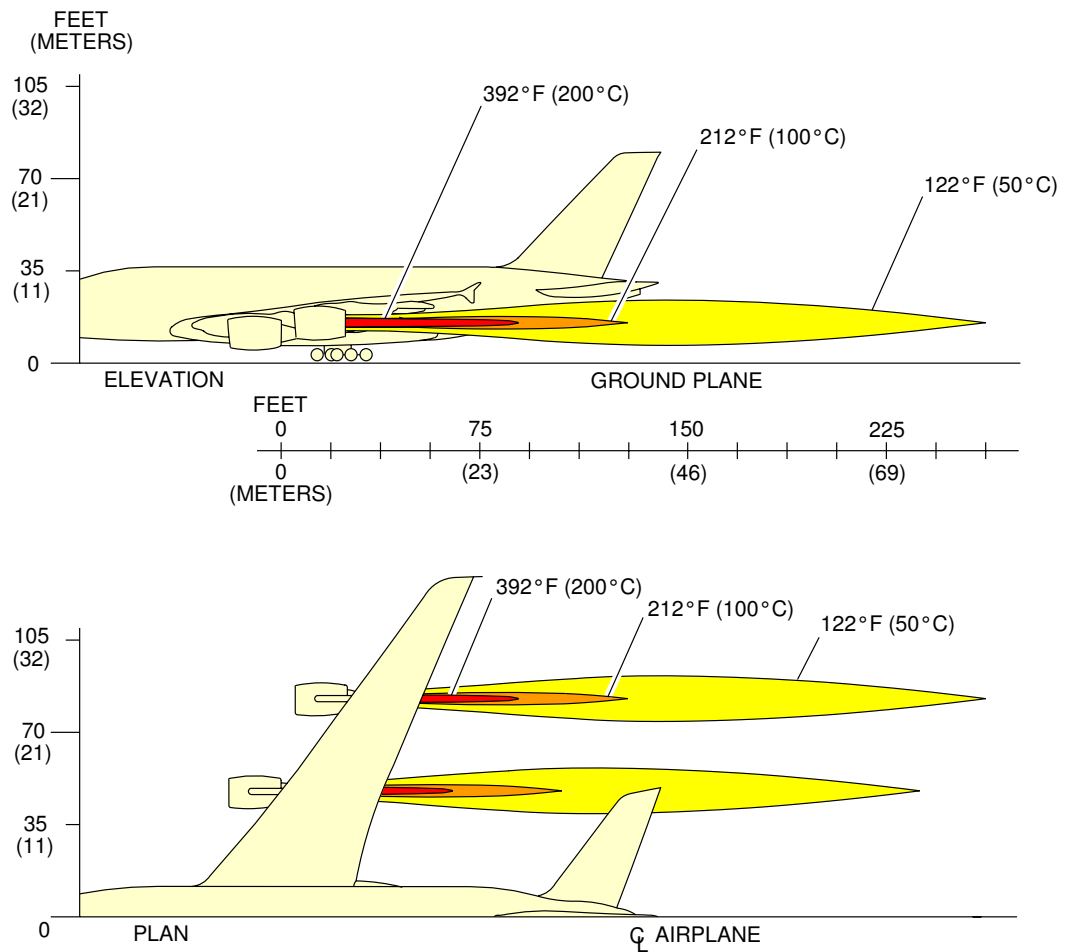
deh0002314

L_AC_060106_1_0010101_01_01

Engine Exhaust Temperatures
Max Take-Off Power - TRENT 900 Engines
FIGURE 1

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

E-00227 (0704)
PW V



NOTE : ALL TEMPERATURES ARE IN FAHRENHEIT (CELSIUS).

L_AC_060106_1_0020101_01_00

Engine Exhaust Temperatures
Max Take-Off Power - GP 7200 Engines
FIGURE 2



AIRPLANE CHARACTERISTICS

6-2-0 Airport and Community Noise Data

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

Airport and Community Noise Data

1. Airport and Community Noise Data

6-2-1 Airport and Community Noise Data

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

Airport and Community Noise Data

1. RR TRENT 900 Engines

A. Description of Test Conditions

The arc of circle (radius = 60m), with microphones 1.2 m high, is centered on the position of the noise reference point.

A.P.U. : off ; E.C.S. : Packs off.

B. Meteorological Data

The meteorological parameters measured 1.6 m from the ground on the day of test were as follows:

- Temperature: 32 ° C
- Relative humidity: 31%
- Atmospheric pressure: 996 hPa
- Wind speed: Negligible
- No rain

2. EA GP7200 Engines

A. Description of Test Conditions

The arc of circle (radius = 60m), with microphones 1.2 m high, is centered on the position of the noise reference point.

A.P.U. : off ; E.C.S. : Packs off.

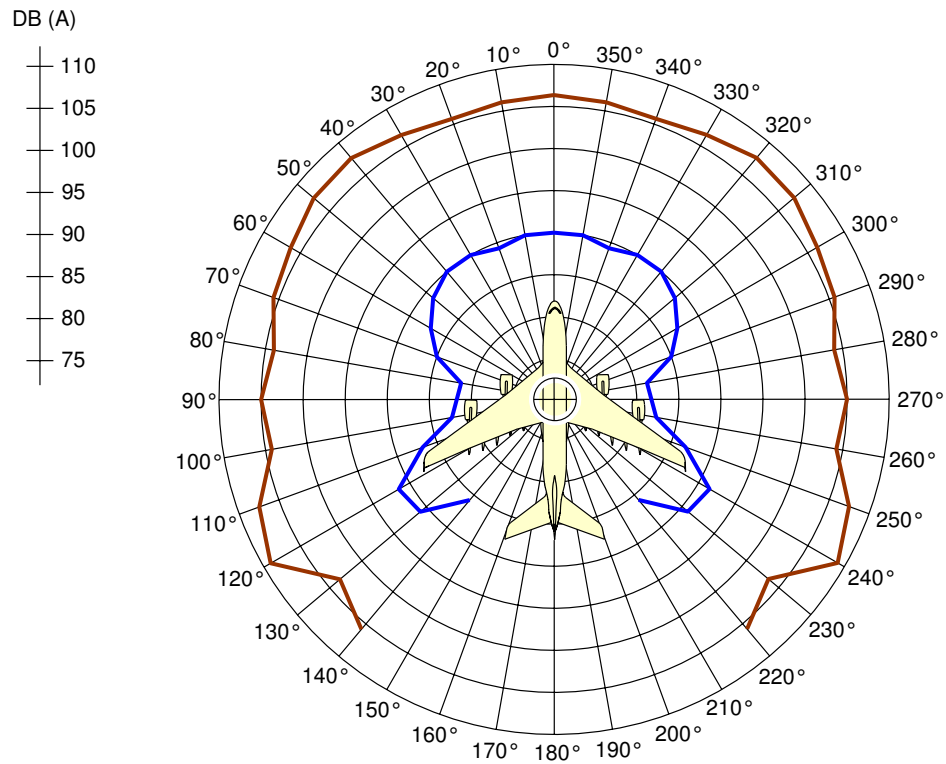
B. Meteorological Data

The meteorological parameters measured 1.6 m from the ground on the day of test were as follows:

- Temperature: 12 ° C
- Relative humidity: 90%
- Atmospheric pressure: 1015 hPa
- Wind speed: Negligible
- No rain

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

GROUND IDLE 4 ENGINES RUNNING	MAX THRUST POSSIBLE ON BRAKES 4 ENGINES RUNNING
	

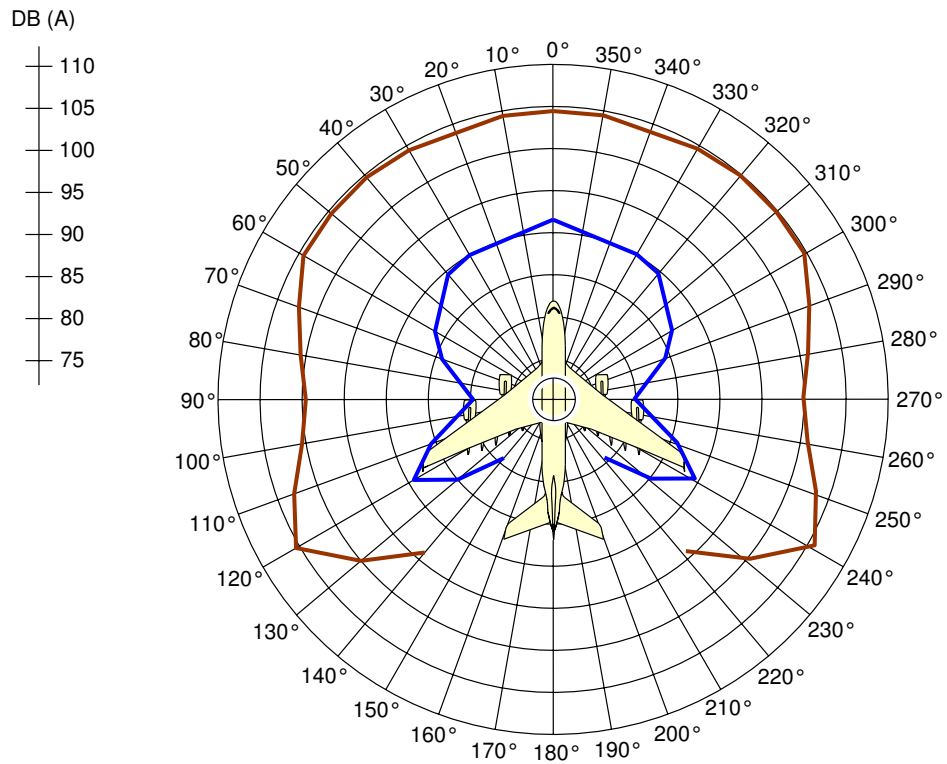


L_AC_060201_1_0030101_01_01

Airport and Community Noise Data
TRENT 900 Engines
FIGURE 1

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

GROUND IDLE 4 ENGINES RUNNING	MAX THRUST POSSIBLE ON BRAKES 4 ENGINES RUNNING
	



L_AC_060201_1_0010101_01_01

Airport and Community Noise Data
GP 7200 Engines
FIGURE 2

6-3-0 Danger Areas of the Engines

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

Danger Areas of the Engines

1. Danger Areas of the Engines

The intake suction danger areas, which are plotted in this chapter, correspond to very low suction velocities in order to prevent very low density objects (hat, handkerchief) from ingestion by engines. The primary aim of those danger areas is to protect the people working around the engines.

The A380 outer engines are high enough above ground to prevent the ingestion of typical loose objects, which can be found on ground at the edge of runways/taxiways paved areas (loose gravels for example), in the following conditions:

- at usual taxiway thrust (i.e. up to the breakaway power setting), even if the loose objects are below the A380 outer engines.
- at usual take-off thrust (i.e. up to the maximum take-off power setting), if the loose objects are beyond 3 meters from the A380 outer engines centreline.



AIRPLANE CHARACTERISTICS

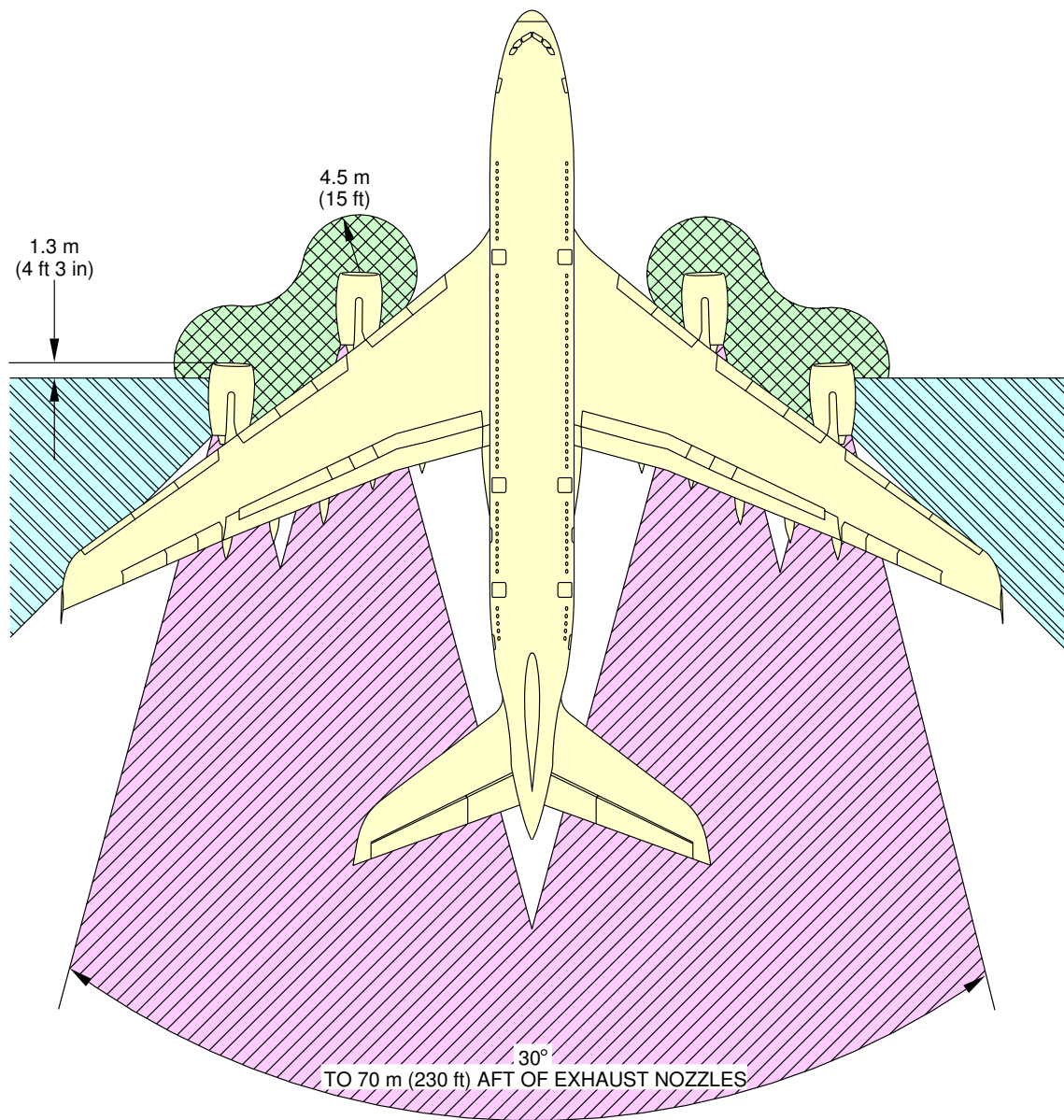
6-3-1 Danger Areas of the Engines - Ground Idle Power

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

Danger Areas of the Engines - Ground Idle Power

1. This section gives danger areas of the engines at ground idle power conditions.

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



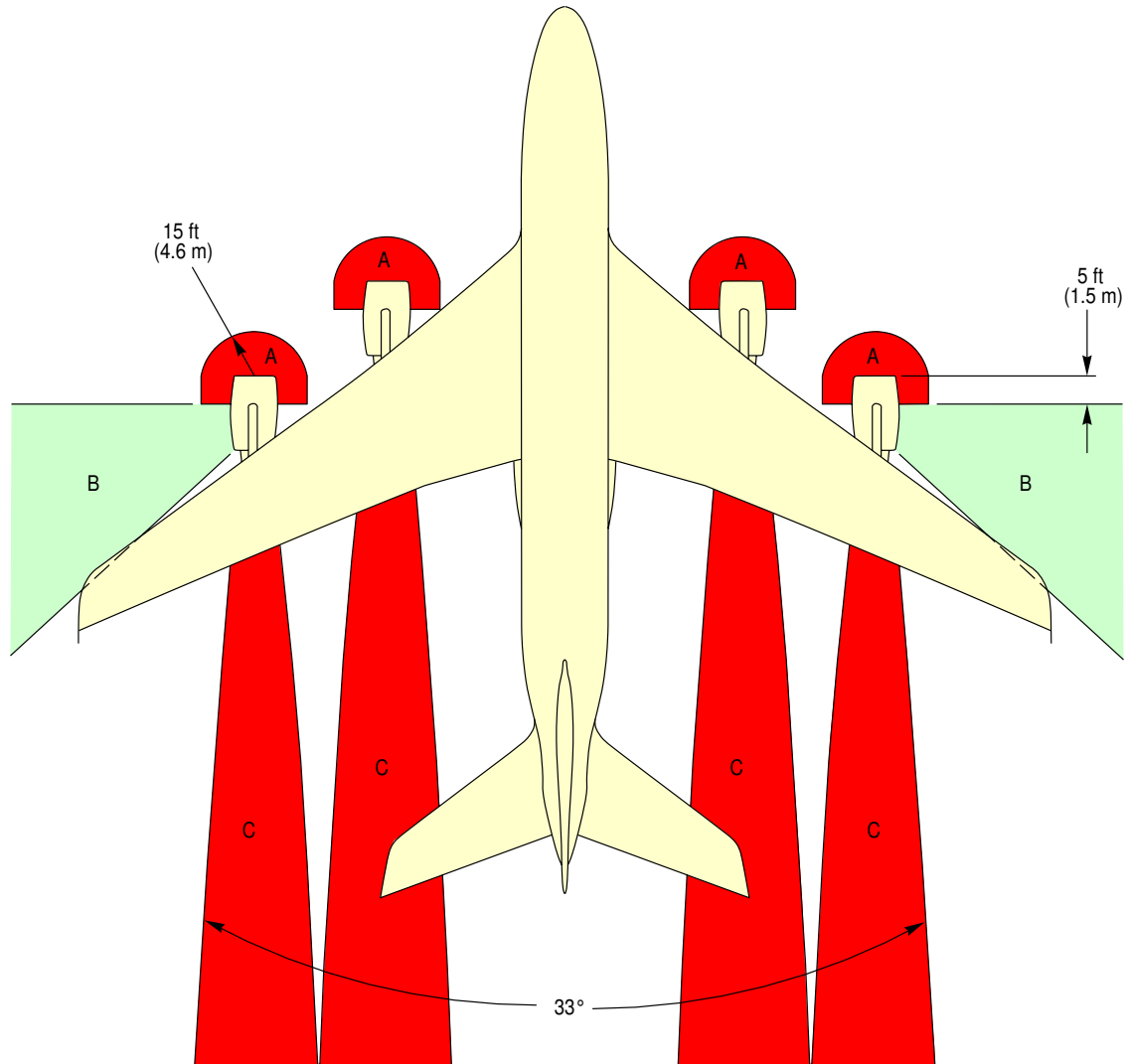
-  INTAKE SUCTION DANGER AREA MINIMUM IDLE POWER
-  EXHAUST DANGER AREA
-  ENTRY CORRIDOR

L_AC_060301_1_0010101_01_00

Danger Areas of the Engines
Ground Idle Power - TRENT 900 Engines
FIGURE 1

deh0001513

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



- AREA A – INTAKE SUCTION DANGER AREA
- AREA B – ENTRY CORRIDOR
- AREA C – EXHAUST DANGER AREA (AFT OF EXHAUST NOZZLE)
277 ft (84 m) – GROUND IDLE (20 kt HEADWIND)

E-02197 (0207)
PW V

L_AC_060301_1_0020101_01_01

Danger Areas of the Engines
Ground Idle Power - GP 7200 Engines
FIGURE 2



AIRPLANE CHARACTERISTICS

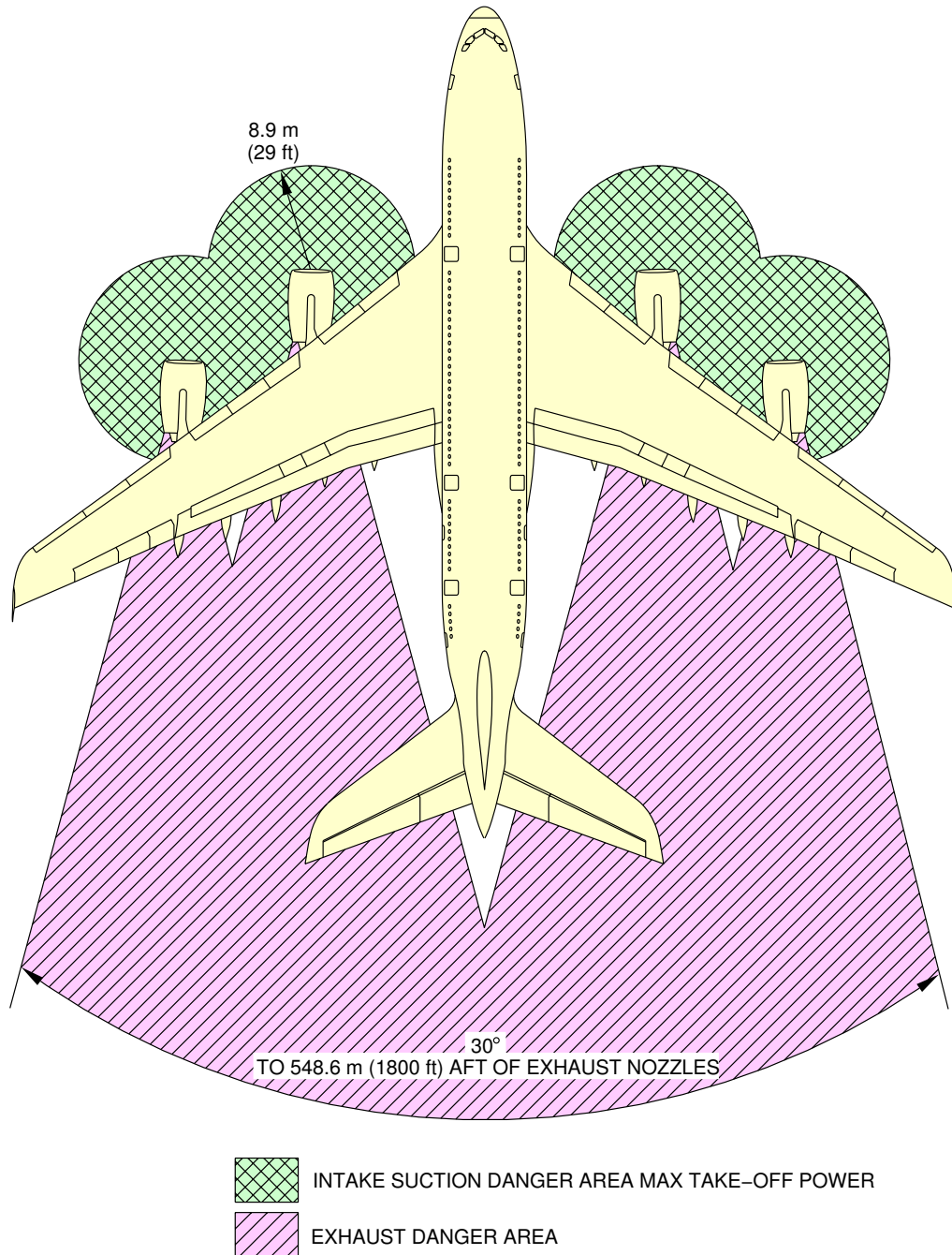
6-3-2 Danger Areas of the Engines - Max. Take-Off Power

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

Danger Areas of the Engines - Max. Take-Off Power

1. This section gives danger areas of the engines at max take-off power conditions.

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

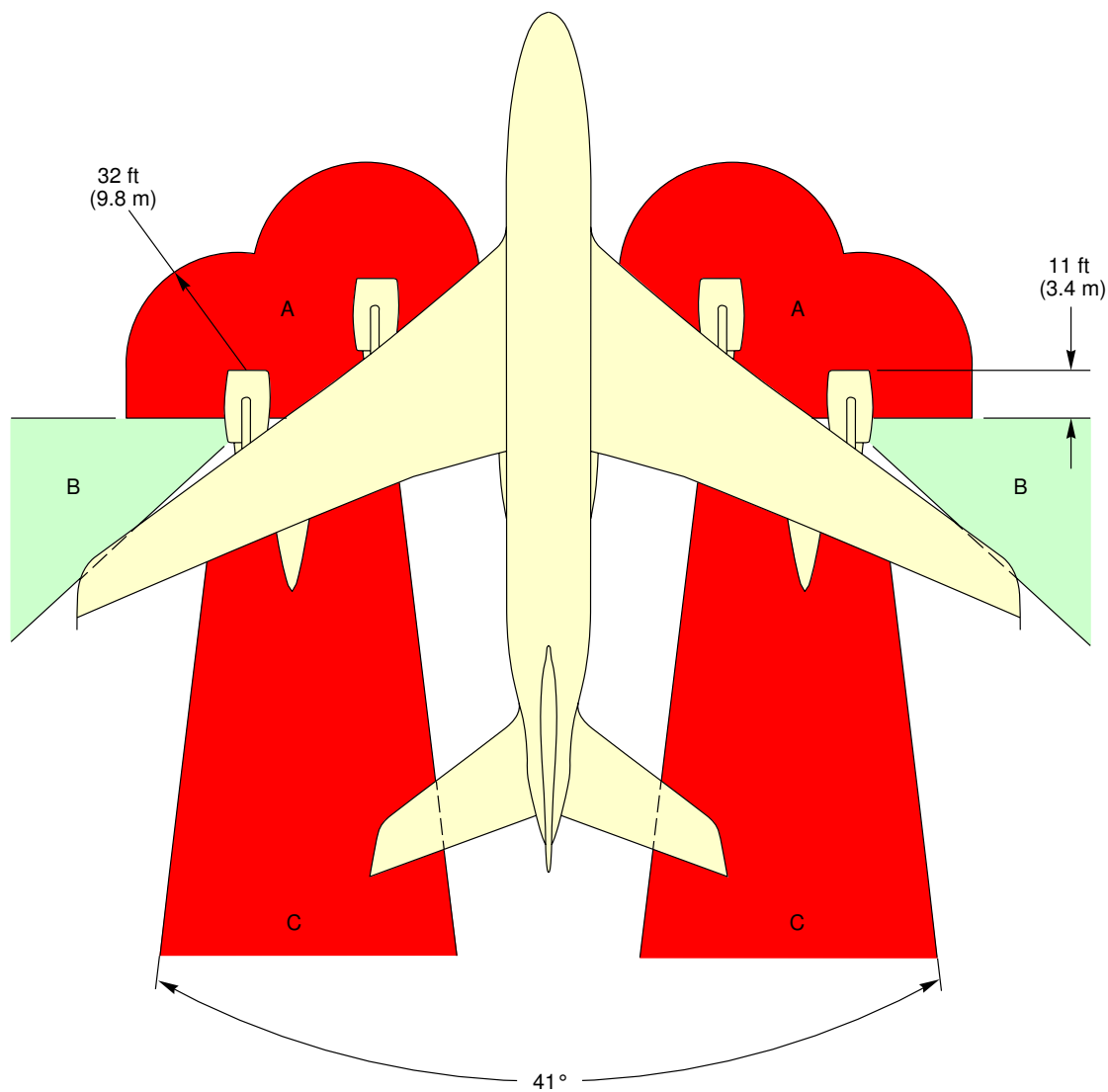


deh0001515

L_AC_060302_1_0010101_01_00

Danger Areas of the Engines
Max Take-Off Power - TRENT 900 Engines
FIGURE 1

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



- AREA A – INTAKE SUCTION DANGER AREA
- AREA B – ENTRY CORRIDOR
- AREA C – EXHAUST DANGER AREA (AFT OF EXHAUST NOZZLE)
1553 ft (473 m) – MAXIMUM TAKEOFF (20 kt HEADWIND)

E-02199 (0207)
PW V

L_AC_060302_1_0020101_01_01

Danger Areas of the Engines
Max Take-Off Power - GP 7200 Engines
FIGURE 2



AIRPLANE CHARACTERISTICS

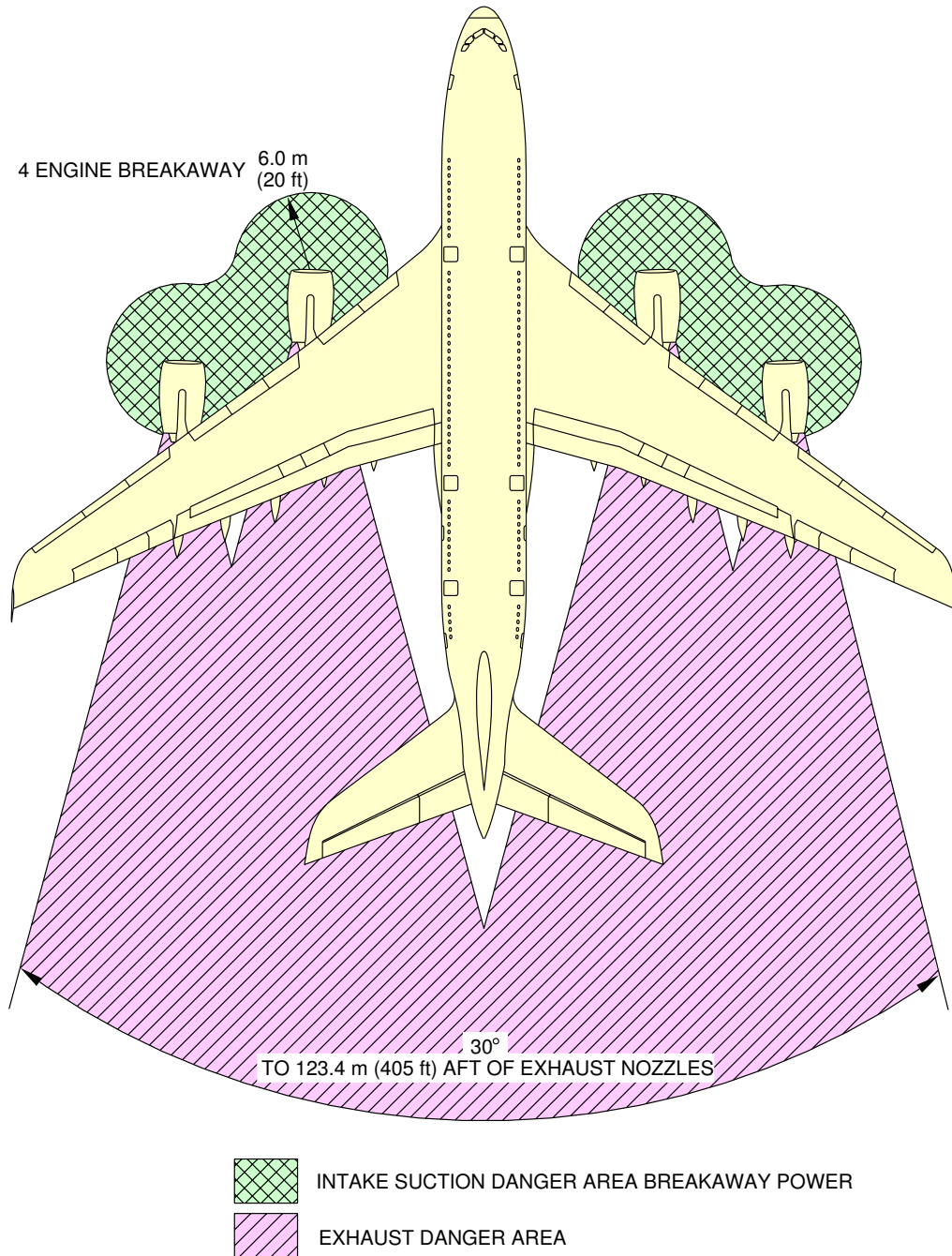
6-3-3 Danger Areas of the Engines - Breakaway Power

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

Danger Areas of the Engines - Breakaway Power

1. This section gives danger areas of the engines at breakaway power.

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

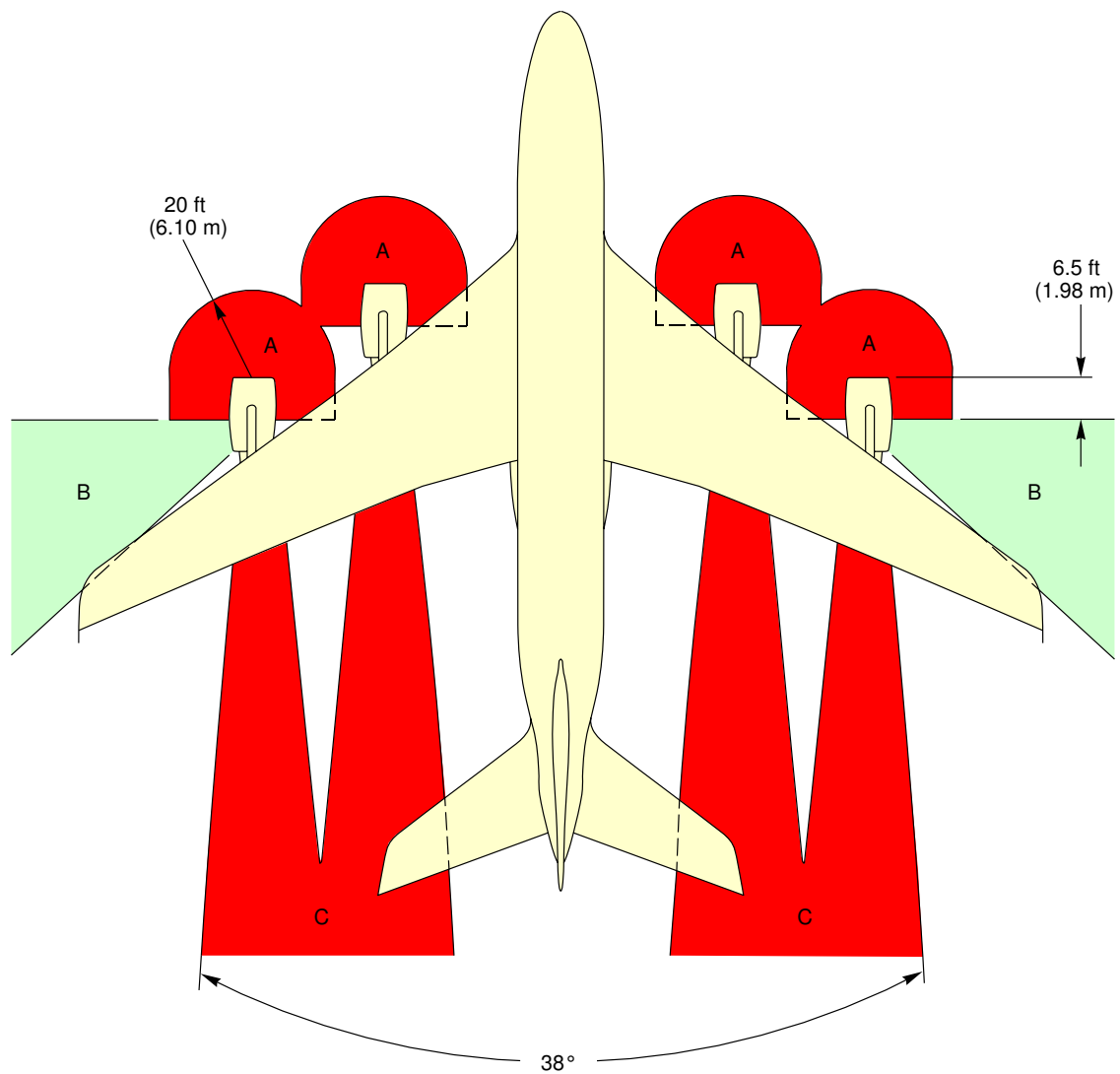


deh0001514

L_AC_060303_1_0010101_01_00

Danger Areas of the Engines
Breakaway Power - TRENT 900 Engines
FIGURE 1

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



- AREA A – INTAKE SUCTION DANGER AREA
- AREA B – ENTRY CORRIDOR
- AREA C – EXHAUST DANGER AREA (AFT OF EXHAUST NOZZLE)
415 ft (126 m) – BREAKAWAY (20 kt HEADWIND)

E-02198 (0207)
PW V

L_AC_060303_1_0020101_01_01

Danger Areas of the Engines
Breakaway Power - GP 7200 Engines
FIGURE 2



AIRPLANE CHARACTERISTICS

6-4-0 APU Exhaust Velocities and Temperatures

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

APU Exhaust Velocities and Temperatures

1. APU Exhaust Velocities and Temperatures



AIRPLANE CHARACTERISTICS

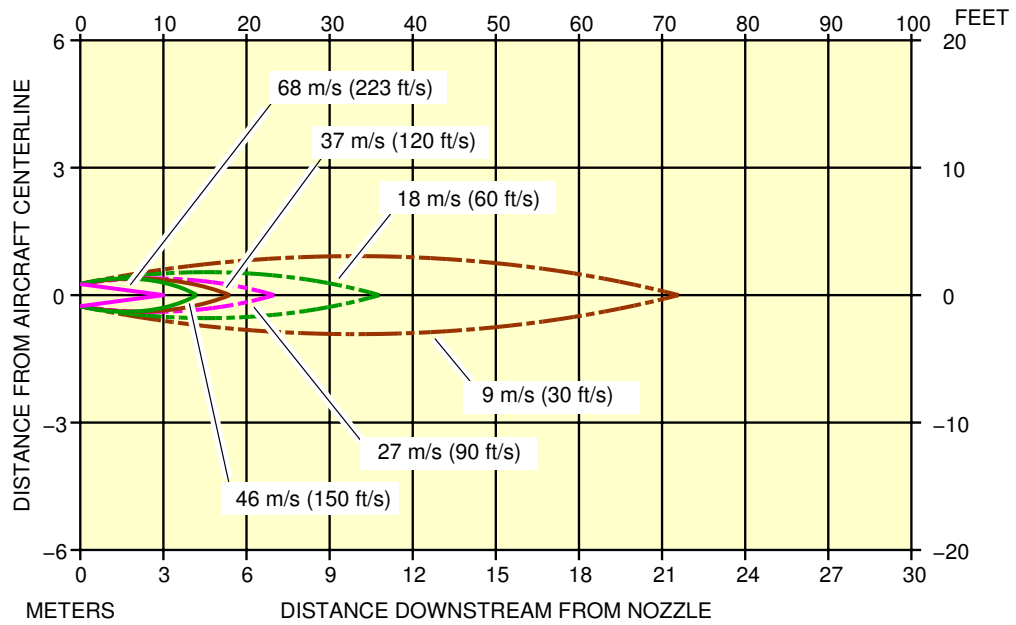
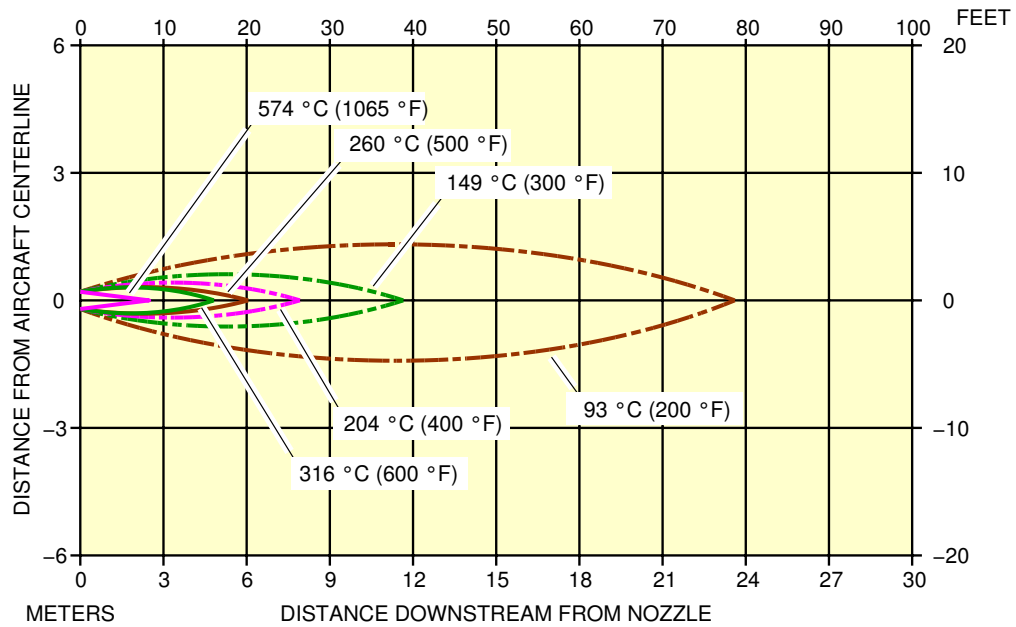
6-4-1 APU Exhaust Velocities and Temperatures

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

APU Exhaust Velocities and Temperatures

1. This section gives APU exhaust velocities and temperatures in max. ECS conditions.

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



NOTE: THE DATA GIVEN IS BASED ON THE FOLLOWING ASSUMPTIONS:

- SEA LEVEL STATIC CONDITIONS
- ISA + 23 °C (73 °F)
- NO WIND

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APU Exhaust Velocities and Temperatures
Max. ECS Conditions
FIGURE 1



AIRPLANE CHARACTERISTICS

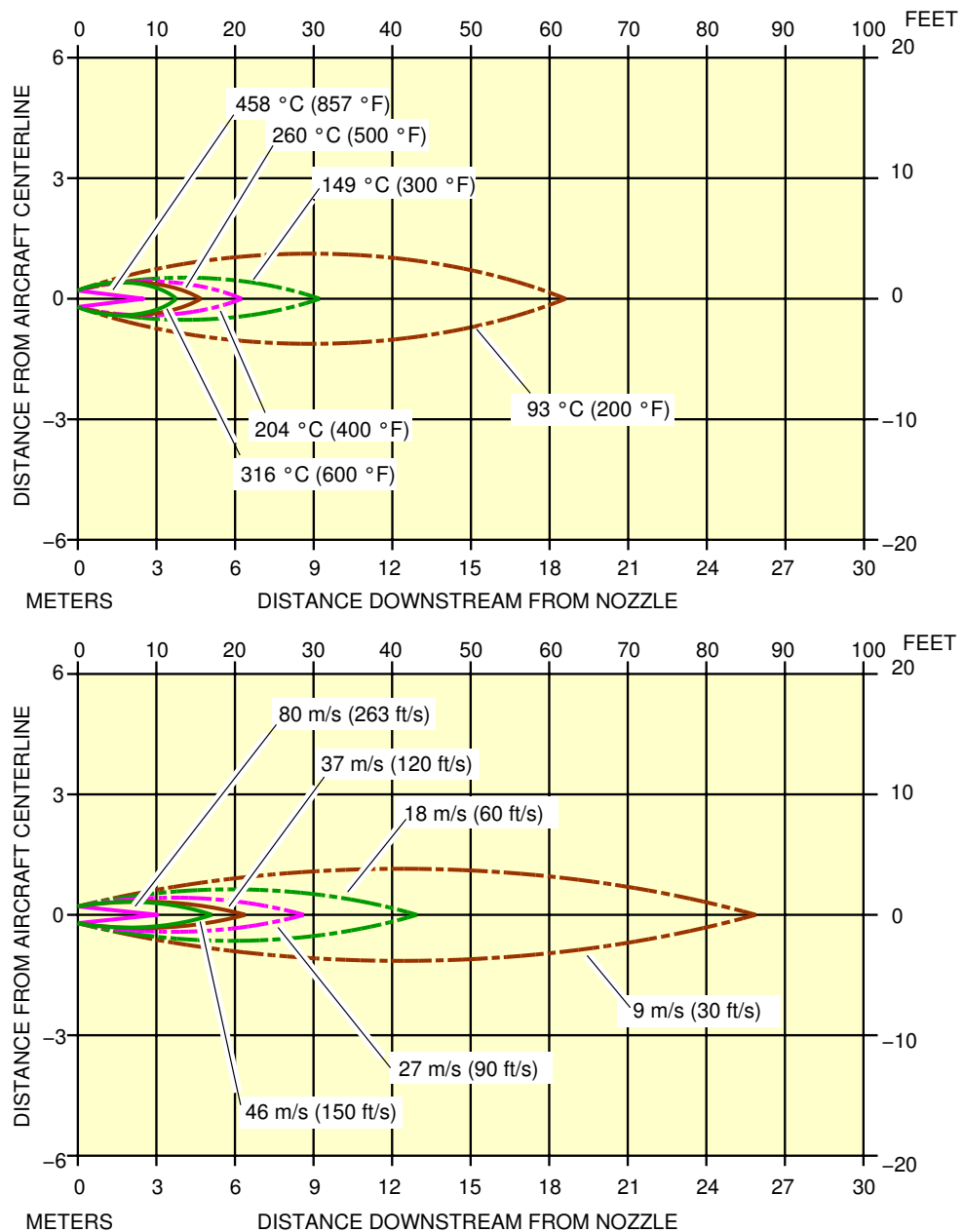
6-4-2 APU Exhaust Velocities and Temperatures - MES Conditions

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

APU Exhaust Velocities and Temperatures - MES Conditions

1. This section gives the APU exhaust velocities and temperatures in MES conditions.

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



NOTE: THE DATA GIVEN IS BASED ON THE FOLLOWING ASSUMPTIONS:

- SEA LEVEL STATIC CONDITIONS
- ISA + 23 °C (73 °F)
- NO WIND

L_AC_060402_1_0010101_01_00

APU Exhaust Velocities and Temperatures
MES Conditions
FIGURE 1

PAVEMENT DATA**7-1-0 General Information******ON A/C A380-800 Models A380-800F Models**General Information

1. A brief description of the pavement charts that follow will help in airport planning.

To help in the interpolation between the discrete values shown, each airplane configuration is shown with a minimum range of five loads on the main landing gear.

All curves on the charts represent data at a constant specified tire pressure with:

- the airplane loaded to the maximum ramp weight
- the CG at its maximum permissible aft position.

Pavement requirements for commercial airplanes are derived from the static analysis of loads imposed on the main landing gear struts.

Section 7-2-0, gives basic data on the landing gear footprint configuration, maximum ramp weights and tire sizes and pressures.

Section 7-3-0, shows maximum vertical and horizontal pavement loads for certain critical conditions at the tire-ground interfaces.

Section 7-4-0 contains charts to find these loads throughout the stability limit of the airplane at rest on the pavement.

Section 7-4-2 gives examples of the distribution of the main landing load to the wing and body landing gears.

Section 7-4-3 shows the distribution of the main landing gear load to the wing and body gears.

These main landing gear loads are used as the point of entry to the pavement design charts which follow, interpolating load values where necessary.

Section 7-5-1 uses procedures in Instruction Report No. S-77-1 "Procedures for Development of CBR Design Curves", dated June 1977 to show flexible pavement design curves.

The report was prepared by the U.S. Army Corps Engineer Waterways Experiment Station, Soil and Pavement Laboratory, Vicksburg, Mississippi.

The line showing 10 000 coverages is used to calculate the Aircraft Classification Number (ACN).

The procedure that follows is used to develop flexible pavement design curves such as those shown in Section 7-5-1.

- A. With the scale for pavement thickness at the bottom and the scale for CBR at the top, an arbitrary load line is drawn representing 10 000 coverages.
- B. Incremental values of the weight on the main landing gear are then plotted.
- C. Annual departure lines are drawn based on the load lines of the weight on the main landing gear that is shown on the graph.

Section 7-7-1 gives the rigid pavement design curves that have been prepared with the use of the Westergaard Equation. This is in general accordance with the procedures outlined in the Portland Cement Association publications, "Design of Concrete Airport Pavement", 1973 and "Computer Program for Airport Pavement Design", (Program PDILB), 1967 both by Robert G. Packard.

2. The procedure that follows is used to develop rigid pavement design curves such as those shown in Section 7-7-1
 - A. With the scale for pavement thickness on the left and the scale for allowable working stress on the right, an arbitrary line load line is drawn. This represents the main landing gear maximum weight to be shown.
 - B. All values of the subgrade modulus (k values) are then plotted.
 - C. Additional load lines for the incremental values of weight on the main landing gear are drawn on the basis of the curve for $k = 80 \text{ MN/m}^3$ already shown on the graph.

All Load Classification Number (LCN) curves shown in Section 7-6-1 and Section 7-8-2 have been developed from a computer program based on data provided in the International Civil Aviation Organisation (ICAO) document 7920-AN/865/2, Aerodrome Manual, Part 2, "Aerodrome Physical Characteristics", Second Edition, 1965.

The flexible pavement charts in Section 7-6-1 show LCN against equivalent single wheel load, and equivalent single wheel load against pavement thickness.

The rigid pavement charts in Section 7-8-2 show LCN against equivalent single wheel load against radius of relative stiffness.

Section 7-9-0 provides ACN data prepared according to the ACN/PCN system as referenced in ICAO Annex 14, "Aerodromes", Volume 1 "Aerodrome Design and Operations" Fourth Edition July 2004, incorporating Amendments 1 to 6.

The ACN/PCN system provides a standardized international airplane/pavement rating system replacing the various S, T, TT, LCN, AUW, ISWL, etc., rating systems used throughout the world.

ACN is the Aircraft Classification Number and PCN is the corresponding Pavement Classification Number.

An aircraft having an ACN equal to or less than the PCN can operate without restriction on the pavement.

Numerically the ACN is two times the derived single wheel load (expressed in thousands of kilograms).

The derived single wheel load is defined as the load on a single tire inflated to 1.25 MPa (181 psi) that would have the same pavement requirements as the aircraft.

Computationally, the ACN/PCN system uses PCA program PDILB for rigid pavement and S-77-1 for flexible pavements to calculate ACN values.

The Airport Authority must decide on the method of pavement analysis and the results of their evaluation shown as follows:

PCN			
PAVEMENT TYPE	SUBGRADE CATEGORY	TIRE-PRESSURE CATEGORY	EVALUATION METHOD
R - Rigid F - Flexible	A - HighLow B - Medium C - Low D - Ultra Low	W - No Limit X - To 1.5 MPa (217 psi) Y - To 1 MPa (145 psi) Z - To 0.5 MPa (73 psi)	T - Technical U - Using aircraft

Section 7-9-1 show the aircraft ACN values for flexible pavements. The four subgrade categories are :

- A High Strength CBR 15
- B Medium Strength CBR 10
- C Low Strength CBR 6
- D Ultra Low Strength CBR 3

Section 7-9-2 show the aircraft ACN for rigid pavements.

The four subgrade categories are :

- A High Strength Subgrade $k = 150 \text{ MN/m}^3$ (550 pci)
- B Medium Strength Subgrade $k = 80 \text{ MN/m}^3$ (300 pci)
- C Low Strength Subgrade $k = 40 \text{ MN/m}^3$ (150 pci)
- D Ultra Low Strength Subgrade $k = 20 \text{ MN/m}^3$ (75 pci)



AIRPLANE CHARACTERISTICS

7-2-0 Landing Gear Footprint

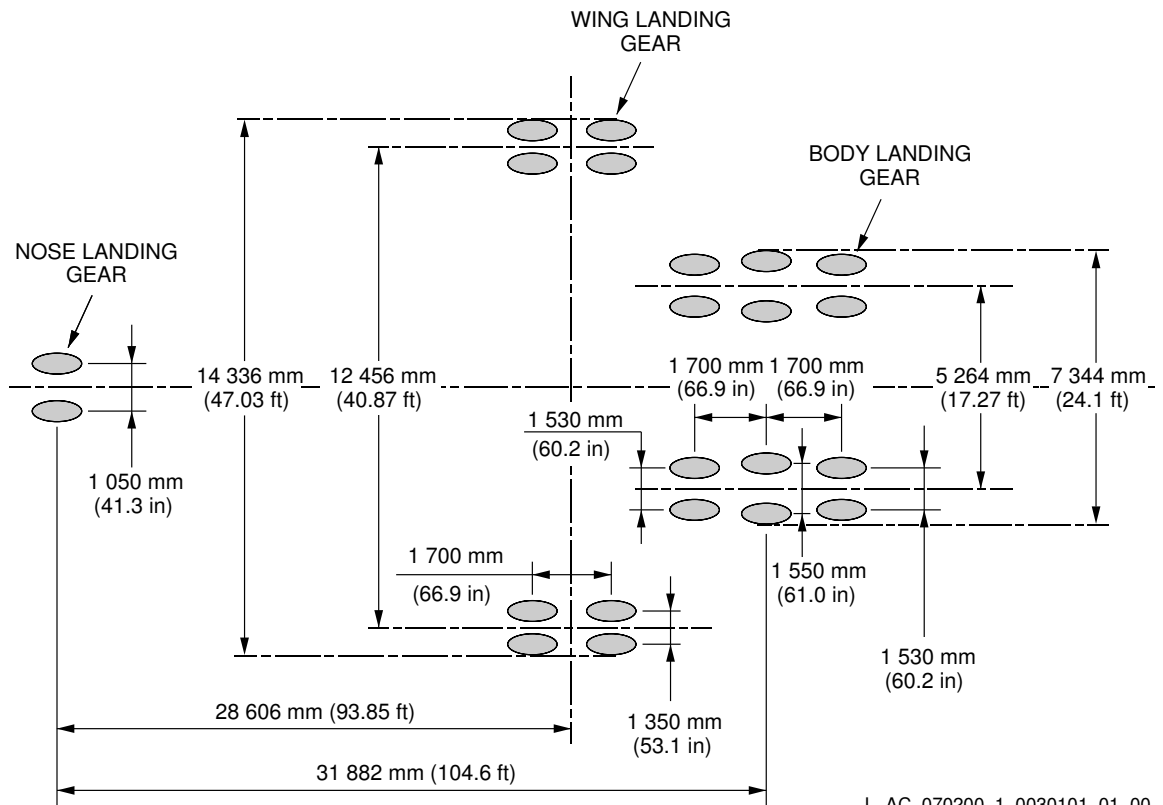
****ON A/C A380-800 Models**

Landing Gear Footprint - Pax

1. This section gives the Landing Gear Footprint.

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

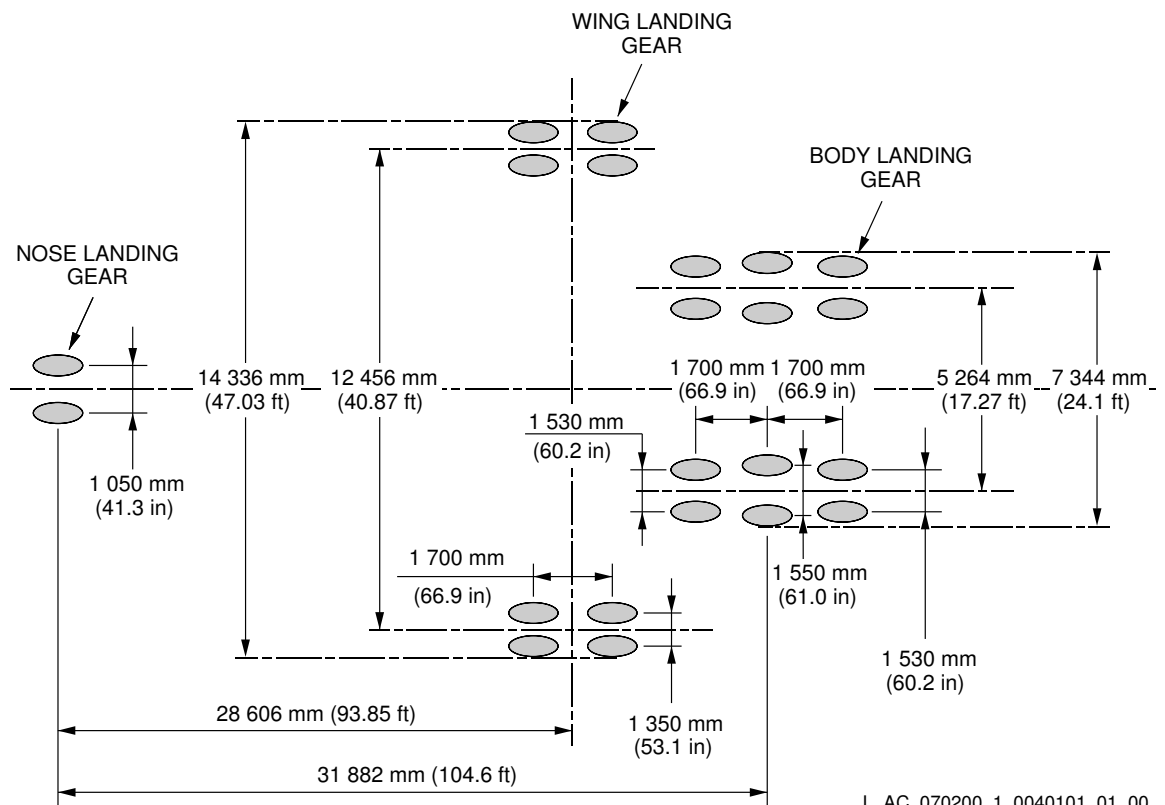
MAXIMUM RAMP WEIGHT	512 000 kg (1 128 775 lb)
PERCENTAGE OF WEIGHT ON MAIN GEAR GROUP	See Section 7-4-1 Figure: Landing Gear Loading on Pavement – MRW 512 000 kg – A380-800 Models
NOSE GEAR TIRE SIZE	1270 x 455R22 32PR or 50 x 20R22 34PR
NOSE GEAR TIRE PRESSURE	14.1 bar (205 psi)
WING GEAR TIRE SIZE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

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

MAXIMUM RAMP WEIGHT	562 000 kg (1 239 000 lb)
PERCENTAGE OF WEIGHT ON MAIN GEAR GROUP	See Section 7-4-1 Figure: Landing Gear Loading on Pavement – MRW 562 000 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	15 bar (218 psi)
BODY GEAR TIRE SIZE	1400 x 530R23 40PR
BODY GEAR TIRE PRESSURE	15 bar (218 psi)

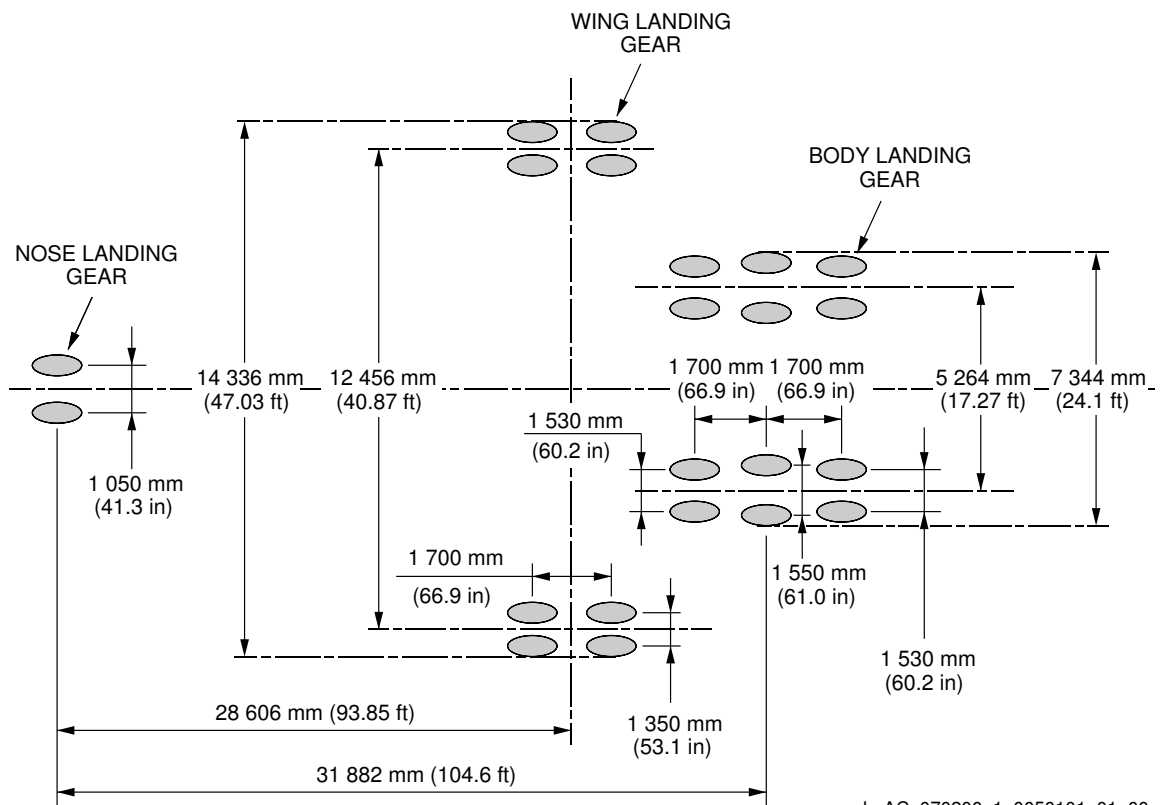


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Landing Gear Footprint
MRW 562 000 kg - A380-800 Models
FIGURE 2

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

MAXIMUM RAMP WEIGHT	571 000 kg (1 258 850 lb)
PERCENTAGE OF WEIGHT ON MAIN GEAR GROUP	See Section 7-4-1 Figure: Landing Gear Loading on Pavement – MRW 571 000 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	15 bar (218 psi)
BODY GEAR TIRE SIZE	1400 x 530R23 40PR
BODY GEAR TIRE PRESSURE	15 bar (218 psi)



Landing Gear Footprint
MRW 571 000 kg - A380-800 Models
FIGURE 3



AIRPLANE CHARACTERISTICS

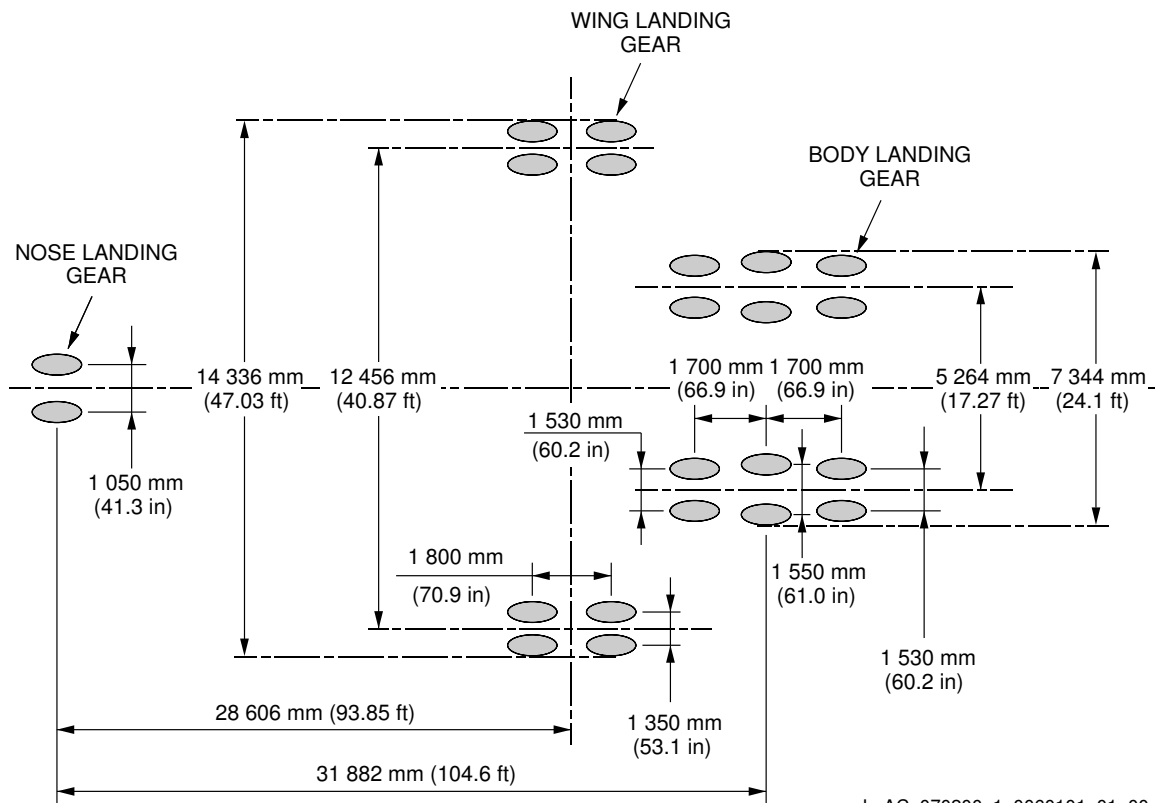
****ON A/C A380-800F Models**

Landing Gear Footprint - Freighter

1. This section gives the Landing Gear Footprint.

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

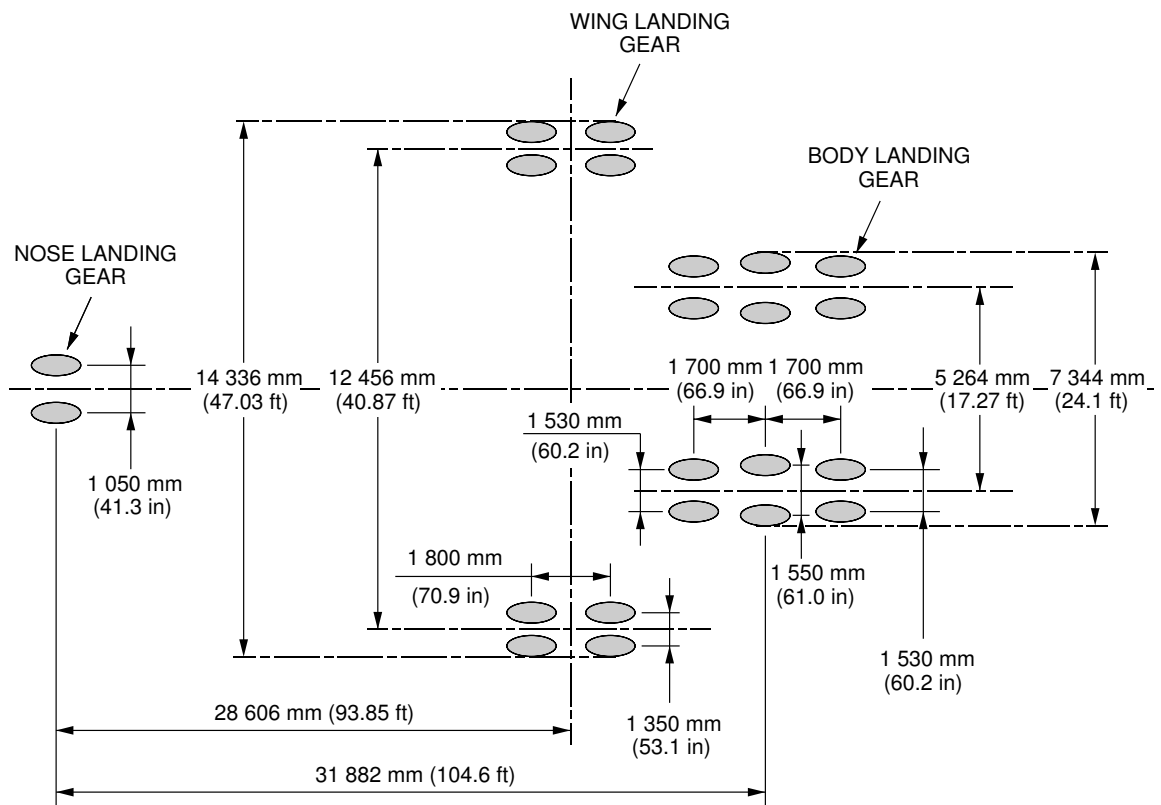
MAXIMUM RAMP WEIGHT	592 000 kg (1 305 125 lb)
PERCENTAGE OF WEIGHT ON MAIN GEAR GROUP	See Section 7-4-1 Figure: Landing Gear Loading on Pavement – MRW 592 000 kg – A380-800F Models
NOSE GEAR TIRE SIZE	50 x 20R22 34PR
NOSE GEAR TIRE PRESSURE	14.9 bar (216 psi)
WING GEAR TIRE SIZE	1400 x 530R23 42PR
WING GEAR TIRE PRESSURE	16.1 bar (234 psi)
BODY GEAR TIRE SIZE	1400 x 530R23 42PR
BODY GEAR TIRE PRESSURE	16.1 bar (234 psi)



Landing Gear Footprint
MRW 592 000 kg - A380-800F Models
FIGURE 4

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

MAXIMUM RAMP WEIGHT	602 000 kg (1 327 175 lb)
PERCENTAGE OF WEIGHT ON MAIN GEAR GROUP	See Section 7-4-1 Figure: Landing Gear Loading on Pavement – MRW 602 000 kg – A380-800F Models
NOSE GEAR TIRE SIZE	50 x 20R22 34PR
NOSE GEAR TIRE PRESSURE	14.9 bar (216 psi)
WING GEAR TIRE SIZE	1400 x 530R23 42PR
WING GEAR TIRE PRESSURE	16.1 bar (234 psi)
BODY GEAR TIRE SIZE	1400 x 530R23 42PR
BODY GEAR TIRE PRESSURE	16.1 bar (234 psi)



Landing Gear Footprint
MRW 602 000 kg - A380-800F Models
FIGURE 5



AIRPLANE CHARACTERISTICS

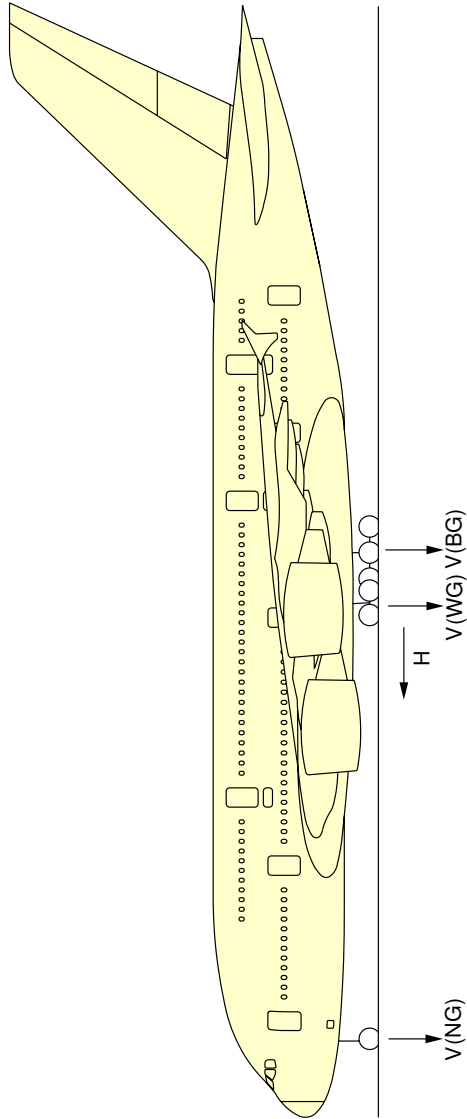
7-3-0 Maximum Pavement Loads

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

Maximum Pavement Loads - Pax

1. This section gives Maximum Pavement Loads.

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



1	2		3		4		5		6		7			
					VNG		VWG (PER STRUT)		VBG (PER STRUT)		H (PER STRUT)			
MODEL	MAXIMUM RAMP WEIGHT		STATIC LOAD AT MOST FWD CG (1)		STATIC BRAKING @ 10 ft/s ² DECELERATION		STATIC LOAD AT MAX AFT CG (2)		STATIC LOAD AT MAX AFT CG (2)		STATIC BRAKING @ 10 ft/s ² DECELERATION		AT INSTANTANEOUS BRAKING COEFFICIENT = 0.8	
	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg
-800	1 128 775	512 000	87 700	39 770	147 425	66 880	214 750	97 410	322 125	146 110	70 175(3)	31 830(3)	171 800(3)	77 930(3)
											105 250(4)	47 740(4)	257 700(4)	116 890(4)

V (NG) MAXIMUM VERTICAL NOSE GEAR GROUND LOAD AT MOST FORWARD CG

V (WG) MAXIMUM VERTICAL WING GEAR GROUND LOAD AT MOST AFT CG

V (BG) MAXIMUM VERTICAL BODY GEAR GROUND LOAD AT MOST AFT CG

H MAXIMUM HORIZONTAL GROUND LOAD FROM BRAKING

(1) FWD CG = 35.81 % MAC

(2) AFT CG = 43 % MAC

(3) BRAKED WING GEAR

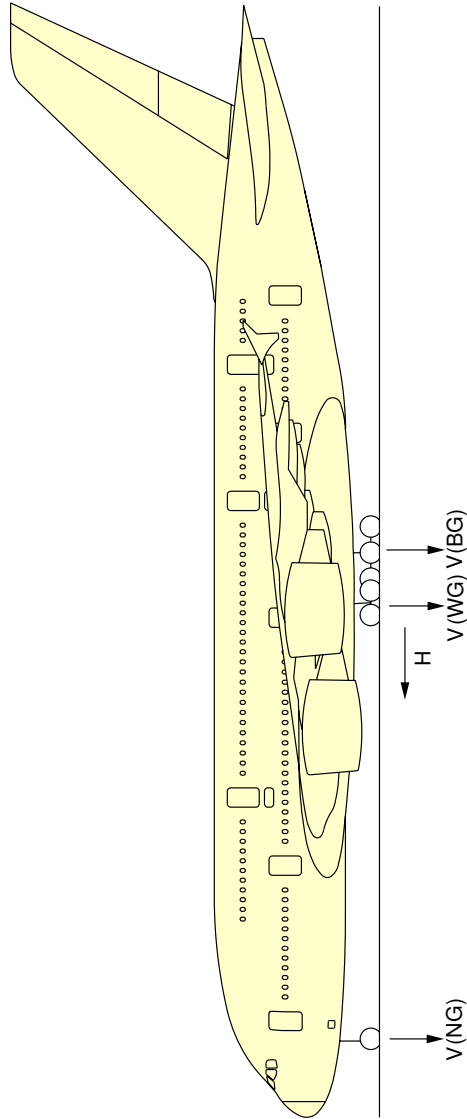
(4) BRAKED BODY GEAR

NOTE: ALL LOADS CALCULATED USING AIRPLANE MAXIMUM RAMP WEIGHT

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Maximum Pavement Loads
MRW 512 000 kg - A380-800 Models
FIGURE 1

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



1	2		3		4		5		6		7			
					VNG		VWG (PER STRUT)		VBG (PER STRUT)		H (PER STRUT)			
MODEL	MAXIMUM RAMP WEIGHT		STATIC LOAD AT MOST FWD CG (1)		STATIC BRAKING @ 10 ft/s ² DECELERATION		STATIC LOAD AT MAX AFT CG (2)		STATIC LOAD AT MAX AFT CG (2)		AT INSTANTANEOUS BRAKING COEFFICIENT = 0.8			
	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg		
-800	1 239 000	562 000	87 825	39 840	153 400	69 590	235 725	106 920	353 575	160 380	77 025(3)	34 940(3)	188 575(3)	85 540(3)
											115 525(4)	52 400(4)	282 850(4)	128 300(4)

V(NG) MAXIMUM VERTICAL NOSE GEAR GROUND LOAD AT MOST FORWARD CG

V(WG) MAXIMUM VERTICAL WING GEAR GROUND LOAD AT MOST AFT CG

V(BG) MAXIMUM VERTICAL BODY GEAR GROUND LOAD AT MOST AFT CG

H MAXIMUM HORIZONTAL GROUND LOAD FROM BRAKING

(1) FWD CG = 37.5 % MAC

(2) AFT CG = 43.0 % MAC

(3) BRAKED WING GEAR

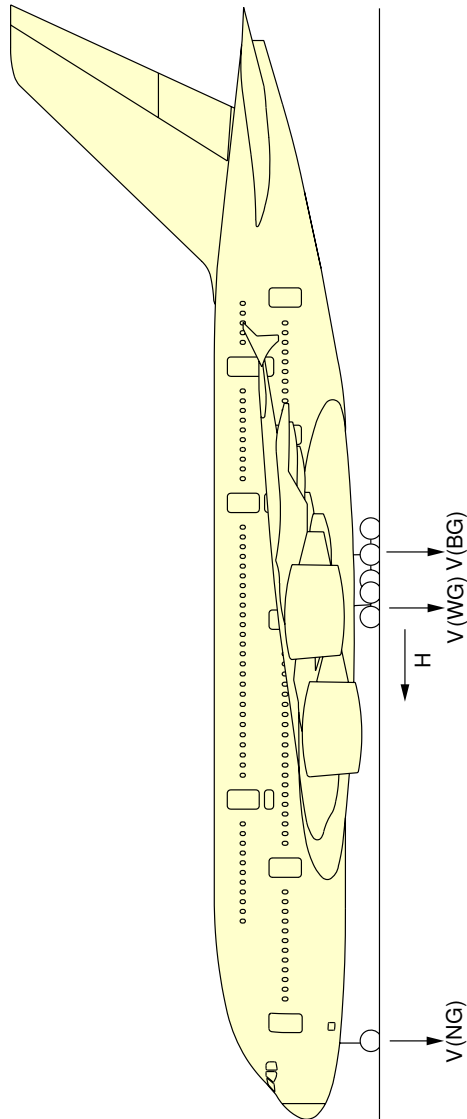
(4) BRAKED BODY GEAR

NOTE: ALL LOADS CALCULATED USING AIRPLANE MAXIMUM RAMP WEIGHT

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Maximum Pavement Loads
MRW 562 000 kg - A380-800 Models
FIGURE 2

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



1	2		3		4		5		6		7			
					VNG		VWG (PER STRUT)		VBG (PER STRUT)		H (PER STRUT)			
MODEL	MAXIMUM RAMP WEIGHT		STATIC LOAD AT MOST FWD CG (1)		STATIC BRAKING @ 10 ft/s ² DECELERATION		STATIC LOAD AT MAX AFT CG (2)		STATIC LOAD AT MAX AFT CG (2)		STATIC BRAKING @ 10 ft/s ² DECELERATION		AT INSTANTANEOUS BRAKING COEFFICIENT = 0.8	
	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg
-800	1 258 850	571 000	87 725	39 790	154 350	70 010	237 475	107 710	356 200	161 570	78 250(3)	35 490(3)	189 975(3)	86 170(3)
											117 375(4)	53 240(4)	284 950(4)	129 260(4)

V(NG) MAXIMUM VERTICAL NOSE GEAR GROUND LOAD AT MOST FORWARD CG

V(WG) MAXIMUM VERTICAL WING GEAR GROUND LOAD AT MOST AFT CG

V(BG) MAXIMUM VERTICAL BODY GEAR GROUND LOAD AT MOST AFT CG

H MAXIMUM HORIZONTAL GROUND LOAD FROM BRAKING

(1) FWD CG = 37.8 % MAC

(2) AFT CG = 41.0 % MAC

(3) BRAKED WING GEAR

(4) BRAKED BODY GEAR

NOTE: ALL LOADS CALCULATED USING AIRPLANE MAXIMUM RAMP WEIGHT

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Maximum Pavement Loads
MRW 571 000 kg - A380-800 Models
FIGURE 3



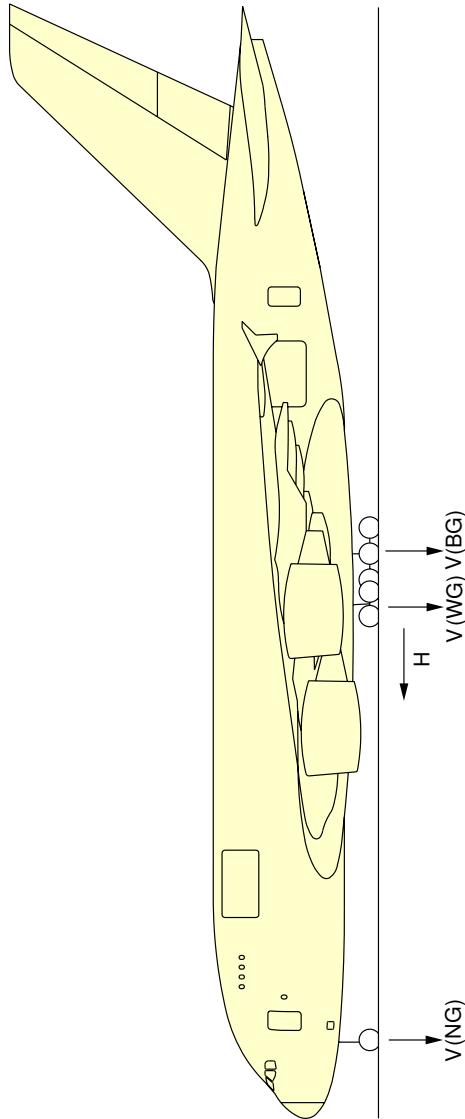
AIRPLANE CHARACTERISTICS

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

Maximum Pavement Loads - Freighter

1. This section gives Maximum Pavement Loads.

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



1	2		3	4		5		6		7				
			VNG			VWG (PER STRUT)		VBG (PER STRUT)		H (PER STRUT)				
MODEL	MAXIMUM RAMP WEIGHT		STATIC LOAD AT MOST FWD CG (1)		STATIC BRAKING @ 10 ft/s ² DECELERATION		STATIC LOAD AT MAX AFT CG (2)		STATIC LOAD AT MAX AFT CG (2)		STATIC BRAKING @ 10 ft/s ² DECELERATION		AT INSTANTANEOUS BRAKING COEFFICIENT = 0.8	
	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg
-800F	1 305 125	592 000	100 400	45 540	169 475	76 870	248 100	112 530	372 125	168 800	81 125(3)	36 800(3)	198 475(3)	90 030(3)
											121 700(4)	55 200(4)	297 700(4)	135 040(4)

V(NG) MAXIMUM VERTICAL NOSE GEAR GROUND LOAD AT MOST FORWARD CG

V(WG) MAXIMUM VERTICAL WING GEAR GROUND LOAD AT MOST AFT CG

V(BG) MAXIMUM VERTICAL BODY GEAR GROUND LOAD AT MOST AFT CG

H MAXIMUM HORIZONTAL GROUND LOAD FROM BRAKING

(1) FWD CG = 36.0 % MAC

(2) AFT CG = 42.8 % MAC

(3) BRAKED WING GEAR

(4) BRAKED BODY GEAR

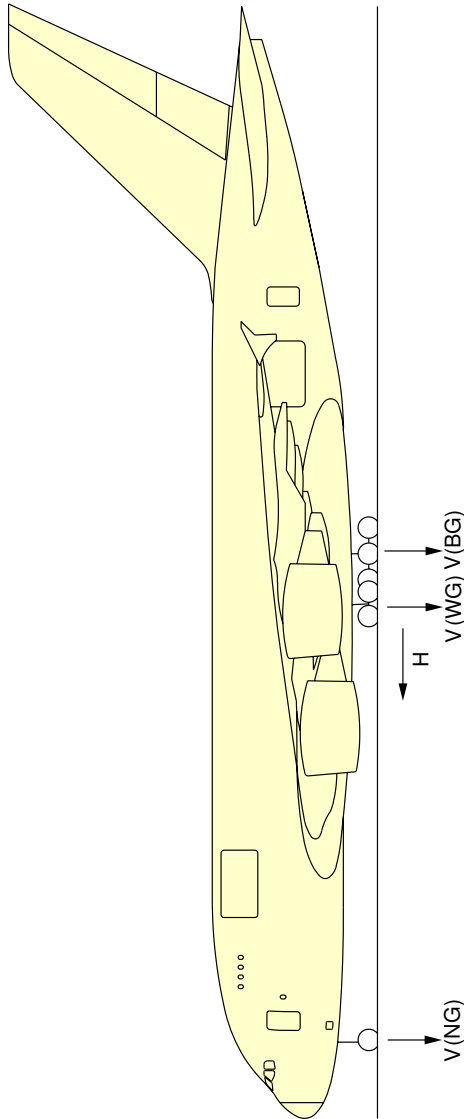
NOTE: ALL LOADS CALCULATED USING AIRPLANE MAXIMUM RAMP WEIGHT

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Maximum Pavement Loads - Freighter
MRW 592 000 kg - A380-800F Models

FIGURE 4

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



1	2		3		4		5		6		7			
					VNG		VWG (PER STRUT)		VBG (PER STRUT)		H (PER STRUT)			
MODEL	MAXIMUM RAMP WEIGHT		STATIC LOAD AT MOST FWD CG (1)		STATIC BRAKING @ 10 ft/s ² DECELERATION		STATIC LOAD AT MAX AFT CG (2)		STATIC LOAD AT MAX AFT CG (2)		STATIC BRAKING @ 10 ft/s ² DECELERATION		AT INSTANTANEOUS BRAKING COEFFICIENT = 0.8	
	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg
-800F	1 327 175	602 000	100 475	45 580	170 725	77 440	252 175	114 380	378 250	171 580	82 500(3)	37 420(3)	201 750(3)	91 510(3)
											123 750(4)	56 130(4)	302 600(4)	137 260(4)

V(NG) MAXIMUM VERTICAL NOSE GEAR GROUND LOAD AT MOST FORWARD CG
V(WG) MAXIMUM VERTICAL WING GEAR GROUND LOAD AT MOST AFT CG
V(BG) MAXIMUM VERTICAL BODY GEAR GROUND LOAD AT MOST AFT CG
H MAXIMUM HORIZONTAL GROUND LOAD FROM BRAKING
(1) FWD CG = 36.3 % MAC
(2) AFT CG = 42.7 % MAC
(3) BRAKED WING GEAR
(4) BRAKED BODY GEAR

NOTE: ALL LOADS CALCULATED USING AIRPLANE MAXIMUM RAMP WEIGHT

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Maximum Pavement Loads
MRW 602 000 kg- A380-800F Models
FIGURE 5

7-4-0 Landing Gear Loading on Pavement

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

Landing Gear Loading on Pavement

1. General

The Main Landing Gear Group consists of two Wing Gears (4 Wheel Bogies) plus two Body Gears (6 Wheel Bogies).

- A380-800 Models :

In the example shown in Section 7-4-1, Figure: Landing Gear Loading on Pavement - MRW 512 000 kg - A380-800 Models, the Gross Aircraft Weight is 450 000 kg (992 080 lb) and the percentage of weight on the Main Landing gear is 95.1 %.

For these conditions the total weight on the Main Landing Gear Group is 428 000 kg (943 580 lb).

In the example shown in Section 7-4-1 Figure: Landing Gear Loading on Pavement - MRW 562 000 kg - A380-800 Models, the Gross Aircraft Weight is 450 000 kg (992 080 lb) and the percentage of weight on the Main Landing gear is 95.1 %.

For these conditions the total weight on the Main Landing Gear Group is 428 000 kg (943 580 lb).

In the example shown in Section 7-4-1 Figure: Landing Gear Loading on Pavement - MRW 571 000 kg - A380-800 Models, the Gross Aircraft Weight is 450 000 kg (992 080 lb) and the percentage of weight on the Main Landing gear is 94.3 %.

For these conditions the total weight on the Main Landing Gear Group is 424 400 kg (935 040 lb).

- A380-800F Models :

In the example shown in Section 7-4-1, Figure: Landing Gear Loading on Pavement - MRW 592 000 kg - A380-800F Models, the Gross Aircraft Weight is 450 000 kg (992 080 lb) and the percentage of weight on the Main Landing gear is 95.04 %.

For these conditions the total weight on the MLG Group is 427 700 (942 920 lb).

In the example shown in Section 7-4-1, Figure: Landing Gear Loading on Pavement - MRW 602 000 kg - A380-800F Models, the Gross Aircraft Weight is 450 000 kg (992 080 lb) and the percentage of weight on the Main Landing gear is 95 %.

For these conditions the total weight on the MLG Group is 427 500 (942 475 lb).



AIRPLANE CHARACTERISTICS

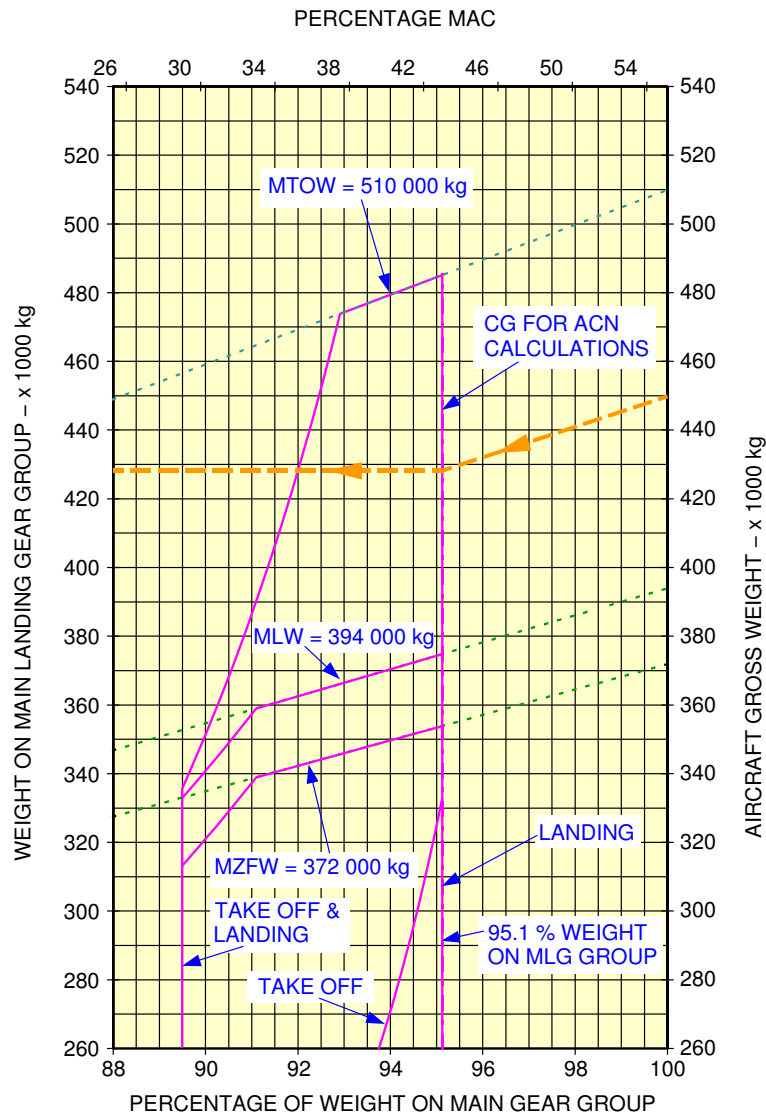
7-4-1 Landing Gear Loading on Pavement

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

Landing Gear Loading on Pavement - Pax

1. This section gives Landing Gear Loading on Pavement.

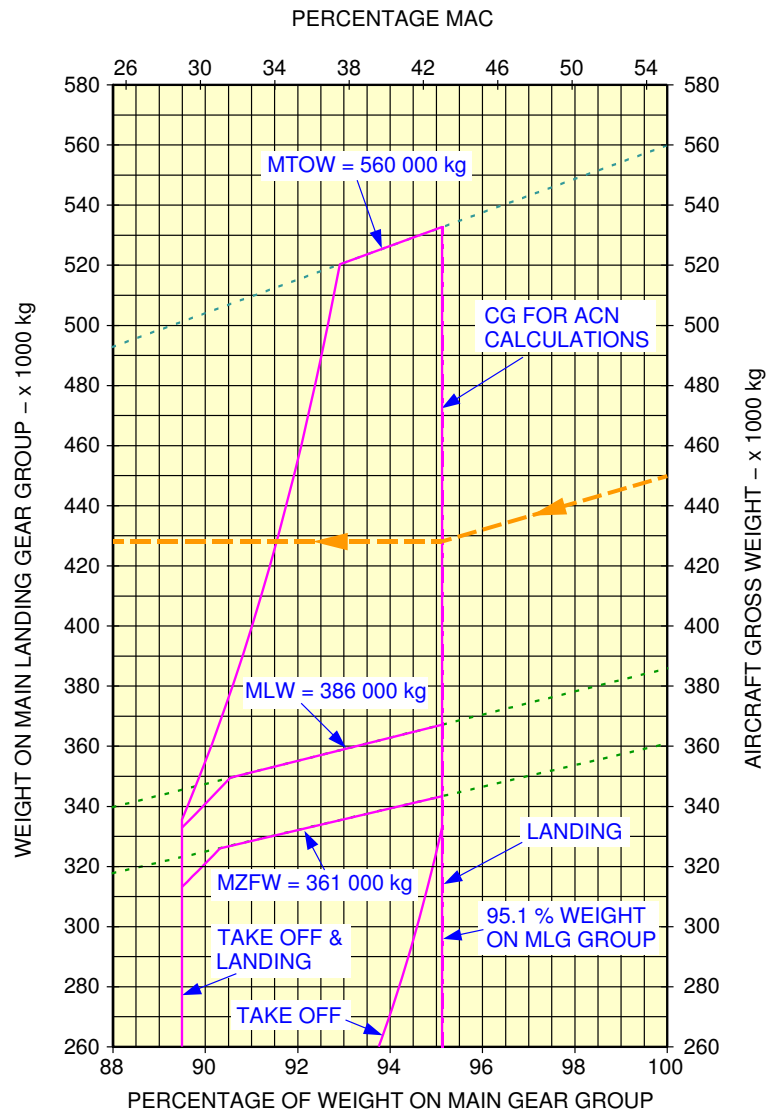
****ON A/C A380-800 Models**



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Landing Gear Loading on Pavement
MRW 512 000 kg - A380-800 Models
FIGURE 1

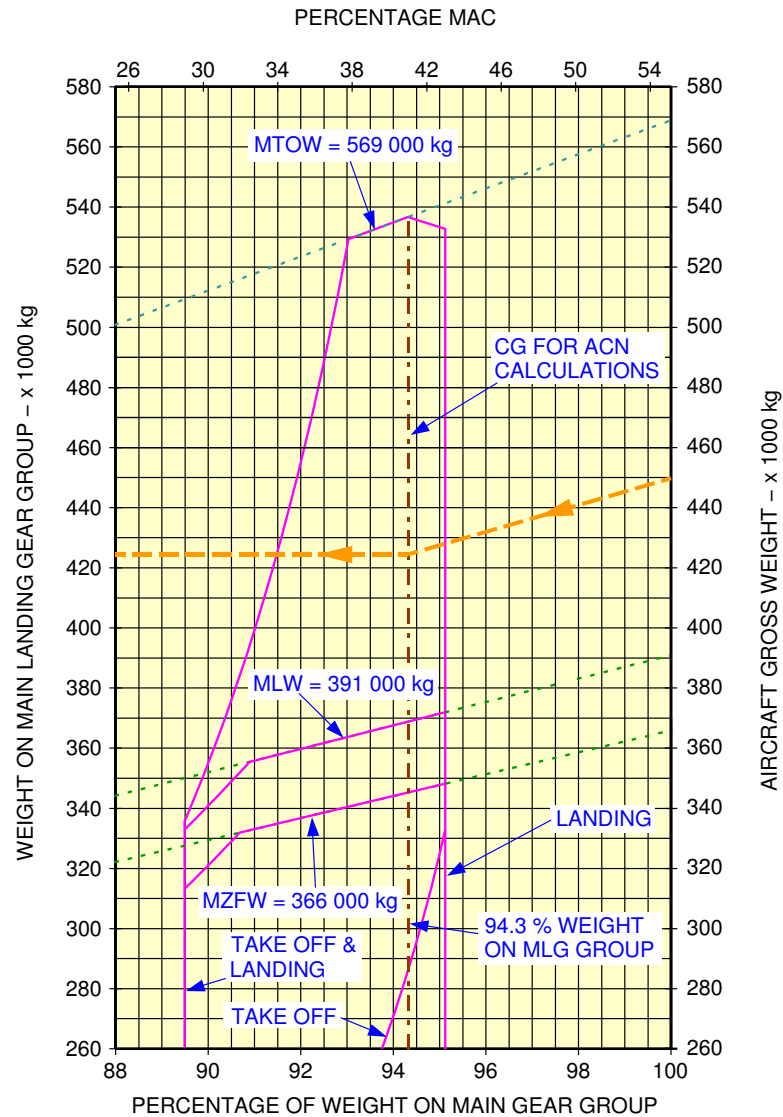
****ON A/C A380-800 Models**



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Landing Gear Loading on Pavement
MRW 562 000 kg - A380-800 Models
FIGURE 2

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



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Landing Gear Loading on Pavement
MRW 571 000 kg - A380-800 Models
FIGURE 3



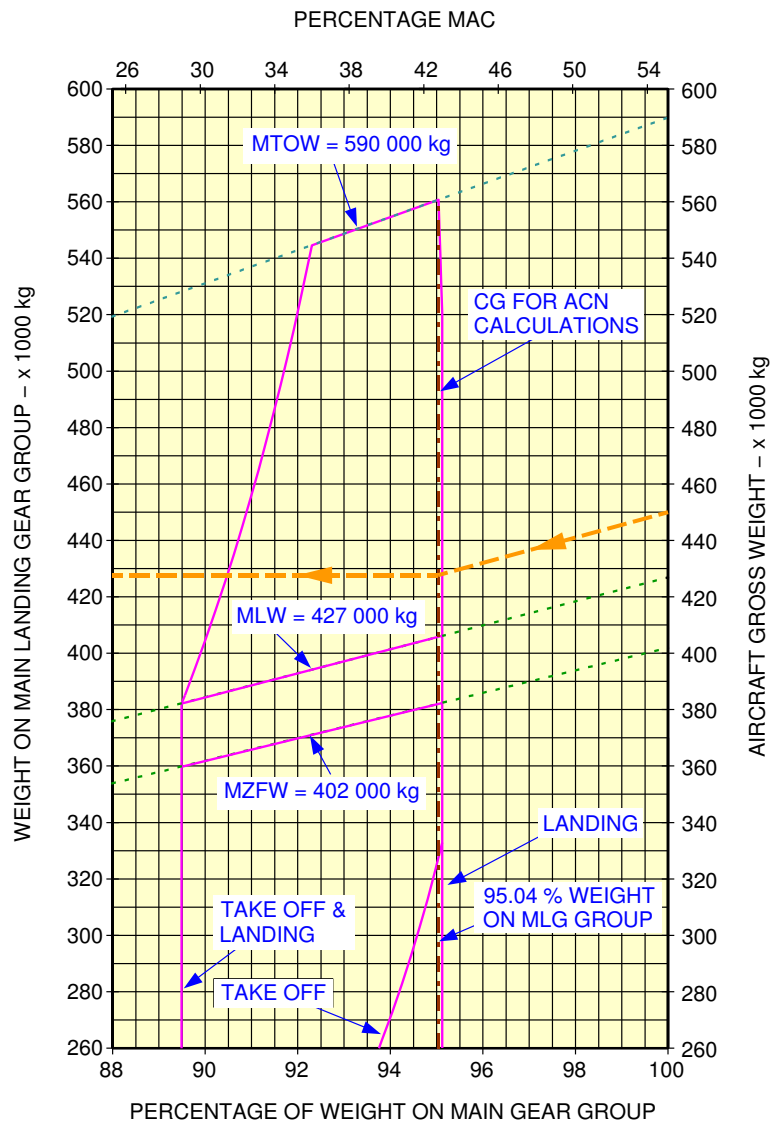
AIRPLANE CHARACTERISTICS

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

Landing Gear Loading on Pavement - Freighter

1. This section gives Landing Gear Loading on Pavement.

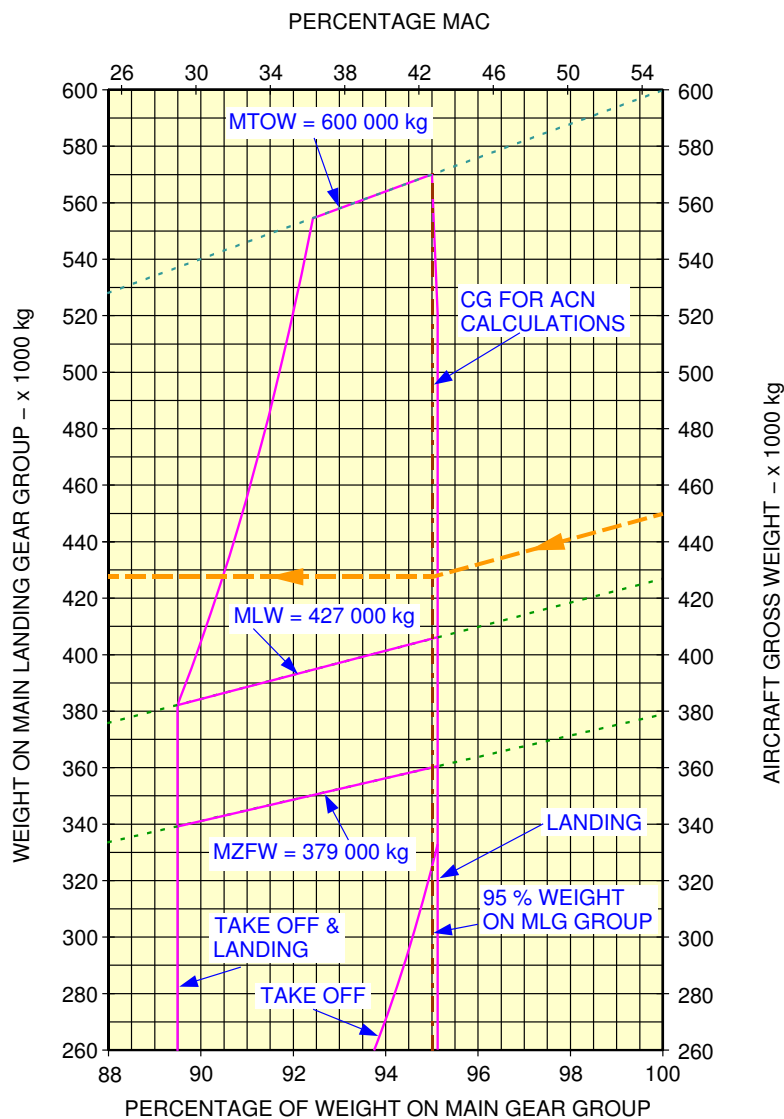
****ON A/C A380-800F Models**



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Landing Gear Loading on Pavement
MRW 592 000kg - A380-800F Models
FIGURE 4

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



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Landing Gear Loading on Pavement
MRW 602 000kg - A380-800F Models
FIGURE 5

7-4-2 Wing Gear and Body Gear Loading on Pavement

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

Wing Gear and Body Gear Loading on Pavement

1. General

The Main Landing Gear Group consists of two Wing Gears (4 Wheel Bogies) and two Body Gears (6 Wheel Bogies).

- A380-800 models :

In the example shown in Section 7-4-3, Figure: Wing Gear and Body Gear Loads on Pavement - MRW 512 000 kg - A380-800 Models, the Gross Aircraft Weight is 450 000 kg (992 080 lb) at Aft CG for ACN Calculations.

For these conditions the load on the two Wing Gears is 171 200 kg (377 430 lb) and the load on the two Body Gears is 256 800 kg (566 150 lb).

The total weight on the Main Landing Gear Group is 428 000 kg (943 580 lb).

In the example shown in Section 7-4-3, Figure: Wing Gear and Body Gear Loads on Pavement - MRW 562 000 kg - A380-800 Models, the Gross Aircraft Weight is 450 000 kg (992 080 lb) at Aft CG for ACN Calculations.

For these conditions the load on the two Wing Gears is 171 200 kg (377 430 lb) and the load on the two Body Gears is 256 800 kg (566 150 lb).

The total weight on the Main Landing Gear Group is 428 000 kg (943 580 lb).

In the example shown in Section 7-4-3, Figure: Wing Gear and Body Gear Loads on Pavement - MRW 571 000 kg - A380-800 Models, the Gross Aircraft Weight is 450 000 kg (992 080 lb) at Aft CG for ACN Calculations.

For these conditions the load on the two Wing Gears is 169 800 kg (374 345 lb) and the load on the two Body Gears is 254 700 kg (561 515 lb).

The total weight on the Main Landing Gear Group is 424 500 kg (935 860 lb).

- A380-800F models :

In the example shown in Section 7-4-3, Figure: Wing Gear and Body Gear Loads on Pavement - MRW 592 000 kg - A380-800F Models, the Gross Aircraft Weight is 450 000 kg (992 080 lb) at Aft CG for ACN Calculations.

For these conditions the load on the two Wing Gears is 171 100 kg (377 210 lb) and the load on the two Body Gears is 256 600 kg (565 710 lb).

The total weight on the Main Landing Gear Group is 427 700 kg (942 920 lb).



AIRPLANE CHARACTERISTICS

In the example shown in Section 7-4-3, Figure: Wing Gear and Body Gear Loads on Pavement - MRW 602 000 kg - A380-800F Models, the Gross Aircraft Weight is 450 000 kg (992 080 lb) at Aft CG for ACN Calculations.

For these conditions the load on the two Wing Gears is 171 000 kg (376 990 lb) and the load on the two Body Gears is 256 500 kg (565 485 lb).

The total weight on the Main Landing Gear Group is 427 500 kg (942 475 lb).



AIRPLANE CHARACTERISTICS

7-4-3 Wing Gear and Body Gear Loading on Pavement

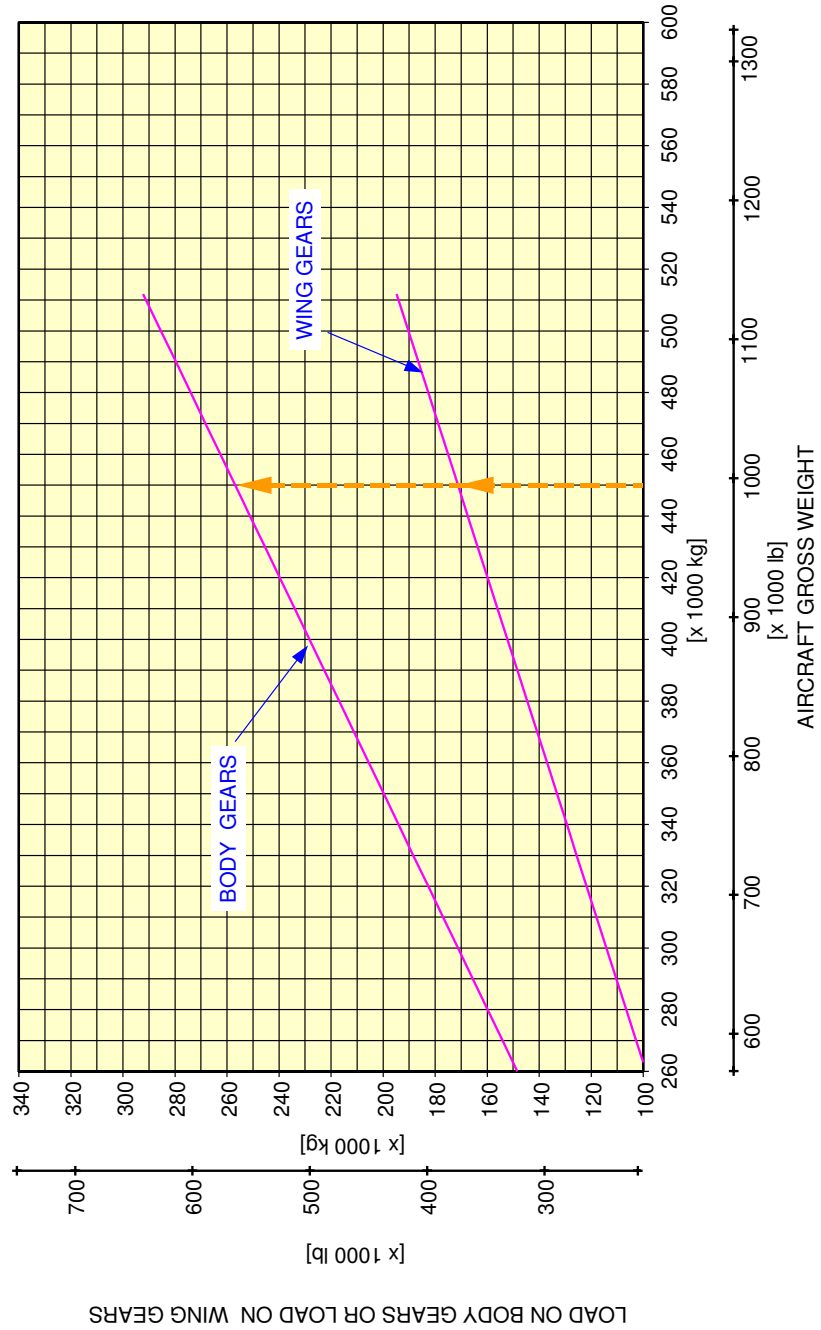
****ON A/C A380-800 Models**

Wing Gear and Body Gear Loading on Pavement - Pax

1. This section gives the Wing Gear and Body Gear Loading on Pavement.

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

CG FOR ACN CALCULATIONS: 43 % MAC.
See Section 7-4-1 Figure: Landing Gear Loading
on Pavement – MRW 512 000 kg – A380-800 Models

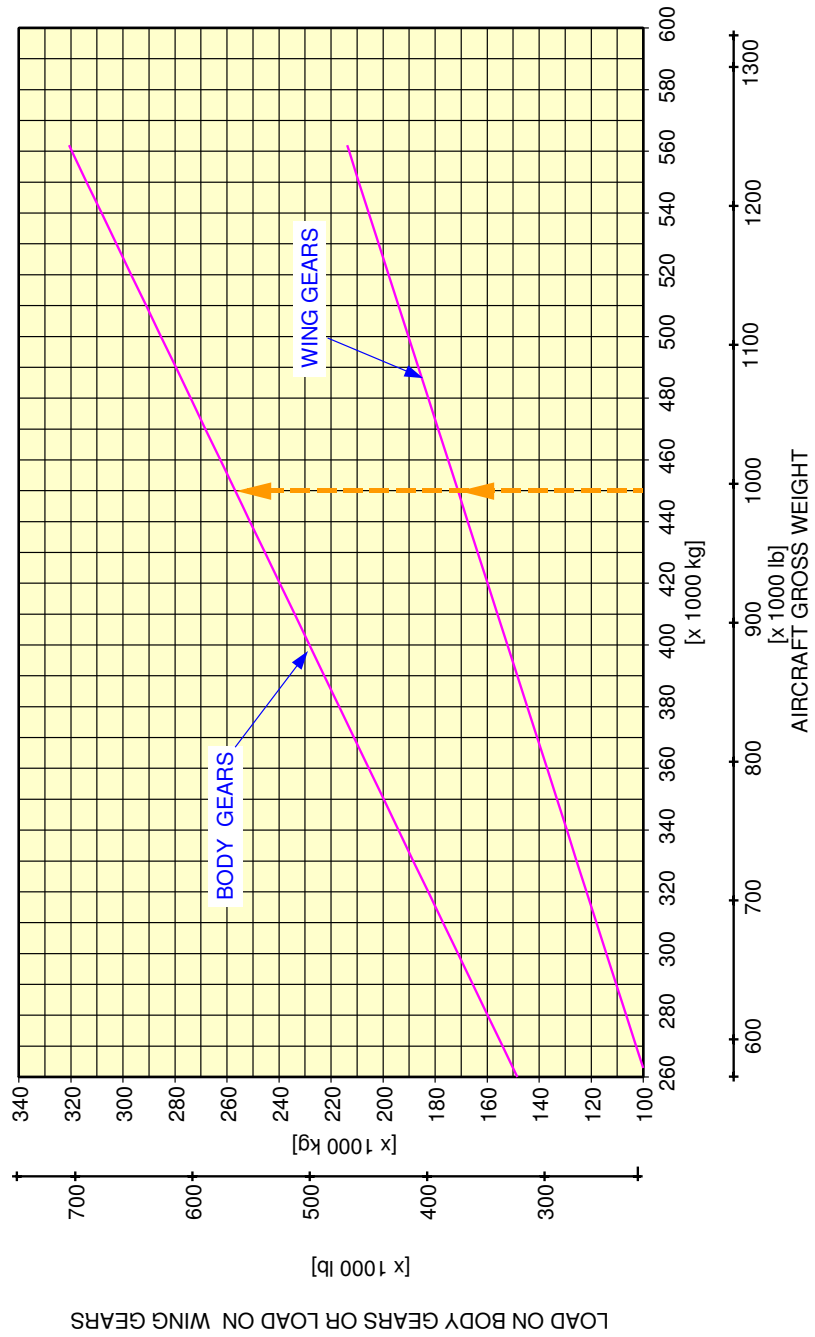


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Wing Gear and Body Gear Loads on Pavement
MRW 512 000 kg - A380-800 Models
FIGURE 1

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

CG FOR ACN CALCULATIONS: 43 % MAC.
See Section 7-4-1 Figure: Landing Gear Loading
on Pavement – MRW 562 000 kg – A380-800 Models

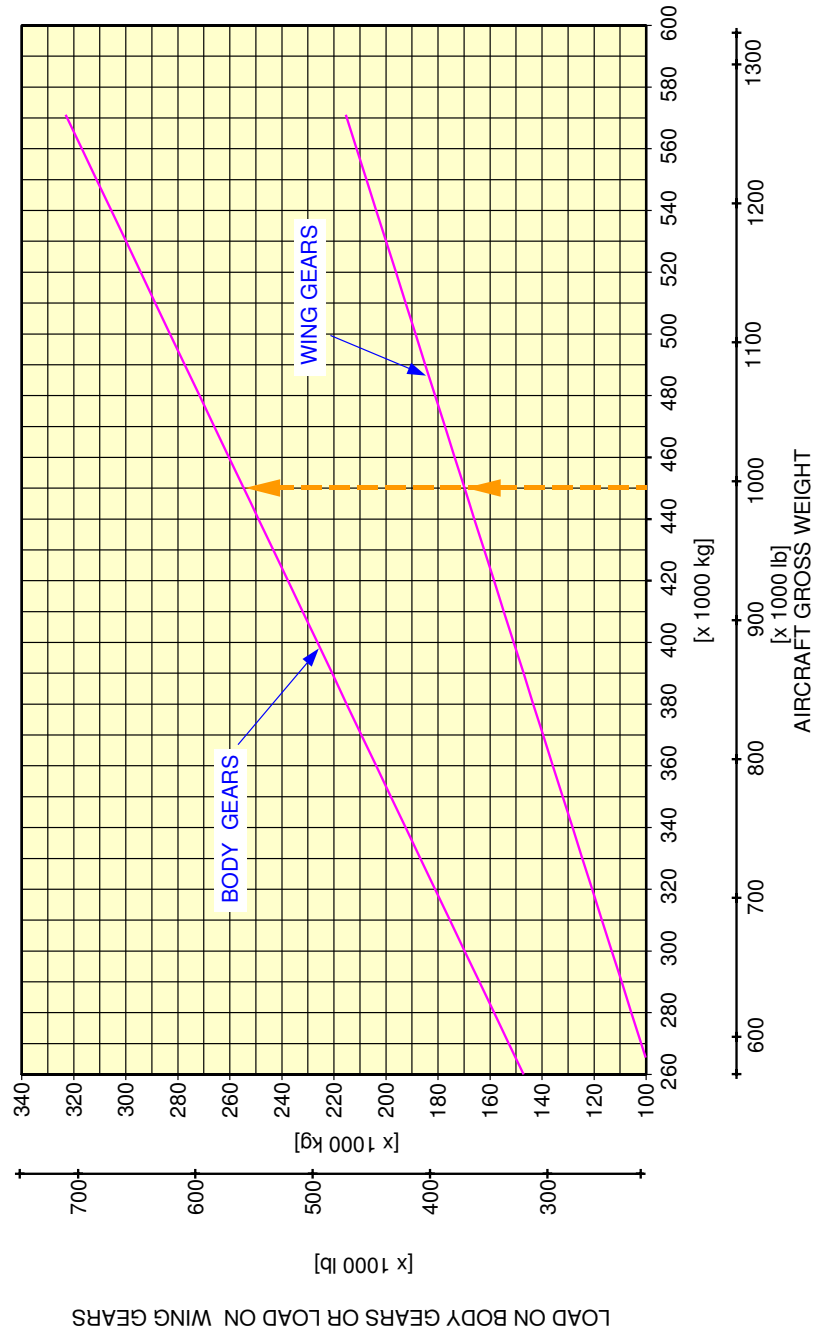


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Wing Gear and Body Gear Loads on Pavement
MRW 562 000 kg - A380-800 Models
FIGURE 2

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

CG FOR ACN CALCULATIONS: 41 % MAC.
See Section 7-4-1 Figure: Landing Gear Loading
on Pavement – MRW 571 000 kg – A380-800 Models



LOAD ON BODY GEARS OR LOAD ON WING GEARS

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Wing Gear and Body Gear Loads on Pavement
MRW 571 000 kg - A380-800 Models
FIGURE 3



AIRPLANE CHARACTERISTICS

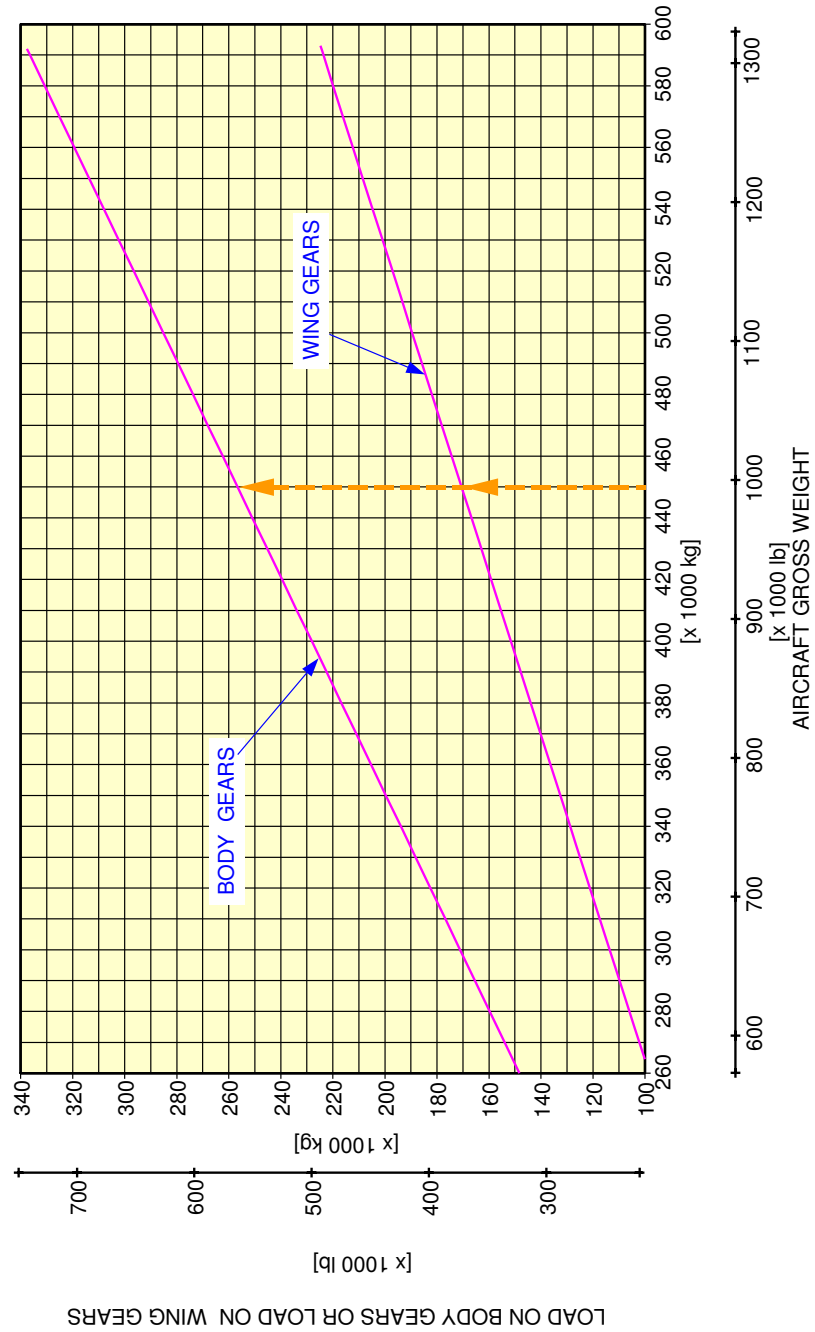
****ON A/C A380-800F Models**

Wing Gear and Body Gear Loading on Pavement - Freighter

1. This section gives the Wing Gear and Body Gear Loading on Pavement.

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

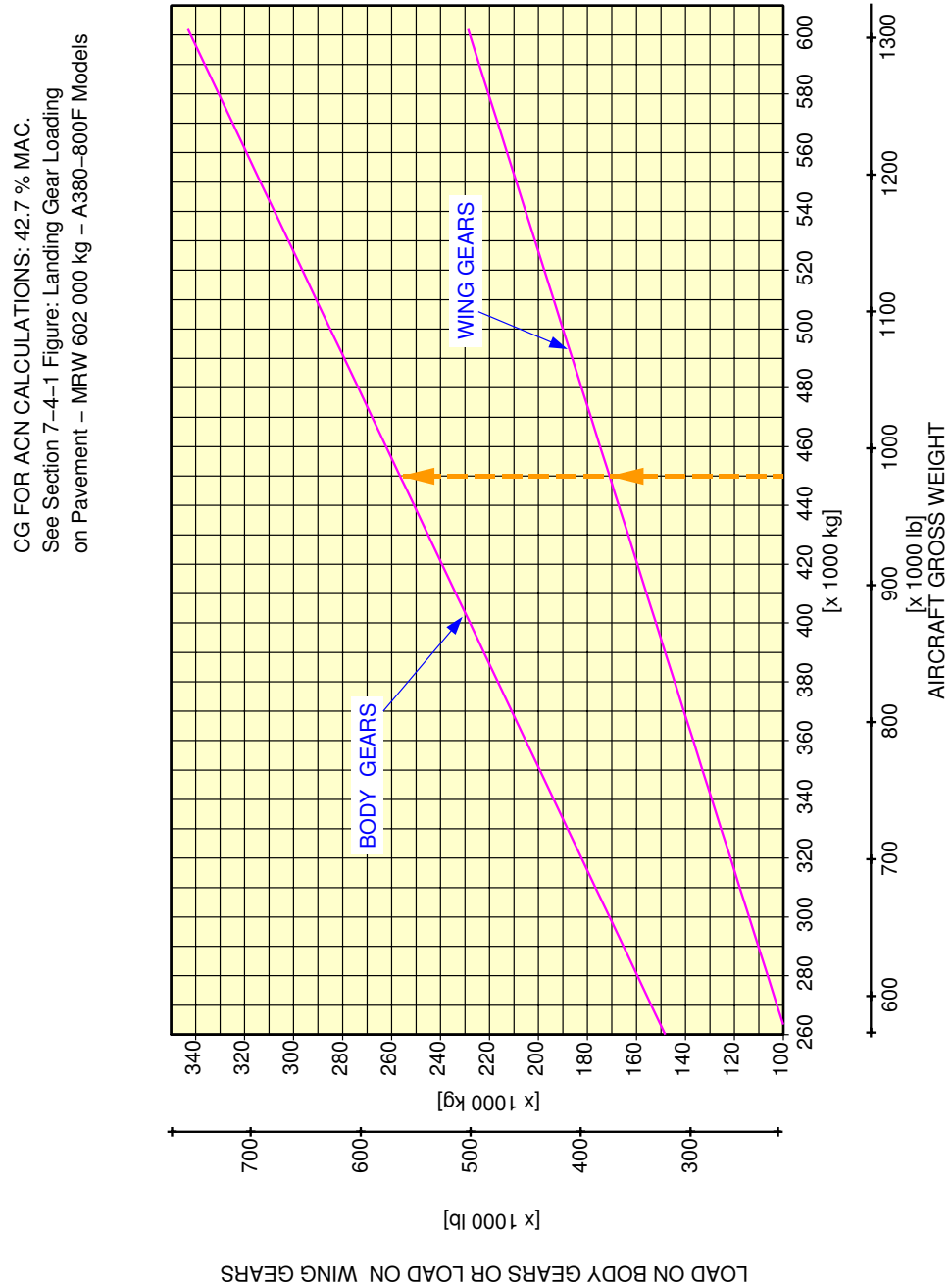
CG FOR ACN CALCULATIONS: 42.8 % MAC.
See Section 7-4-1 Figure: Landing Gear Loading
on Pavement – MRW 592 000 kg – A380-800F Models



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Wing Gear and Body Gear Loads on Pavement
MRW 592 000 kg - A380-800F Models
FIGURE 4

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



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Wing Gear and Body Gear Loads on Pavement
MRW 602 000 kg - A380-800F Models
FIGURE 5

7-5-0 Flexible Pavement Requirements - US Army Corps of Engineers Design Method

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

Flexible Pavement Requirements - US Army Corps of Engineers Design Method

1. General

To find a Flexible Pavement Thickness, the Subgrade Strength (CBR), the Annual Departure Level and the weight on one Main Landing Gear must be known.

In the typical example shown in Section 7-5-1, Figure: Flexible Pavement Requirements - 4 Wheel Bogie - MRW 512 000 kg - A380-800 Models.

- a CBR value of 10
- an Annual Departure level of 3 000
- and the load on one Wing Landing Gear of 90 000 kg (198 420 lb) the required Flexible Pavement Thickness is 54 cm (21 inches).

The line showing 10 000 Coverages is used to calculate Aircraft Classification Number (ACN).



AIRPLANE CHARACTERISTICS

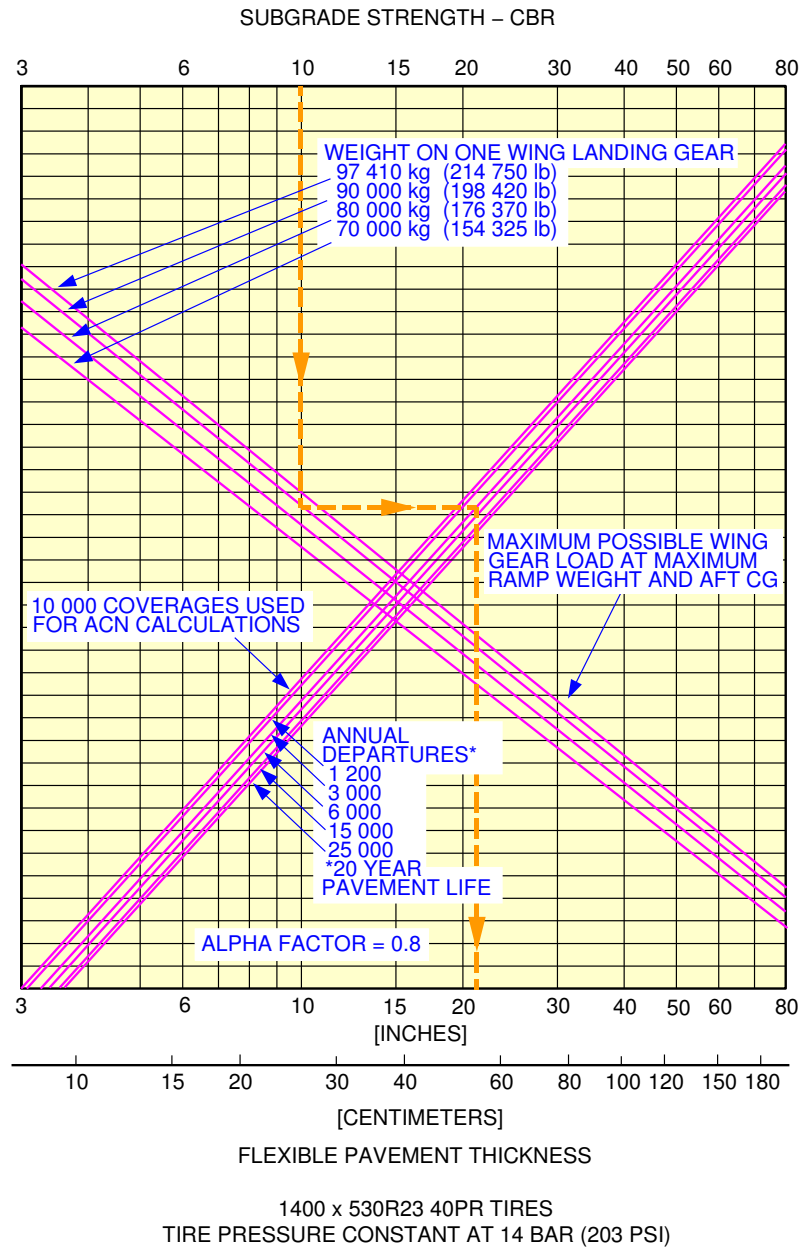
7-5-1 Flexible Pavement Requirements - US Army Corps of Engineers Design Method S-77-1

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

Flexible Pavement Requirements - US Army Corps of Engineers Design Method - Pax

1. This section gives Flexible Pavement Requirements.

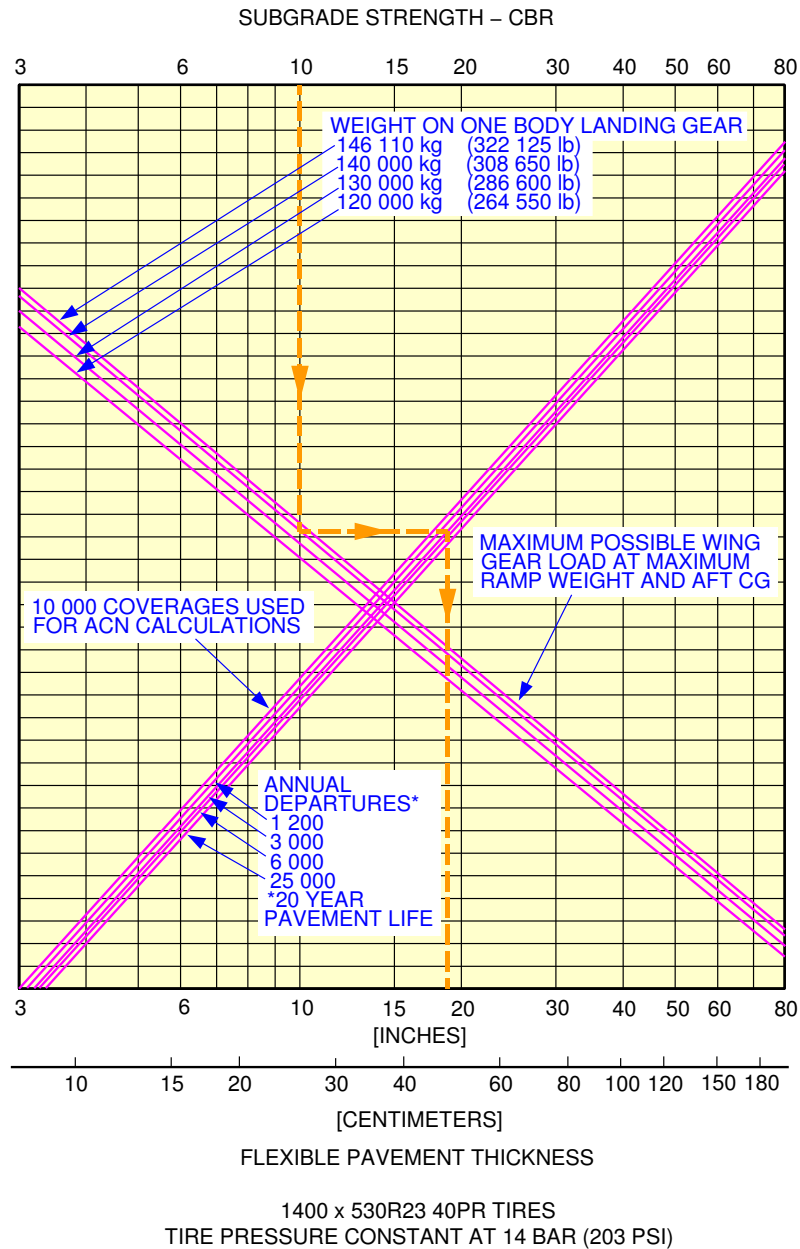
****ON A/C A380-800 Models**



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Flexible Pavement Requirements – 4 Wheel Bogie
 MRW 512 000 kg - A380-800 Models
 FIGURE 1

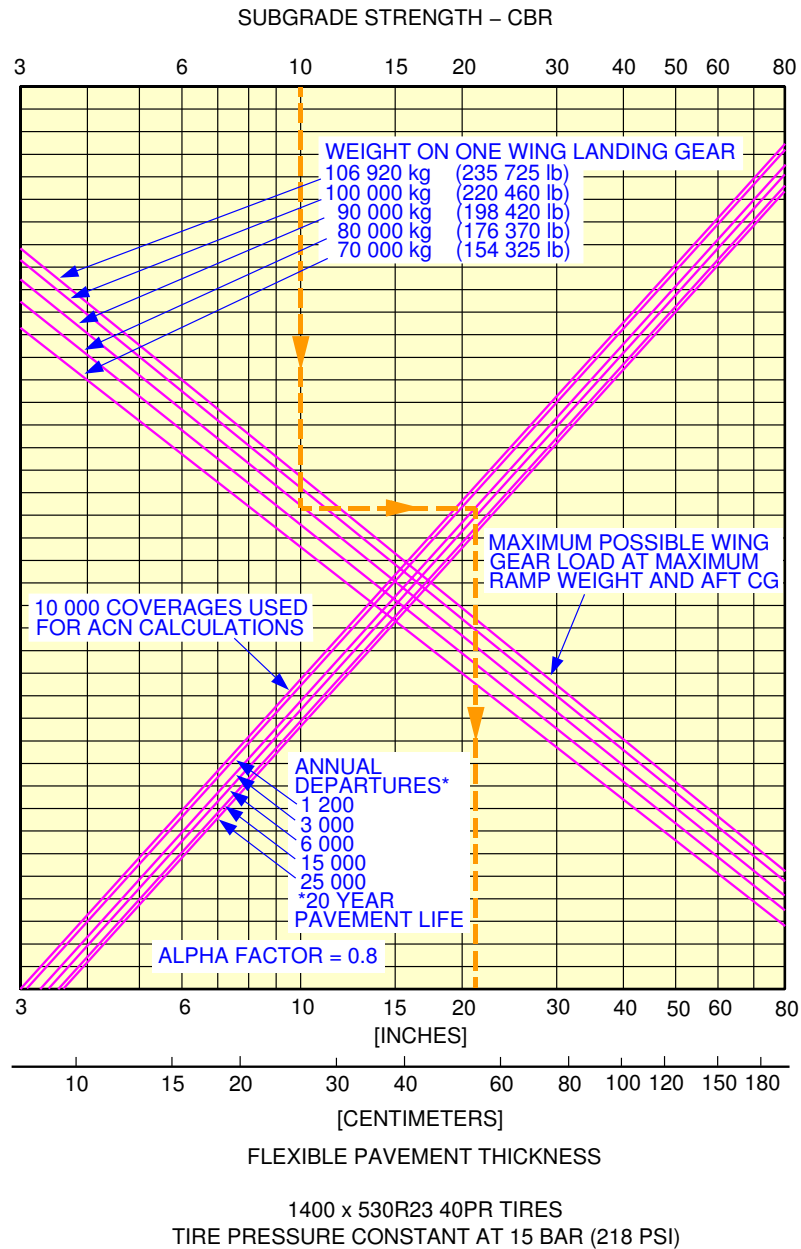
****ON A/C A380-800 Models**



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Flexible Pavement Requirements – 6 Wheel Bogie
MRW 512 000 kg - A380-800 Models
FIGURE 2

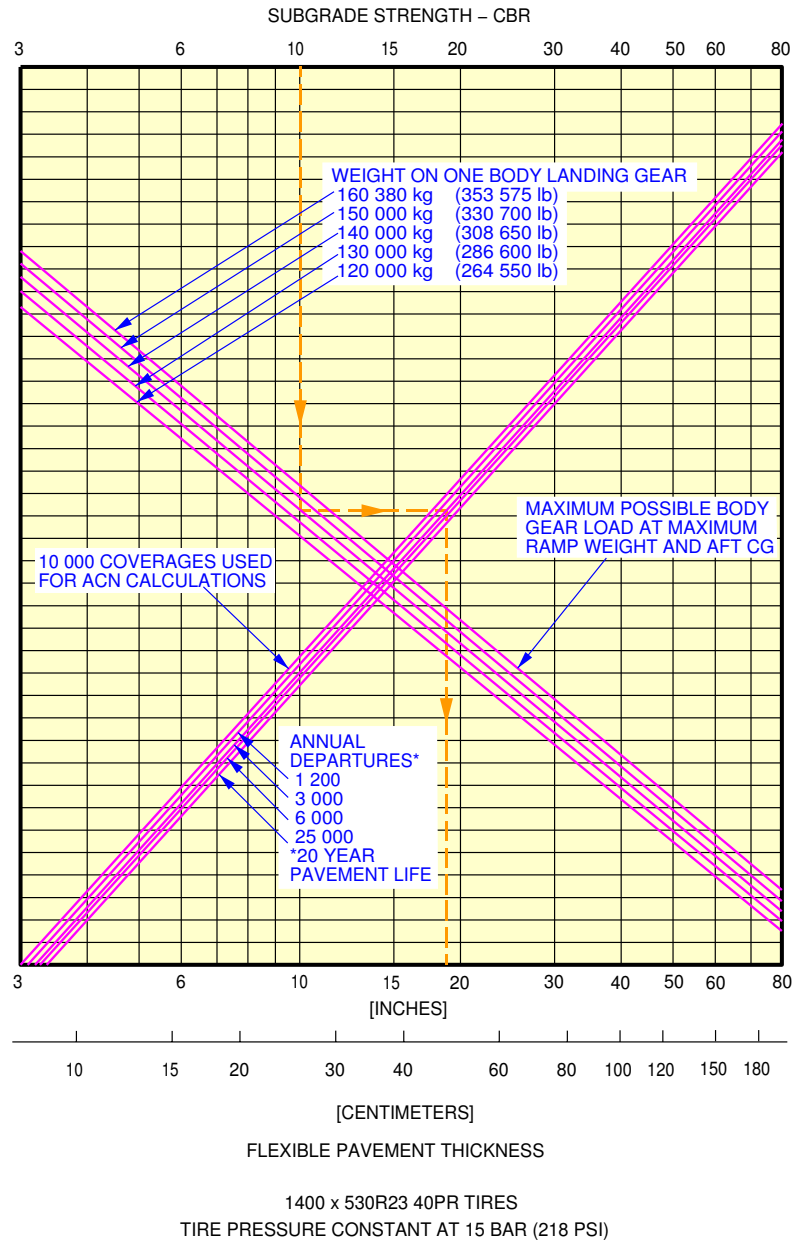
****ON A/C A380-800 Models**



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Flexible Pavement Requirements – 4 Wheel Bogie
MRW 562 000 kg - A380-800 Models
FIGURE 3

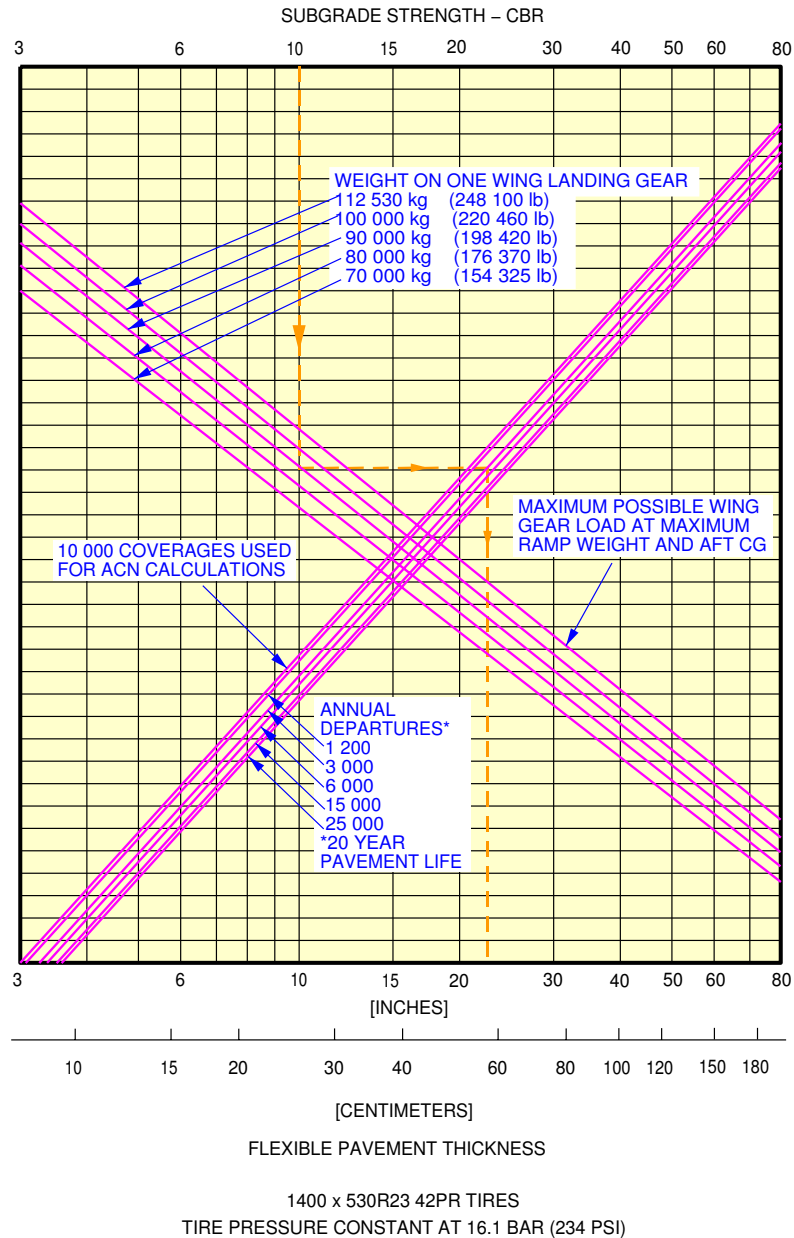
****ON A/C A380-800 Models**



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Flexible Pavement Requirements – 6 Wheel Bogie
MRW 562 000 kg - A380-800 Models
FIGURE 4

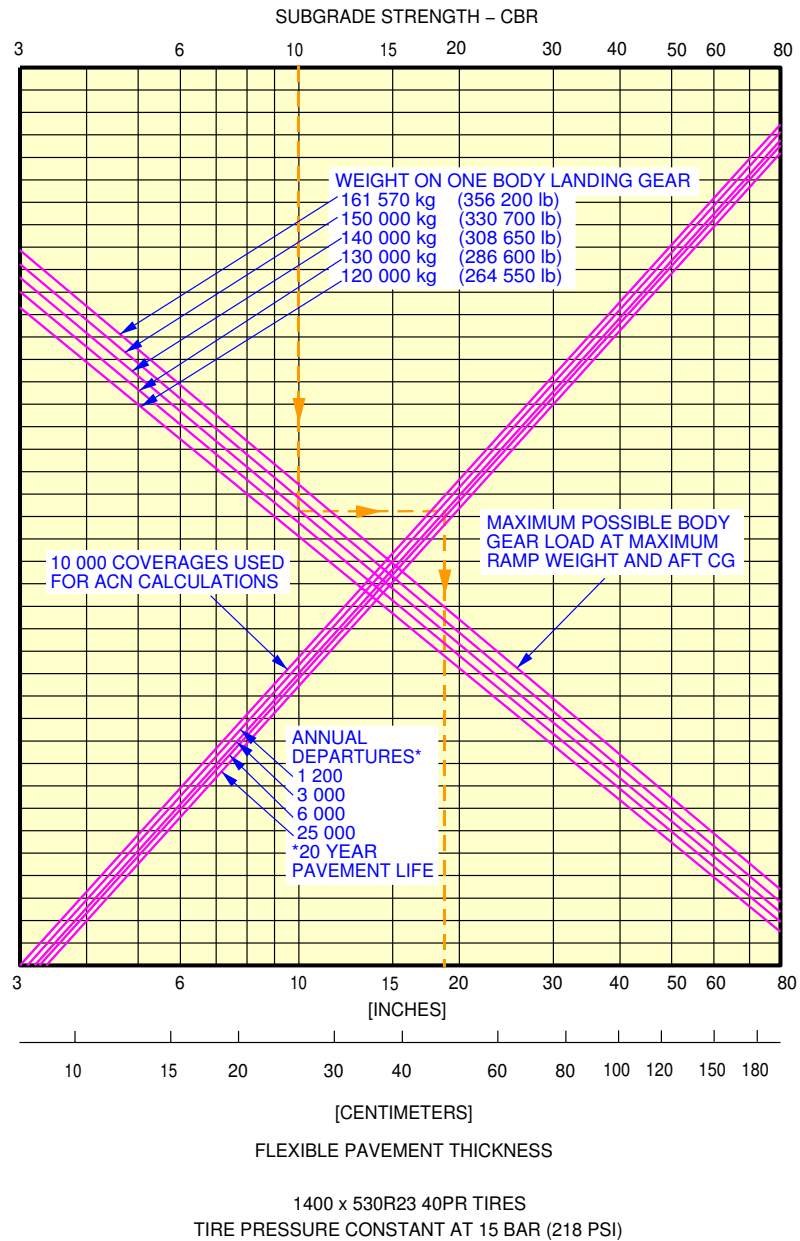
****ON A/C A380-800 Models**



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Flexible Pavement Requirements – 4 Wheel Bogie
MRW 571 000 kg - A380-800 Models
FIGURE 5

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



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Flexible Pavement Requirements – 6 Wheel Bogie
MRW 571 000 kg - A380-800 Models
FIGURE 6



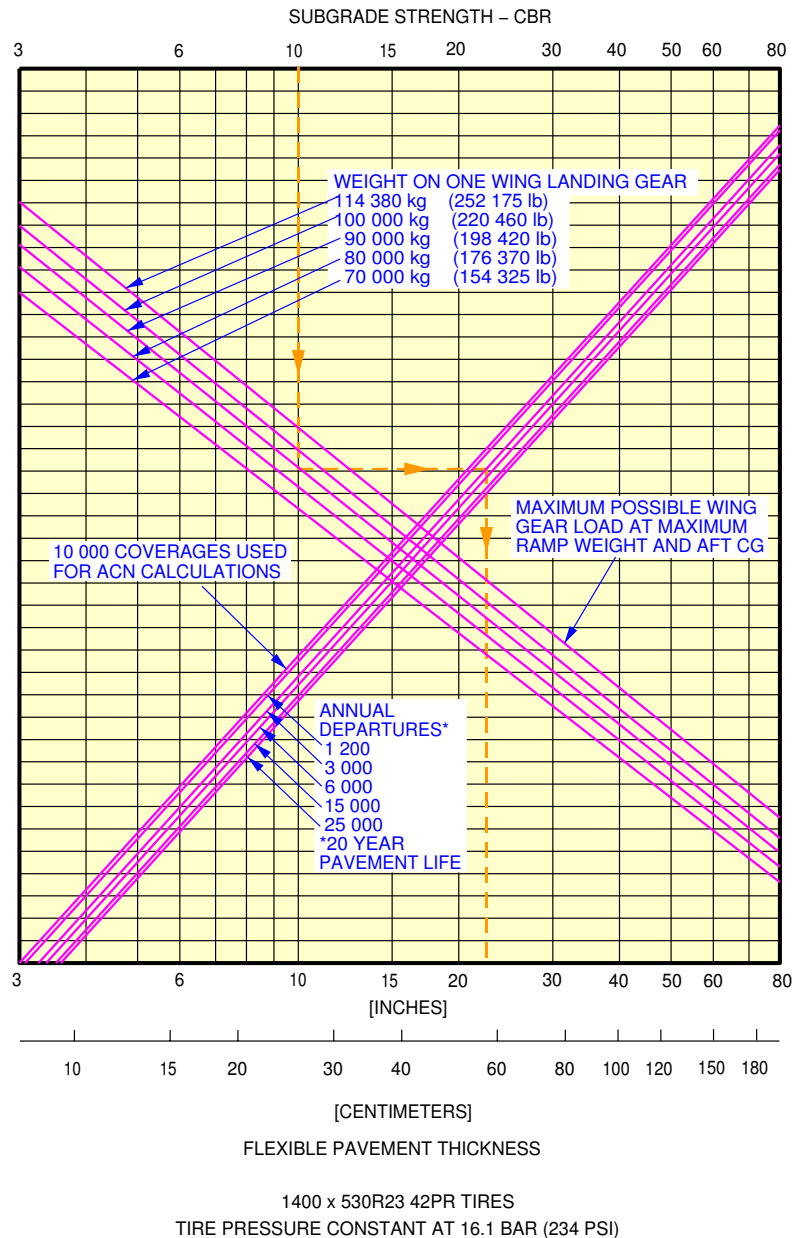
AIRPLANE CHARACTERISTICS

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

Flexible Pavement Requirements - US Army Corps of Engineers Design Method - Freighter

1. This section gives Flexible Pavement Requirements.

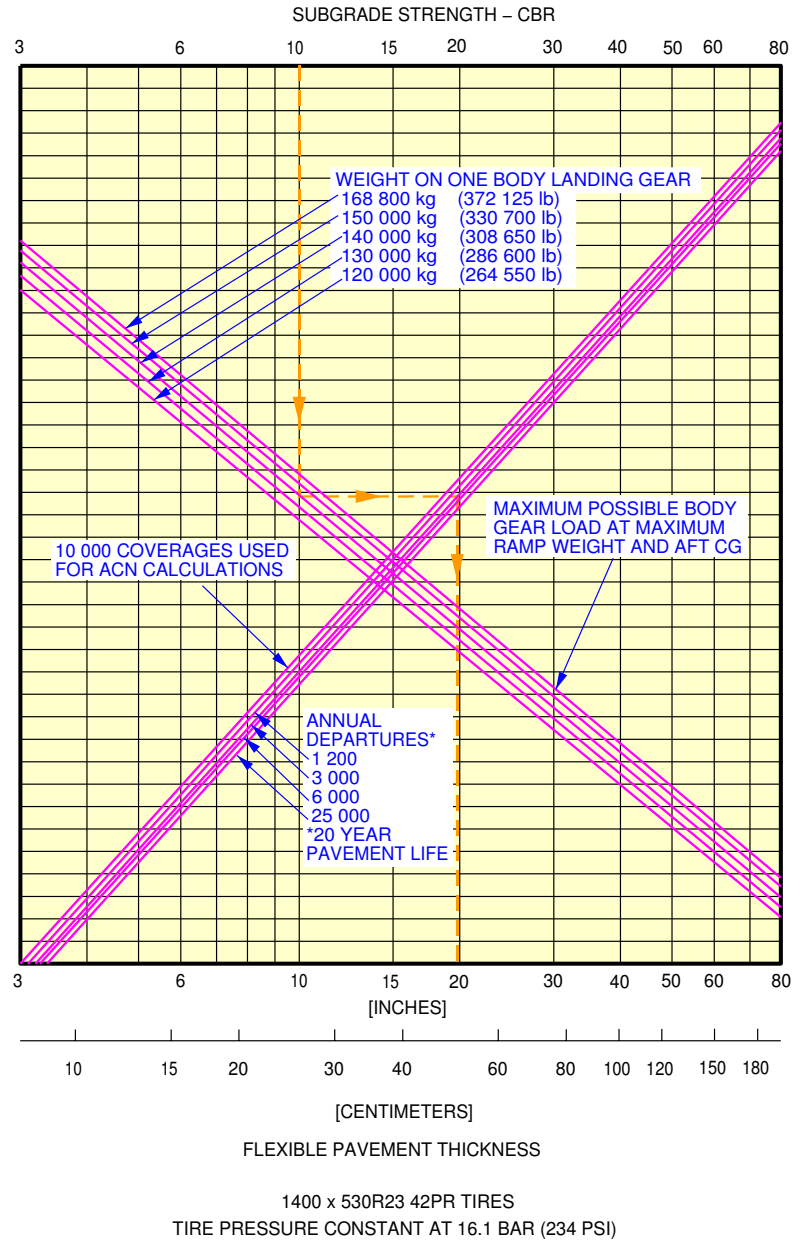
****ON A/C A380-800F Models**



L_AC_070501_1_0130101_01_00

Flexible Pavement Requirements – 4 Wheel Bogie
MRW 592 000 kg - A380-800F Models
FIGURE 7

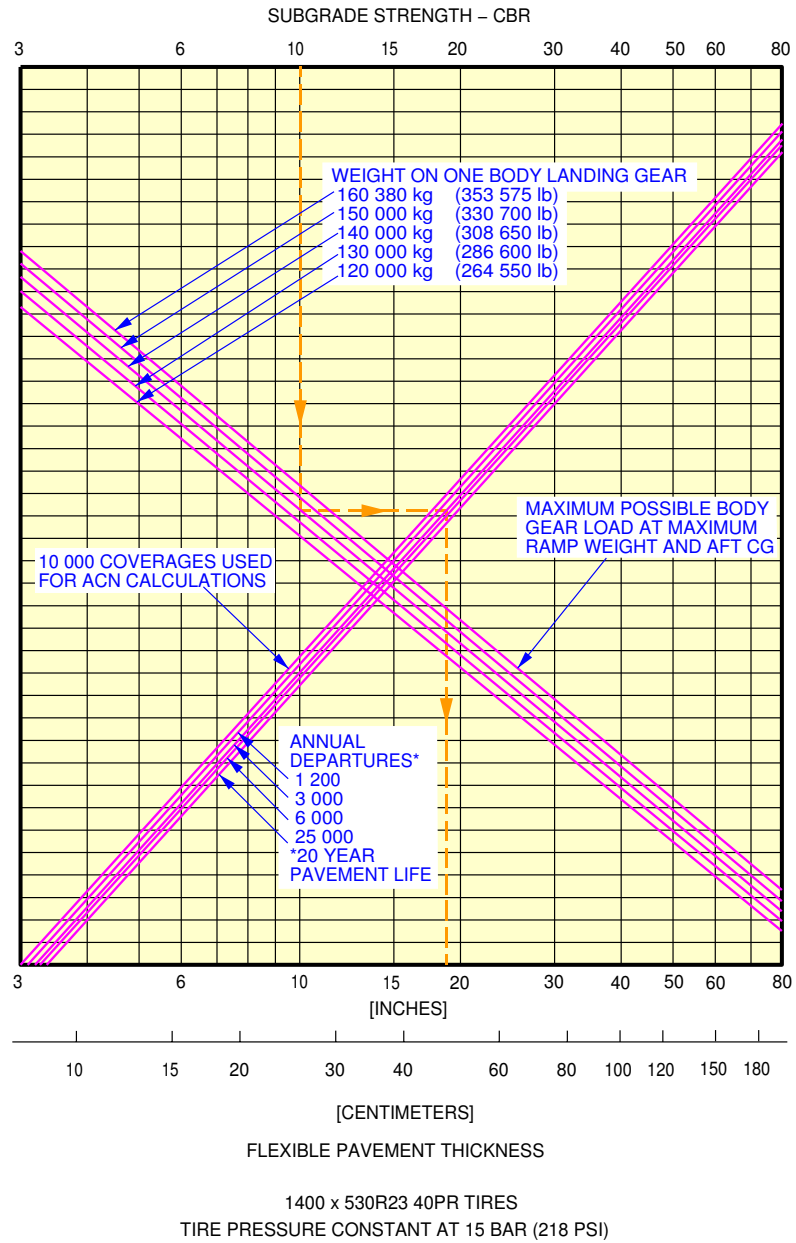
****ON A/C A380-800F Models**



L_AC_070501_1_0040101_01_01

Flexible Pavement Requirements – 6 Wheel Bogie
MRW 592 000 kg - A380-800F Models
FIGURE 8

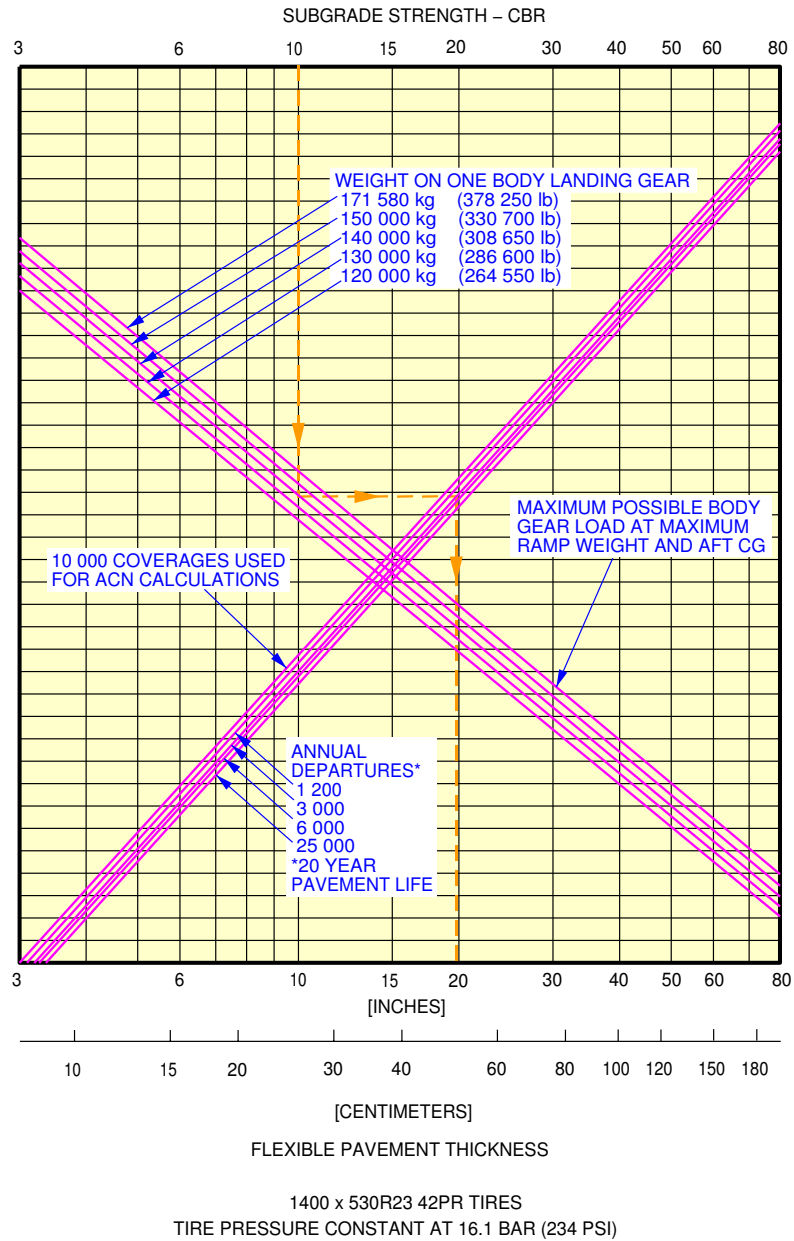
****ON A/C A380-800F Models**



L_AC_070501_1_0140101_01_00

Flexible Pavement Requirements – 4 Wheel Bogie
MRW 602 000 kg - A380-800F Models
FIGURE 9

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



L_AC_070501_1_0080101_01_00

Flexible Pavement Requirements – 6 Wheel Bogie
MRW 602 000 kg - A380-800F Models
FIGURE 10



AIRPLANE CHARACTERISTICS

7-6-0 Flexible Pavement Requirements - LCN Conversion

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

General

1. To find the airplane weight that a Flexible Pavement can support, the LCN of the pavement and the thickness (h) must be known.

In the typical example shown in Section 7-6-1, Figure: Flex Pavement Requirements LCN - 4 Wheel Bogie - MRW 512 000 kg - A380-800 Models, the thickness (h) is shown at 508 mm (20 in.) with an LCN of 82. For these conditions the weight on one Wing Landing Gear is 90 000 kg (198 420 lb).



AIRPLANE CHARACTERISTICS

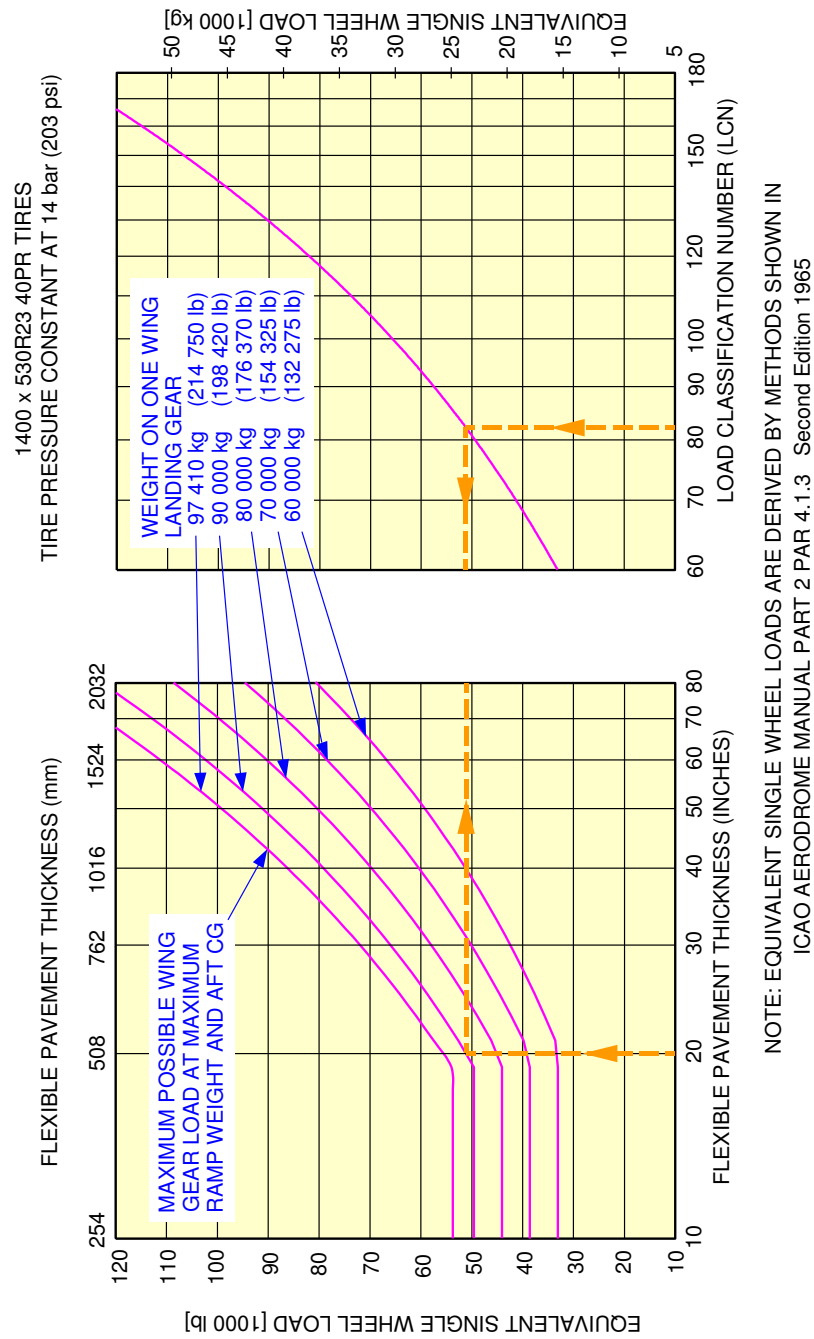
7-6-1 Flexible Pavement Requirements - LCN Conversion

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

Flexible Pavement Requirements - LCN Conversion - Pax

1. This section gives Flexible Pavement Requirements - LCN Conversion.

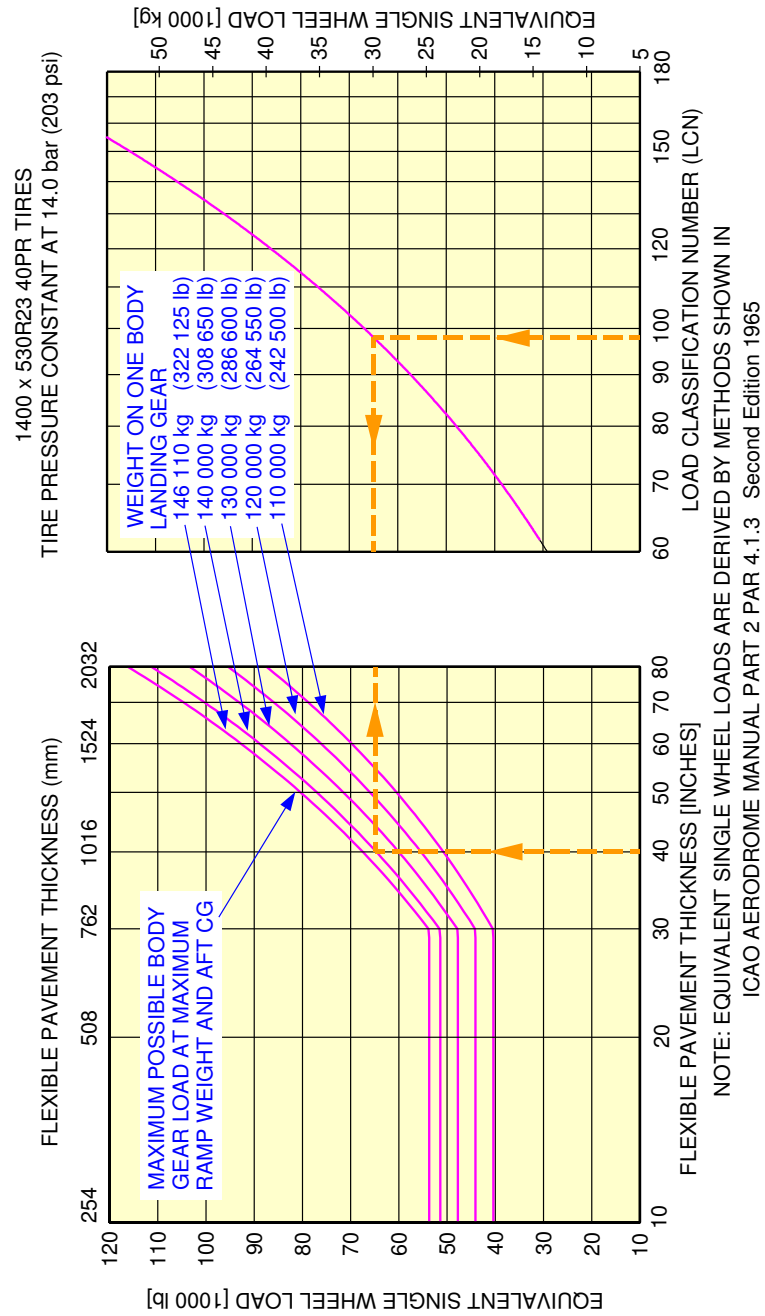
****ON A/C A380-800 Models**



L_AC_070601_1_0090101_01_00

Flex Pavement Requirements LCN - 4 Wheel Bogie
MRW 512 000 kg - A380-800 Models
FIGURE 1

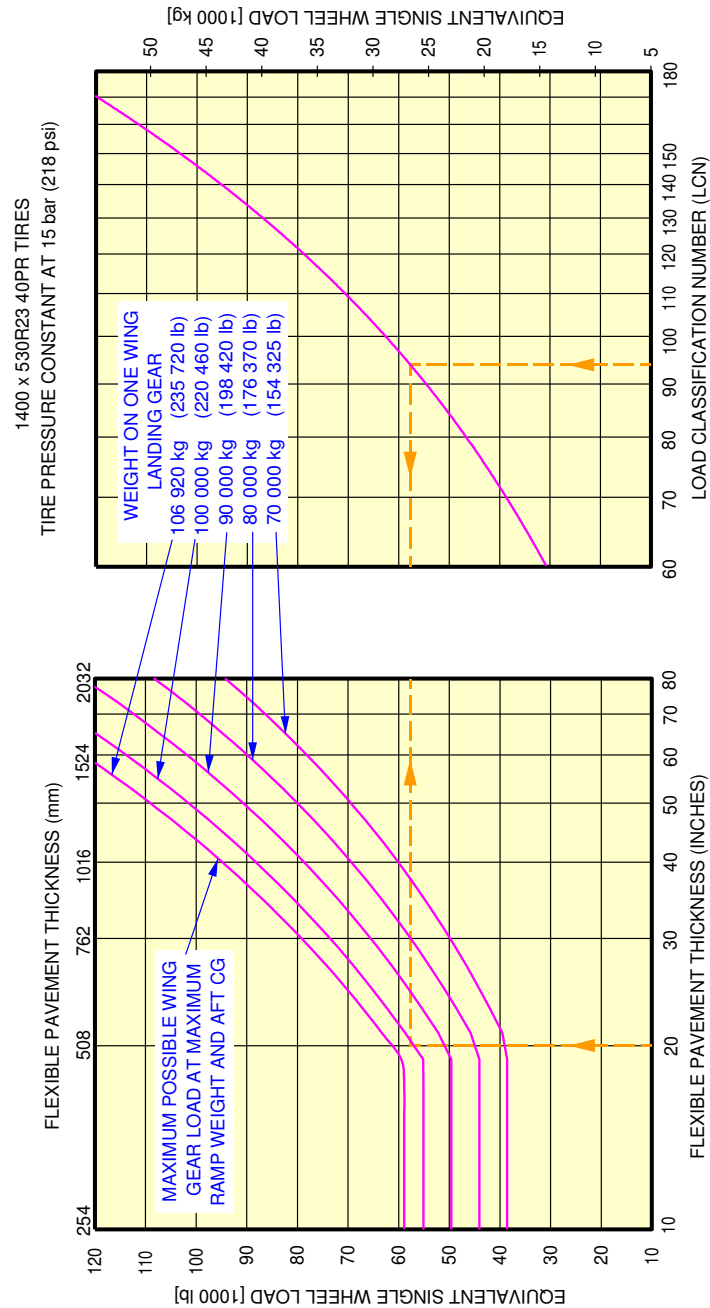
****ON A/C A380-800 Models**



L_AC_070601_1_0100101_01_00

Flex Pavement Requirements LCN - 6 Wheel Bogie
MRW 512 000 kg - A380-800 Models
FIGURE 2

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

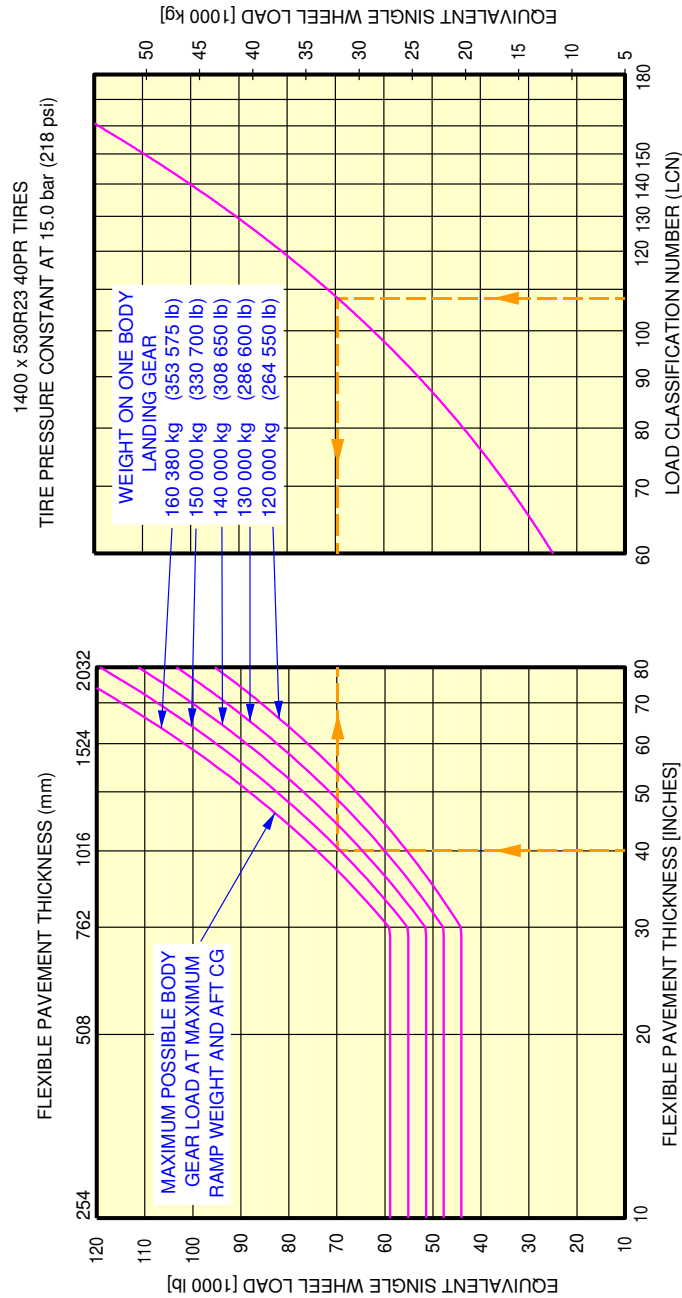


NOTE: EQUIVALENT SINGLE WHEEL LOADS ARE DERIVED BY METHODS SHOWN IN
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L_AC_070601_1_0010101_01_01

Flex Pavement Requirements LCN - 4 Wheel Bogie
MRW 562 000 kg - A380-800 Models
FIGURE 3

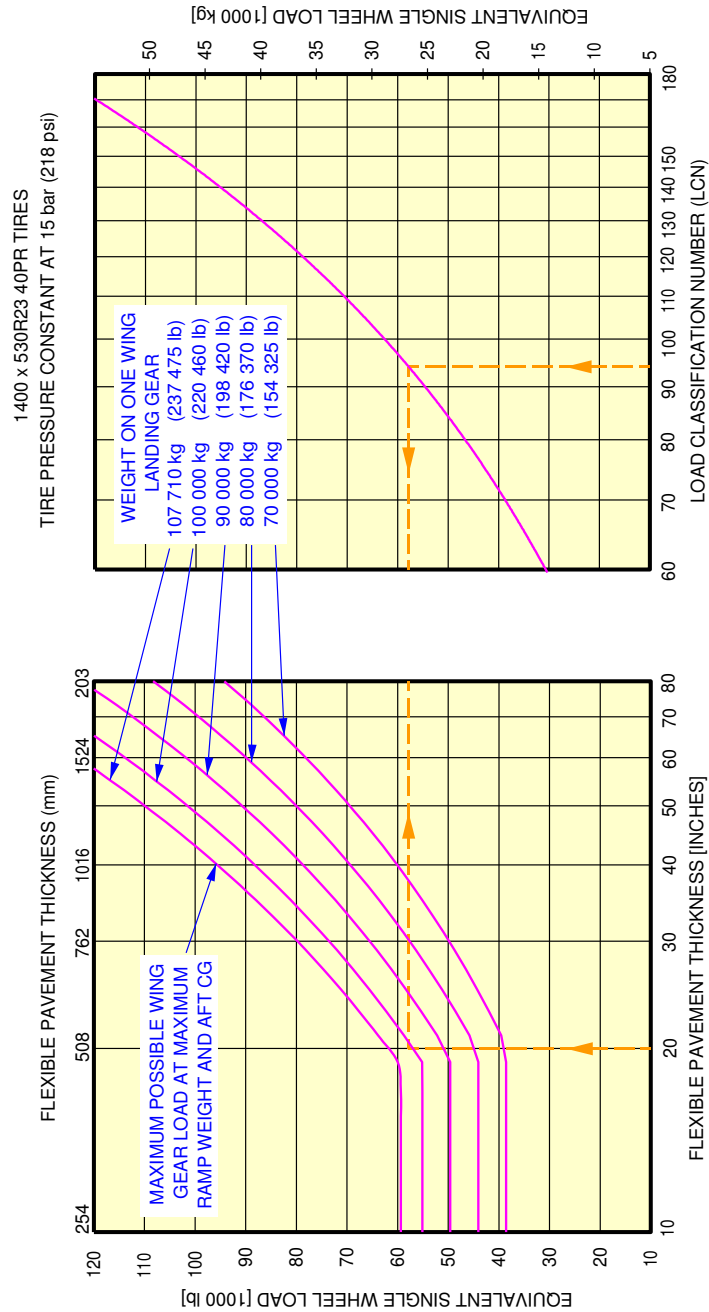
****ON A/C A380-800 Models**



L_AC_070601_1_0020101_01_01

Flex Pavement Requirements LCN - 6 Wheel Bogie
MRW 562 000 kg - A380-800 Models
FIGURE 4

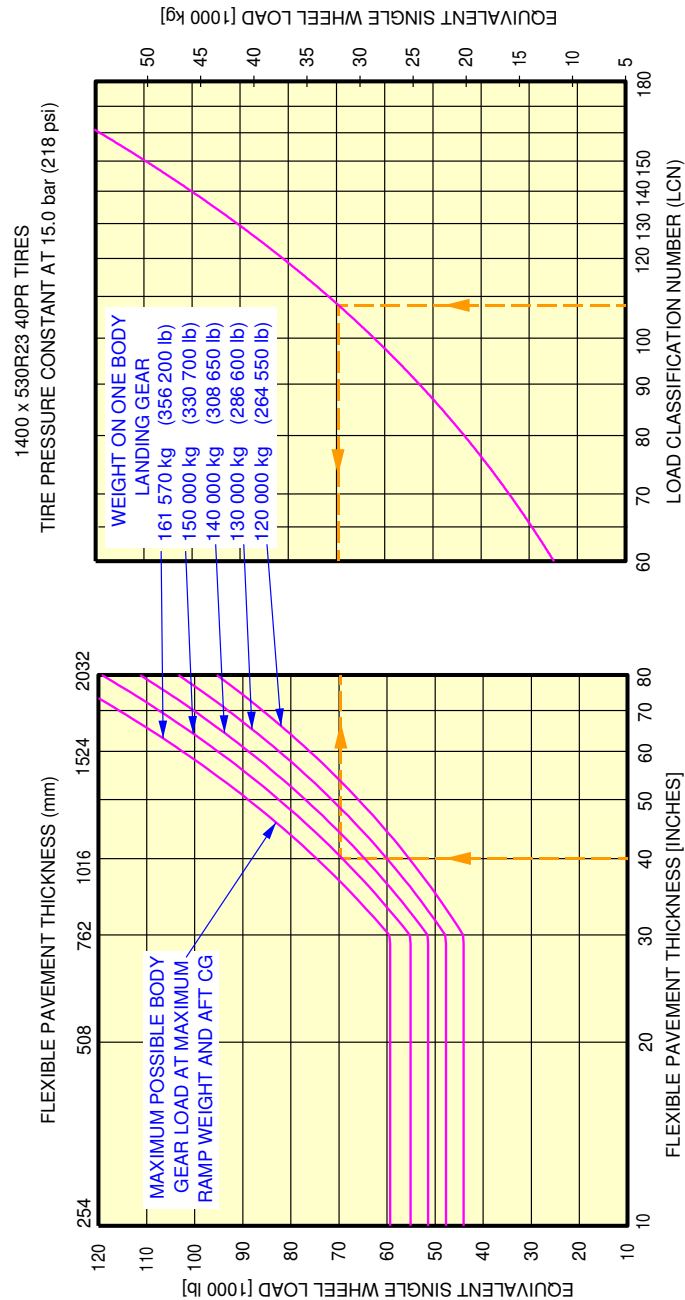
****ON A/C A380-800 Models**



L_AC_070601_1_0050101_01_00

Flex Pavement Requirements LCN - 4 Wheel Bogie
MRW 571 000 kg - A380-800 Models
FIGURE 5

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



L_AC_070601_1_0060101_01_00

Flex Pavement Requirements LCN - 6 Wheel Bogie
MRW 571 000 kg - A380-800 Models
FIGURE 6



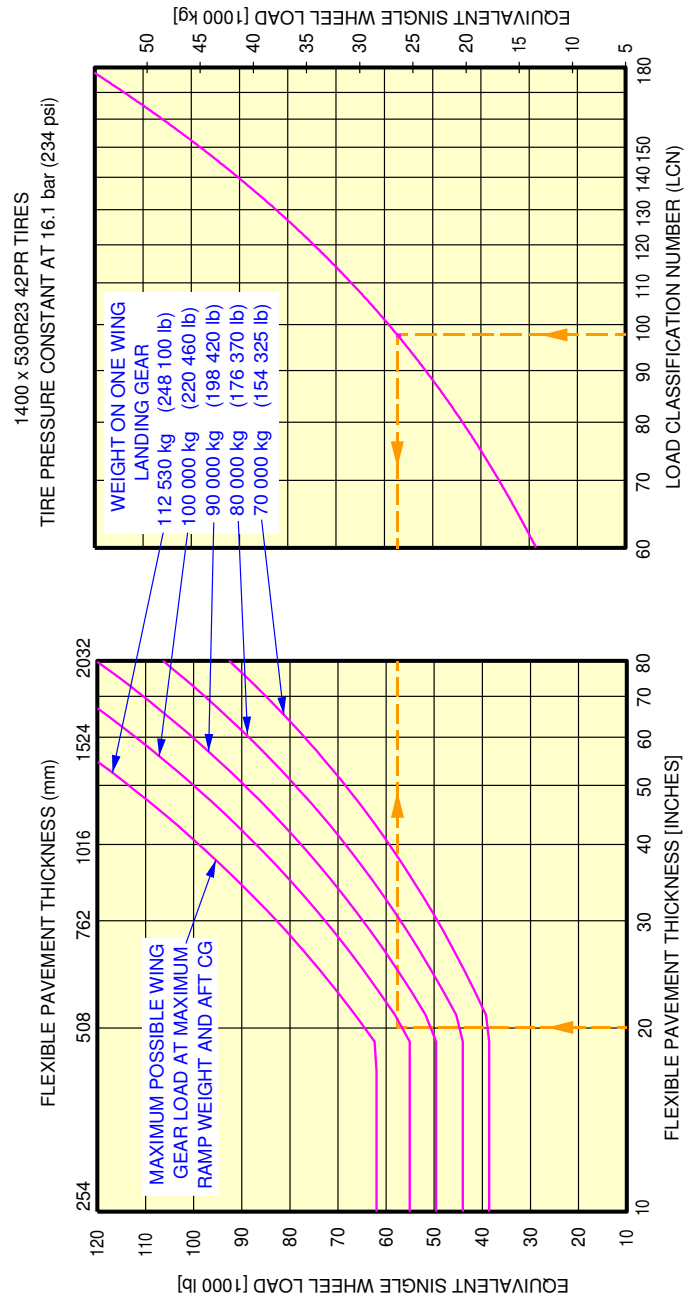
AIRPLANE CHARACTERISTICS

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

For A380-800F ModelsFlexible Pavement Requirements - LCN Conversion - Freighter

1. This section gives Flexible Pavement Requirements - LCN Conversion.

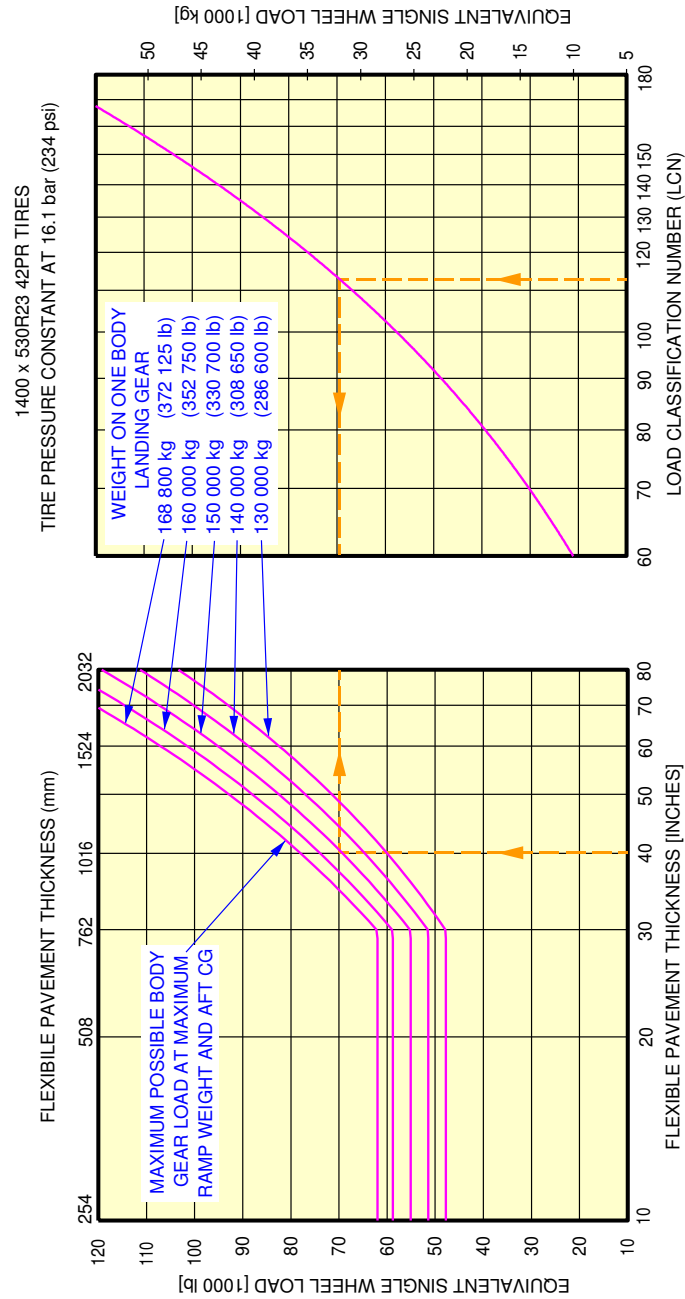
****ON A/C A380-800F Models**



L_AC_070601_1_0030101_01_01

Flex Pavement Requirements LCN - 4 Wheel Bogie
MRW 592 000 kg - A380-800F Models
FIGURE 7

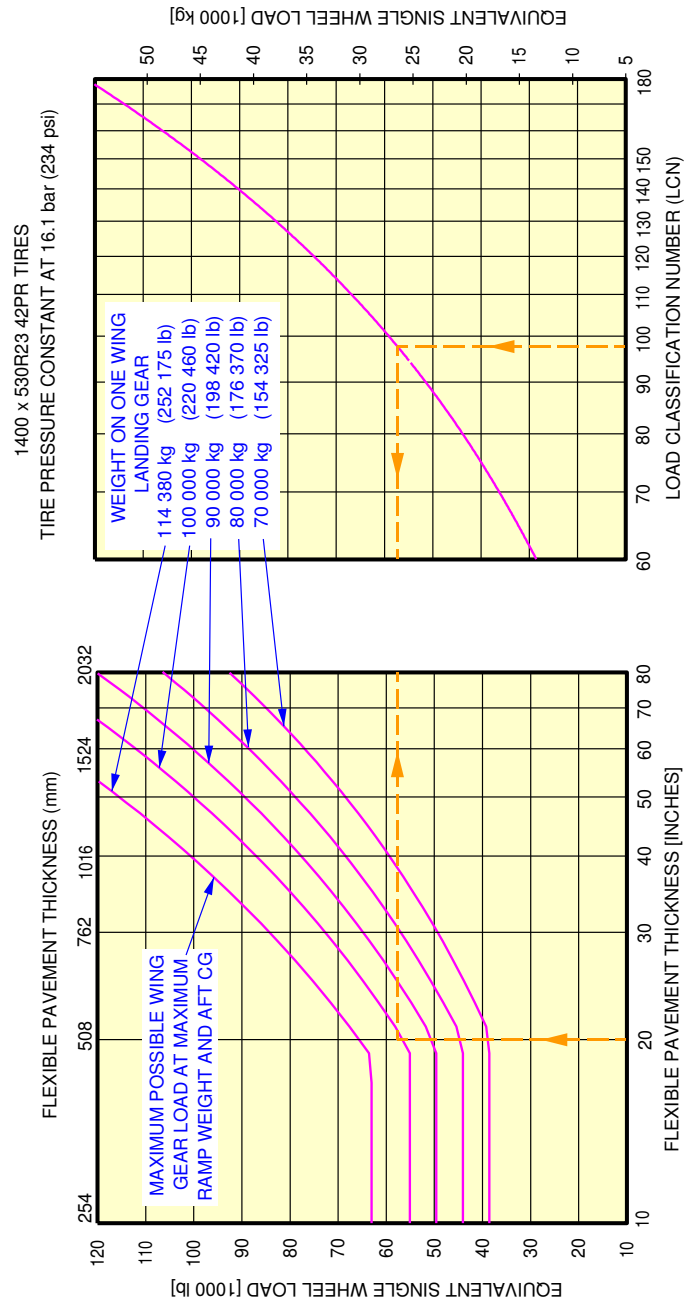
****ON A/C A380-800F Models**



L_AC_070601_1_0040101_01_01

Flex Pavement Requirements LCN - 6 Wheel Bogie
MRW 592 000 kg - A380-800F Models
FIGURE 8

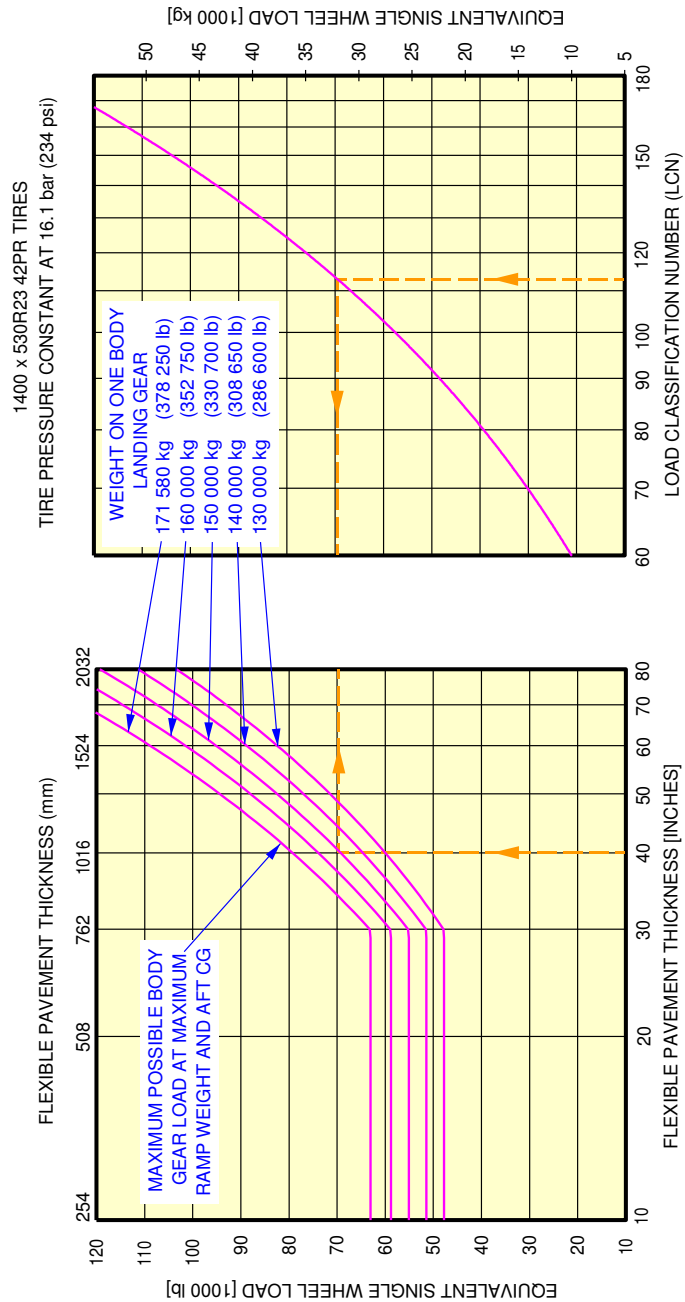
****ON A/C A380-800F Models**



L_AC_070601_1_0070101_01_00

Flex Pavement Requirements LCN - 4 Wheel Bogie
MRW 602 000 kg - A380-800F Models
FIGURE 9

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



L_AC_070601_1_0080101_01_00

Flex Pavement Requirements LCN - 6 Wheel Bogie
MRW 602 000 kg - A380-800F Models
FIGURE 10

7-7-0 Rigid Pavement Requirements - Portland Cement Association Design Method

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

Rigid Pavement Requirements - Portland Cement Association Design Method

1. General

To determine a Rigid Pavement Thickness, the Subgrade Modulus (k), the allowable working stress and the weight on one Main Landing Gear must be known.

- In the typical example shown in Section 7-7-1, Figure: Rigid Pavement Requirements - 4 Wheel Bogie
- MRW 512 000 kg - A380-800 Models.
 - a k value of 150 MN/m³ (550 lb/in³)
 - an allowable working stress of 36 kg/cm² (500 lb/in²)
 - the load on one Wing Landing Gear of 90 000 kg (198 420 lb), the required Rigid Pavement Thickness is 24 cm (9.5 inches).



AIRPLANE CHARACTERISTICS

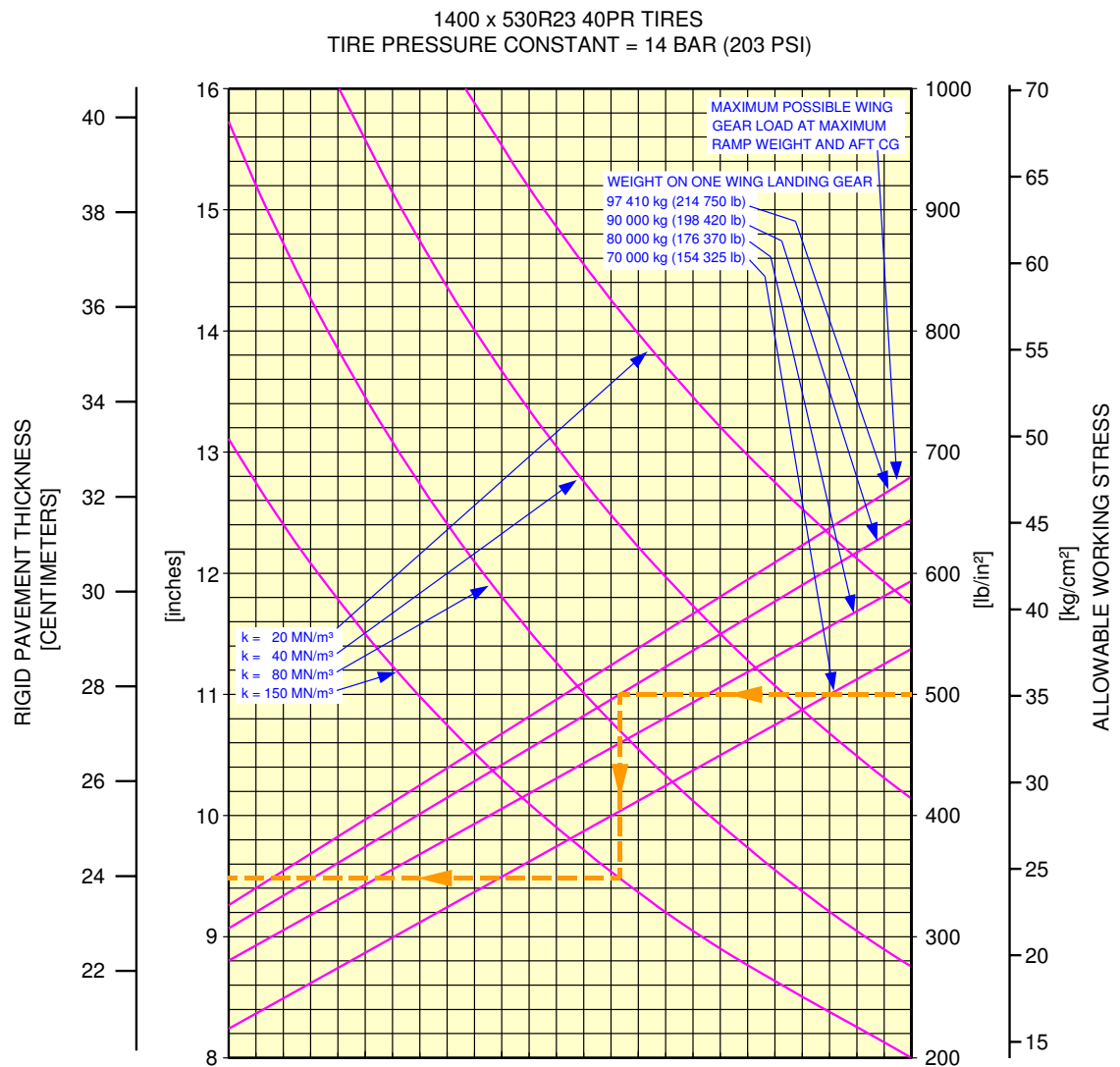
7-7-1 Rigid Pavement Requirements - Portland Cement Association Design Method

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

Rigid Pavement Requirements - Portland Cement Association Design Method - Pax

1. This section gives Rigid Pavement Requirements.

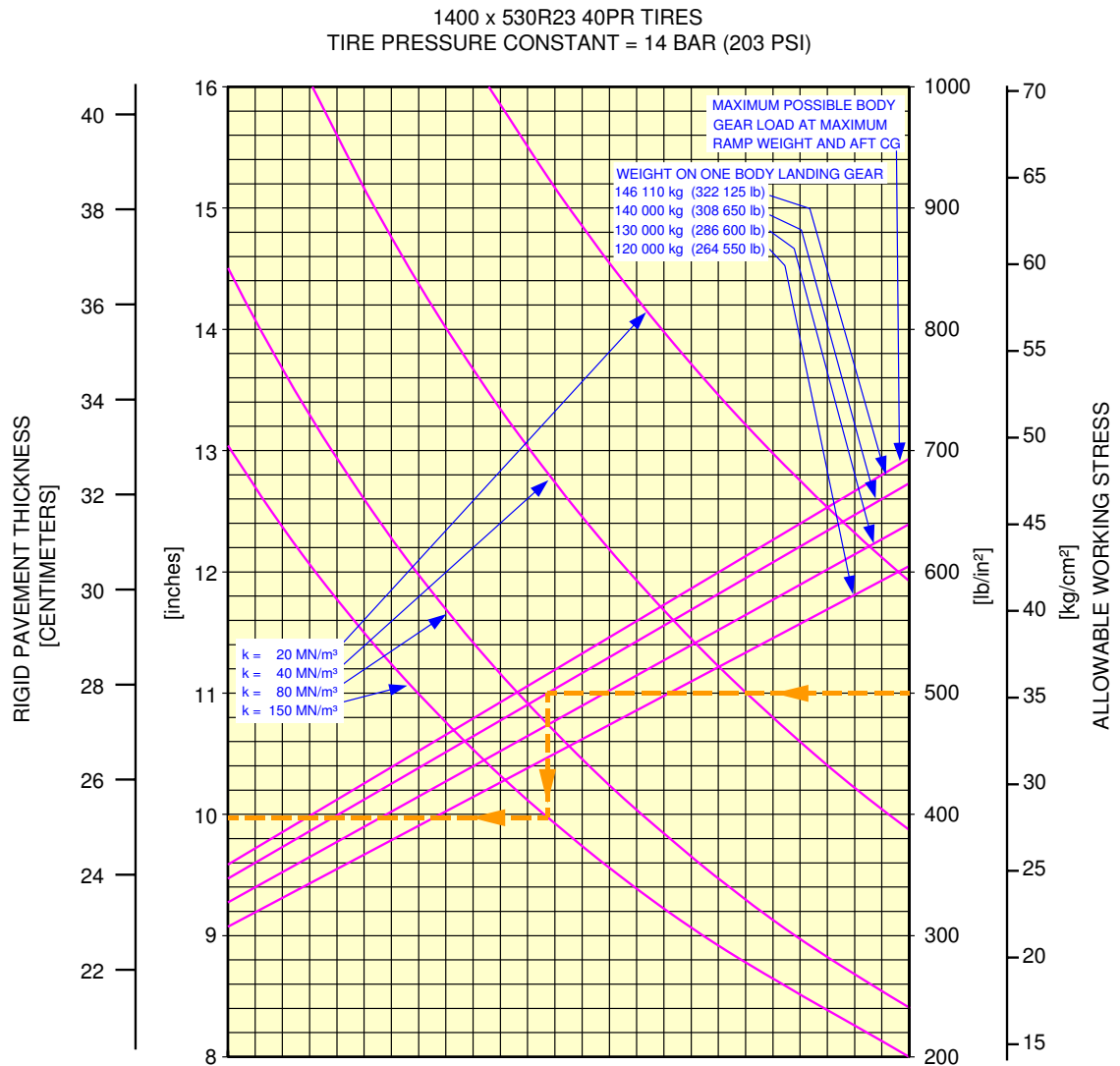
****ON A/C A380-800 Models**



L_AC_070701_1_0090101_01_00

Rigid Pavement Requirements - 4 Wheel Bogie
MRW 512 000 kg - A380-800 Models
FIGURE 1

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



NOTES:
THE VALUES OBTAINED BY USING THE MAXIMUM LOAD REFERENCE LINE AND ANY VALUES FOR K ARE EXACT. FOR LOADS LESS THAN MAXIMUM, THE CURVES ARE EXACT FOR K = 80 MN/m³ BUT DEVIATE SLIGHTLY FOR ANY OTHER VALUES OF K

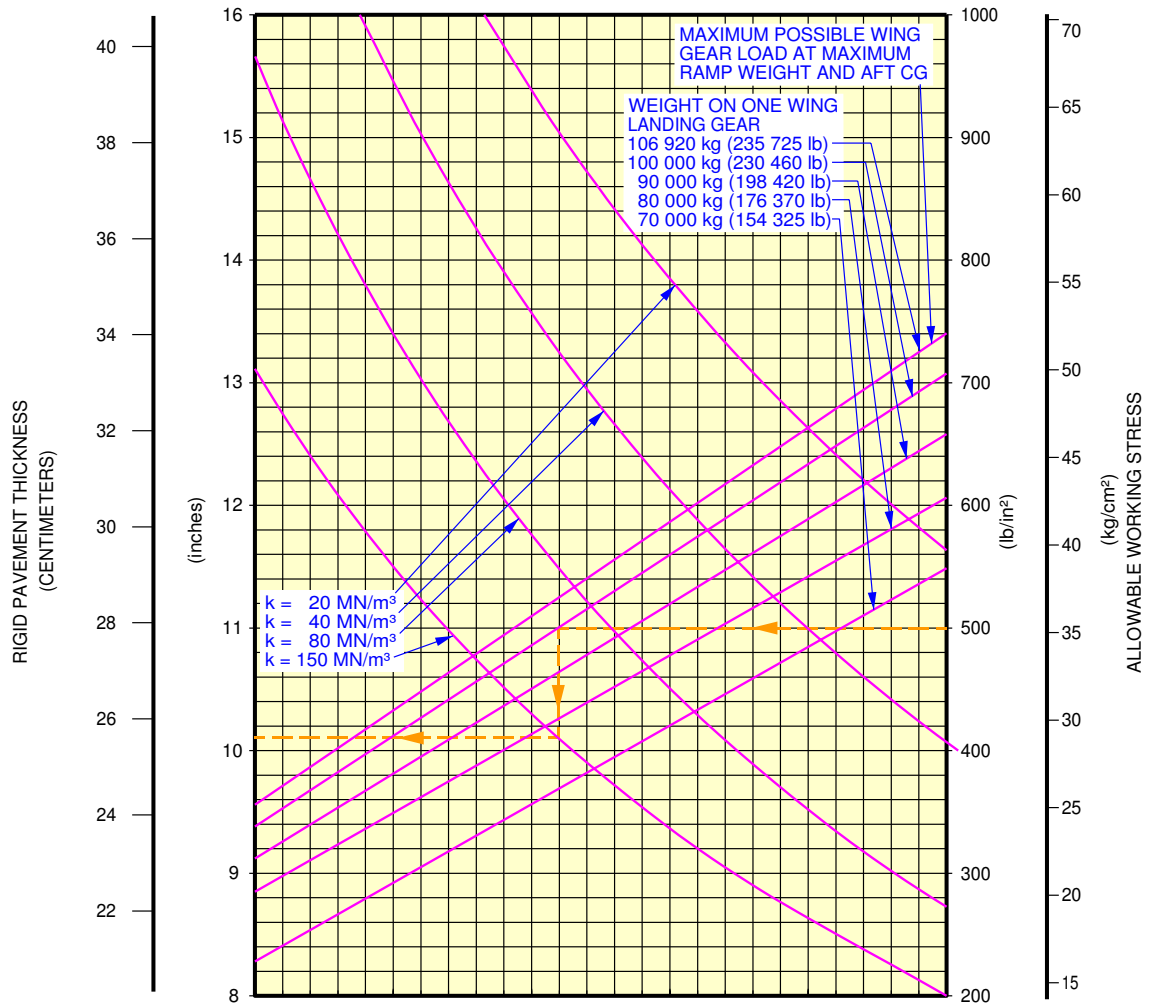
REFERENCE:
"DESIGN OF CONCRETE AIRPORT PAVEMENTS" AND "COMPUTER PROGRAM FOR AIRPORT PAVEMENT DESIGN – PROGRAM PDILB" PORTLAND CEMENT ASSOCIATION

L_AC_070701_1_0100101_01_00

Rigid Pavement Requirements - 6 Wheel Bogie
MRW 512 000 kg - A380-800 Models
FIGURE 2

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

1400 x 530R23 40PR TIRES
TIRE PRESSURE CONSTANT = 15 BAR (218 PSI)

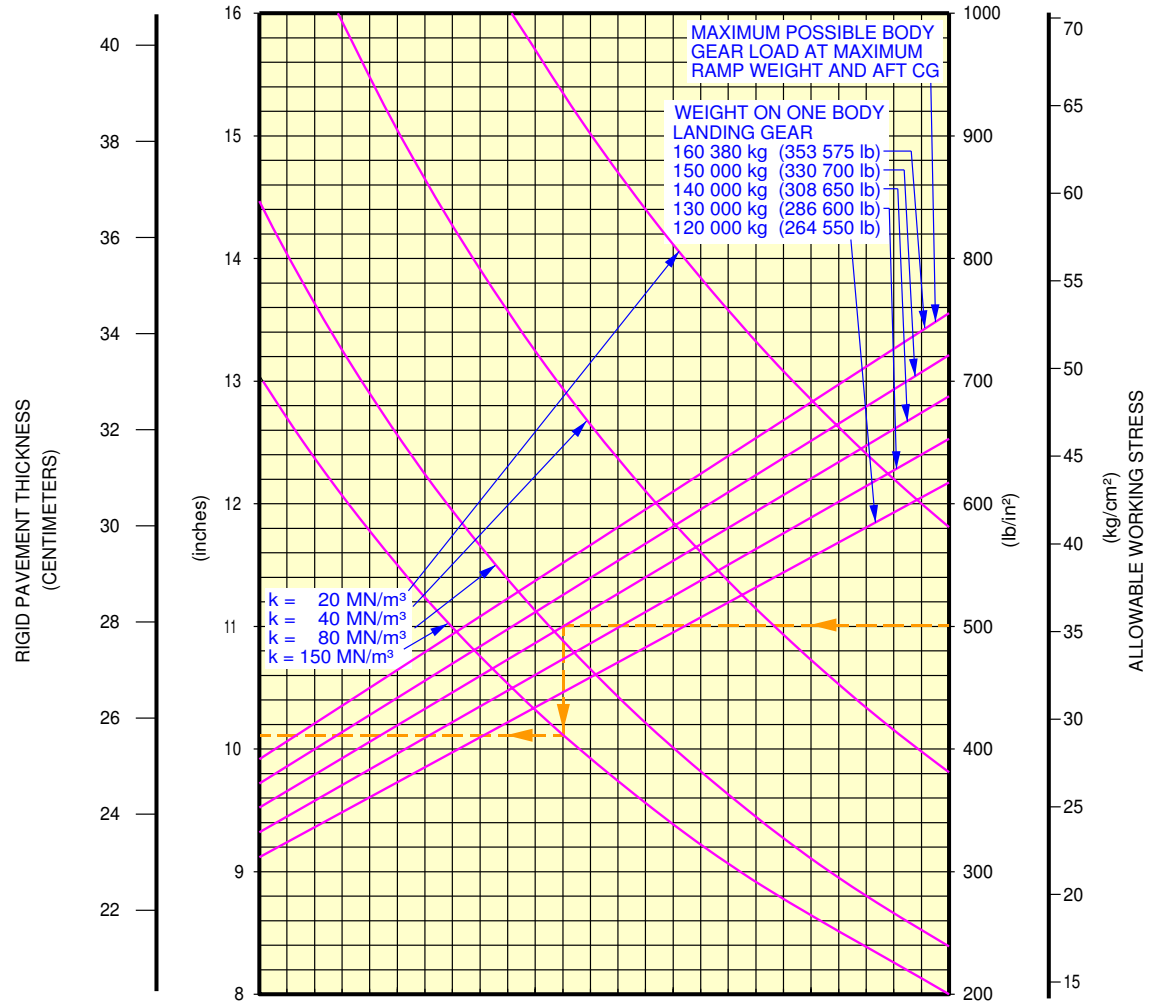


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Rigid Pavement Requirements - 4 Wheel Bogie
MRW 562 000 kg - A380-800 Models
FIGURE 3

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

1400 x 530R23 40PR TIRES
TIRE PRESSURE CONSTANT = 15 BAR (218 PSI)



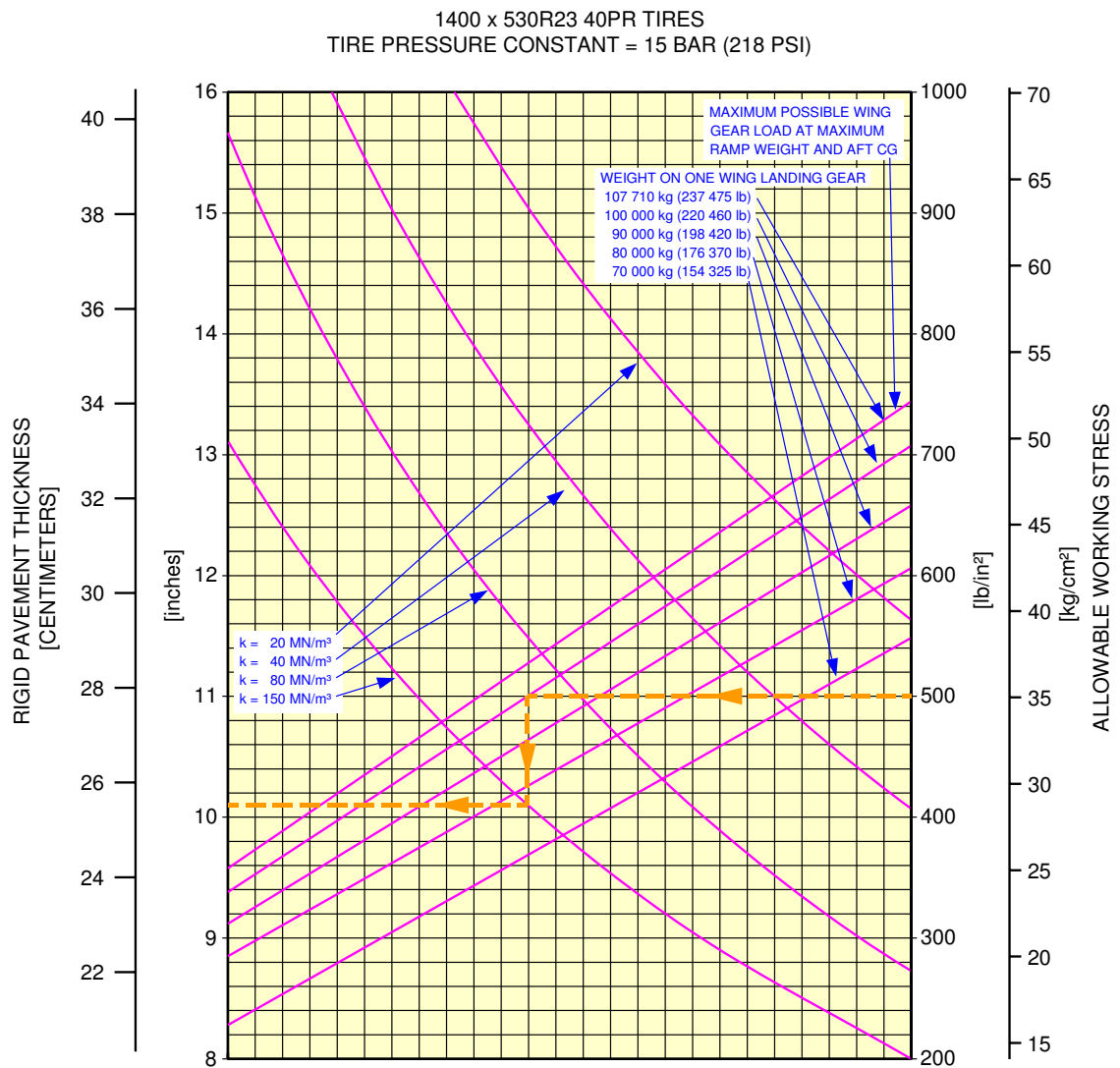
NOTES:
THE VALUES OBTAINED BY USING THE MAXIMUM LOAD REFERENCE LINE AND ANY VALUES FOR K ARE EXACT. FOR LOADS LESS THAN MAXIMUM, THE CURVES ARE EXACT FOR K = 80 MN/m³ BUT DEVIATE SLIGHTLY FOR ANY OTHER VALUES OF K

REFERENCE:
"DESIGN OF CONCRETE AIRPORT PAVEMENTS" AND "COMPUTER PROGRAM FOR AIRPORT PAVEMENT DESIGN - PROGRAM PDILB" PORTLAND CEMENT ASSOCIATION

L_AC_070701_1_0020101_01_01

Rigid Pavement Requirements - 6 Wheel Bogie
MRW 562 000 kg - A380-800 Models
FIGURE 4

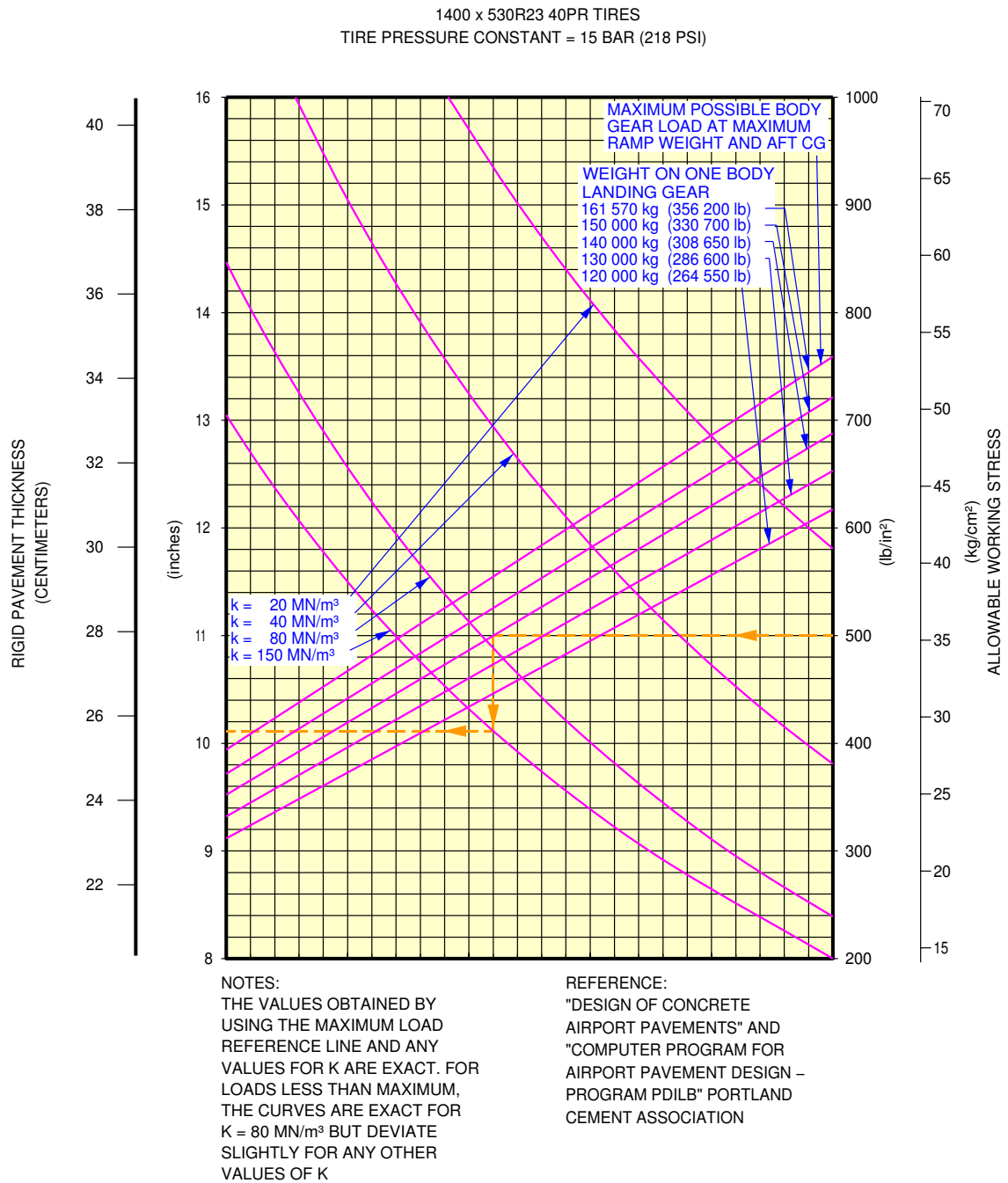
****ON A/C A380-800 Models**



L_AC_070701_1_0120101_01_00

Rigid Pavement Requirements - 4 Wheel Bogie
MRW 571 000 kg - A380-800 Models
FIGURE 5

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



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Rigid Pavement Requirements - 6 Wheel Bogie
MRW 571 000 kg - A380-800 Models
FIGURE 6



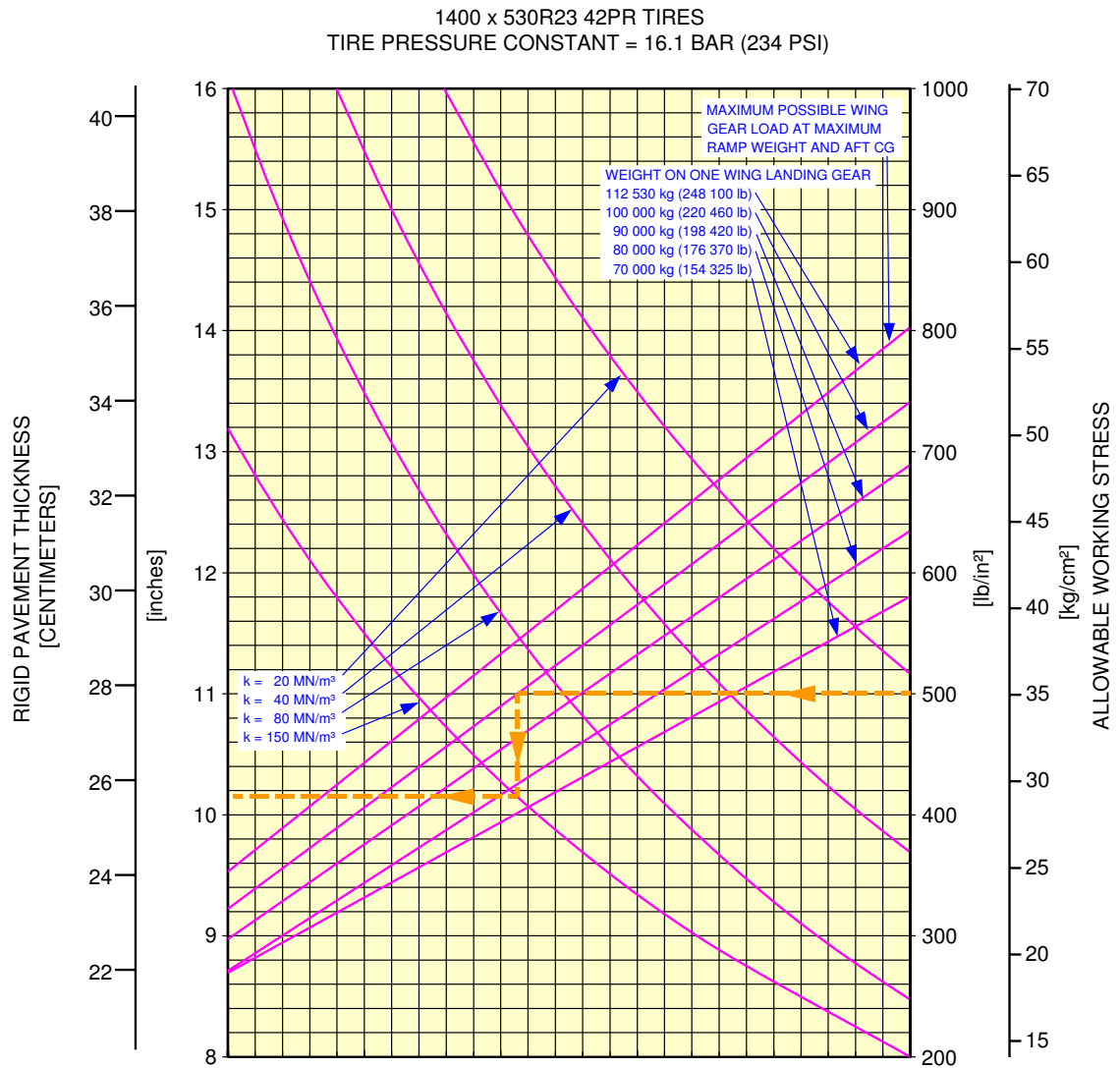
AIRPLANE CHARACTERISTICS

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

Rigid Pavement Requirements - Portland Cement Association Design Method - Freighter

1. This section gives Rigid Pavement Requirements.

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



NOTES:
THE VALUES OBTAINED BY
USING THE MAXIMUM LOAD
REFERENCE LINE AND ANY
VALUES FOR K ARE EXACT. FOR
LOADS LESS THAN MAXIMUM,
THE CURVES ARE EXACT FOR
K = 80 MN/m³ BUT DEVIATE
SLIGHTLY FOR ANY OTHER
VALUES OF K

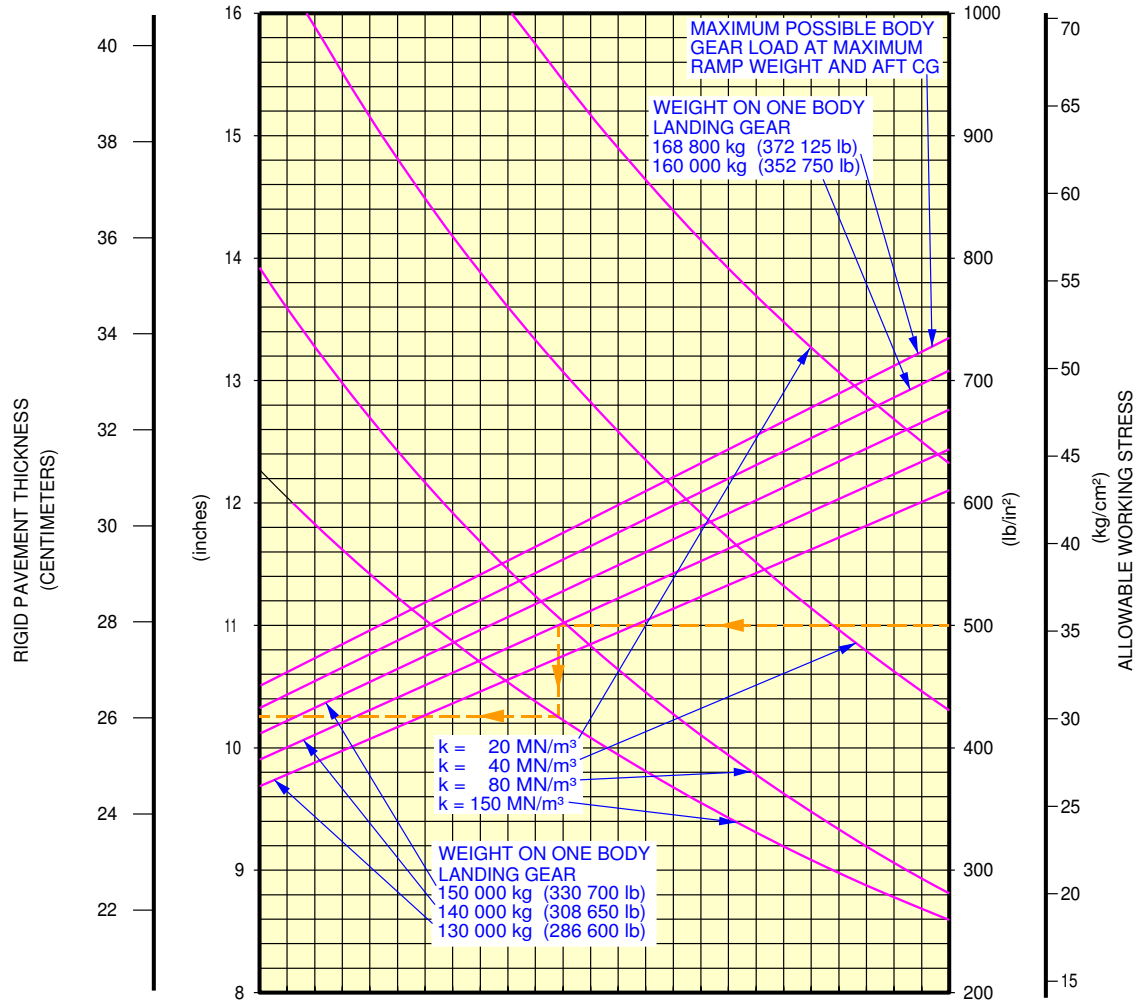
REFERENCE:
"DESIGN OF CONCRETE
AIRPORT PAVEMENTS" AND
"COMPUTER PROGRAM FOR
AIRPORT PAVEMENT DESIGN -
PROGRAM PDILB" PORTLAND
CEMENT ASSOCIATION

L_AC_070701_1_0130101_01_00

Rigid Pavement Requirements - 4 Wheel Bogie
MRW 592 000 kg - A380-800F Models
FIGURE 7

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

1400 x 530R23 42PR TIRES
TIRE PRESSURE CONSTANT = 16.1 BAR (234 PSI)



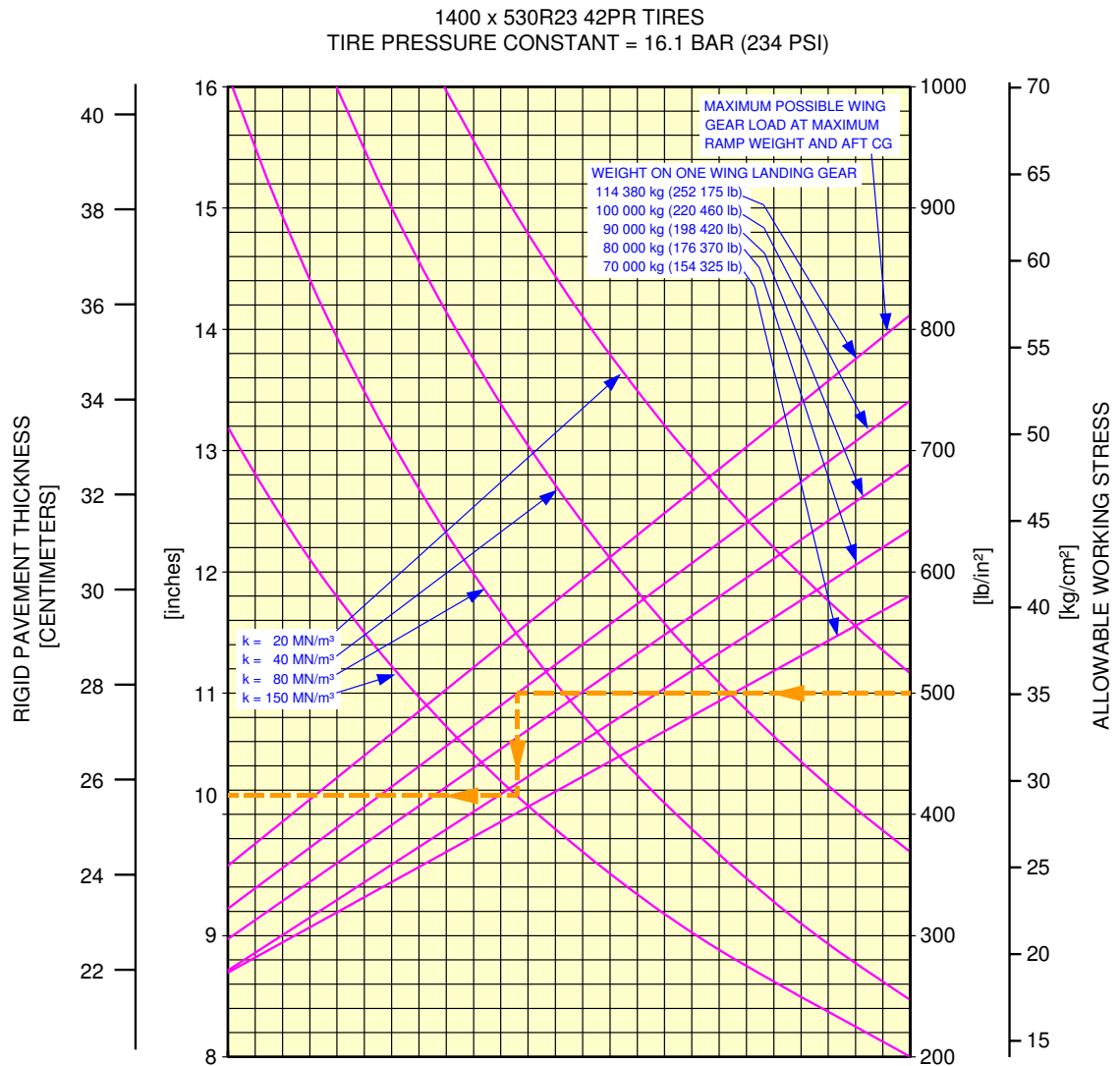
NOTES:
THE VALUES OBTAINED BY USING THE MAXIMUM LOAD REFERENCE LINE AND ANY VALUES FOR K ARE EXACT. FOR LOADS LESS THAN MAXIMUM, THE CURVES ARE EXACT FOR K = 80 MN/m³ BUT DEVIATE SLIGHTLY FOR ANY OTHER VALUES OF K

REFERENCE:
"DESIGN OF CONCRETE AIRPORT PAVEMENTS" AND "COMPUTER PROGRAM FOR AIRPORT PAVEMENT DESIGN – PROGRAM PDILB" PORTLAND CEMENT ASSOCIATION

L_AC_070701_1_0040101_01_01

Rigid Pavement Requirements - 6 Wheel Bogie
MRW 592 000 kg - A380-800F Models
FIGURE 8

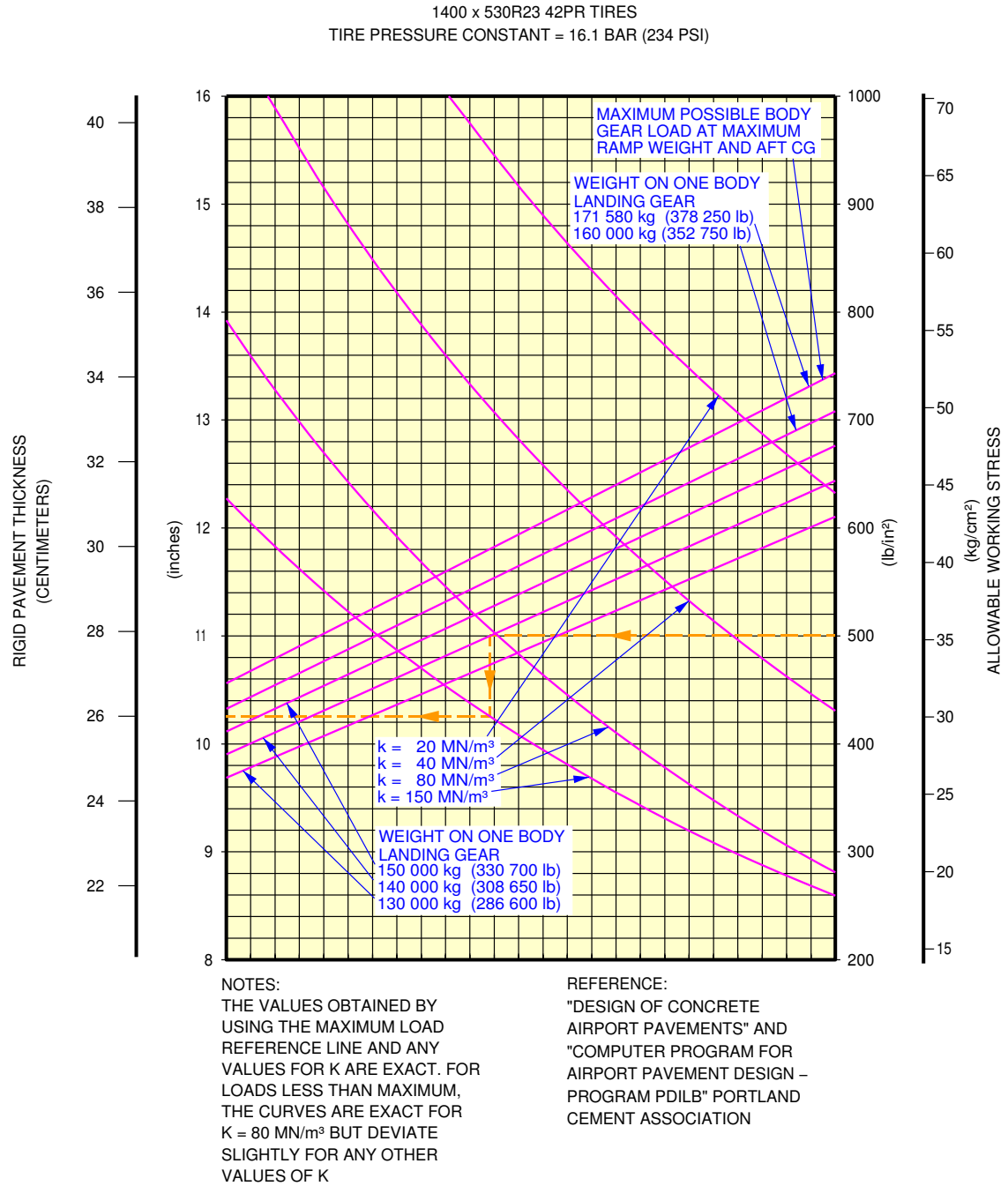
****ON A/C A380-800F Models**



L_AC_070701_1_0140101_01_00

Rigid Pavement Requirements - 4 Wheel Bogie
MRW 602 000 kg - A380-800F Models
FIGURE 9

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



Rigid Pavement Requirements - 6 Wheel Bogie
MRW 602 000 kg - A380-800F Models
FIGURE 10

7-8-0 Rigid Pavement Requirements - LCN Conversion

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

Rigid Pavement Requirements - LCN Conversion

1. General

To find the airplane weight that a Rigid Pavement can support, the LCN of the pavement and the Radius of Relative Stiffness (L) must be Known.

In the typical example shown in Section 7-8-2, Figure: Rigid Pavement Requirements LCN - 4 Wheel Bogie - MRW 512 000 Kg - A380-800 Models, The Radius of Relative Stiffness is shown at 1 016 mm (40 in.) with an LCN of 90. For these conditions the weight on one Wing Landing Gear is 90 000 kg (198 420 lb).



AIRPLANE CHARACTERISTICS

7-8-1 Radius of Relative Stiffness

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

Radius of Relative Stiffness

1. This section gives Radius of Relative Stiffness.

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

RADIUS OF RELATIVE STIFFNESS (L)
VALUES IN INCHES

$$L = 4 \sqrt{\frac{Ed^3}{12(1-\mu^2)k}} = 24.1652 \sqrt{\frac{d^3}{k}}$$

WHERE E = Young's Modulus = 4×10^6 psi
k = Subgrade Modulus, lbf/in³
d = Rigid Pavement Thickness, inches
 μ = Poisson's Ratio = 0.15

d	k=75	k=100	k=150	k=200	k=250	k=300	k=350	k=400	k=550
6.0	31.48	29.30	26.47	24.63	23.30	22.26	21.42	20.72	19.13
6.5	33.43	31.11	28.11	26.16	24.74	23.64	22.74	22.00	20.31
7.0	35.34	32.89	29.72	27.65	26.15	24.99	24.04	23.25	21.47
7.5	37.22	34.63	31.29	29.12	27.54	26.32	25.32	24.49	22.61
8.0	39.06	36.35	32.85	30.57	28.91	27.62	26.58	25.70	23.74
8.5	40.88	38.04	34.37	31.99	30.25	28.91	27.81	26.90	24.84
9.0	42.67	39.71	35.88	33.39	31.58	30.17	29.03	28.08	25.93
9.5	44.43	41.35	37.36	34.77	32.89	31.42	30.23	29.24	27.00
10.0	46.18	42.97	38.83	36.14	34.17	32.65	31.42	30.39	28.06
10.5	47.90	44.57	40.28	37.48	35.45	33.87	32.59	31.52	29.11
11.0	49.60	46.16	41.71	38.81	36.71	35.07	33.75	32.64	30.14
11.5	51.28	47.72	43.12	40.13	37.95	36.26	34.89	33.74	31.16
12.0	52.94	49.27	44.52	41.43	39.18	37.44	36.02	34.84	32.17
12.5	54.59	50.80	45.90	42.72	40.40	38.60	37.14	35.92	33.17
13.0	56.22	52.32	47.27	43.99	41.61	39.75	38.25	36.99	34.16
13.5	57.83	53.82	48.63	45.26	42.80	40.89	39.35	38.06	35.14
14.0	59.43	55.31	49.98	46.51	43.98	42.02	40.44	39.11	36.12
14.5	61.02	56.78	51.31	47.75	45.16	43.15	41.51	40.15	37.08
15.0	62.59	58.25	52.63	48.98	46.32	44.26	42.58	41.19	38.03
15.5	64.15	59.70	53.94	50.20	47.47	45.36	43.64	42.21	38.98
16.0	65.69	61.13	55.24	51.41	48.62	46.45	44.70	43.23	39.92
16.5	67.23	62.56	56.53	52.61	49.75	47.54	45.74	44.24	40.85
17.0	68.75	63.98	57.81	53.80	50.88	48.61	46.77	45.24	41.78
17.5	70.26	65.38	59.08	54.98	52.00	49.68	47.80	46.23	42.70
18.0	71.76	66.78	60.34	56.15	53.11	50.74	48.82	47.22	43.61
19.0	74.73	69.54	62.84	58.48	55.31	52.84	50.84	49.17	45.41
20.0	77.66	72.27	65.30	60.77	57.47	54.91	52.84	51.10	47.19
21.0	80.55	74.96	67.74	63.04	59.62	56.96	54.81	53.01	48.95
22.0	83.41	77.63	70.14	65.28	61.73	58.98	56.75	54.89	50.69
23.0	86.24	80.26	72.52	67.49	63.83	60.98	58.68	56.75	52.41
24.0	89.04	82.86	74.87	69.68	65.90	62.96	60.58	58.59	54.11
25.0	91.81	85.44	77.20	71.84	67.95	64.92	62.46	60.41	55.79

REFERENCE: PORTLAND CEMENT ASSOCIATION

L_AC_070801_1_0010101_01_00

Radius of Relative Stiffness
FIGURE 1



AIRPLANE CHARACTERISTICS

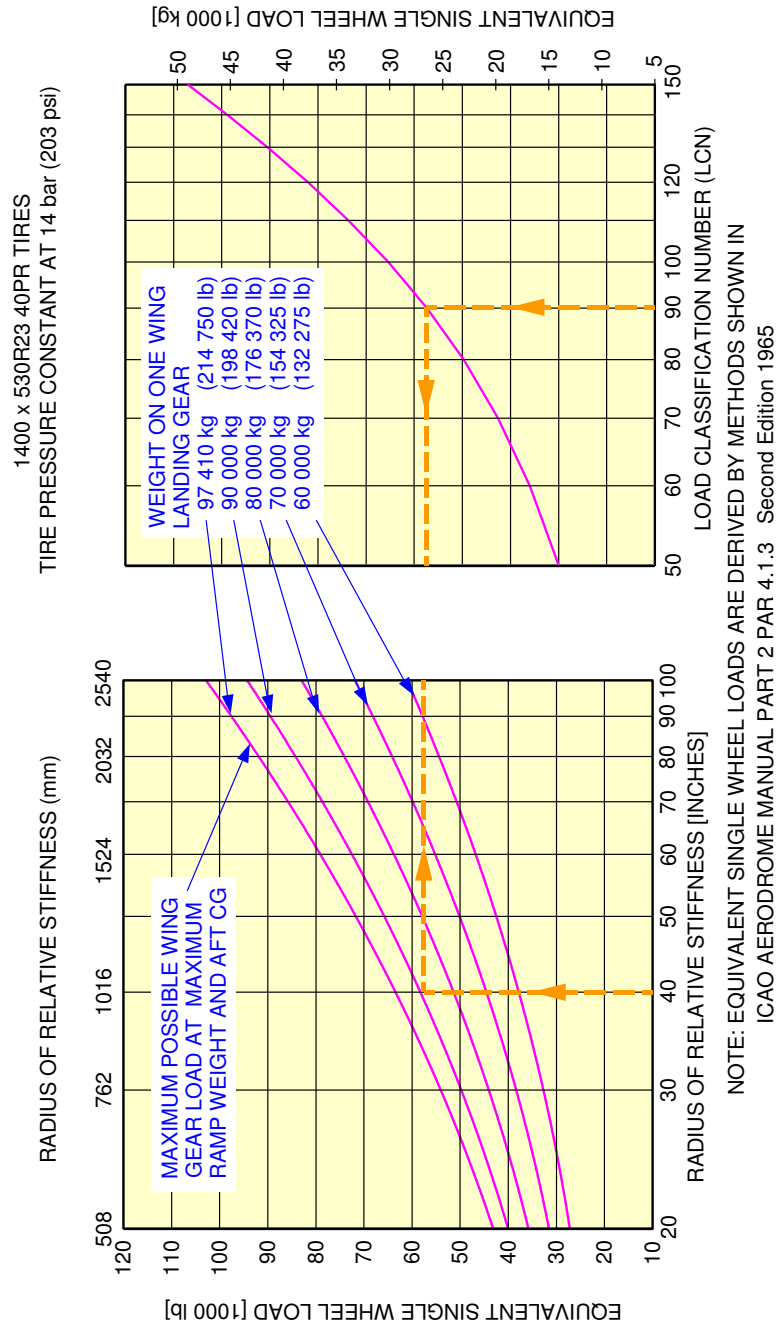
7-8-2 Rigid Pavement Requirements - LCN Conversion

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

Rigid Pavement Requirements - LCN Conversion - Pax

1. This section gives Rigid Pavement Requirements - LCN Conversion.

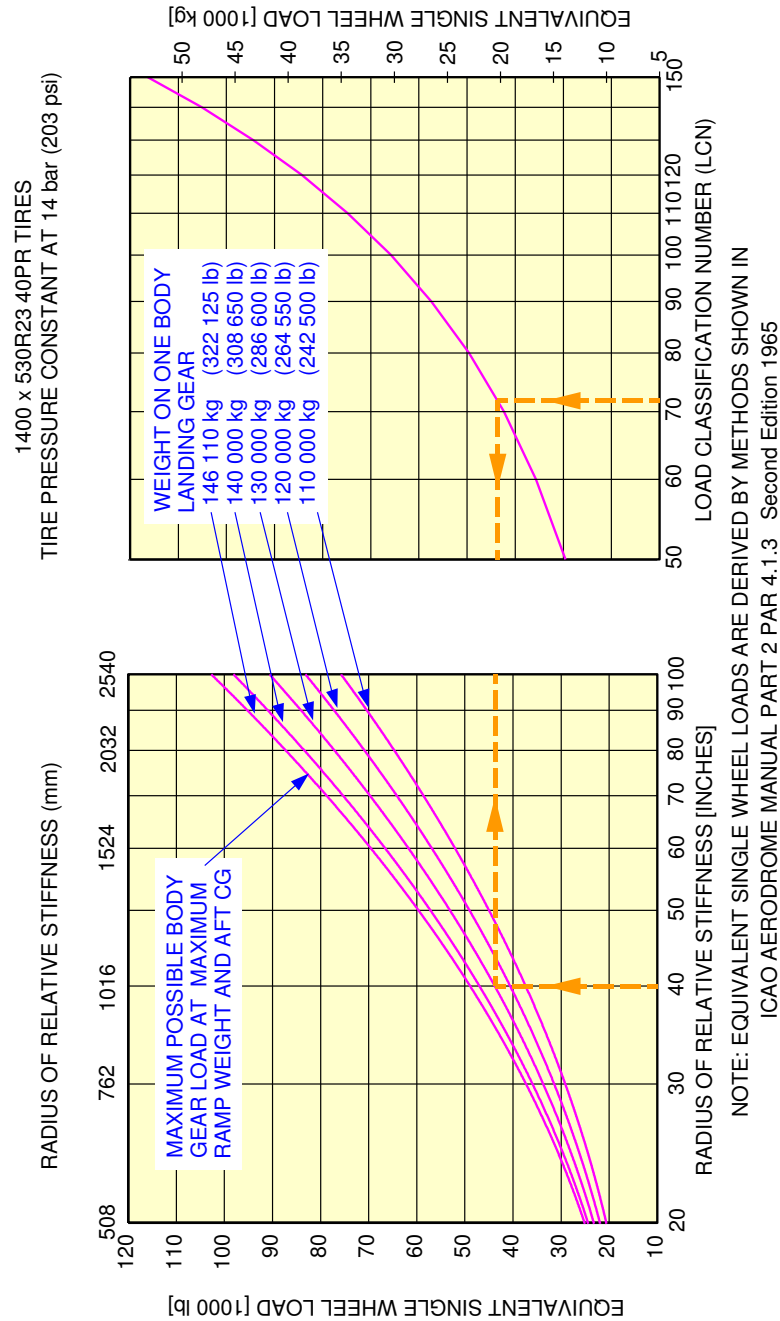
****ON A/C A380-800 Models**



L_AC_070802_1_0090101_01_00

Rigid Pavement Requirements LCN - 4 Wheel Bogie
MRW 512 000 kg - A380-800 Models
FIGURE 1

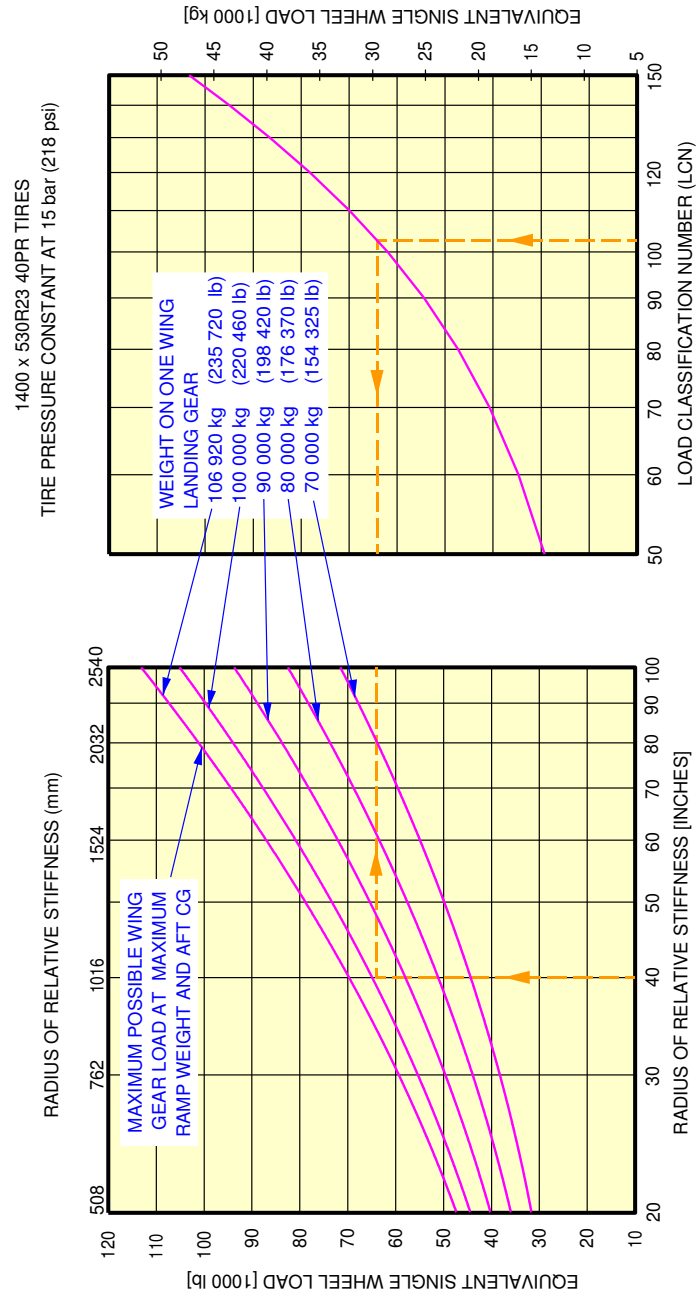
****ON A/C A380-800 Models**



L_AC_070802_1_0100101_01_00

Rigid Pavement Requirements LCN - 6 Wheel Bogie
MRW 512 000 kg - A380-800 Models
FIGURE 2

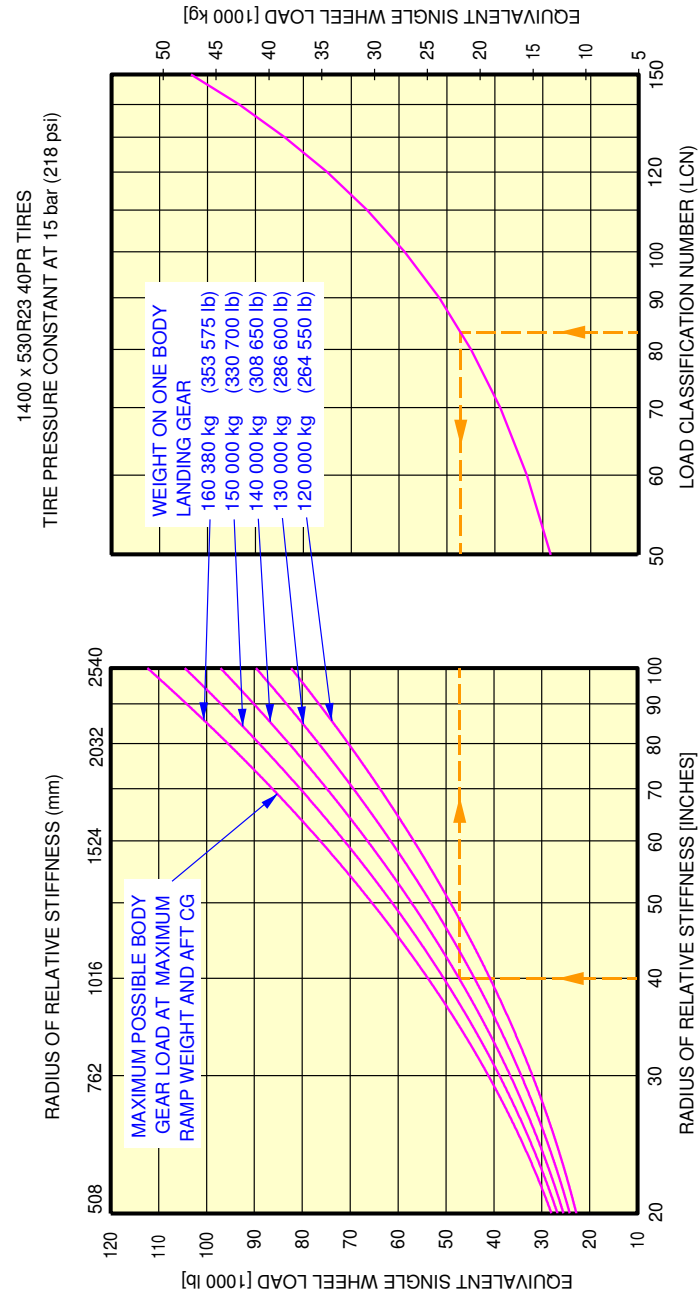
****ON A/C A380-800 Models**



L_AC_070802_1_0010101_01_01

Rigid Pavement Requirements LCN - 4 Wheel Bogie
MRW 562 000 kg - A380-800 Models
FIGURE 3

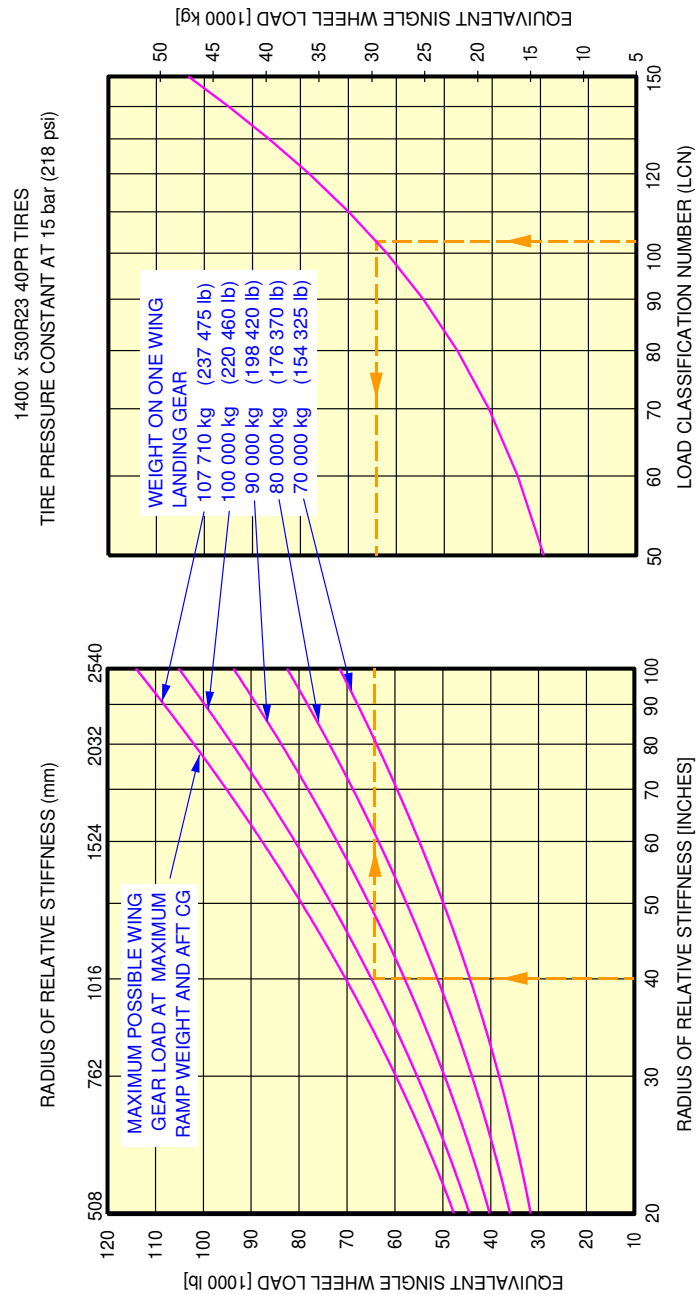
****ON A/C A380-800 Models**



L_AC_070802_1_0020101_01_01

Rigid Pavement Requirements LCN - 6 Wheel Bogie
MRW 562 000 kg - A380-800 Models
FIGURE 4

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

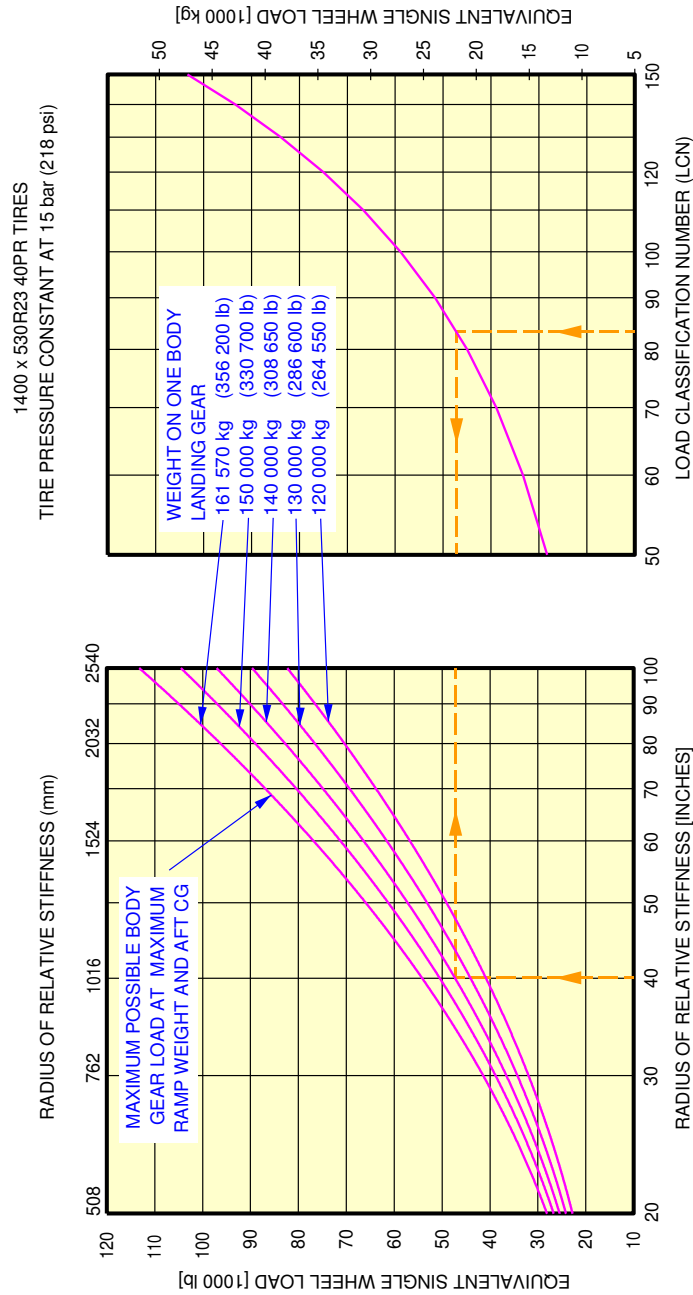


NOTE: EQUIVALENT SINGLE WHEEL LOADS ARE DERIVED BY METHODS SHOWN IN
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L_AC_070802_1_0050101_01_00

Rigid Pavement Requirements LCN - 4 Wheel Bogie
MRW 571 000 kg - A380-800 Models
FIGURE 5

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



L_AC_070802_1_0060101_01_00

Rigid Pavement Requirements LCN - 6 Wheel Bogie
MRW 571 000 kg - A380-800 Models
FIGURE 6



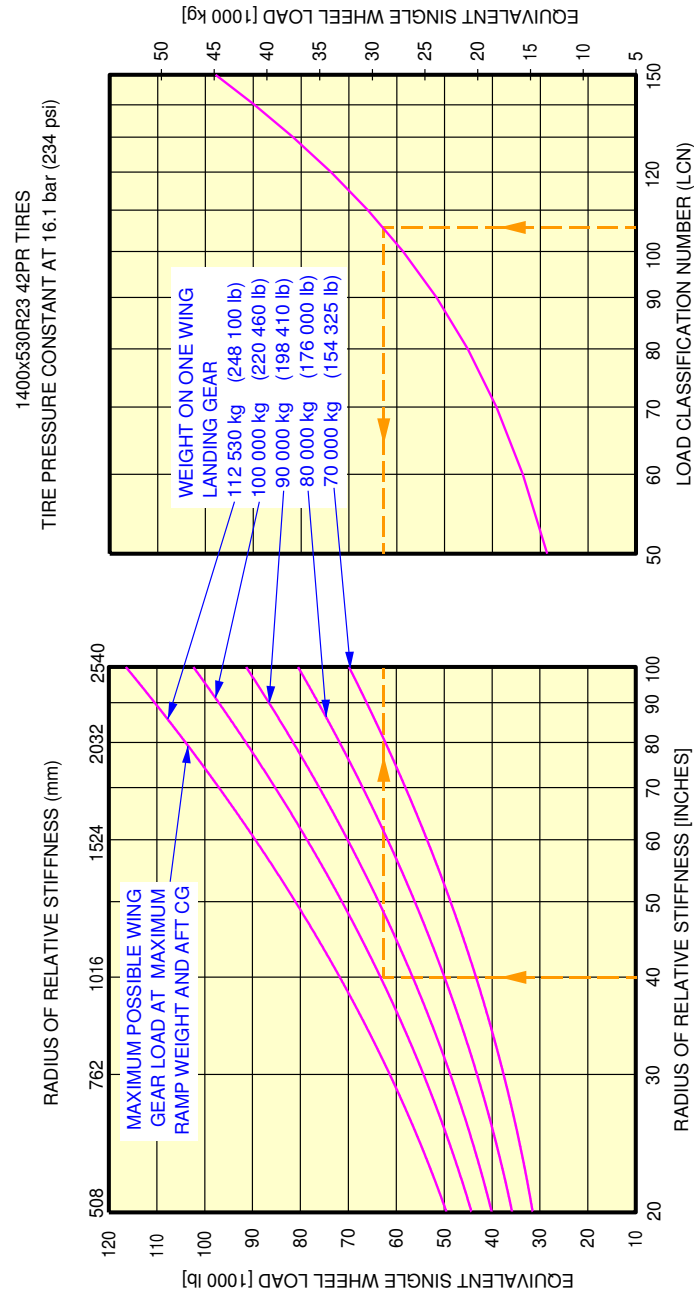
AIRPLANE CHARACTERISTICS

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

Rigid Pavement Requirements - LCN Conversion - Freighter

1. This section gives Rigid Pavement Requirements LCN.

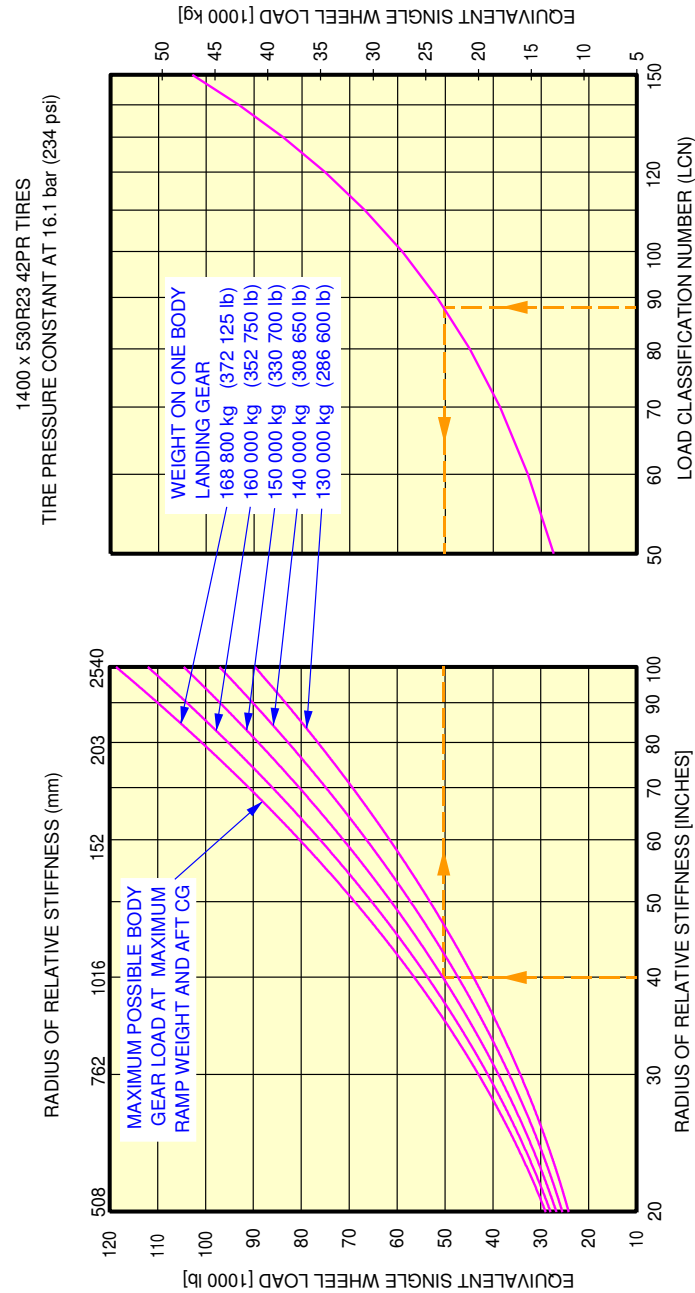
****ON A/C A380-800F Models**



L_AC_070802_1_0030101_01_01

Rigid Pavement Requirements LCN - 4 Wheel Bogie
MRW 592 000 kg - A380-800F Models
FIGURE 7

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

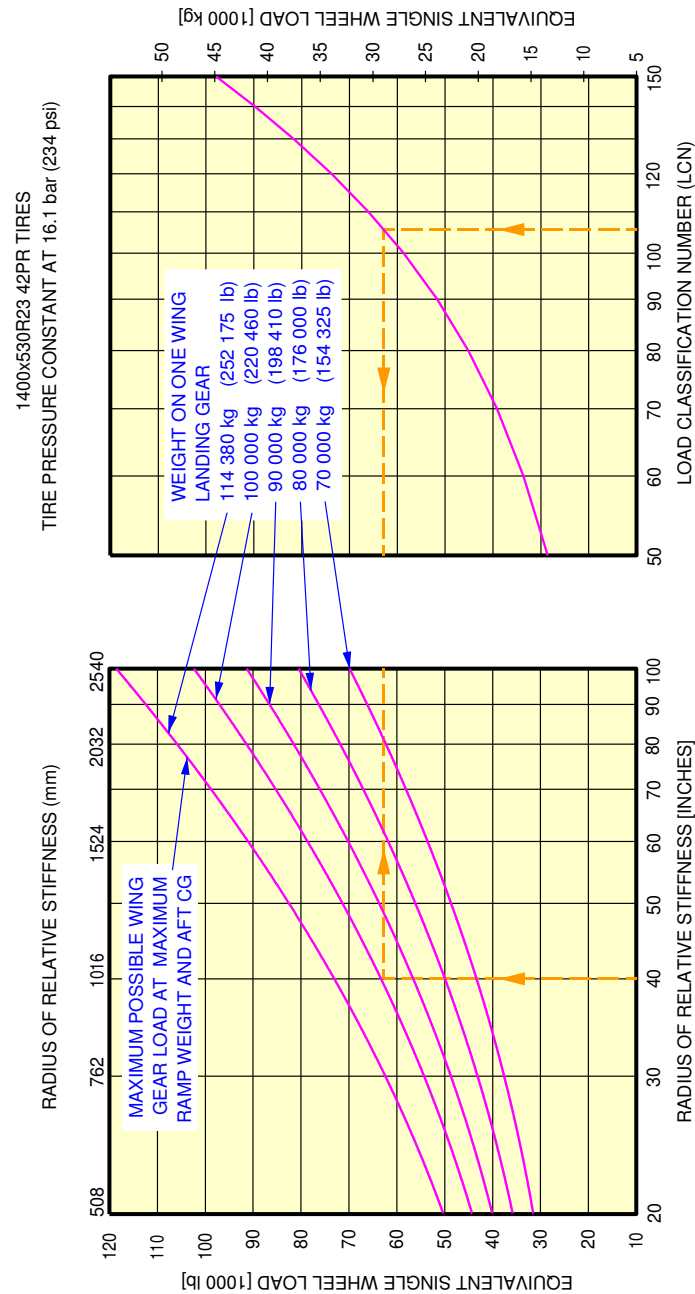


NOTE: EQUIVALENT SINGLE WHEEL LOADS ARE DERIVED BY METHODS SHOWN IN
ICAO AERODROME MANUAL PART 2 PAR 4.1.3 Second Edition 1965

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Rigid Pavement Requirements LCN - 6 Wheel Bogie
MRW 592 000 kg - A380-800F Models
FIGURE 8

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

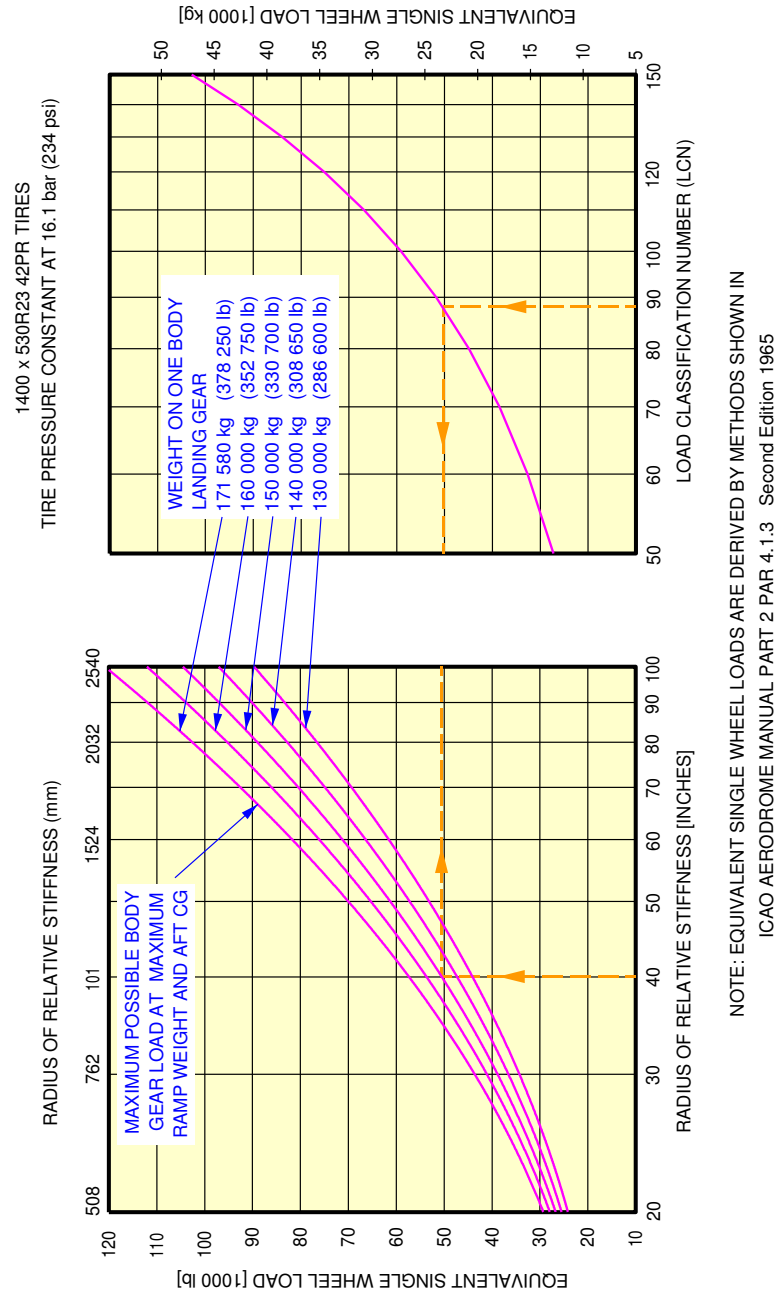


NOTE: EQUIVALENT SINGLE WHEEL LOADS ARE DERIVED BY METHODS SHOWN IN
ICAO AERODROME MANUAL PART 2 PAR 4.1.3 Second Edition 1965

L_AC_070802_1_0070101_01_00

Rigid Pavement Requirements LCN - 4 Wheel Bogie
MRW 602 000 kg - A380-800F Models
FIGURE 9

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



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Rigid Pavement Requirements LCN - 6 Wheel Bogie
MRW 602 000 kg - A380-800F Models
FIGURE 10

7-8-3 Radius of Relative Stiffness (Other values of E and μ)****ON A/C A380-800 Models A380-800F Models**Radius of Relative Stiffness (Other values of E and μ)**1. General**

The chart of Section 7-8-1, Figure: Radius of Relative Stiffness, presents "L" values based on Young's Modulus (E) of 4 000 000 psi and Poisson's Ratio (μ) of 0.15.

To find "L" values based on other values of E and μ , see section 7-8-4, Figure: Radius of Relative Stiffness (other values of E and μ).

For example, to find an "L" value based on an E of 3 000 000 psi, the "E" factor of 0.931 is multiplied by the "L" value found in table of Section 7-8-1, Figure: Radius of Relative Stiffness.

The effect of variations of μ on the "L" value is treated in a similar manner.

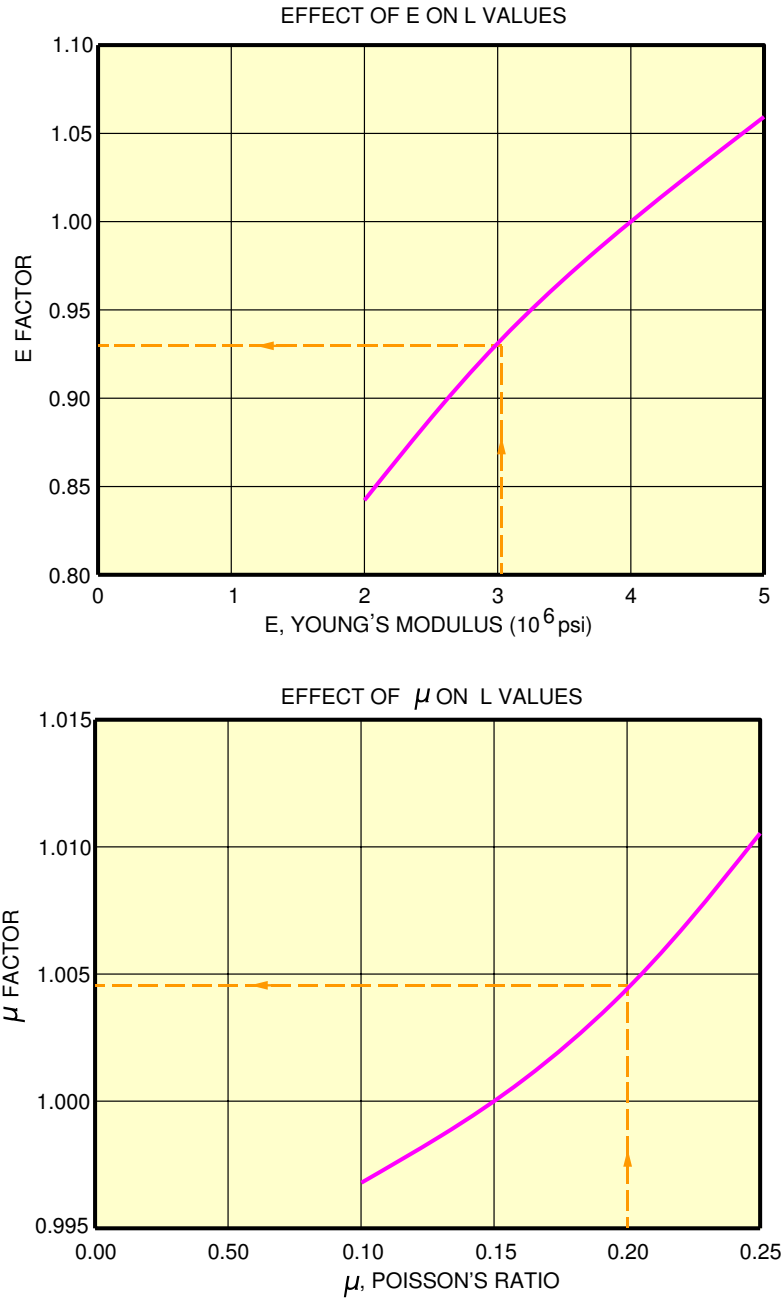
7-8-4 Radius of Relative Stiffness (Other values of E and μ)

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

Radius of Relative Stiffness (Other values of E and μ)

1. This section gives Radius of Relative Stiffness.

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



NOTE: BOTH CURVES ON THIS PAGE ARE USED TO ADJUST THE L VALUES OF TABLE 7-8-1

L_AC_070804_1_0010101_01_00

Radius of Relative Stiffness
FIGURE 1

7-9-0 ACN/PCN Reporting System****ON A/C A380-800 Models A380-800F Models**ACN/PCN Reporting System**1. General**

To find the ACN of an aircraft on flexible or rigid pavement, the aircraft gross weight and the subgrade strength must be known.

A380-800 model:

In the example shown in Section 7-9-1, Figure: Aircraft Classification Number - Flexible Pavement - MRW 512 000 kg - A380-800 Models, for an Aircraft Gross Weight of 440 000 kg (970 035 lb) and medium subgrade strength (code B), the ACN for the flexible pavement is 46.

In the example shown in Section 7-9-1, Figure: Aircraft Classification Number - Flexible Pavement - MRW 562 000 kg - A380-800 Models, for an Aircraft Gross Weight of 510 000 kg (1 124 360 lb) and medium subgrade strength (code B), the ACN for the flexible pavement is 56.

In the example shown in Section 7-9-1, Figure: Aircraft Classification Number - Flexible Pavement - MRW 571 000 kg - A380-800 Models, for an Aircraft Gross Weight of 510 000 kg (1 124 360 lb) and medium subgrade strength (code B), the ACN for the flexible pavement is 55.

In the example shown in Section 7-9-2, Figure: Aircraft Classification Number - Flexible Pavement - MRW 512 000 kg - A380-800 Models, for an Aircraft Gross Weight of 440 000 kg (970 035 lb) and medium subgrade strength (code B), the ACN for the rigid pavement is 46.

In the example shown in Section 7-9-2, Figure: Aircraft Classification Number - Flexible Pavement - MRW 562 000 kg - A380-800 Models, for an Aircraft Gross Weight of 510 000 kg (1 124 360 lb) and medium subgrade strength (code B), the ACN for the rigid pavement is 58.5.

In the example shown in Section 7-9-2, Figure: Aircraft Classification Number - Flexible Pavement - MRW 571 000 kg - A380-800 Models, for an Aircraft Gross Weight of 510 000 kg (1 124 360 lb) and medium subgrade strength (code B), the ACN for the flexible pavement is 58.

A380-800F model:

In the example shown in Section 7-9-1, Figure: Aircraft Classification Number - Flexible Pavement - MRW 592 000 kg - A380-800F Models, for an Aircraft Gross Weight of 510 000 (1 124 360 lb) and medium subgrade strength (code B), the ACN for the flexible pavement is 55.

In the example shown in Section 7-9-1, Figure: Aircraft Classification Number - Flexible Pavement - MRW 602 000 Kg - A380-800F Models, for an Aircraft Gross Weight of 510 000 (1 124 360 lb) and medium subgrade strength (code B), the ACN for the rigid pavement is 55.

In the example shown in Section 7-9-2, Figure: Aircraft Classification Number - Flexible Pavement - MRW 592 000 Kg - A380-800F Models, for an Aircraft Gross Weight of 510 000 (1 124 360 lb) and medium subgrade strength (code B), the ACN for the rigid pavement is 60.

In the example shown in Section 7-9-2, Figure: Aircraft Classification Number - Flexible Pavement - MRW 602 000 Kg - A380-800F Models, for an Aircraft Gross Weight of 510 000 (1 124 360 lb) and medium subgrade strength (code B), the ACN for the rigid pavement is 60.

NOTE : An aircraft with an ACN equal to or less than the reported PCN can operate on that pavement, subject to a limitation on the tire pressure. (Ref: ICAO Aerodrome Design Manual Part 3 Chapter 1 Second Edition 1983)



AIRPLANE CHARACTERISTICS

7-9-1 Aircraft Classification Number - Flexible Pavement

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

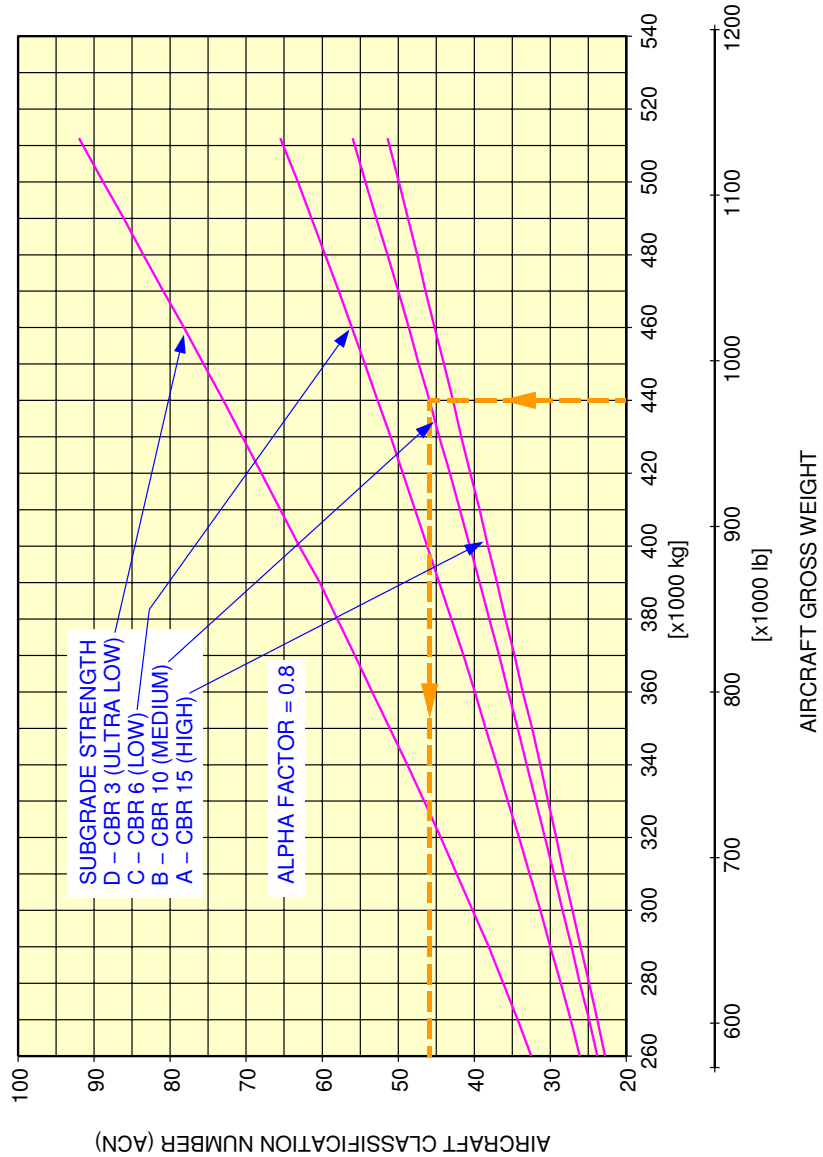
Aircraft Classification Number - Flexible Pavement - Pax

1. This section gives the Aircraft Classification Number - Flexible Pavement.

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

ACN WAS DETERMINED AS REFERENCED IN
ICAO AERODROME DESIGN MANUAL PART 3
CHAPTER 1 SECOND EDITION 1983.
CG USED FOR ACN CALCULATIONS: 43 % MAC.
See Section 7-4-1 Figure: Landing Gear Loading
on Pavement – MRW 512 000 kg – A380-800 Models

1400 x 530R23 40PR TIRES
TIRE PRESSURE CONSTANT AT 14 bar (203 psi)

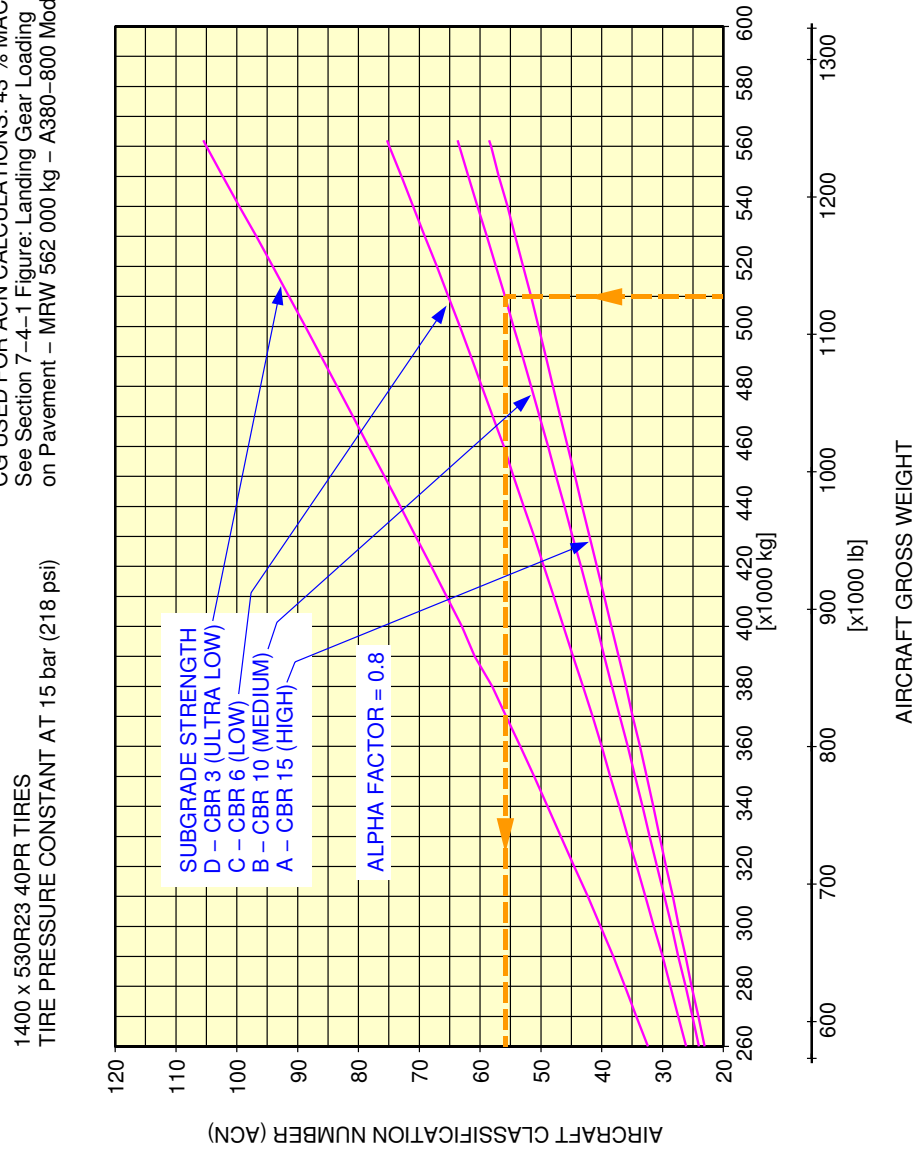


L_AC_070901_1_0050101_01_00

Aircraft Classification Number - Flexible Pavement
MRW 512 000 kg - A380-800 Models
FIGURE 1

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

ACN WAS DETERMINED AS REFERENCED IN
ICAO AERODROME DESIGN MANUAL PART 3
CHAPTER 1 SECOND EDITION 1983.
CG USED FOR ACN CALCULATIONS: 43 % MAC.
See Section 7-4-1 Figure: Landing Gear Loading
on Pavement – MRW 562 000 kg – A380-800 Models



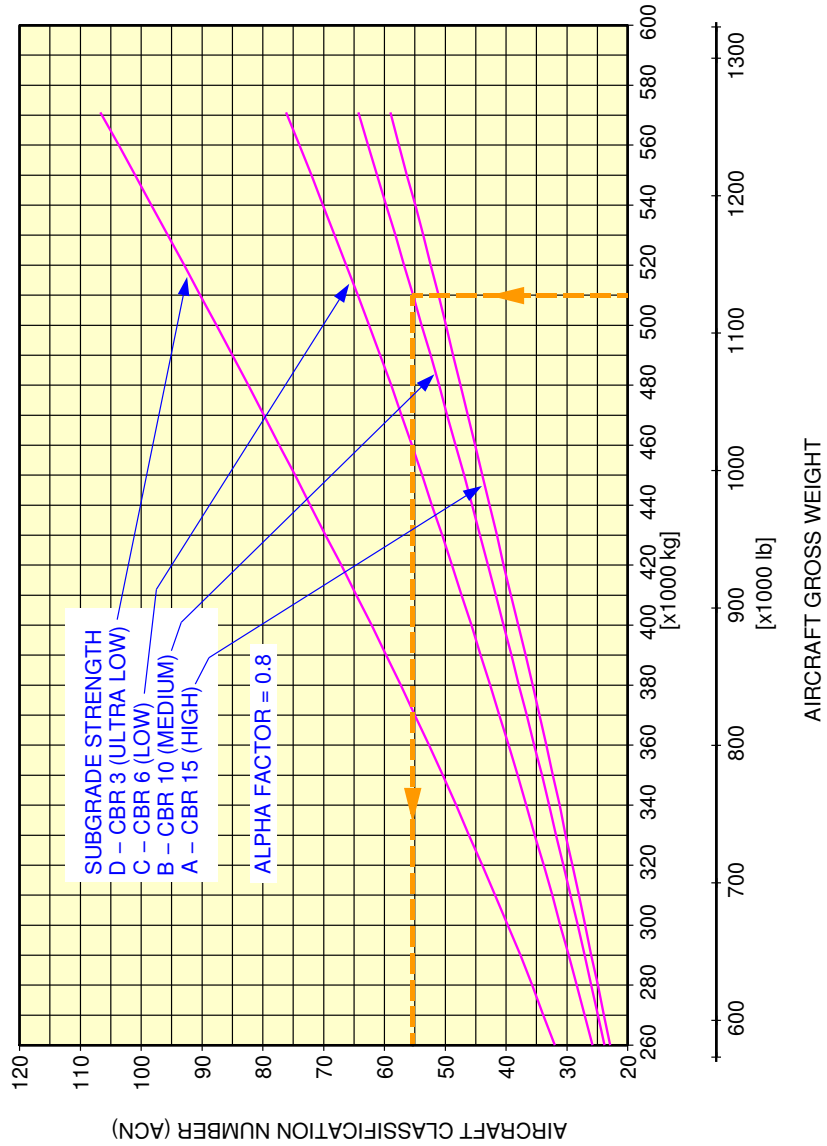
L_AC_070901_1_0060101_01_00

Aircraft Classification Number - Flexible Pavement
MRW 562 000 kg - A380-800 Models
FIGURE 2

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

ACN WAS DETERMINED AS REFERENCED IN
ICAO AERODROME DESIGN MANUAL PART 3
CHAPTER 1 SECOND EDITION 1983.
CG USED FOR ACN CALCULATIONS: 41 % MAC.
See Section 7-4-1 Figure: Landing Gear Loading
on Pavement – MRW 571 000 kg – A380-800 Models

1400 x 530R23 40PR TIRES
TIRE PRESSURE CONSTANT AT 15 bar (218 psi)



L_AC_070901_1_0070101_01_00

Aircraft Classification Number - Flexible Pavement
MRW 571 000 kg - A380-800 Models
FIGURE 3



AIRPLANE CHARACTERISTICS

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

Aircraft Classification Number - Flexible Pavement - Freighter

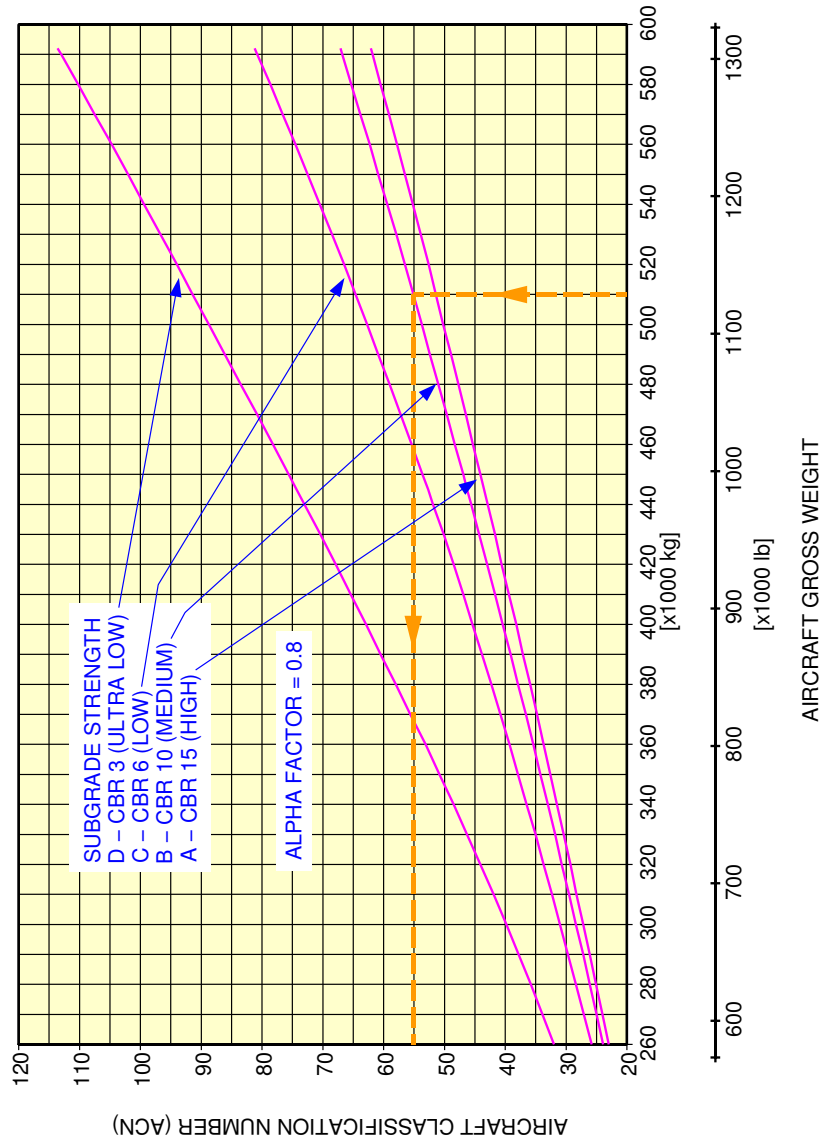
1. This section gives the Aircraft Classification Number - Flexible Pavement.

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

ACN WAS DETERMINED AS REFERENCED IN
ICAO AERODROME DESIGN MANUAL PART 3
CHAPTER 1 SECOND EDITION 1983.
CG USED FOR ACN CALCULATIONS: 42.8 % MAC.
See Section 7-4-1 Figure: Landing Gear Loading
on Pavement - MRW 592 000 kg - A380-800F Models

1400 x 530R23 42PR TIRES

TIRE PRESSURE CONSTANT AT 16.1 bar (234 psi)

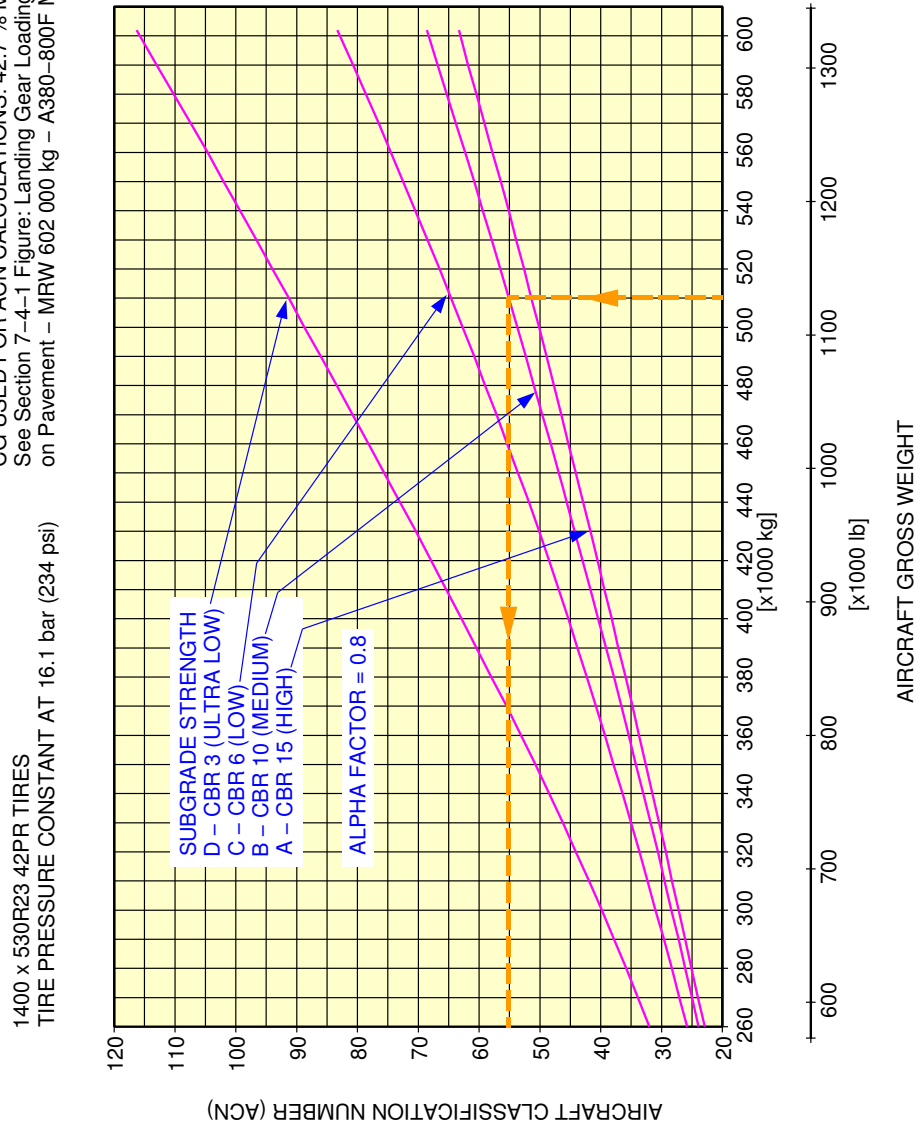


L_AC_070901_1_0080101_01_00

Aircraft Classification Number - Flexible Pavement
MRW 592 000 kg - A380-800F Models
FIGURE 4

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

ACN WAS DETERMINED AS REFERENCED IN
ICAO AERODROME DESIGN MANUAL PART 3
CHAPTER 1 SECOND EDITION 1983.
CG USED FOR ACN CALCULATIONS: 42.7 % MAC.
See Section 7-4-1 Figure: Landing Gear Loading
on Pavement – MRW 602 000 kg – A380-800F Models



L_AC_070901_1_0090101_01_00

Aircraft Classification Number - Flexible Pavement
MRW 602 000 kg - A380-800F Models
FIGURE 5



AIRPLANE CHARACTERISTICS

7-9-2 Aircraft Classification Number - Rigid Pavement

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

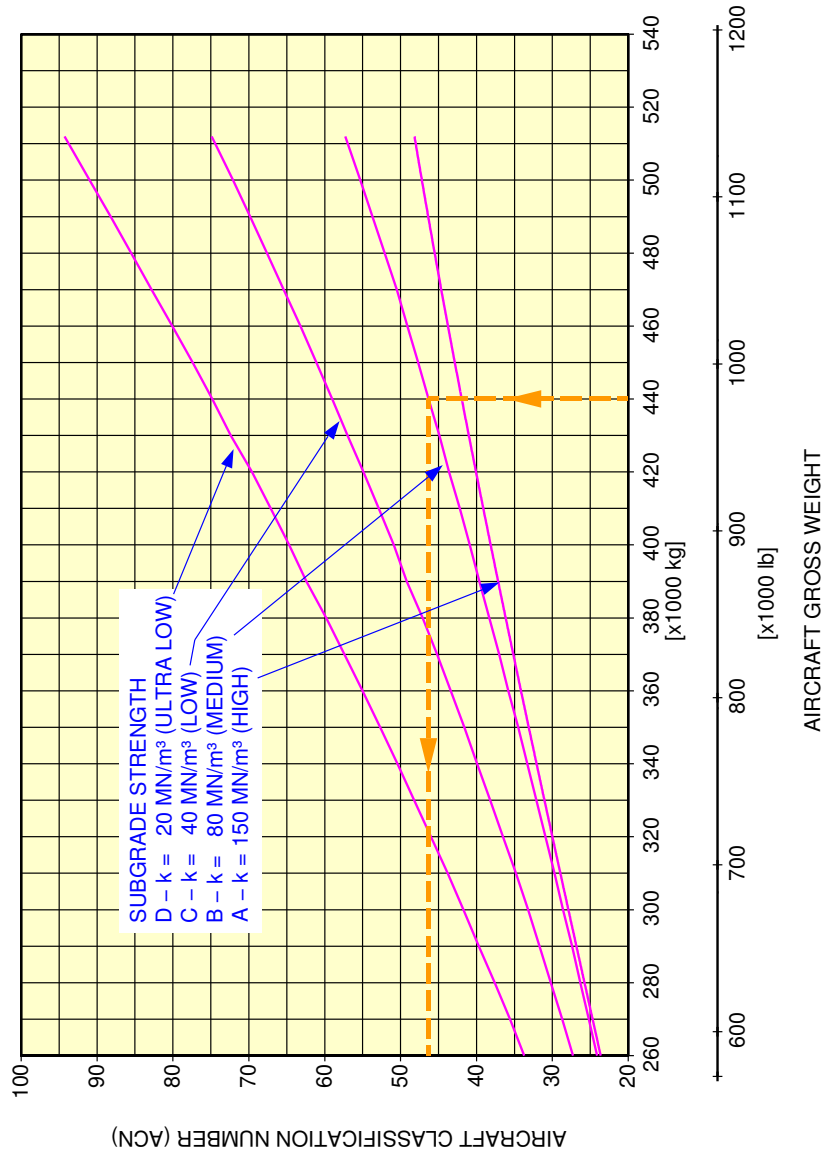
Aircraft Classification Number - Rigid Pavement - Pax

1. This section gives the Aircraft Classification Number - Rigid Pavement.

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

ACN WAS DETERMINED AS REFERENCED IN
ICAO AERODROME DESIGN MANUAL PART 3
CHAPTER 1 SECOND EDITION 1983.
CG USED FOR ACN CALCULATIONS: 43 % MAC.
See Section 7-4-1 Figure: Landing Gear Loading
on Pavement – MRW 512 000 kg – A380-800 Models

1400 x 530R23 40PR TIRES
TIRE PRESSURE CONSTANT AT 14 bar (203 psi)



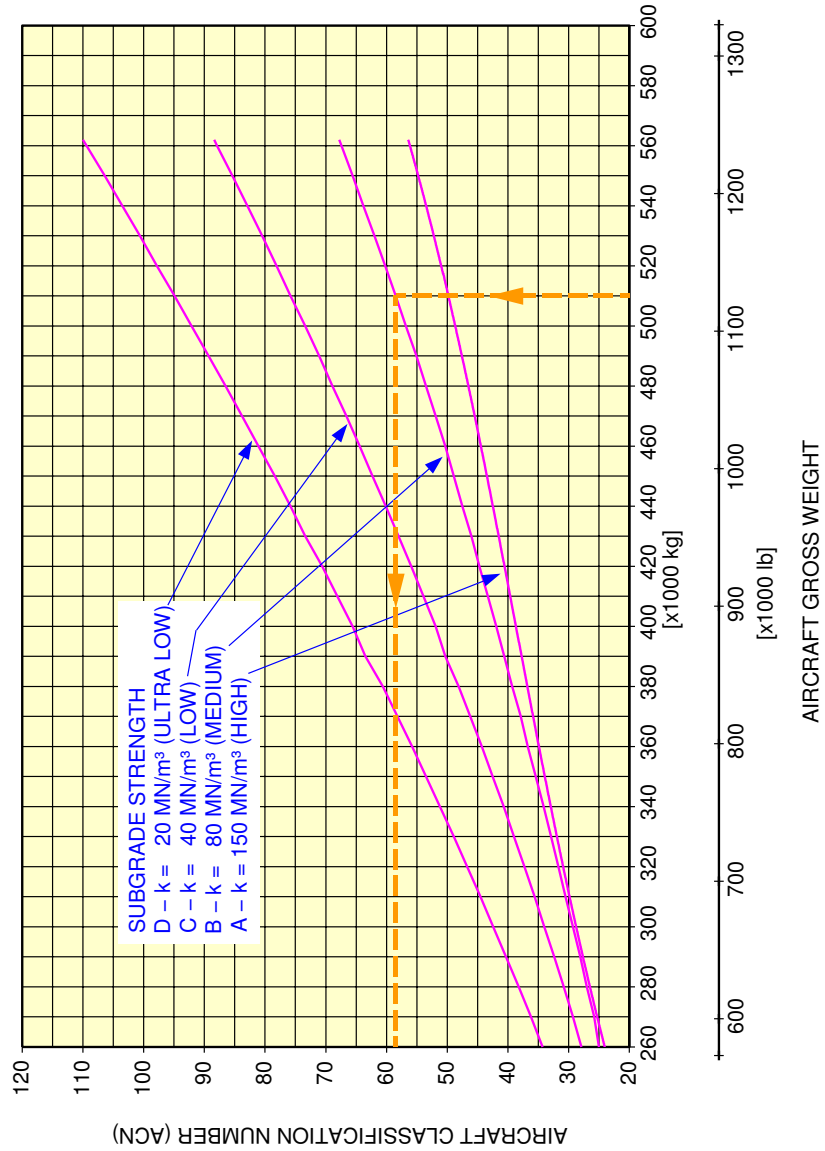
L_AC_070902_1_0050101_01_00

Aircraft Classification Number - Rigid Pavement
MRW 512 000 kg - A380-800 Models
FIGURE 1

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

ACN WAS DETERMINED AS REFERENCED IN
ICAO AERODROME DESIGN MANUAL PART 3
CHAPTER 1 SECOND EDITION 1983.
CG USED FOR ACN CALCULATIONS: 43 % MAC.
See Section 7-4-1 Figure: Landing Gear Loading
on Pavement - MRW 562 000 kg - A380-800 Models

1400 x 530R23 40PR TIRES
TIRE PRESSURE CONSTANT AT 15 bar (218 psi)



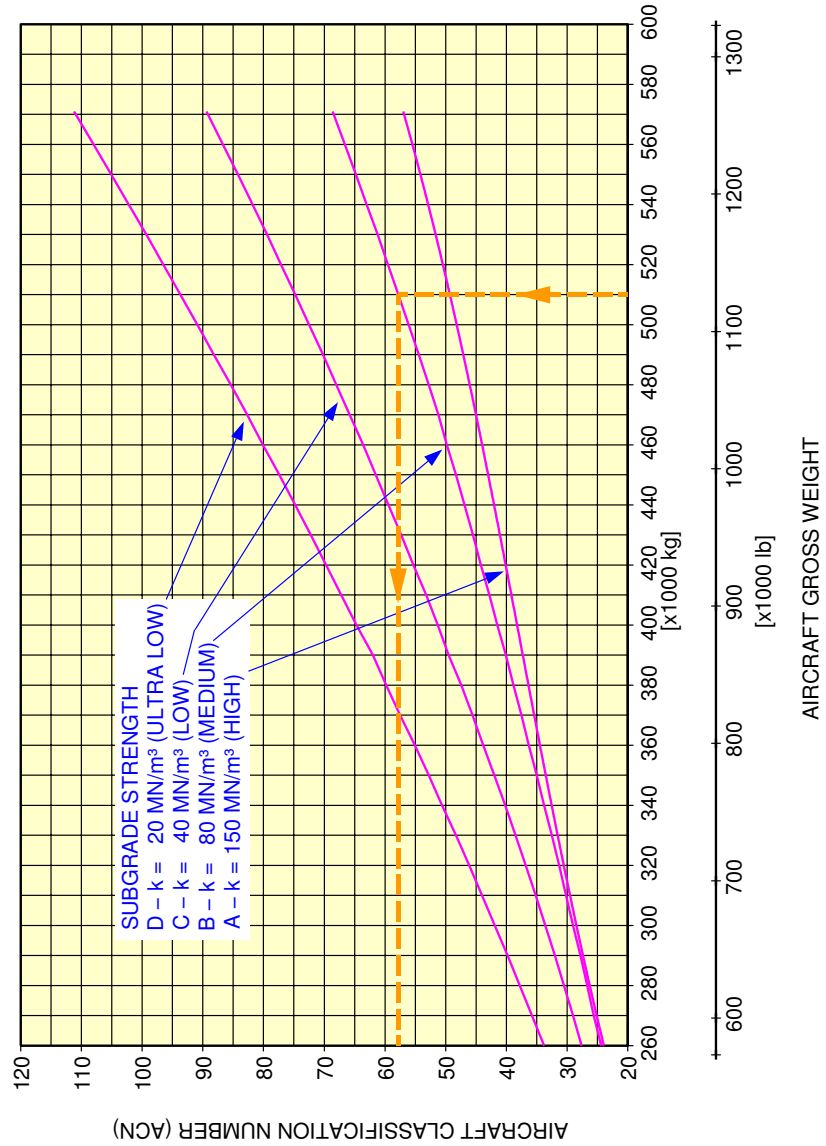
L_AC_070902_1_0060101_01_00

Aircraft Classification Number - Rigid Pavement
MRW 562 000 kg - A380-800 Models
FIGURE 2

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

ACN WAS DETERMINED AS REFERENCED IN
ICAO AERODROME DESIGN MANUAL PART 3
CHAPTER 1 SECOND EDITION 1983.
CG USED FOR ACN CALCULATIONS: 41 % MAC.
See Section 7-4-1 Figure: Landing Gear Loading
on Pavement - MRW 571 000 kg - A380-800 Models

1400 x 530R23 40PR TIRES
TIRE PRESSURE CONSTANT AT 15 bar (218 psi)



L_AC_070902_1_0070101_01_00

Aircraft Classification Number - Rigid Pavement
MRW 571 000 kg - A380-800 Models
FIGURE 3



AIRPLANE CHARACTERISTICS

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

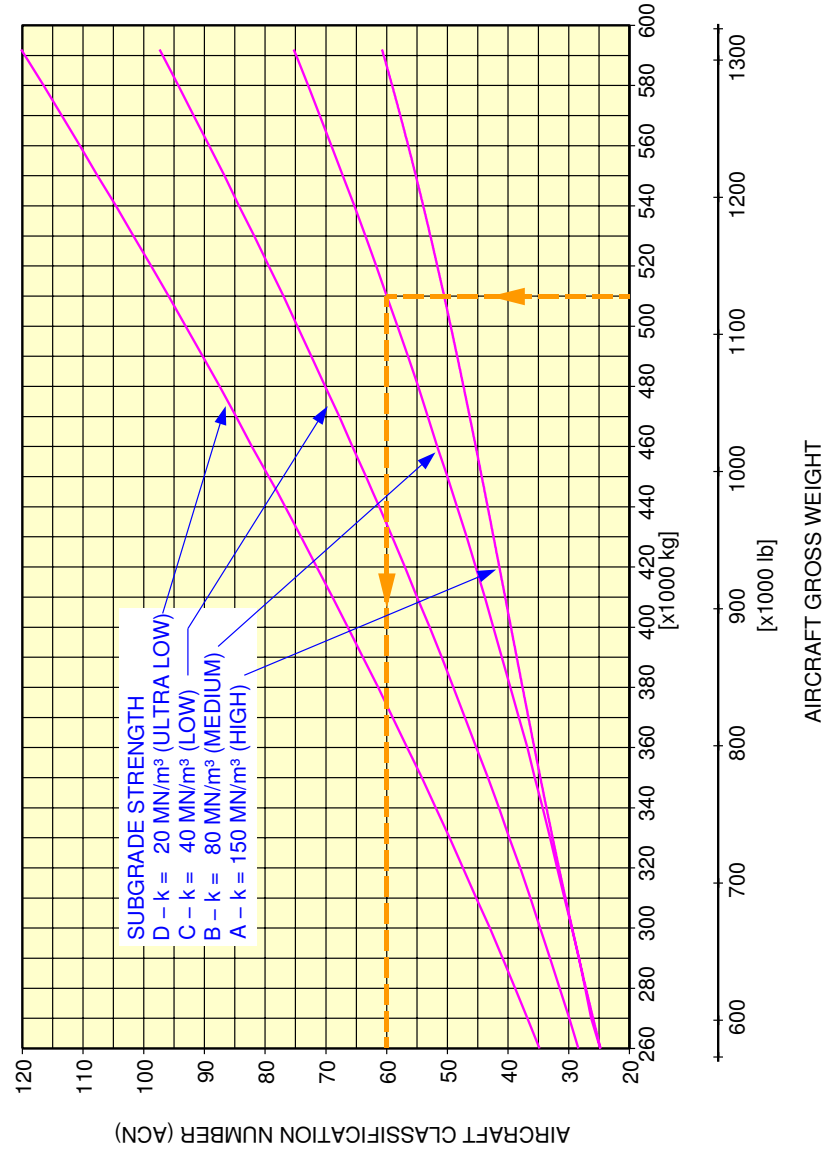
Aircraft Classification Number - Rigid Pavement - Freighter

1. This section gives the Aircraft Classification Number - Rigid Pavement.

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

ACN WAS DETERMINED AS REFERENCED IN
ICAO AERODROME DESIGN MANUAL PART 3
CHAPTER 1 SECOND EDITION 1983.
CG USED FOR ACN CALCULATIONS: 42.8 % MAC.
See Section 7-4-1 Figure: Landing Gear Loading
on Pavement – MRW 592 000 kg – A380-800F Models

1400 x 530R23 42PR TIRES
TIRE PRESSURE CONSTANT AT 16.1 bar (234 psi)



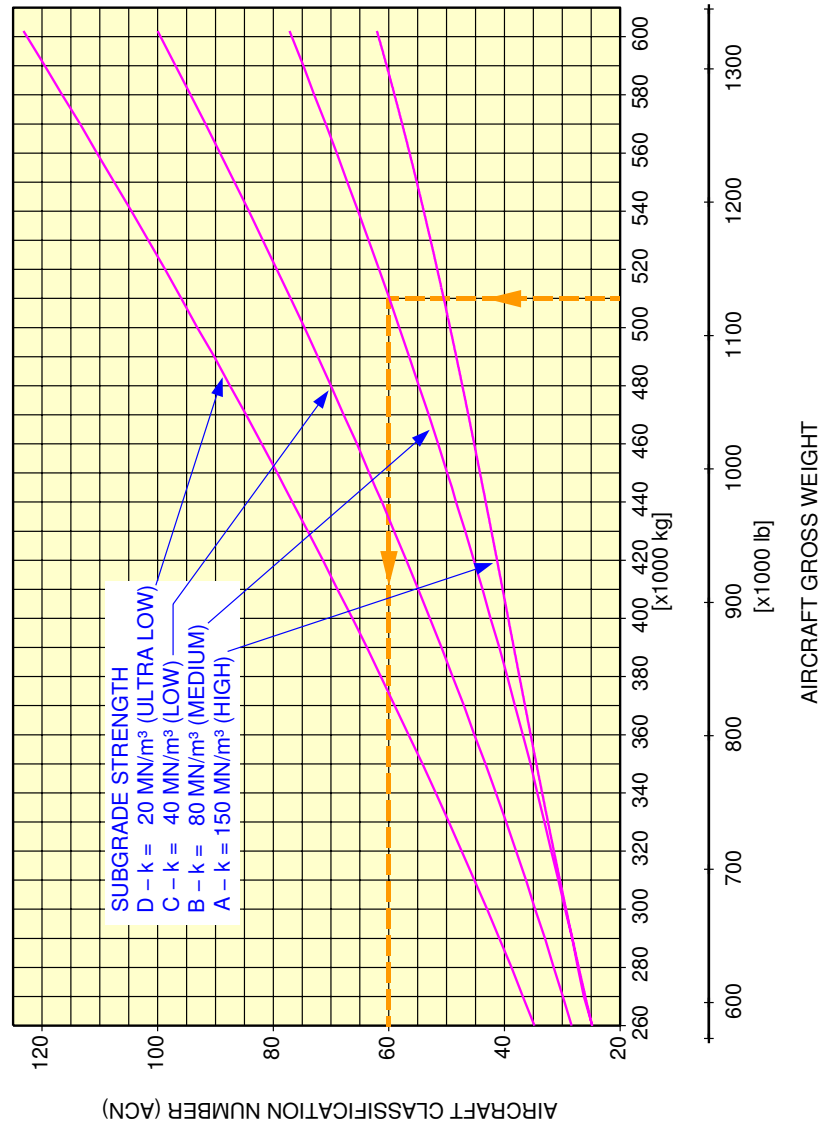
L_AC_070902_1_0080101_01_00

Aircraft Classification Number - Rigid Pavement
MRW 592 000 kg - A380-800F Models
FIGURE 4

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

ACN WAS DETERMINED AS REFERENCED IN
ICAO AERODROME DESIGN MANUAL PART 3
CHAPTER 1 SECOND EDITION 1983.
CG USED FOR ACN CALCULATIONS: 42.7 % MAC.
See Section 7-4-1 Figure: Landing Gear Loading
on Pavement – MRW 602 000 kg – A380-800F Models

1400 x 530R23 42PR TIRES
TIRE PRESSURE CONSTANT AT 16.1 bar (234 psi)



L_AC_070902_1_0090101_01_00

Aircraft Classification Number - Rigid Pavement
MRW 602 000 kg - A380-800F Models
FIGURE 5



AIRPLANE CHARACTERISTICS

DERIVATIVE AIRPLANES

8-1-0 Possible Future Derivative Airplanes

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

Possible Future Derivative Airplanes

1. General

Other versions of the A380 airplane are being studied to satisfy customer requests.

In the future, this program could have new versions:

- Additional passenger capacity,
- Additional cargo modularity,
- New design version,
- Different range or payload.

If these new aircraft definitions are developed, the design and weight will be considered in accordance with airport facilities.



AIRPLANE CHARACTERISTICS

SCALED DRAWINGS

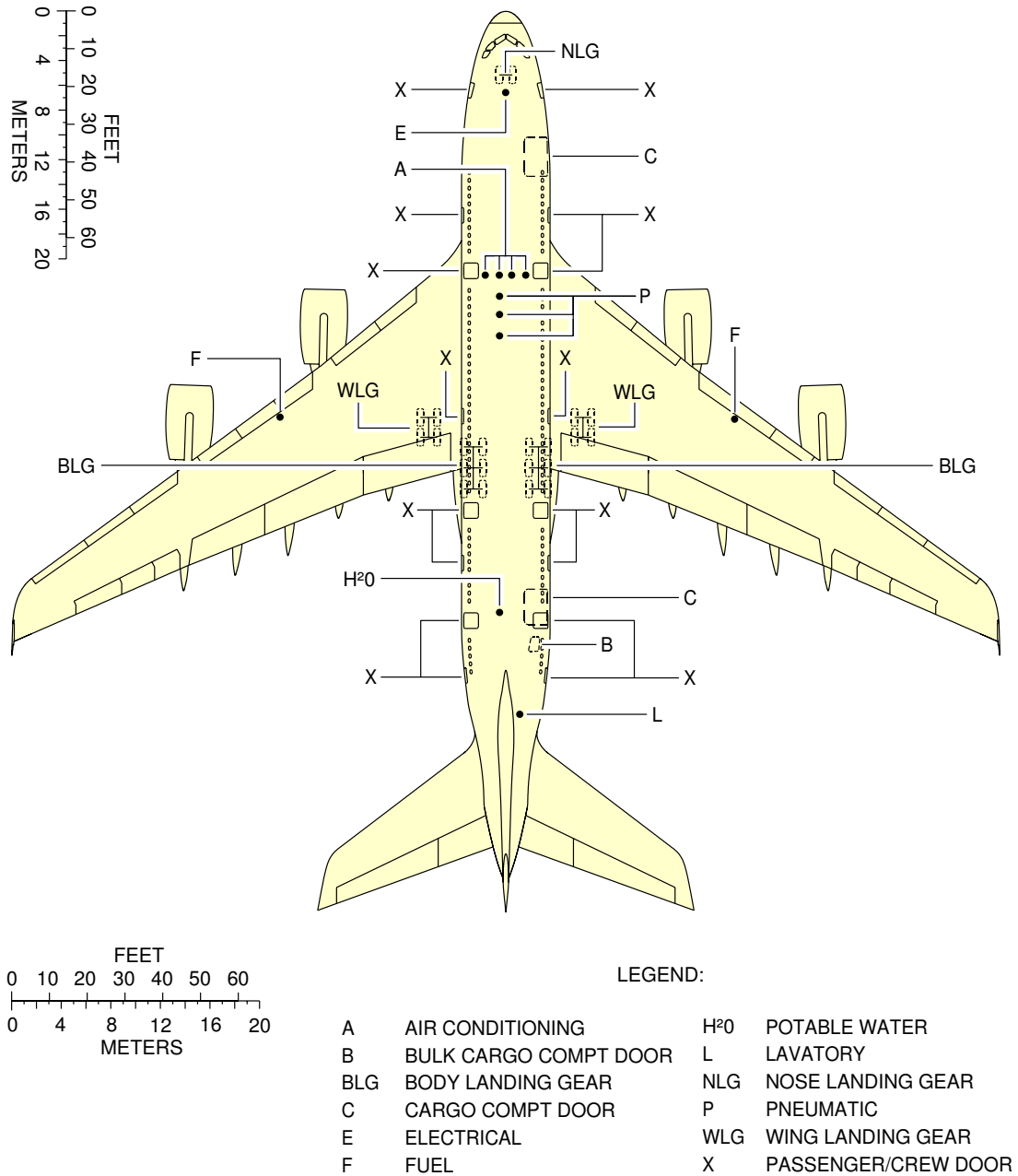
9-1-0 Scaled Drawing - 1 cm. = 500 cm.

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

Scaled Drawing - 1 cm. = 500 cm.

1. This section provides the Scaled Drawing - 1 cm = 500 cm.

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



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

DB1A

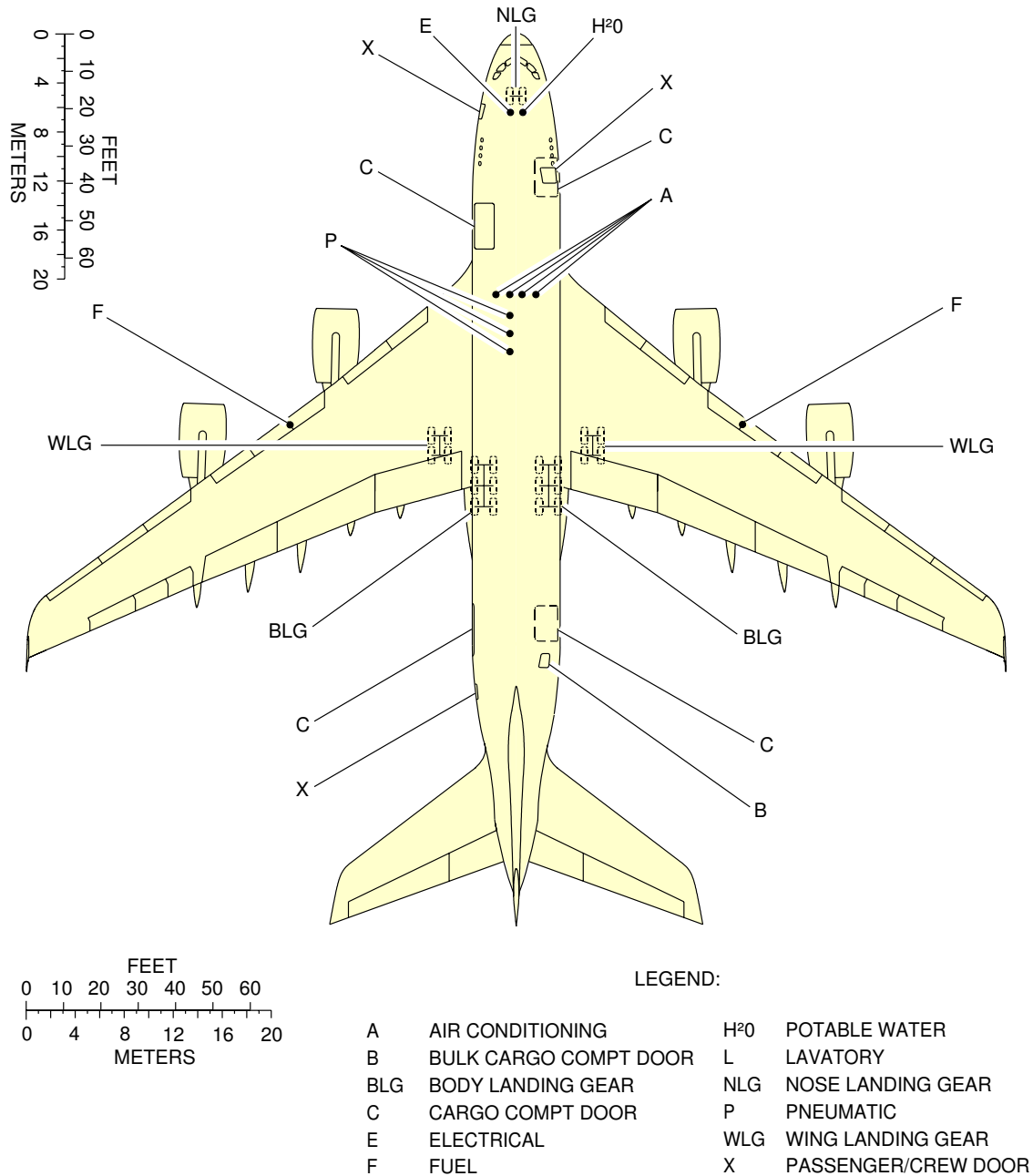
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Scaled Drawing – 1 cm. = 500 cm.

A380-800 Models

FIGURE 1

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



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

DB1A

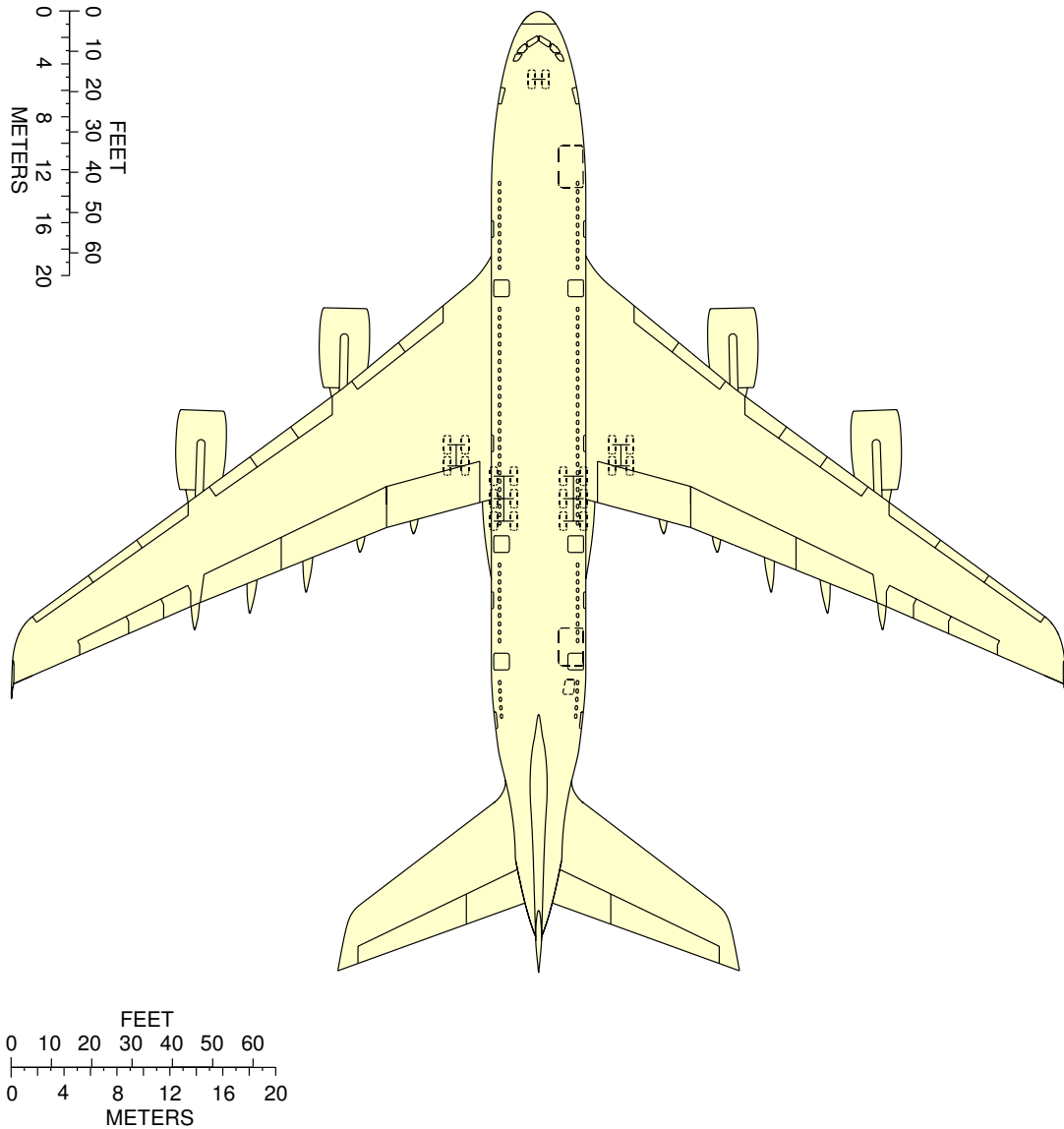
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Scaled Drawing – 1 cm. = 500 cm.

A380-800F Models

FIGURE 2

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



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

DB1A

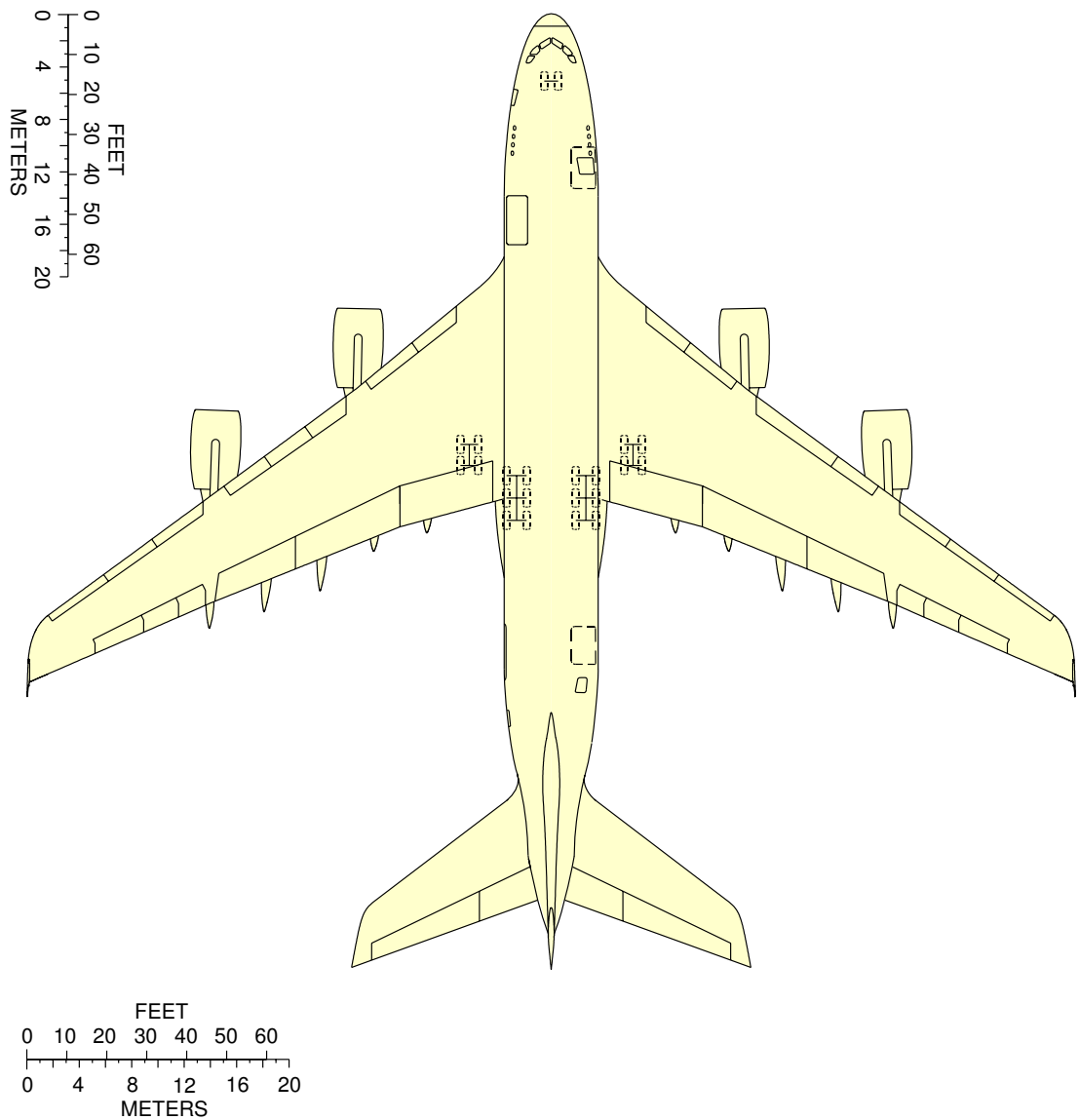
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Scaled Drawing – 1 cm. = 500 cm.

A380-800 Models

FIGURE 3

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



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

DB1A

L_AC_090100_1_0040101_01_02

Scaled Drawing – 1 cm. = 500 cm.
A380-800F Models
FIGURE 4



AIRPLANE CHARACTERISTICS

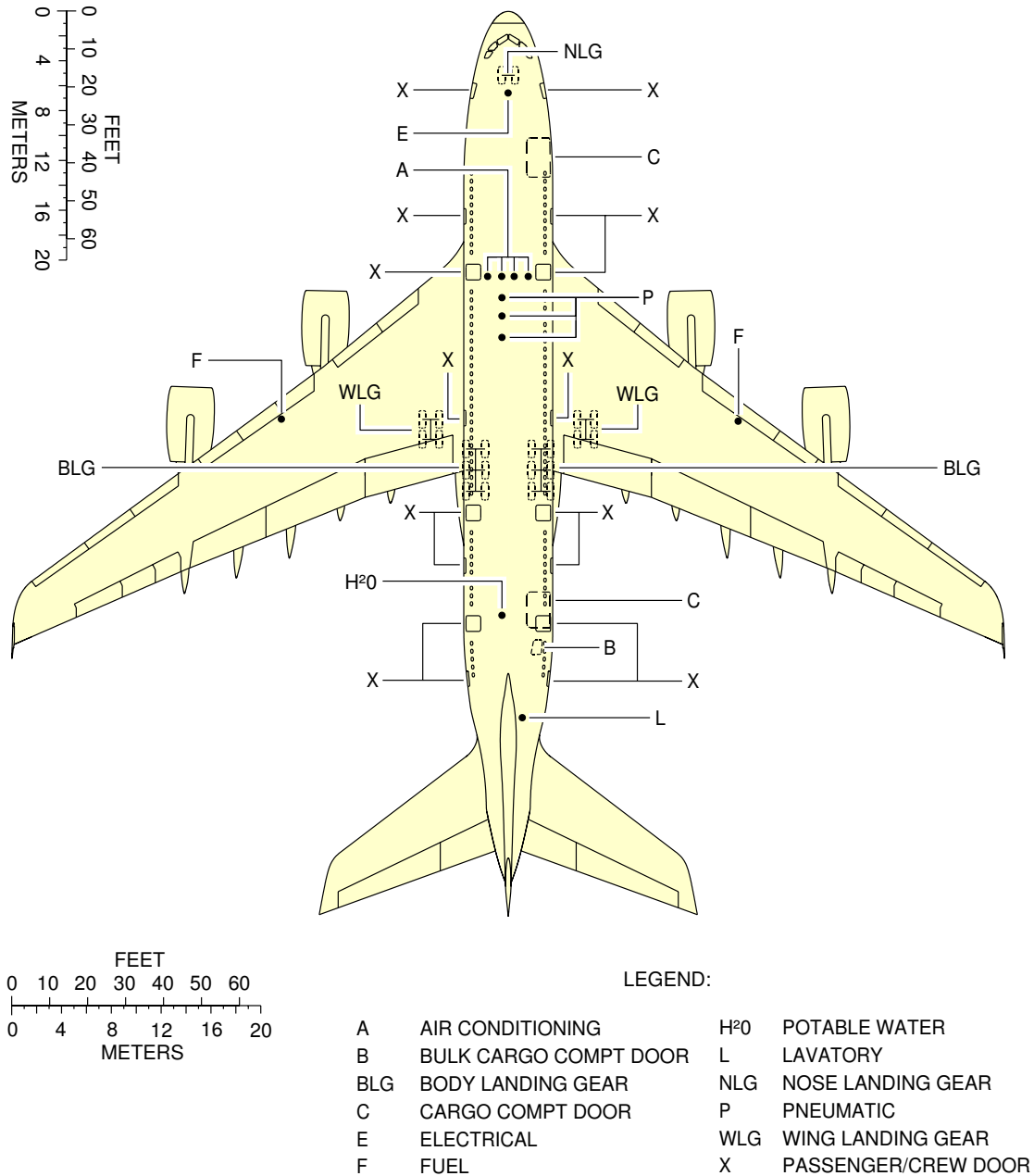
9-2-0 Scaled Drawing - 1 in. = 50 ft.

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

Scaled Drawing - 1 in. = 50 ft.

1. This section provides the Scaled Drawing - 1 in. = 50 ft.

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



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

DB1A

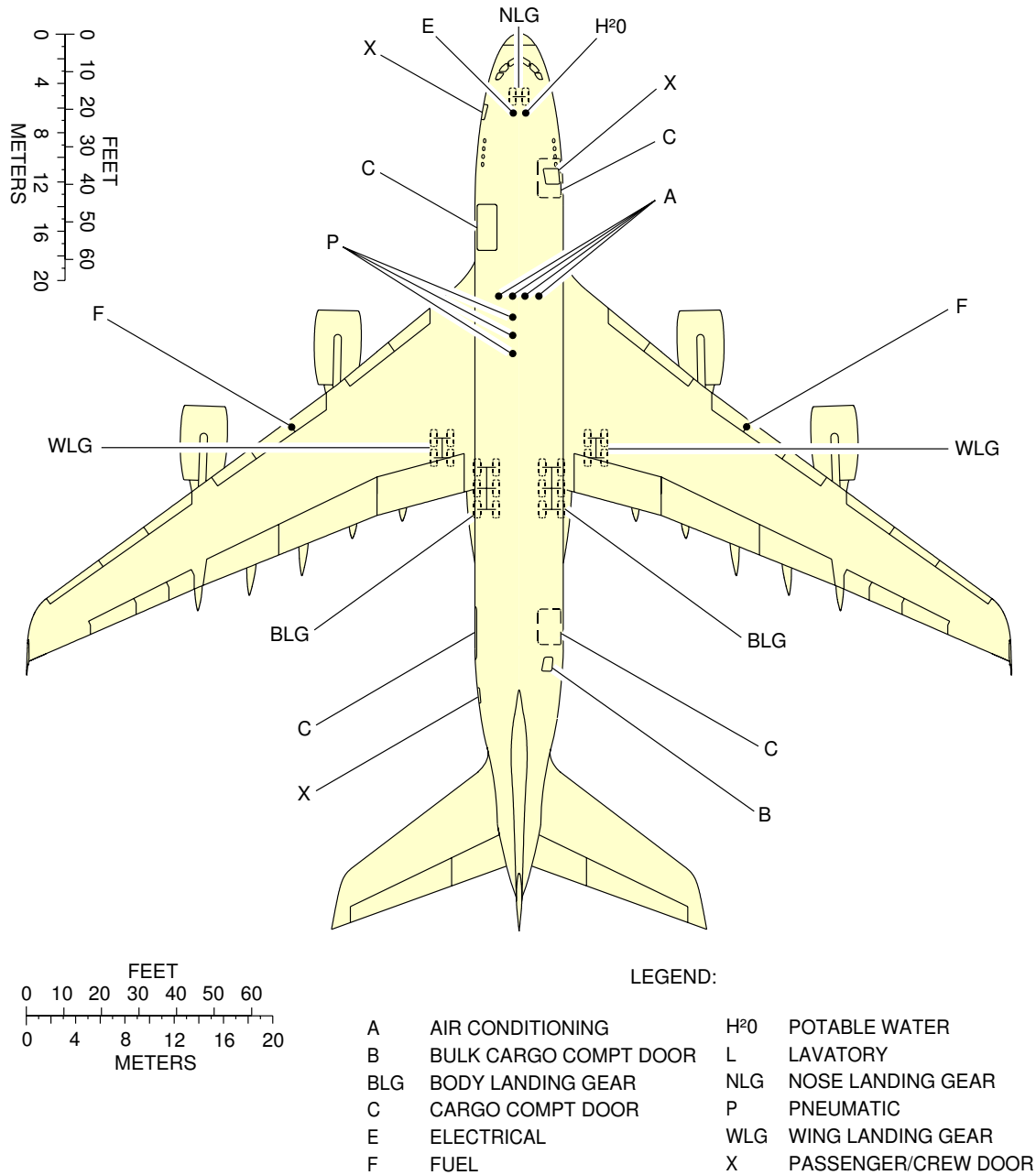
L_AC_090200_1_0010101_01_03

Scaled Drawing – 1 in. = 50 ft.

A380-800 Models

FIGURE 1

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



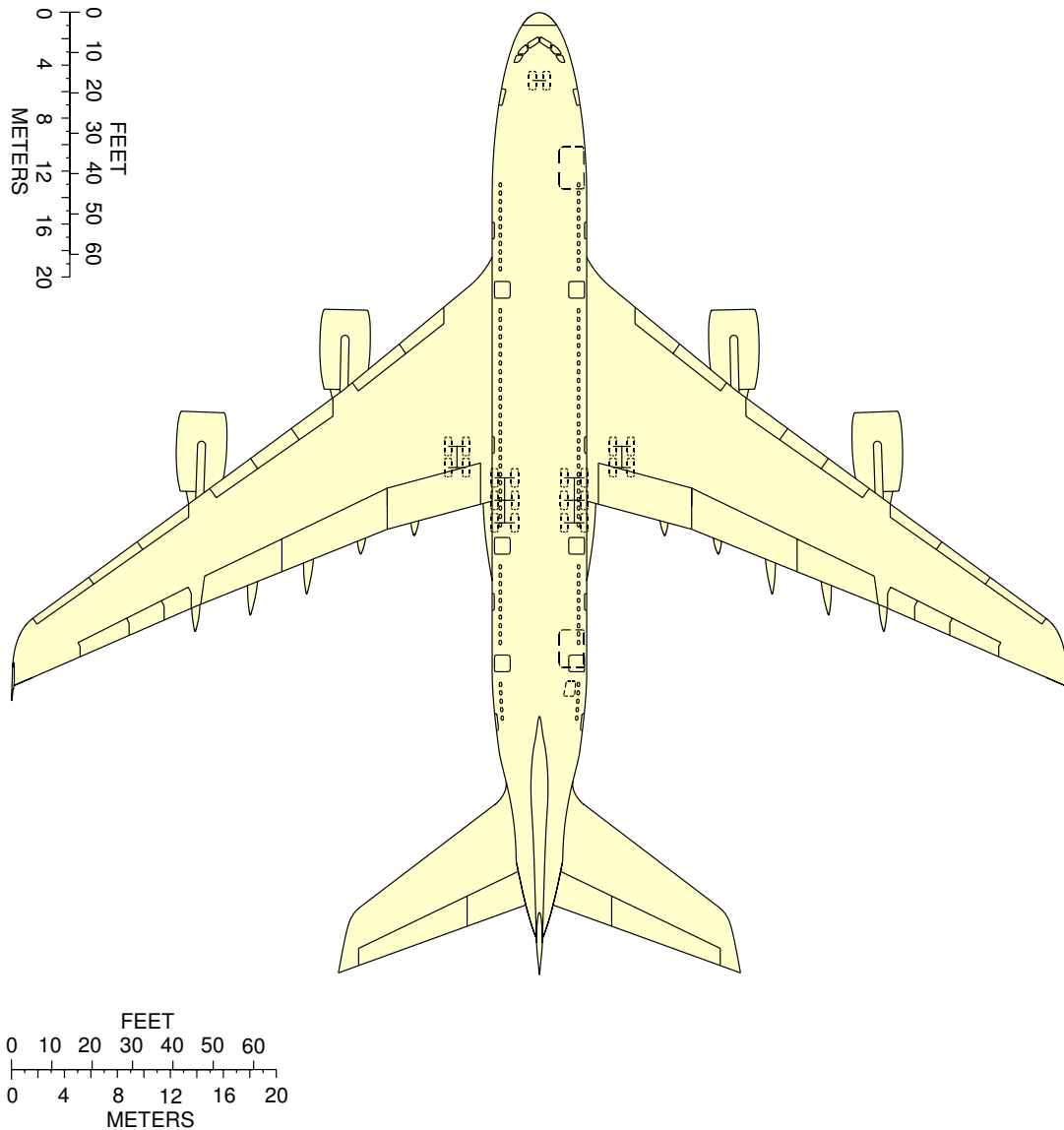
NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

DB1A

L_AC_090200_1_0020101_01_04

Scaled Drawing – 1 in. = 50 ft.
A380-800F Models
FIGURE 2

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



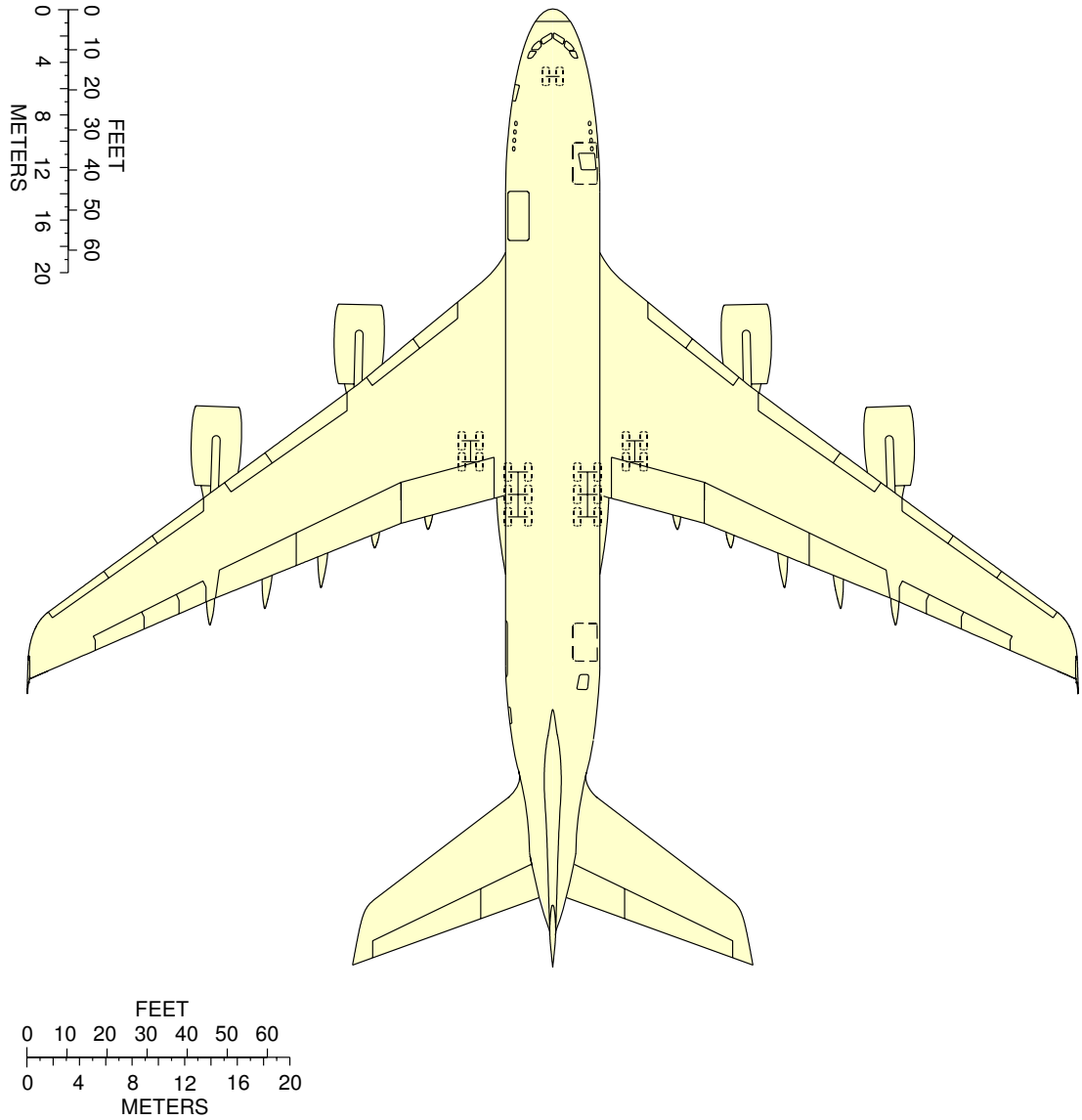
NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

DB1A

L_AC_090200_1_0030101_01_03

Scaled Drawing – 1 in. = 50 ft.
A380-800 Models
FIGURE 3

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



NOTE: WHEN PRINTING THIS DRAWING, MAKE SURE TO ADJUST FOR PROPER SCALING

DB1A

L_AC_090200_1_0040101_01_03

Scaled Drawing – 1 in. = 50 ft.
A380-800F Models
FIGURE 4