*BY ORDER OF THE COMMANDER*
*AIR MOBILITY COMMAND*

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

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# *CIVIL RESERVE AIR FLEET LOAD PLANNING – AIRBUS A330 SERIES*

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This pamphlet series is intended as a load planning guide and provides the basic information, data, and technical specifications needed in order for planners (both long range and individual movement) to load plan aircraft in the Civil Reserve Air Fleet (CRAF). Equipment and methods listed are compatible with all CRAF aircraft and cargo areas discussed. **It must be noted that, unlike military cargo aircraft, civilian airframes are not standardized, and can vary widely, even within each carrier's fleet. Final approval, therefore, ultimately rests with the individual contractor providing airlift services to the DOD.** This pamphlet series enables application of DTR 4500.9-R, Defense Transportation Regulation – Part III Mobility, Appendix V, Aircraft Load Planning and Documentation; as well as AMCI 10-402, Civil Reserve Air Fleet (CRAF). The guidance contained herein is applicable to all USAF, AFRC, ANG and DOD agencies whenever they are charged with using the CRAF assets contained herein, in accordance with DOD, inter-service, and/or MAJCOM agreements.

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## Chapter 1
## GENERAL INFORMATION

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

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

**1.2.1. Volume 2, Airbus.** AMCPAM 24-2 Volume 2 deals specifically with aircraft manufactured by Airbus S.A.S. Corporation. Airbus was first created in 1970 as Airbus Industrie GIE, a multi-national consortium, and is currently owned by European Aeronautic Defence and Space Company (EADS). As of the date of this publication, Airbus S.A.S. has provided more than 5,900 aircraft to carriers worldwide, with over 5,600 still in operation.

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

**1.3.1. Volume 2, Airbus Addenda.** Volume 2 is not separated from each subsequent addendum, but is published as a "cover" document along with and as an introduction for each addendum. The same information for Volume 2 essentially gets republished--unchanged with each Airbus model's addendum.

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

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

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

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**1.7. Description. Addendum D. Airbus A330 Series.**
The aircraft in the A330 Series are wide-body, medium to long-range aircraft, and capitalize on fuel economy with its twin engine design. Although not as numerous as the A320 Series, Airbus has several pending orders for A330 Series aircraft, with military variants (as a Multi Role Tanker Transport) showing up in other countries, so the fleet should be in active production for quite some time.

The A330 Series aircraft was launched concurrently with the A340 Series and share many characteristics in fuselage, wings, and tail design. The two series continued along the Airbus concept of “commonality”, which it started in earlier series. The common fly-by-wire architecture and cockpit systems, not only in different aircraft in the A330 Series, but in the A320 and A340 Series as well, expanded upon this. The A330 and A340 series introduced cross-crew qualification and mixed-fleet flying, in which airlines are able to switch their Airbus aircraft and their pilot crews at short notice to better match capacity to demand.

**The A330-300** was actually the first A330 to enter the market. It had its first flight in November of 1992 and was type-certified in October of 1993. As of the date of this publication, 284 A330-300s have been delivered, with 283 still in operation. (One was written off as a total loss, due to toxic chemical damage of improperly prepared and shipped HAZMAT.)

**The A330-200** became the second version of the series with its first flight in August of 1997 and type-certification in March of 1998. The A330 enabled Airbus to offer airlines a slightly smaller, scaled-down version between the A330-300 and A340-200. Currently, 367 A330-200s are in operation.

**The A330-200F** is the newest addition to the series. Airbus gave the go-ahead for a freighter version of the A330-200 around the 2007 timeframe. The A330-200F had its first flight on 5 November 2009. With almost 70 aircraft on order and the first delivery projected in early 2010, it seemed logical to include information about it in this Addendum D.

AMCPAM 24-2, Volume 2, Addendum D will focus primarily on the:
**A330-200**
**A330-200F**
**A330-300**

# Chapter 2
# QUICK REFERENCE TABLES

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

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

**2.3. Table Legends.**

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

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

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

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

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

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

## 2.6. Tables. Addendum D. Airbus A330 Series.

**Table 2.1. Cargo Planning.**

| Aircraft Type | Pallets (88"×125") Max Ht | Range w/ Max ACL (NM) | Maximum ACL (ST) per Leg Length (NM) | | | | Ferry Range w/ No Cargo (NM) |
|---|---|---|---|---|---|---|---|
| | | | 2000 | 2500 | 3000 | 3500 | |
| **A330-200** | M=X, F= 4, A= 4, B= X | 4,200 | 54.5 | 54.5 | 54.5 | 54.5 | 9,100 |
| **A330-200F** | M=23, F= 4, A= 4, B= X | 2,900–3,700 | 70.15–75.95 | 70.15–75.95 | 70.15–74.0 | 70.15–68.5 | 9,200 |
| **A330-300** | M=X, F= 6, A= 5, B= X | 6,500 | 48.36–50.5 | 48.36–50.5 | 48.36–50.5 | 48.36–50.5 | 6,500 |

**Table 2.2. Passenger Planning.**

| Aircraft Type | Standard Seating | Max Seats (One Class) | Range w/ Max Troops (NM) | Maximum Troops per Leg Length (NM) | | | |
|---|---|---|---|---|---|---|---|
| | | | | 2,000 | 2,500 | 3,000 | 3,500 |
| **A330-200** | 303 | 327 | 6,300 | 303 | 303 | 303 | 303 |
| **A330-200F** | 6 | 6 | X | X | X | X | X |
| **A330-300** | 335 | 440 | 5,500 | 335 | 335 | 335 | 335 |

**Table 2.3. Door Clearances/Sizes.**

| Aircraft Type | Door Height from ground (in inches) | | | | | Door Size (W×H) (in inches) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Front/ Side Pax | Main/ Upper Deck | Lower Lobe FWD | Lower Lobe AFT | Bulk Lobe | Main Deck | Lower Lobe FWD | Lower Lobe AFT | Bulk Lobe |
| **A330-200** | 174.7 to 182.3 | X | 101.5 to 109.4 | 124.3 to 137.8 | 129.8 to 144.1 | X | 106 × 66 | 109 × 66 | 37 × 42 |
| **A330-200F** | 189.7 to 196.8 | 191.8 to 198.5 | 115.3 to 122.4 | 119.6 to 138.6 | 122.9 to 142.1 | 145.2 × 97 | 106 × 66 | 109 × 66 | 37 × 42 |
| **A330-300** | 173.5 to 179.0 | X | 100.3 to 106.2 | 123.2 to 135.0 | 132.0 to 144.8 | X | 106 × 66 | 109 × 66 | 37 × 42 |

**Table 2.4. Compartment Dimensions.**

| Aircraft Type | Compartment Dimensions (L×W×H) (in inches) | | | | Compartment Weight limit (lbs) | | | |
|---|---|---|---|---|---|---|---|---|
| | Main/ Upper Deck | Lower Lobe FWD | Lower Lobe AFT | Bulk Lobe | Main/ Upper Deck | Lower Lobe FWD | Lower Lobe AFT | Bulk Lobe |
| **A330-200** | X | 465.6 × (125@fl) 163.4 × 67.6 | 400.8 × (125@fl) 163.4 × 65.7 | 159 × 150 × 71.6 | X | 41,600 | 33,600 | 7,645 |
| **A330-200F** | ? × ? × ? | 465.6 × (125@fl) 163.4 × 67.6 | 400.8 × (125@fl) 163.4 × 65.7 | 159 × 150 × 71.6 | ? | 41,600 | 33,600 | 7,645 |
| **A330-300** | X | 591.6 × (125@fl) 163.4 × 67.6 | 486 × (125@fl) 163.4 × 65.7 | 159 × 150 × 71.6 | X | 50,400 | 40,800 | 7,645 |

**Table 2.5. Weight Information.**

| Aircraft Type | Maximum Design Weight (lbs) | | | | | | |
|---|---|---|---|---|---|---|---|
| | Ramp/ Taxi (MTW) | T/O (MTW) | Land (MLW) | Zero Fuel (MZFW) | Oper Empty (OEW) | Max Payload | Max Cargo Vol. ($FT^3$) |
| **A330-200** | 425,271–515,660 | 423,287–513,676 | 396,831–401,240 | 370,376–374 785 | 257,368–258,031 | 112,345–133,009 | 6,300 |
| **A330-200F** | 502,432–515,660 | 500,448–513,676 | 401,240–412,263 | 381,399–392,422 | 240,524–241,093 | 140,306–151,898 | 28,196 |
| **A330-300** | 407,634–515,660 | 405,650–513,676 | 383,603–412,263 | 361,557–385,808 | 264,182–264,845 | 96,712–121,406 | 7,607 |

**Table 2.6. Airfield Suitability Information.**

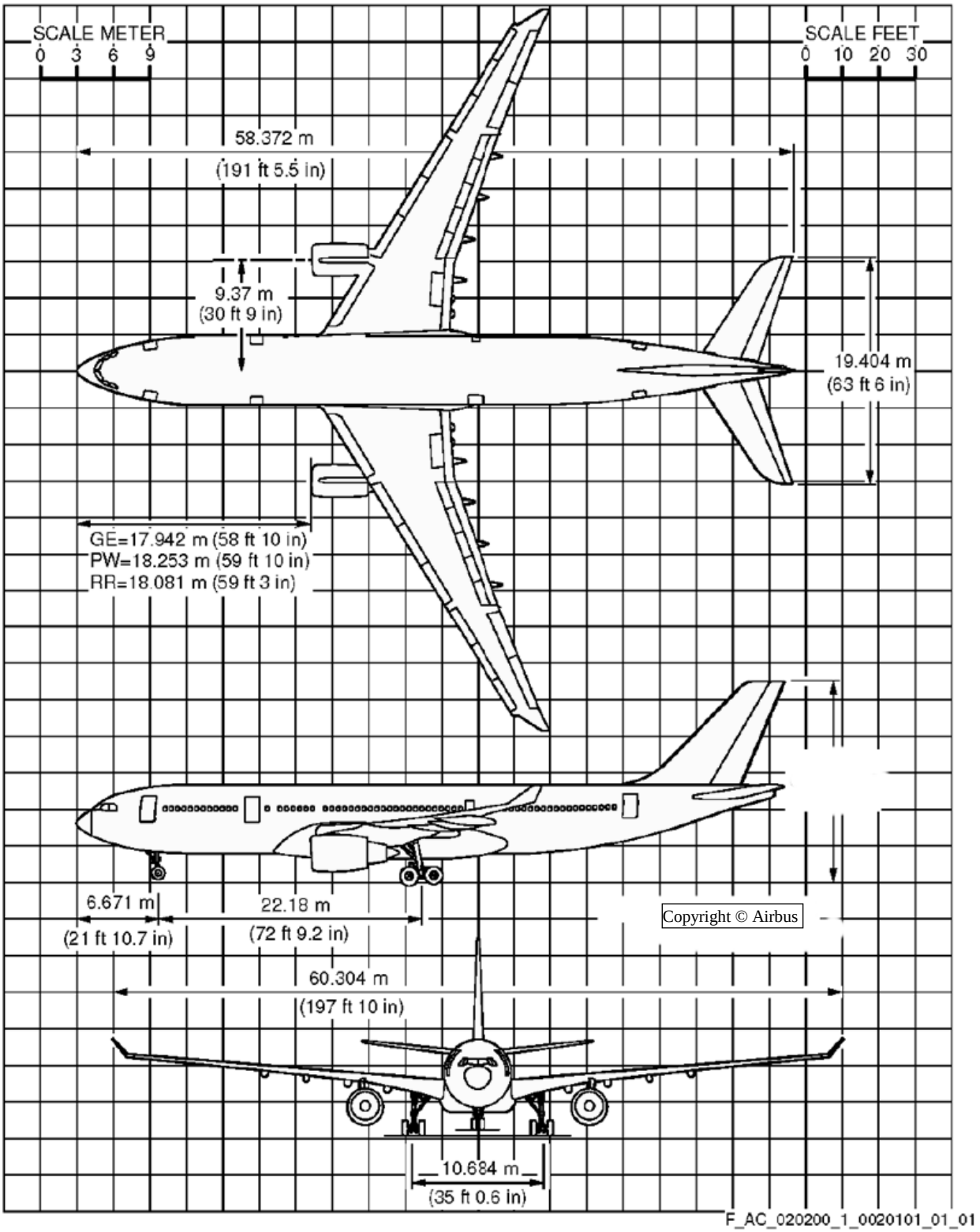
| Aircraft Type | Max Usable Fuel (US Gal) | T/O Min RWY at MTW (FT) | LND Min RWY at MLW (FT) | Parking Ramp Footprint (L×W) | Electrical (Ground Op's & Maintenance) | Air (Starting) (SL, Std Day) | Gear Type |
|---|---|---|---|---|---|---|---|
| | | | | | | | New FAA / USAF |
| **A330-200** | 36,744 | 6,000–11,000 | 5,700–5,750 | 191' 5.5" × 197' 10" | 6 pin IS0 R461 115/200 ± 3 V 3-ph, 400 Hz 90 KVA. | 3" ISO TC20 Max - 60 PSIG, 220° C, 264 PPM | 2D / T-TA(F) |
| **A330-200F** | 36,744 | 9,800–11,800 | 5,700–5,800 | 191' 5.7" × 197' 10" | 6 pin IS0 R461 115/200 ± 3 V 3-ph, 400 Hz 90 KVA. | 3" ISO TC20 | 2D / T-TA(F) |
| **A330-300** | 25,765 | 5,900–11,800 | 5,500–5,650 | 208' 11.5" × 197' 10" | 6 pin IS0 R461 115/200 ± 3 V 3-ph, 400 Hz 90 KVA. | 3" ISO TC20 Max - 60 PSIG, 220° C, 264 PPM | 2D / T-TA(F) |

# Chapter 3
# A330-200

## 3.1. DIMENSIONS.

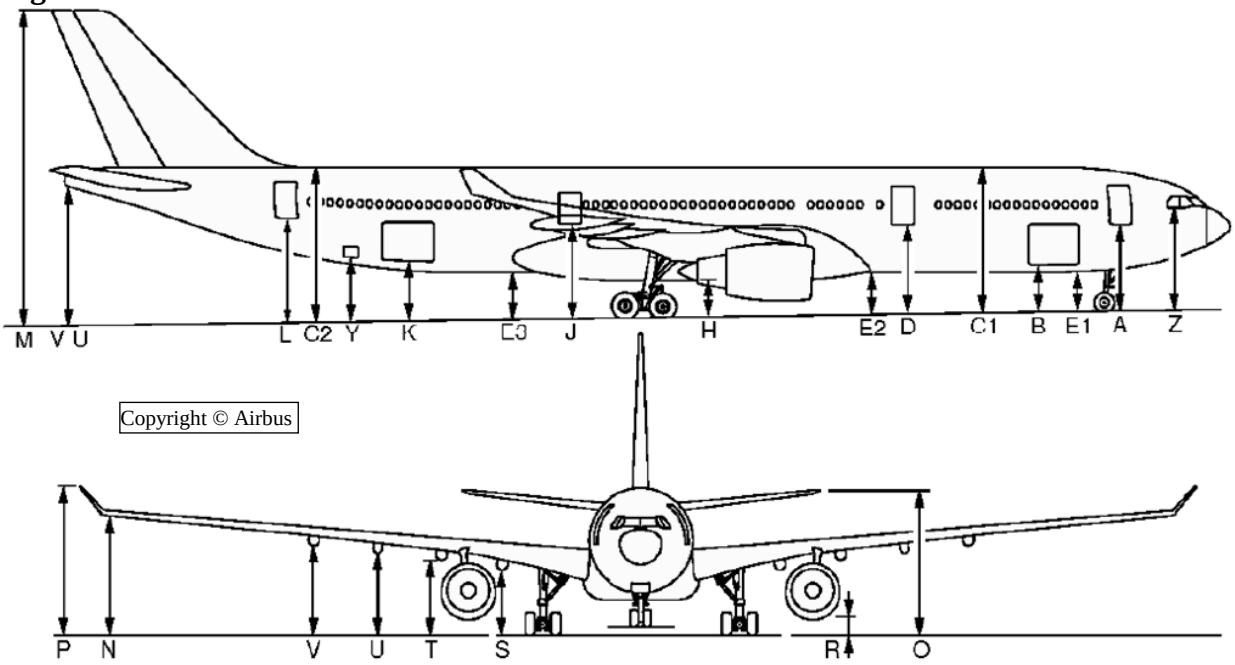
### 3.1.1. General Dimensions.

**Figure 3.1. General Dimensions A330-200.**



**3.1.2. Ground Clearance.**

**Figure 3.2. Ground Clearance A330-200.**

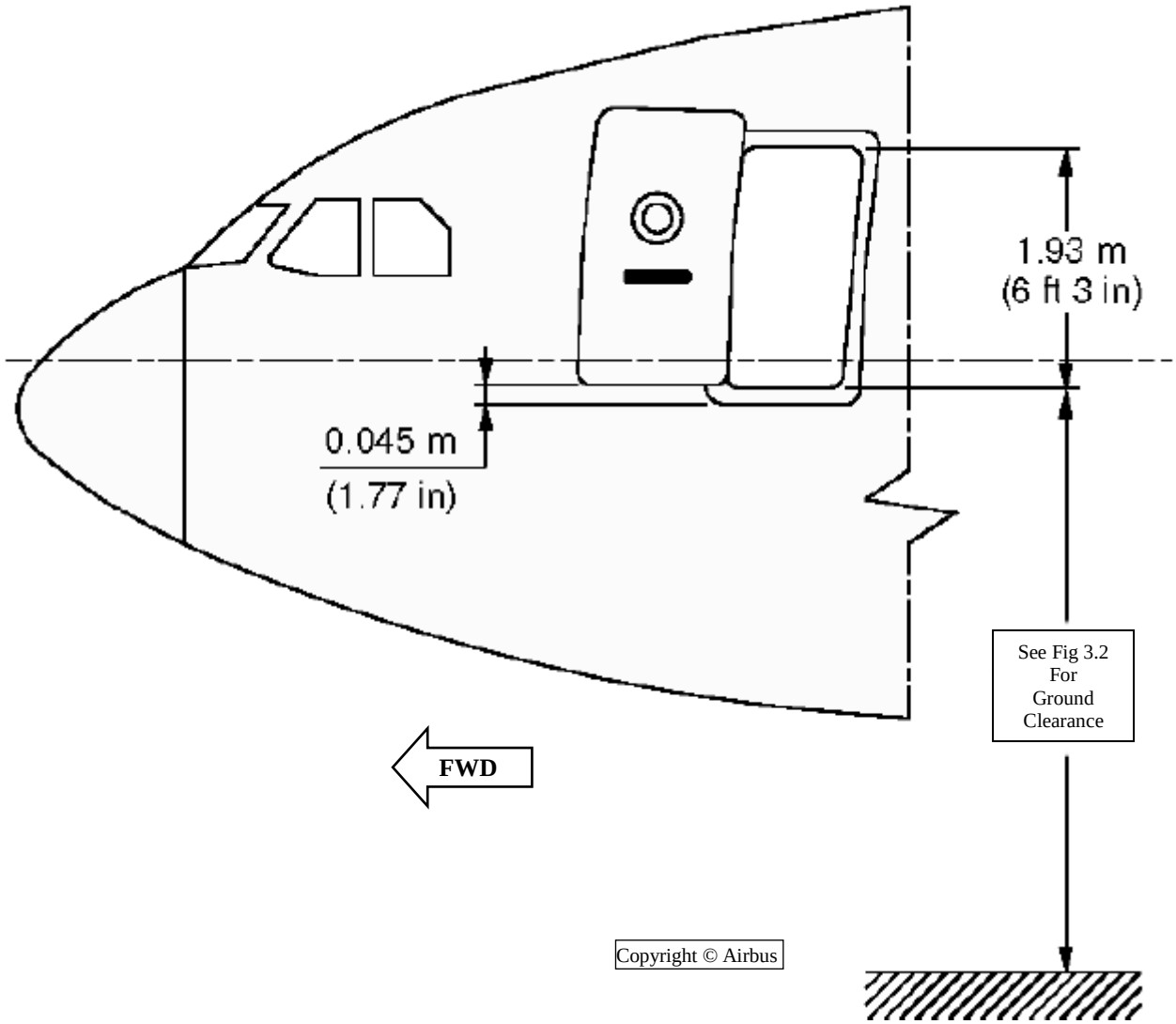





| Vertical Clearances | | | | | |
|---|---|---|---|---|---|
| | | | OEW | MRW | |
| DOOR | | | CG 27.9% | CG 21% | CG 37.5% |
| Pax/Crew | | A | 15.19' | 14.56' | 15.19' |
| FWD | | B | 9.12' | 8.46' | 8.99' |
| | | C1 | 25.42' | 24.8' | 25.23' |
| | | C2 | 28.02' | 27.26' | 26.77' |
| | | D | 15.9' | 15.3' | 15.7' |
| | | E1 | 6.7' | 6.03' | 6.59' |
| | | E2 | 7.31' | 6.66' | 6.95' |
| | | E3 | 8.86' | 8.13' | 7.87' |
| | | H | 6.63' | 5.93' | 6.0' |
| | | J | 17.6' | 16.9' | 16.7' |
| AFT | | K | 11.48' | 10.73' | 10.36' |
| | | L | 18.83' | 18.07' | 17.55' |
| | | M | 59.8' | 58.99' | 58.1' |
| | | M1 | 58.17' | 57.35' | 56.46' |
| | | N | 21.26' | 20.14' | 19.85' |
| | | O | 27.23' | 26.41' | 25.49' |
| | | P | 26.51' | 25.29' | 24.96' |
| | GE= | R | 3.08' | 2.42' | 2.59' |
| | PW= | R | 2.95' | 2.29' | 2.46' |
| | RR= | R | 2.85' | 2.19' | 2.36' |
| | | S | 12.76' | 12.04' | 11.94' |
| | | T | 14.27' | 13.55' | 13.48' |
| | | U | 15.19' | 14.5' | 14.33' |
| | | V | 16.24' | 15.52' | 15.32' |
| | | VU | 24.51' | 23.72' | 22.86' |
| BULK | | Y | 12.01' | 11.25' | 10.82' |
| | | Z | 17.75' | 17.12' | 17.81' |

**3.2. COMPARTMENT CONFIGURATIONS.**

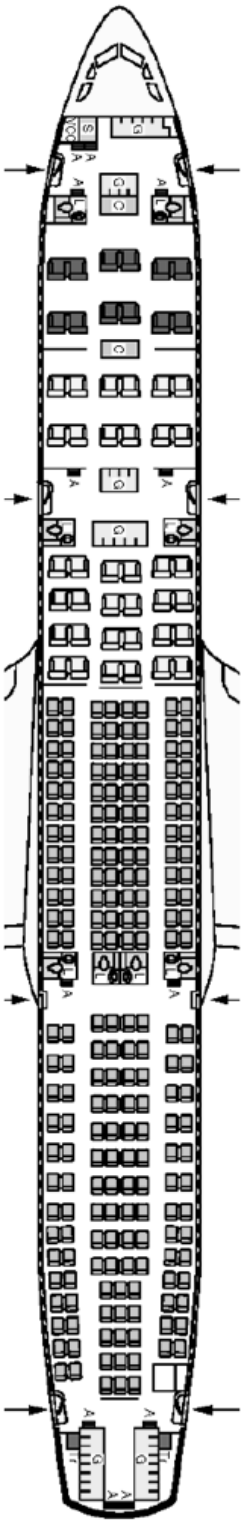
**3.2.1. MAIN/PASSENGER COMPARTMENT.**
**3.2.1.1. Pax/Crew Door.**
**Figure 3.3. Pax/Crew Door A330-200.**




**3.2.1.2. Main Door.**
N/A this model

**3.2.1.3. Compartment Dimensions.**

**Figure 3.4. Typical Passenger Configuration A330-200.**



253 Seats
3 Class
12 First
36 Business
205 Economy

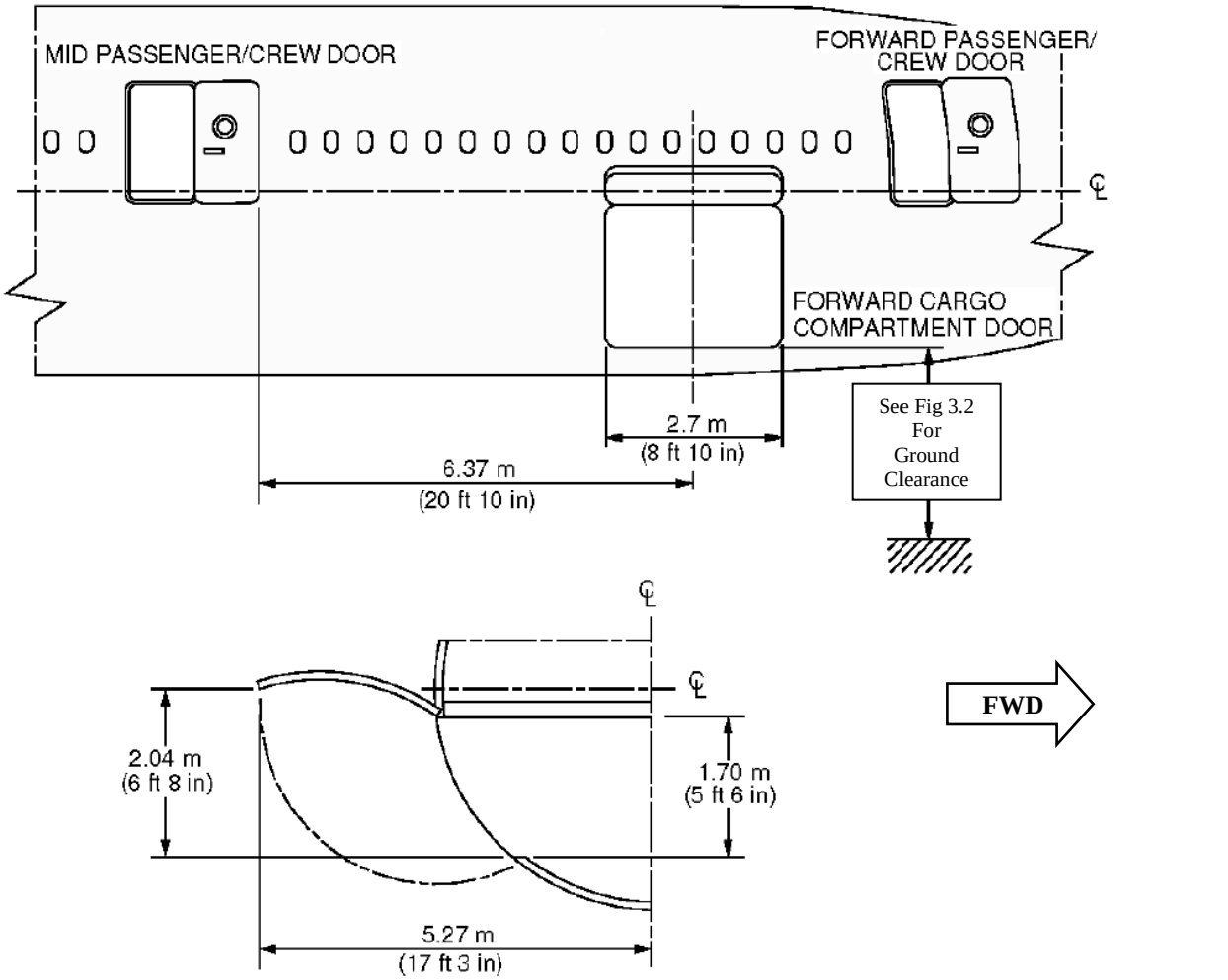
A = Attendant Seat (12)
C = Coat Storage (2)
G = Galley (6)
L = Lavatory (8)
S = Stowage (1)
Tr = Trolley
↑ = Exit



**3.2.1.4. Pallets.**

N/A this model

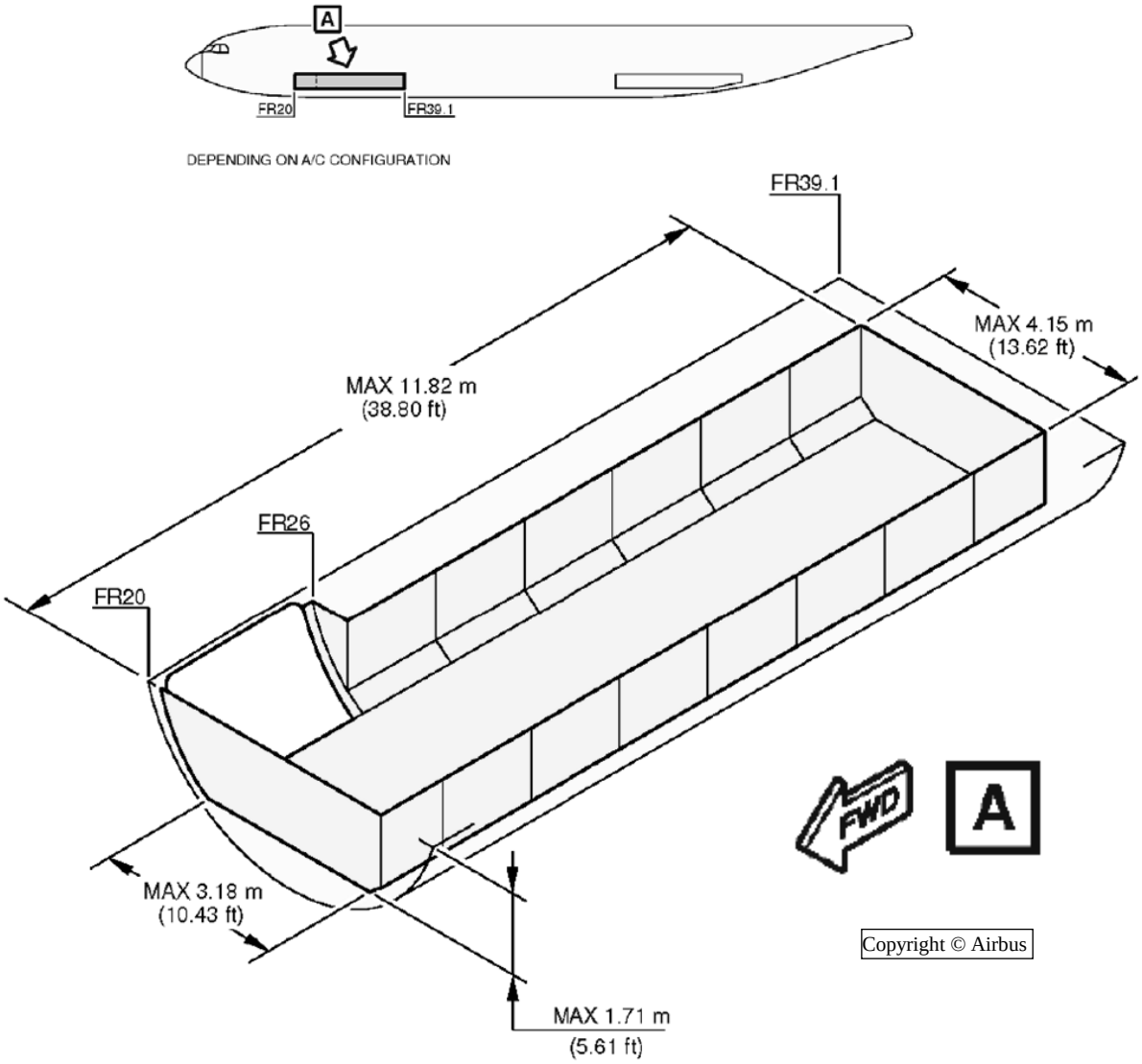
**3.2.2. FORWARD COMPARTMENT.**
**3.2.2.1. Door.**
**Figure 3.5. Forward Compartment Door A330-200.**




 F_AC_020705_1_0010101_01_00

**3.2.2.2. Compartment Dimensions.**

**Figure 3.6. Forward Compartment Dimensions A330-200.**

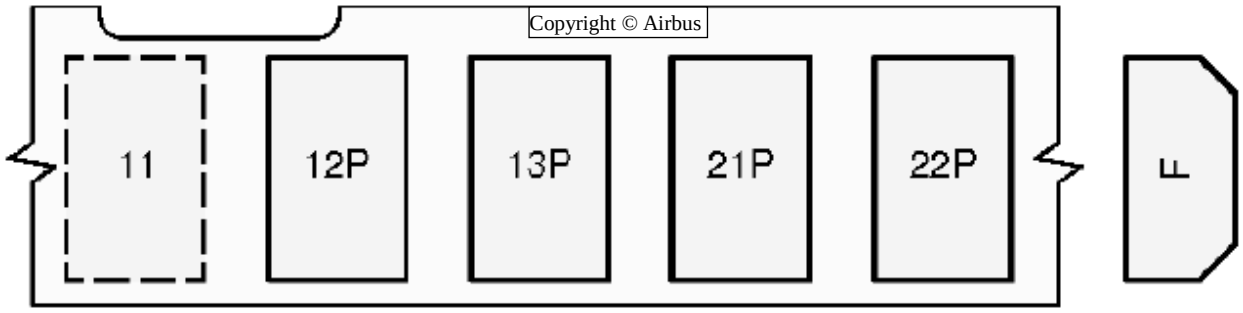



**3.2.2.3. Pallets.**

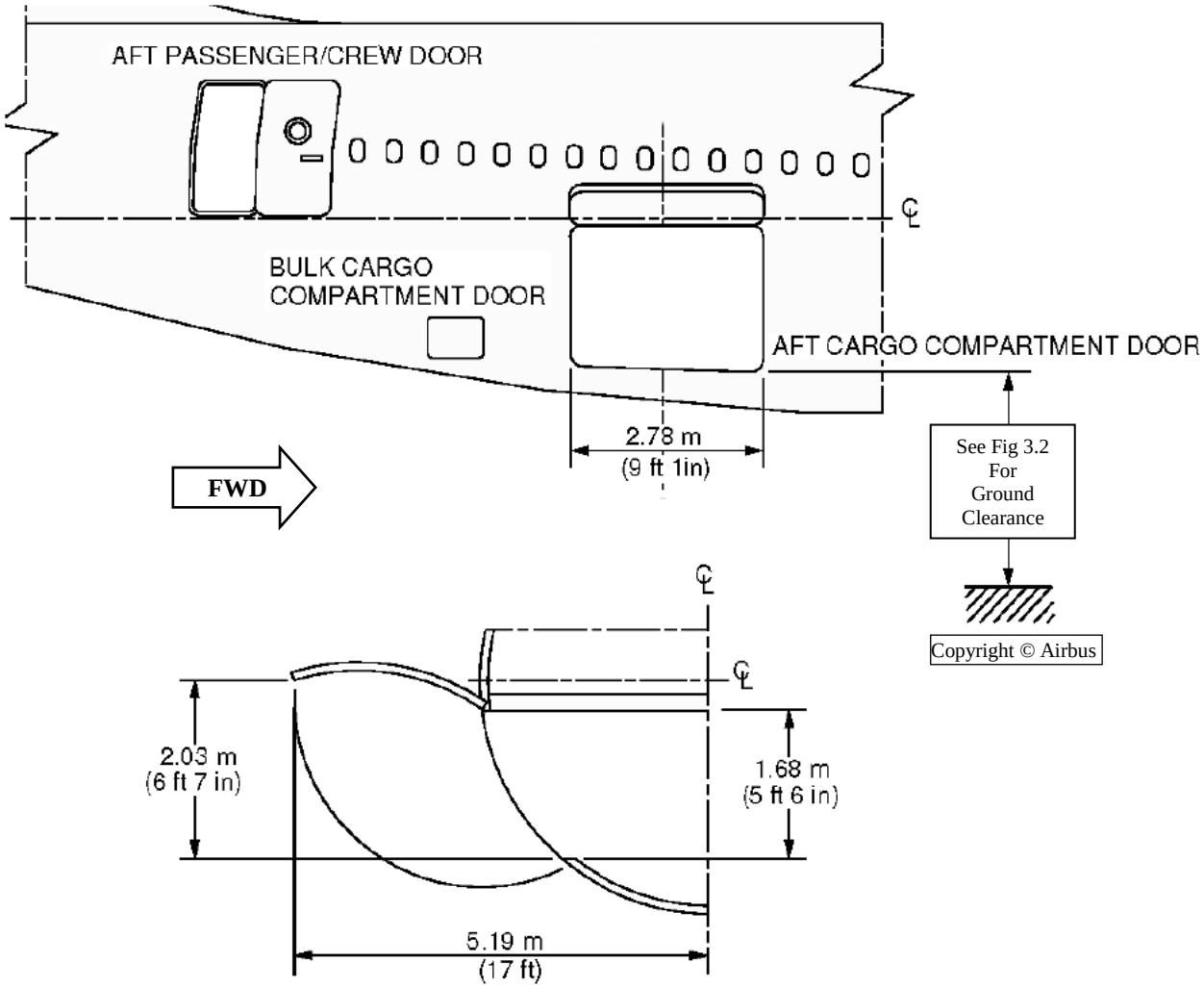
**NOTE:** See Attachment 2 for contour guide for the build-up of cargo.

Four (4) 88" x 125" pallets with a max height of 64"

**Figure 3.7. Forward Compartment Cargo Configurations A330-200.**

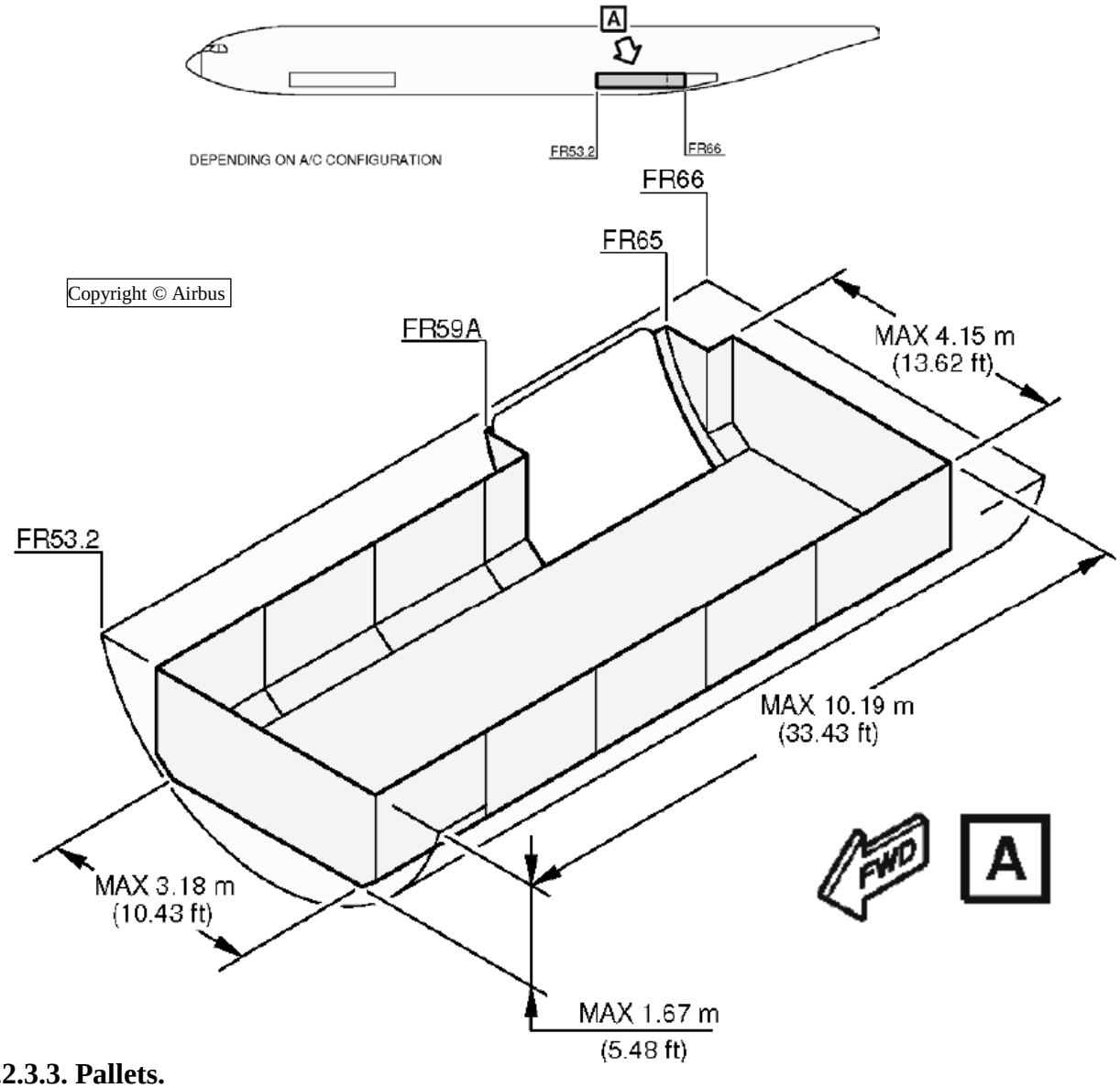


**3.2.3. AFT COMPARTMENT.**
**3.2.3.1. Door.**
**Figure 3.8. Aft Compartment Door A330-200.**



**3.2.3.2. Compartment Dimensions.**

**Figure 3.9. Aft Compartment Dimensions A330-200.**

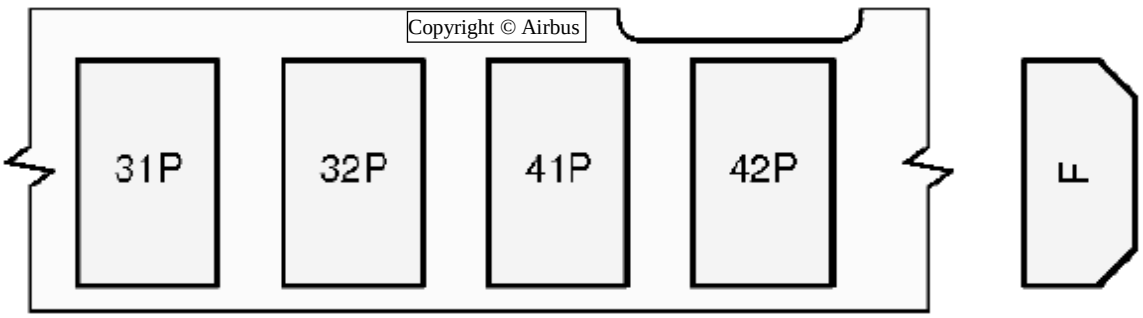



**3.2.3.3. Pallets.**

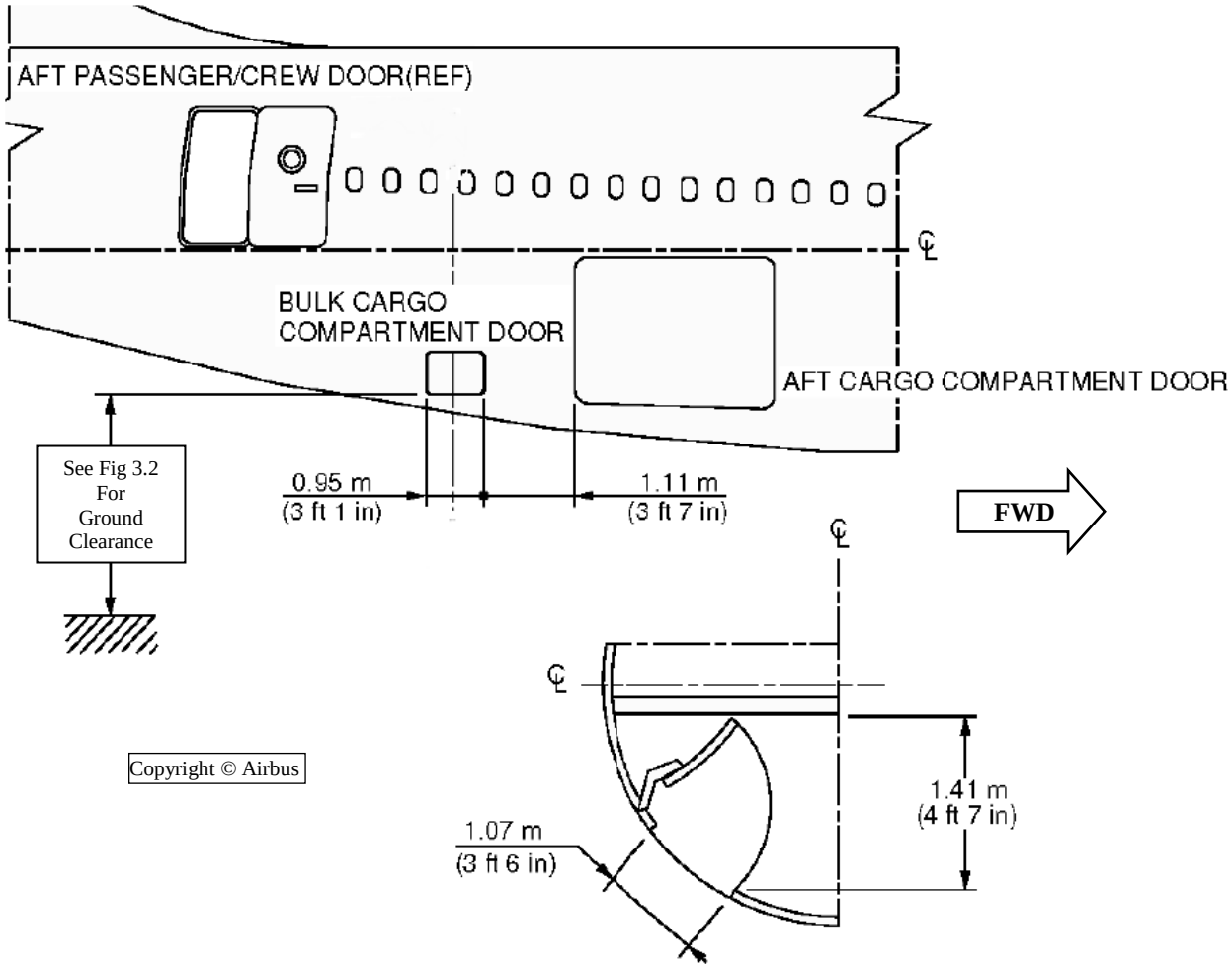
**NOTE:** See Attachment 2 for contour guide for the build-up of cargo.

Four (4) 88" x 125" pallets with a max height of 64"

**Figure 3.10. Aft Compartment Cargo Configurations A330-200.**

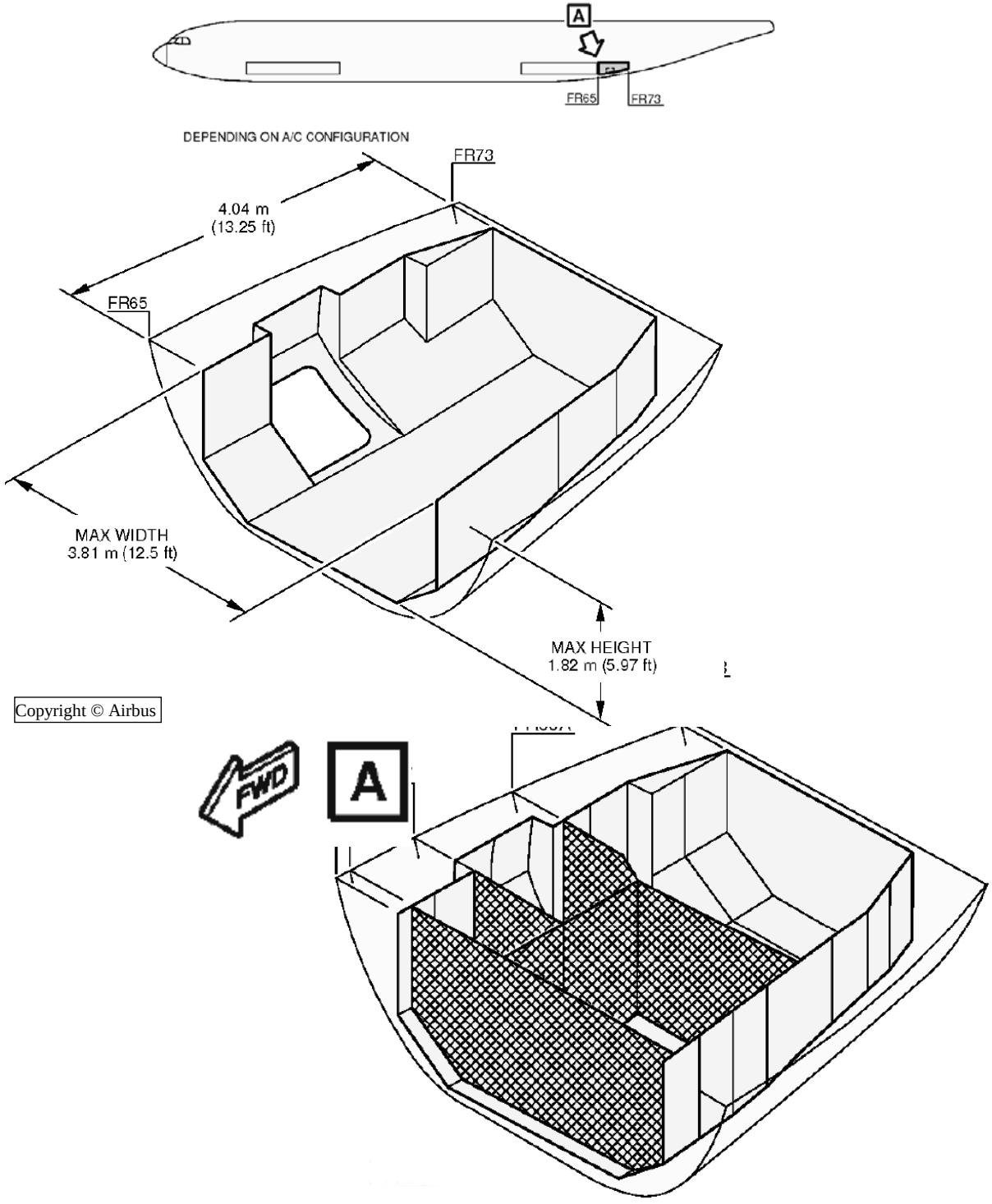


**3.2.4. BULK COMPARTMENT.**
**3.2.4.1. Door.**
**Figure 3.11. Bulk Compartment Door A330-200.**



**3.2.4.2. Compartment Dimensions.**

**Figure 3.12. Bulk Compartment Dimensions A330-200.**



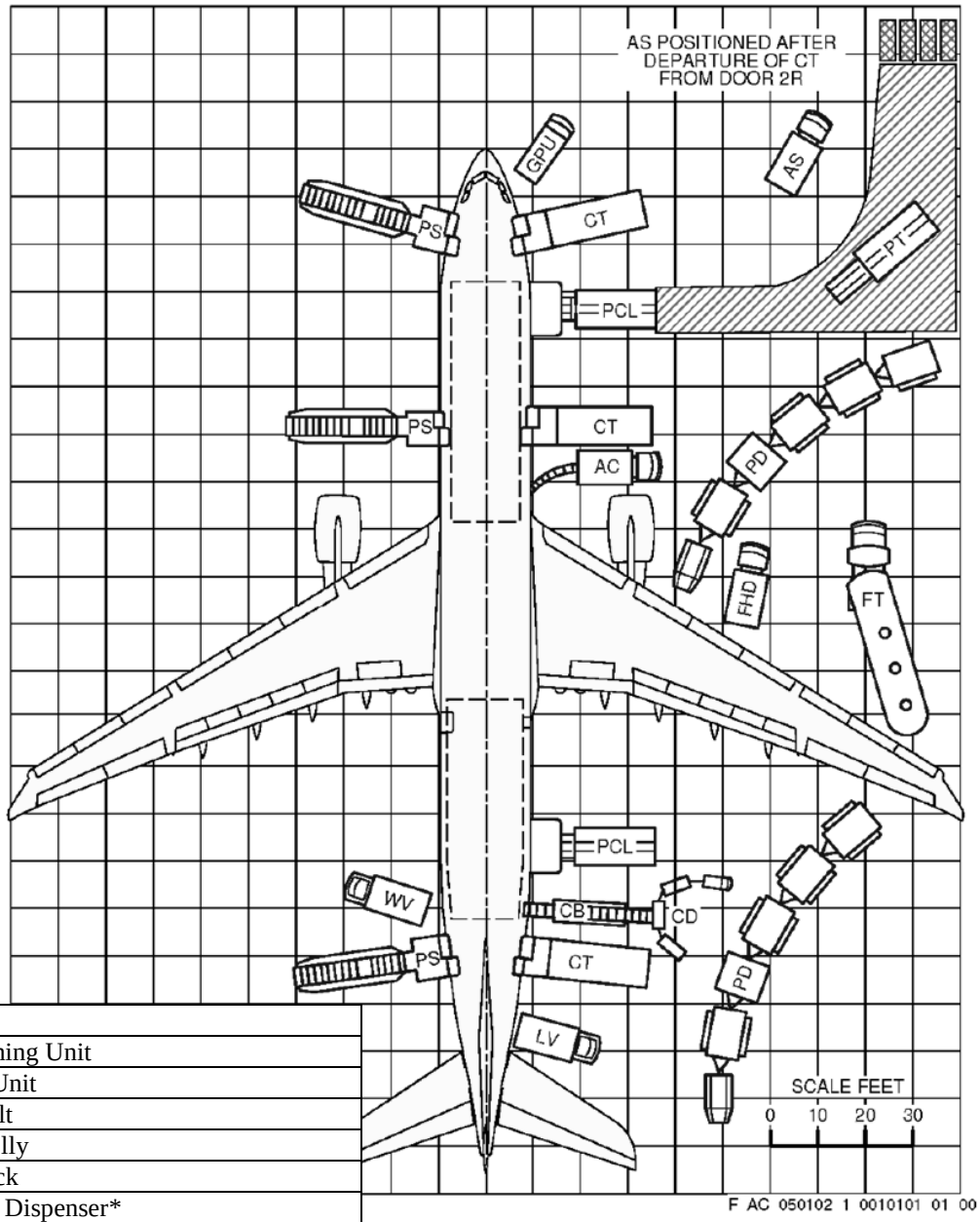

**3.2.4.3. Pallets.**

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

## 3.3. SERVICING DIAGRAMS.

### 3.3.1. Servicing.

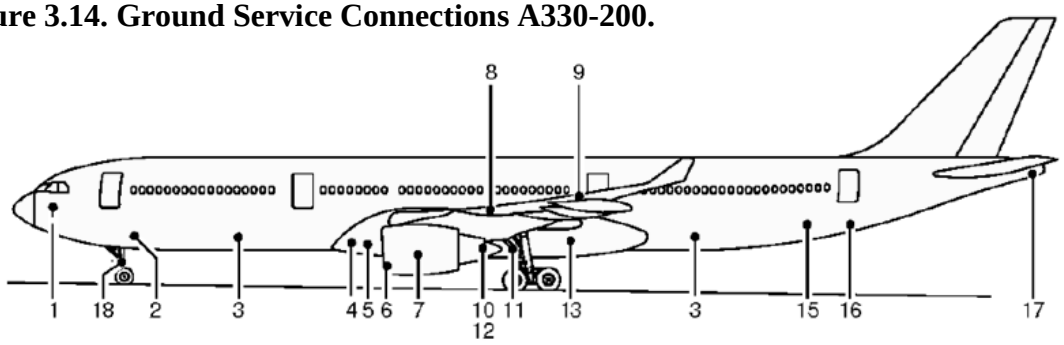
**Figure 3.13. Typical Servicing Arrangement A330-200.**



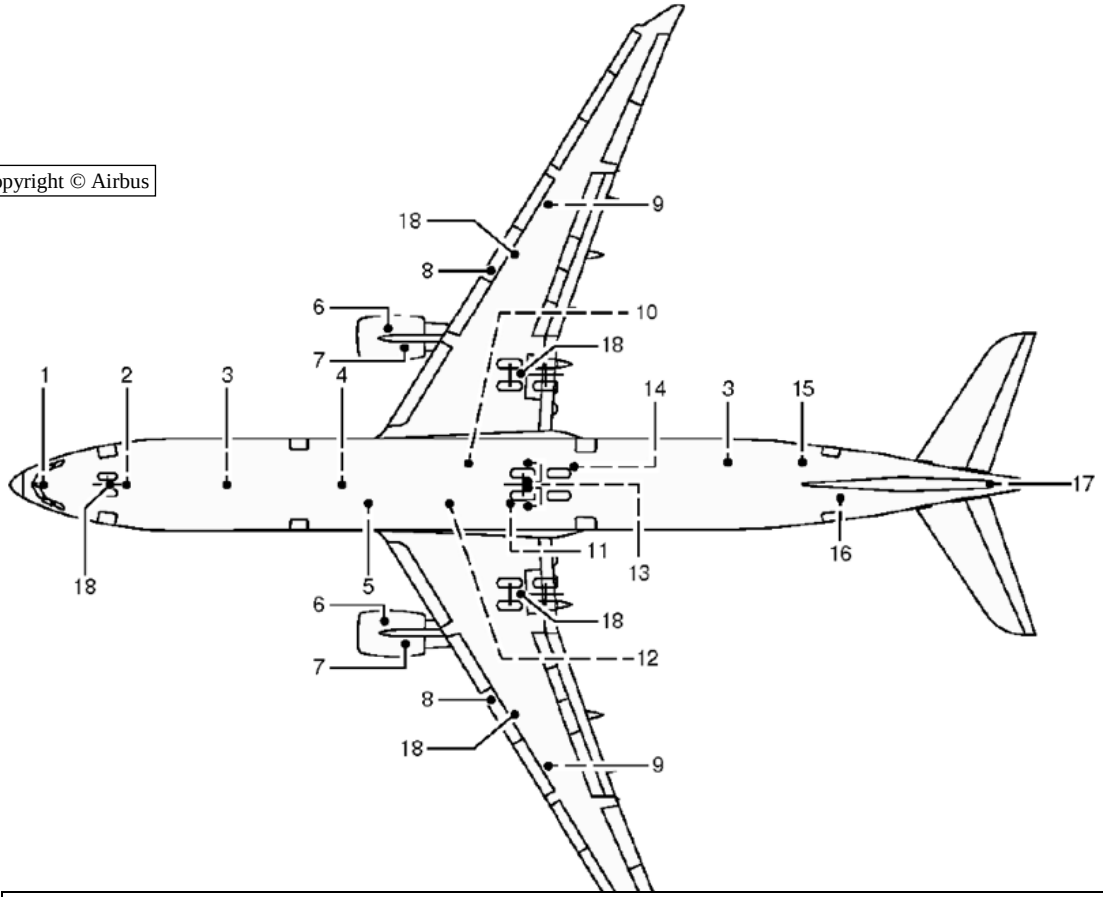

| Servicing Codes | |
|---|---|
| AC | Air Conditioning Unit |
| AS | Air Starting Unit |
| CB | Conveyor Belt |
| CD | Container Dolly |
| CT | Catering Truck |
| FHD | Fuel Hydrant Dispenser* |
| FT | Fuel Tanker |
| | *When using a fuel tanker, the safety zone clearances must be IAW Local/Airport Reg's |
| GPU | Ground Power Unit |
| LV | Lavatory Vehicle |
| PB | Passenger Bridge |
| PCL | Pallet /Container Loader |
| PD | Pallet Dolly |
| PS | Passenger Stairs |
| PT | Pallet Transporter |
| WV | Potable Water Vehicle |

**3.3.2. Ground Connections.**

**Figure 3.14. Ground Service Connections A330-200.**






| Ground Connection Codes | | | |
|---|---|---|---|
| 1 | Oxygen System | 10 | Hyd Grnd Pwr Supply-Yellow |
| 2 | External Electrical Power | 11 | Hyd Reserv Fill/Grnd Pwr Supply-Green |
| 3 | Potable Water Drain | 12 | Hyd Reserv Air Press/Grnd Pwr Supply-Blue |
| 4 | Low Pressure Preconditioning | 13 | Nitrogen Charging (Hyd Accumulators) |
| 5 | High Press Preconditioning & Eng Start | 14 | Refuel/Defuel Panel |
| 6 | IDG Oil Filling | 15 | Potable Water Filling |
| 7 | Engine Oil Filling | 16 | Toilet Servicing |
| 8 | Pressure Refuel | 17 | APU Oil Filling |
| 9 | Overwing Refuel | 18 | Aircraft Grounding Pt. |

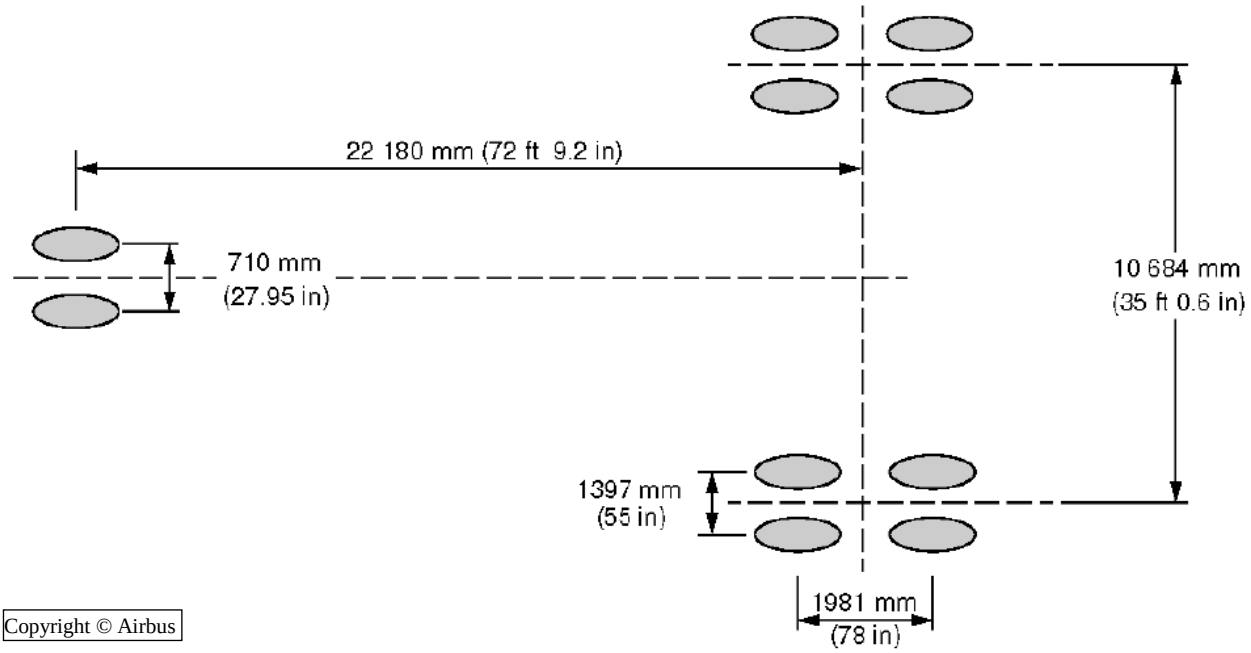
## 3.4. AIRFIELD SUITABILITY.

### 3.4.1. Landing Gear Footprint.

**Figure 3.15. Landing Gear Footprint A330-200.**

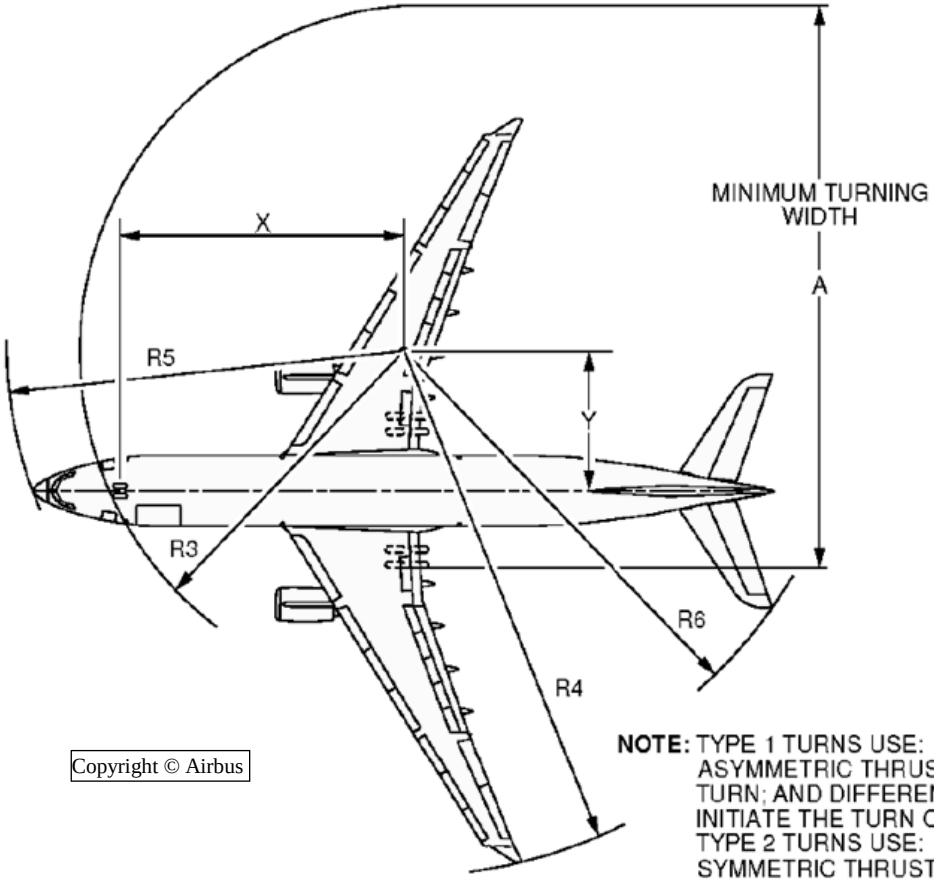
| | | | | | | |
|---|---|---|---|---|---|---|
| Max Ramp Wt. | 192,900 kg (425,275lb) | 202,900 kg (447,325lb) | 210,900 kg (464,950lb) | 220,900 kg (487,000lb) | 230,900 kg (509,050lb) | 233,900 kg (515,650lb) |
| Nose Gear Tire Size | 1050 x 395 R16 | | | | | |
| Nose Gear Tire Press. | 12.7 bar (184psi) | | | | | |
| Main Gear Tire Size | 1400x530R23 (54x21-23(bias)) | | | | | |
| Main Gear Tire Press. | 14.2 bar (206psi) | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Max Ramp Wt. | 230,900 kg (509,050lb) | | | | 233,900 kg (515,650lb) | | | |
| Max Take Off Wt. | 230,000 kg (507,058lb) | | | | 233,000 kg (513,672lb) | | | |
| Nose Gear Tire Size | 1050 x 395 R16 | | | | | | | |
| Main Gear Tire Size | 1400x530R23 (54x21-23(bias)) | | | | | | | |
| | Loaded | | Unloaded | | Loaded | | Unloaded | |
| | bar | psi | bar | psi | bar | psi | bar | psi |
| Nose Gear Tire Press. | 11.4 | 165 | 10.9 | 159 | 12.8 | 186 | 12.3 | 178 |
| Main Gear Tire Press. | 14.2 | 206 | 13.6 | 198 | 14.2 | 206 | 13.7 | 199 |
| % of Wt. on Main Gear | 94.5% | | | | | | | |



**3.4.2. Minimum Turning Radii.**

**Figure 3.16. Minimum Turning Radii A330-200.**






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

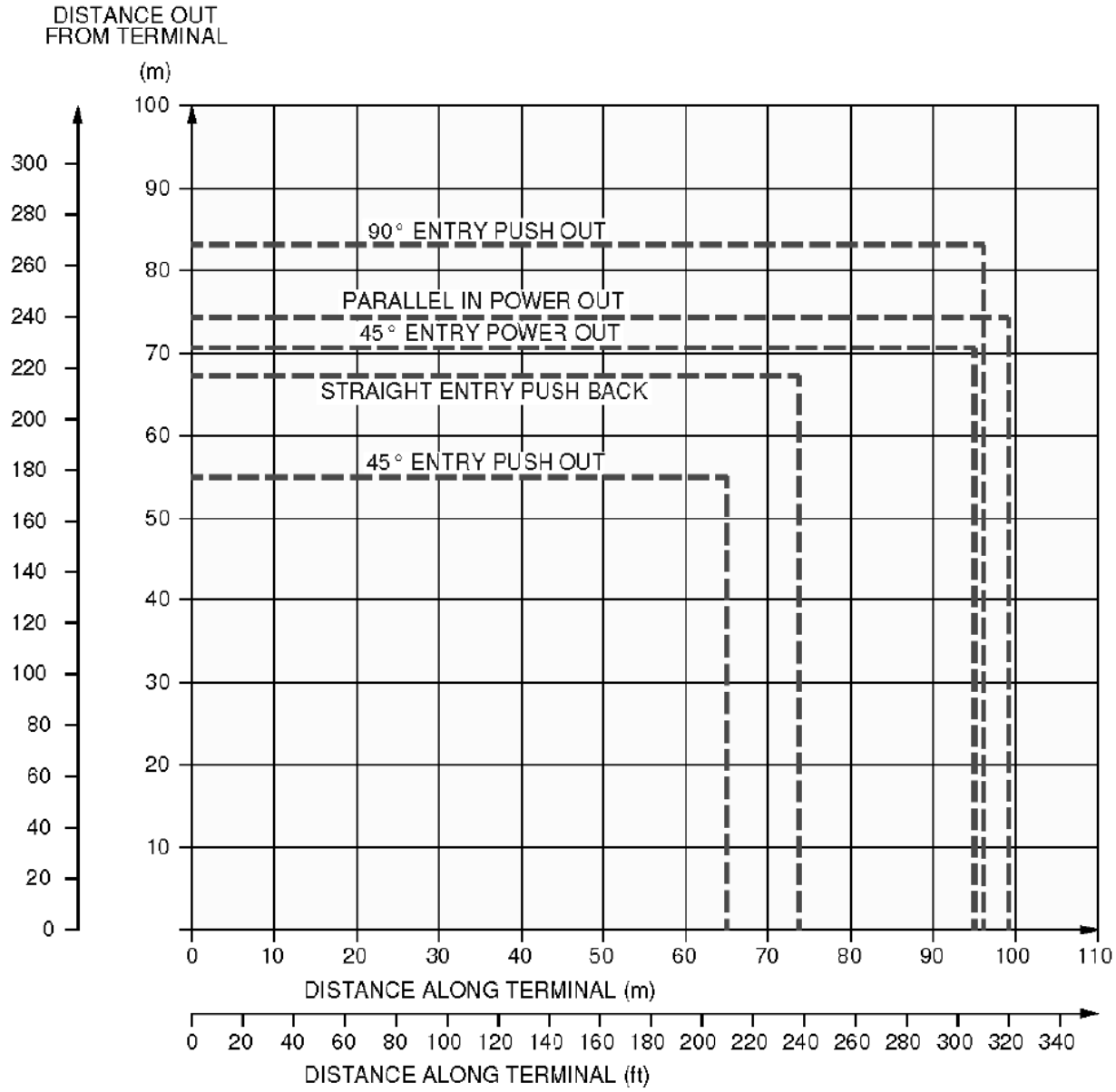
| A330-200/-200F MINIMUM TURNING RADII | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| TYPE OF TURN | STEERING ANGLE | EFFECTIVE STEERING ANGLE | | X | Y | A | R3 NLG | R4 WING | R5 NOSE | R6 TAIL |
| 1 | 72° (MAX) | 68.1° | m | 22 | 8.8 | 39.2 | 24.4 | 40.8 | 30.5 | 39 |
| | | | ftt | 72 | 29 | 129 | 80 | 134 | 100 | 128 |
| 2 | 72° (MAX) | 59.8° | m | 22.5 | 12.8 | 45.2 | 26.5 | 44.6 | 32.3 | 40.7 |
| | | | fft | 74 | 42 | 148 | 87 | 146 | 106 | 134 |

| A330-300 MINIMUM TURNING RADII | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| TYPE OF TURN | STEERING ANGLE | EFFECTIVE STEERING ANGLE | | X | Y | A | R3 NLG | R4 WING | R5 NOSE | R6 TAIL |
| 1 | 72° (MAX) | 68.5° | m | 25.2 | 9.8 | 44.3 | 27.7 | 41.1 | 33.9 | 36.8 |
| | | | ft | 83 | 32 | 145 | 91 | 135 | 111 | 121 |
| 2 | 72° (MAX) | 63.4° | m | 25 | 12.7 | 47.9 | 29 | 43.9 | 35 | 34.3 |
| | | | ft | 82 | 42 | 157 | 95 | 144 | 115 | 113 |

F_AC_040300_1_0010101_01_02

**3.4.3. Parking Footprint.**

**Figure 3.17. Parking Footprint A330-200.**

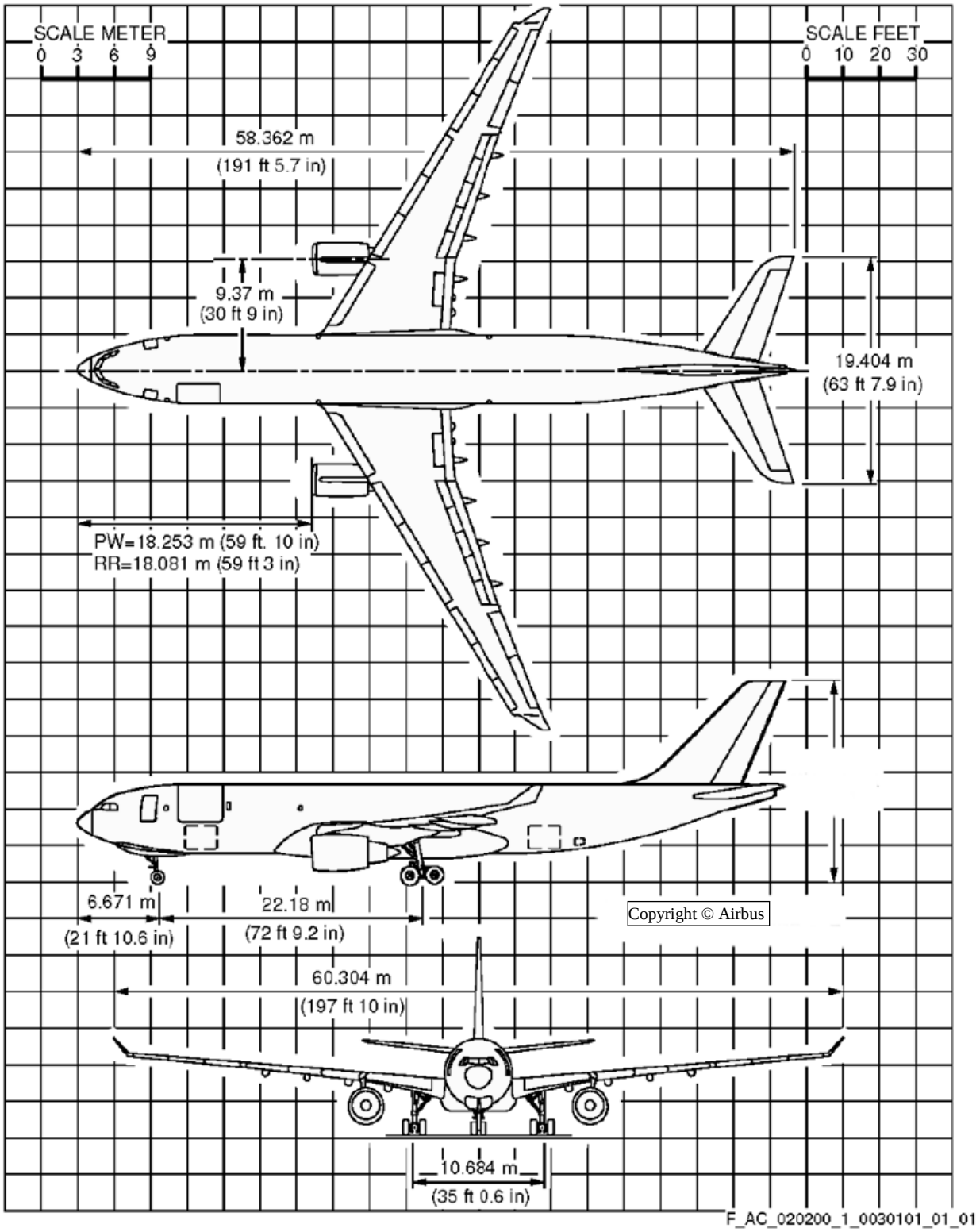


# Chapter 4
# A330-200F

## 4.1. DIMENSIONS.

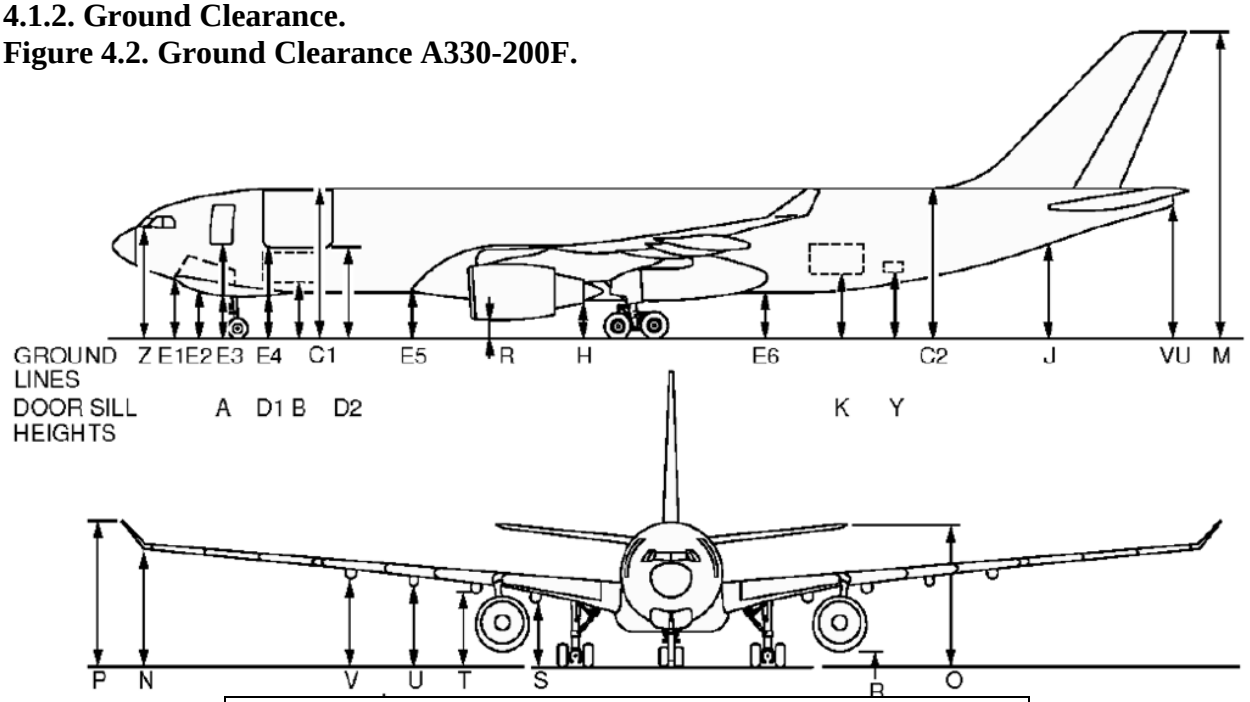
### 4.1.1. General Dimensions.

**Figure 4.1. General Dimensions A330-200F.**



**4.1.2. Ground Clearance.**

**Figure 4.2. Ground Clearance A330-200F.**

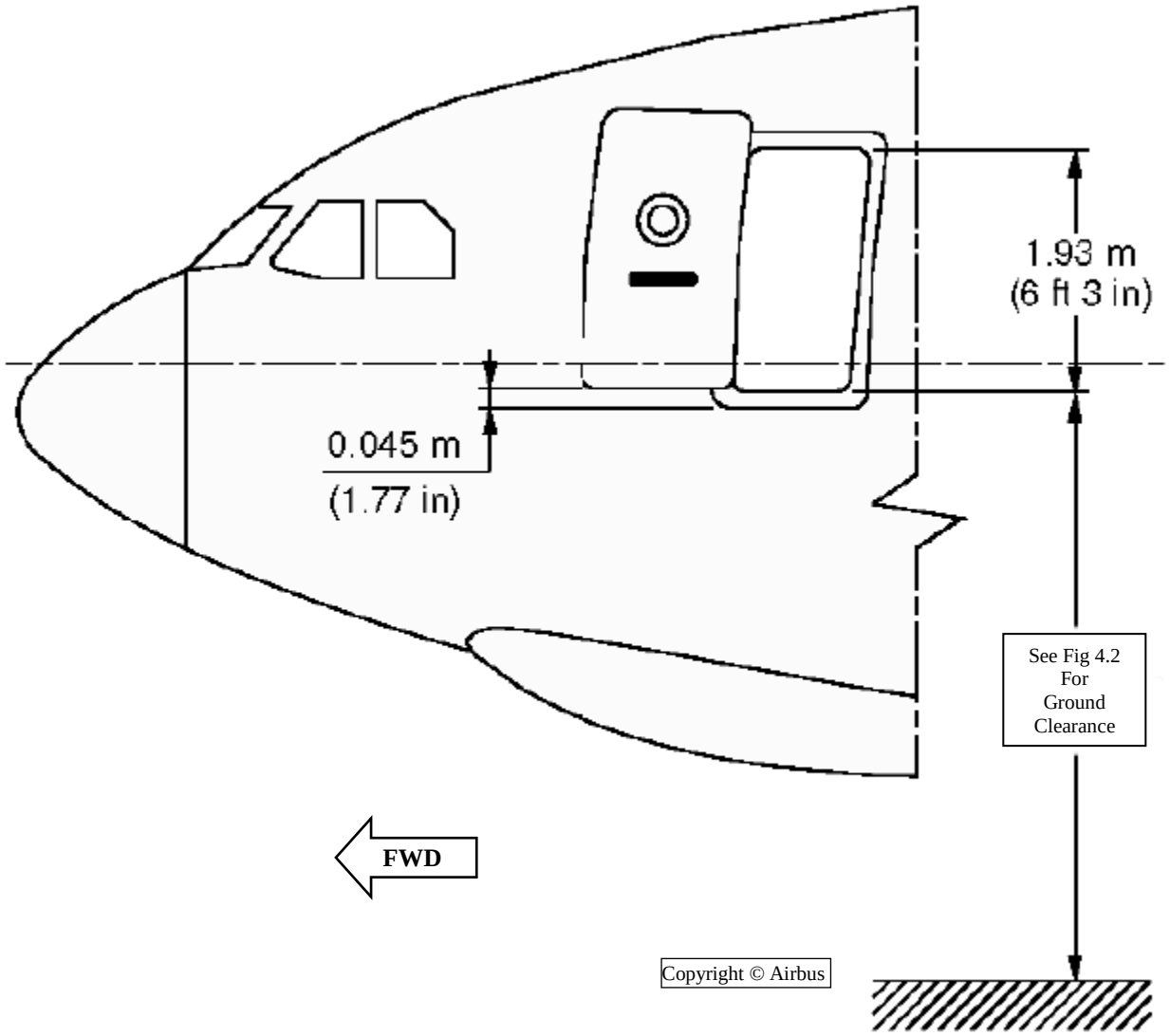





| Vertical Clearances | | | | | |
|---|---|---|---|---|---|
| | | | OEW | MRW | |
| DOOR | | | CG 18% | CG 20.6% | CG 37.4% |
| Pax/Crew | | **A** | 16.34' | 15.81' | 16.4' |
| FWD | | **B** | 10.2' | 9.61' | 10.1' |
| | | **C1** | 26.44' | 25.82' | 26.28' |
| | | **C2** | 27.69' | 26.44' | 25.95' |
| MAIN | | **D1** | 16.54' | 15.98' | 16.5' |
| MAIN | | **D2** | 16.67' | 16.04' | 16.47' |
| | | **E1** | 10.07' | 9.61' | 10.27' |
| | | **E2** | 7.84' | 7.35' | 7.97' |
| | | **E3** | 7.28' | 6.76' | 7.35' |
| | | **E4** | 7.94' | 7.38' | 7.91' |
| | | **E5** | 8.1' | 7.41' | 7.71' |
| | | **E6** | 8.86' | 7.78' | 7.51' |
| | | **H** | 7.09' | 6.2' | 6.27' |
| | | **J** | 18.21' | 16.83' | 16.11' |
| AFT | | **K** | 11.55' | 10.33' | 9.97' |
| | | **M** | 57.12' | 55.61' | 54.69' |
| | | **N** | 25.59' | 24.48' | 24.15' |
| | | **O** | 27.26' | 25.75' | 24.84' |
| | | **P** | 30.28' | 29.13' | 28.81' |
| | PW= | **R** | 3.71' | 2.92' | 3.12' |
| | RR= | **R** | 3.48' | 2.69' | 2.85' |
| | | **S** | TBD | | |
| | | **T** | | | |
| | | **U** | | | |
| | | **V** | | | |
| | | **VU** | 25.98' | 24.48' | 23.59' |
| BULK | | **Y** | 11.84' | 10.66' | 10.24' |
| | | **Z** | 20.41' | 19.95' | 20.64' |

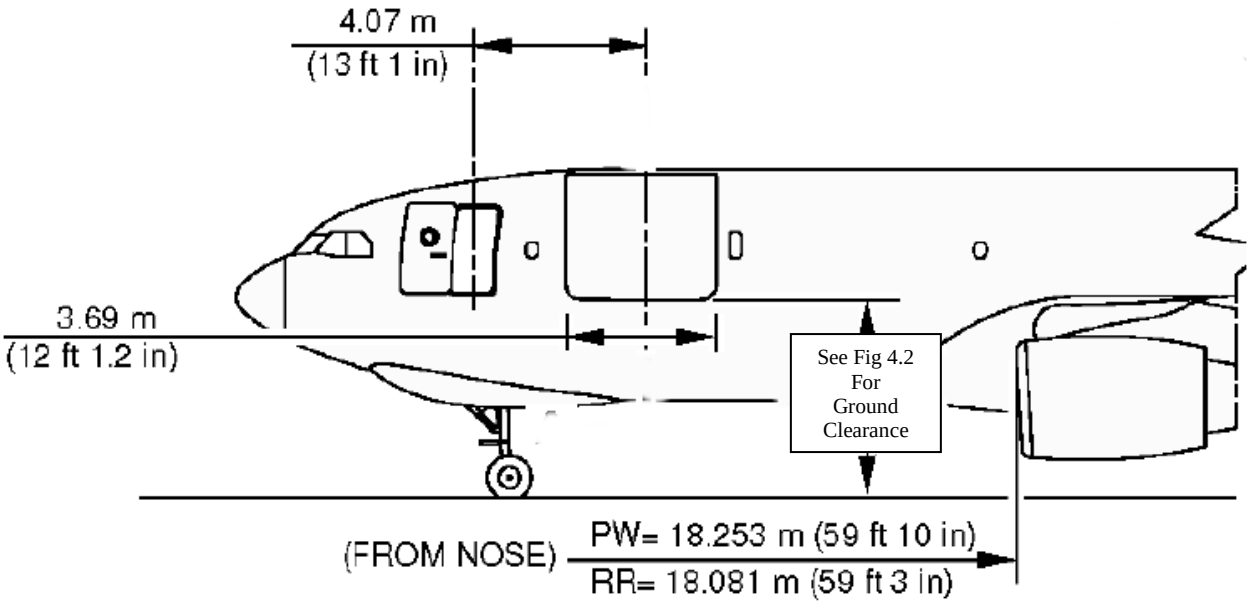
**4.2. COMPARTMENT CONFIGURATIONS.**

**4.2.1. MAIN/PASSENGER COMPARTMENT.**
**4.2.1.1. Pax/Crew Door.**
**Figure 4.3. Pax/Crew Door A330-200F.**

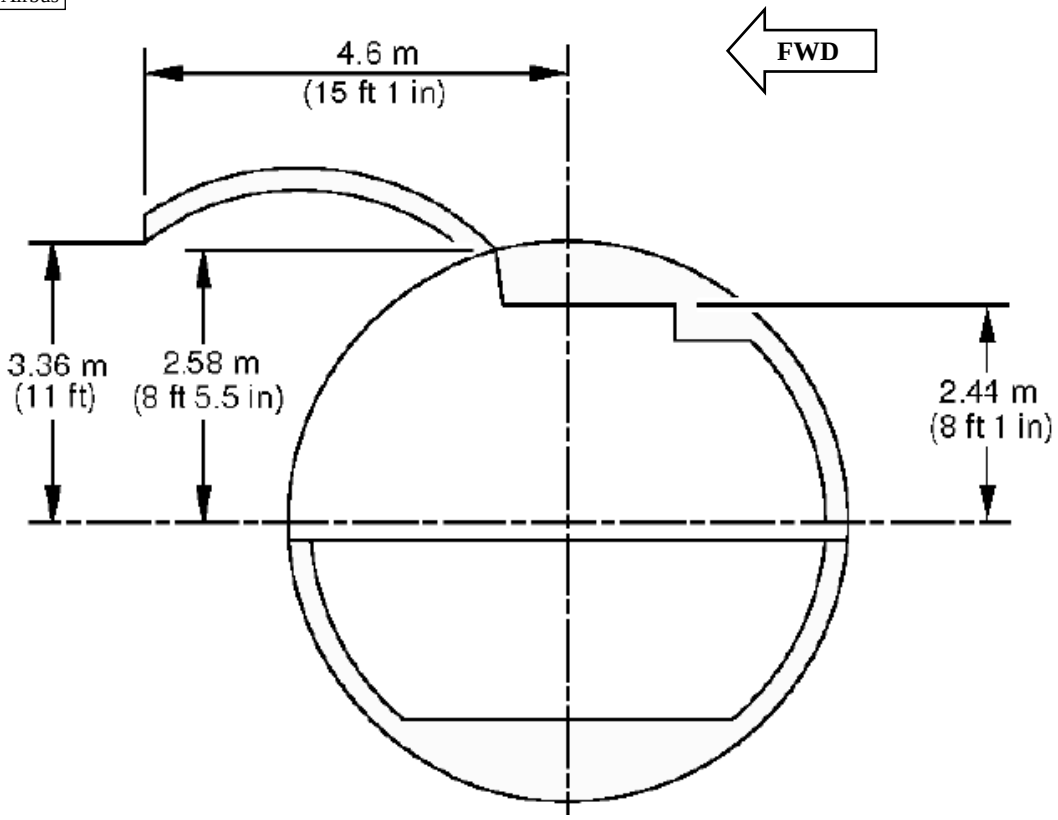


**4.2.1.2. Main Door.**

**Figure 4.4. Main Compartment Door A330-200F.**

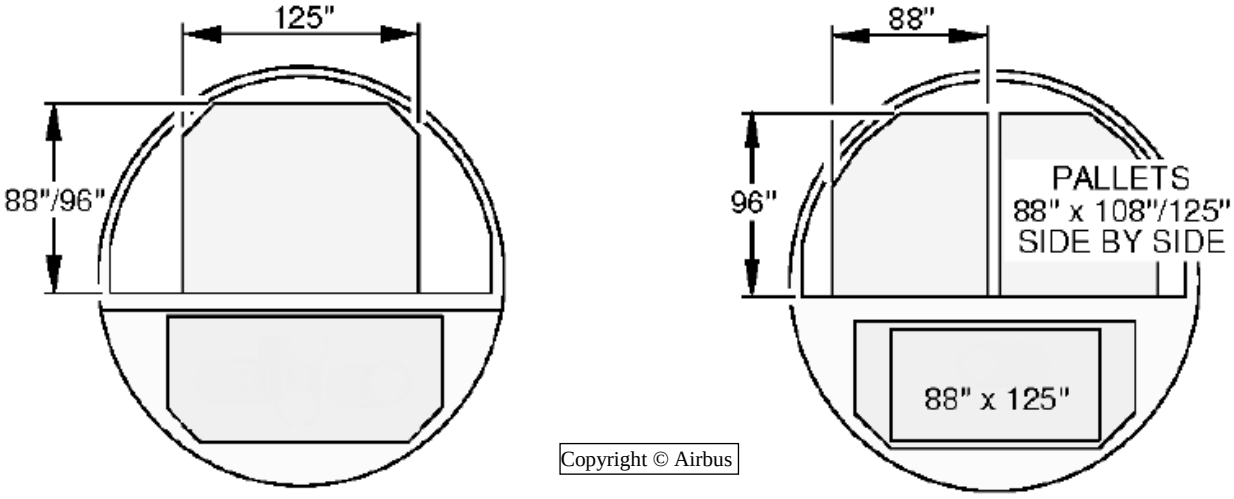




**4.2.1.3. Compartment Dimensions.**

**Figure 4.5. Main Compartment Dimensions A330-200F.**

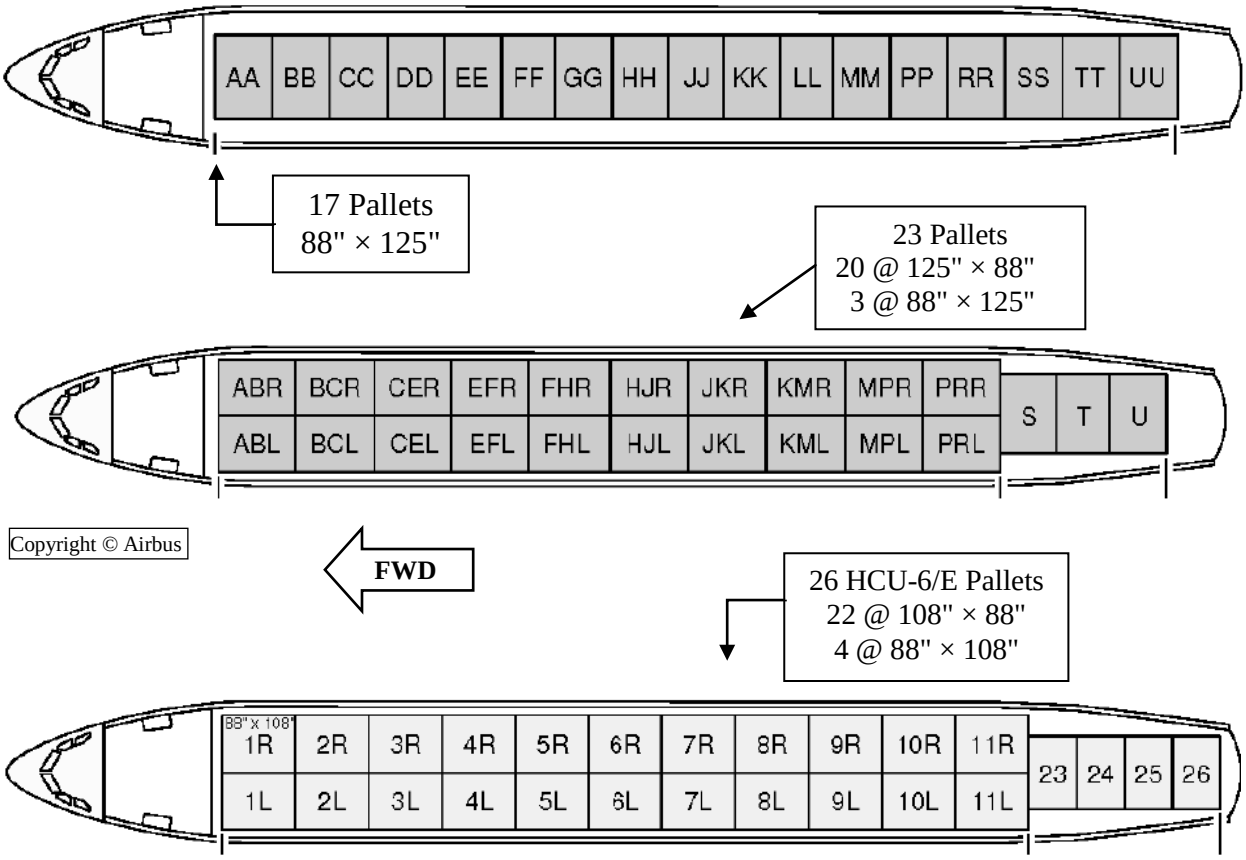





**4.2.1.4. Pallets.**

**NOTE:** See Attachment 1 for contour guide for the build-up of cargo.

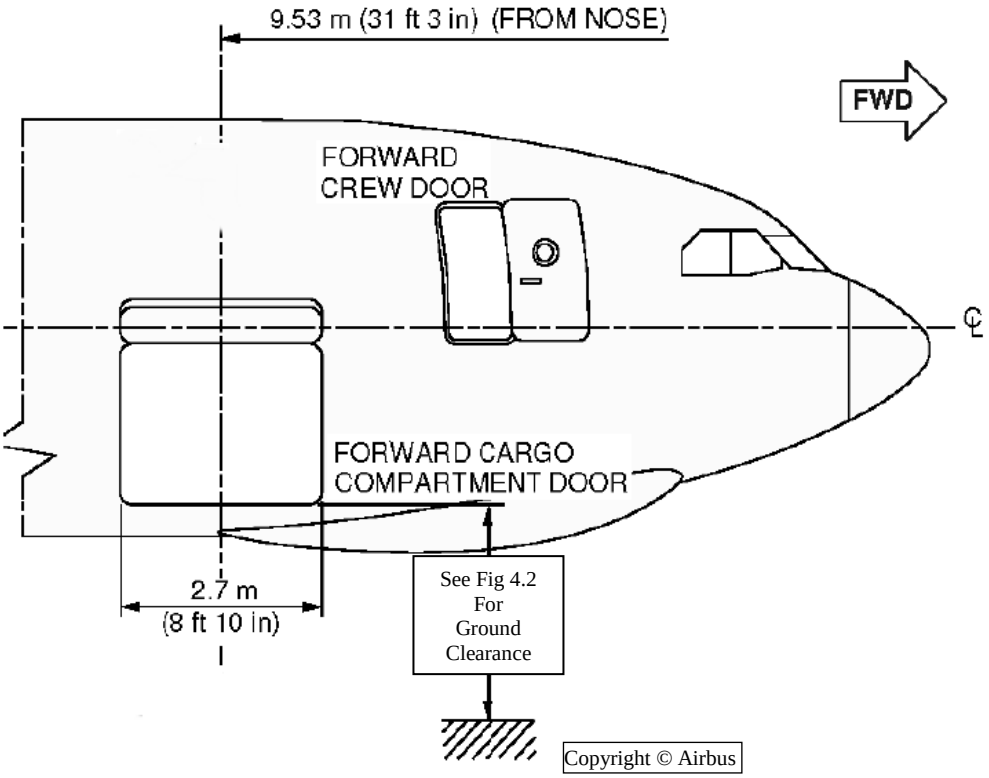
**Figure 4.6. Main Compartment Cargo Configurations A330-200F.**

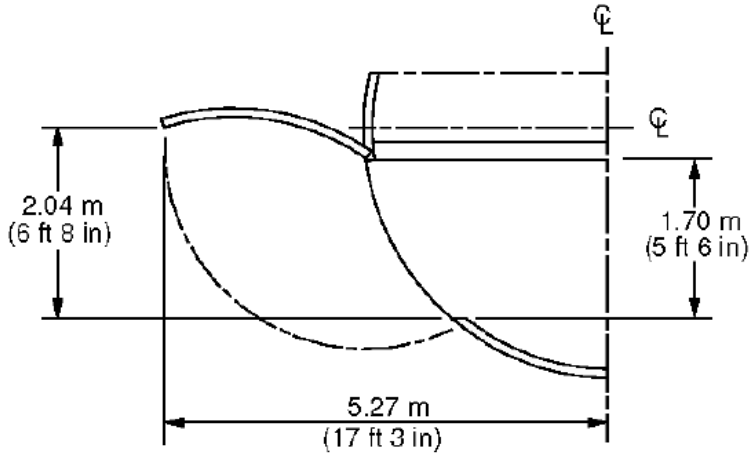


**4.2.2. FORWARD COMPARTMENT.**

**4.2.2.1. Door.**

**Figure 4.7. Forward Compartment Door A330-200F.**




**4.2.2.2. Compartment Dimensions.**

Same as for A330-200. See: Fig. 3.6. Forward Compt. Dimensions A330-200.

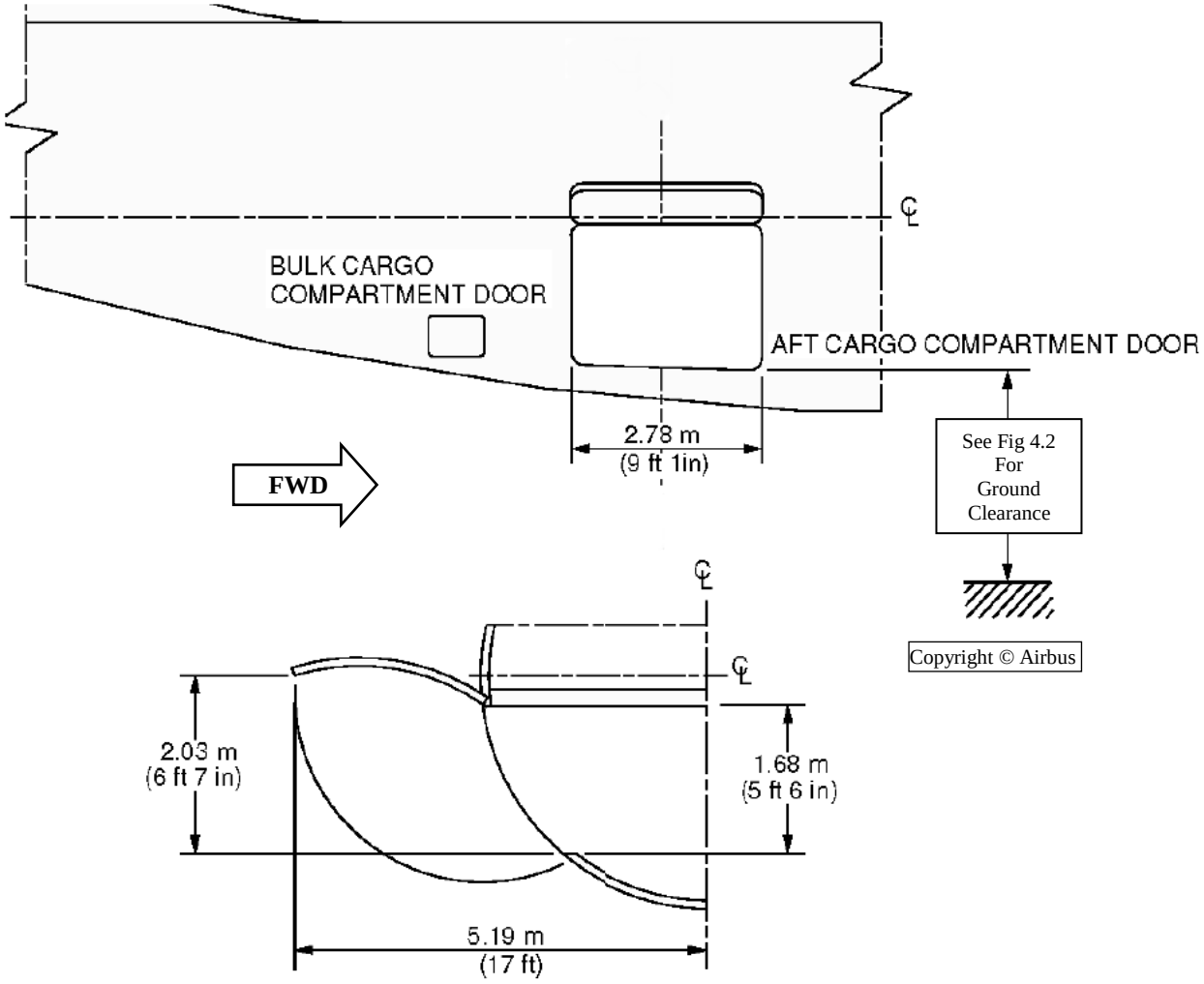
**4.2.2.3. Pallets.**

**NOTE:** See Attachment 2 for contour guide for the build-up of cargo.

Four (4) 88" x 125" pallets with a max height of 64"

Same as for A330-200. See: Fig. 3.7. Forward Compt Cargo Config's A330-200.

**4.2.3. AFT COMPARTMENT.**
**4.2.3.1. Door.**
**Figure 4.8. Aft Compartment Door A330-200F.**





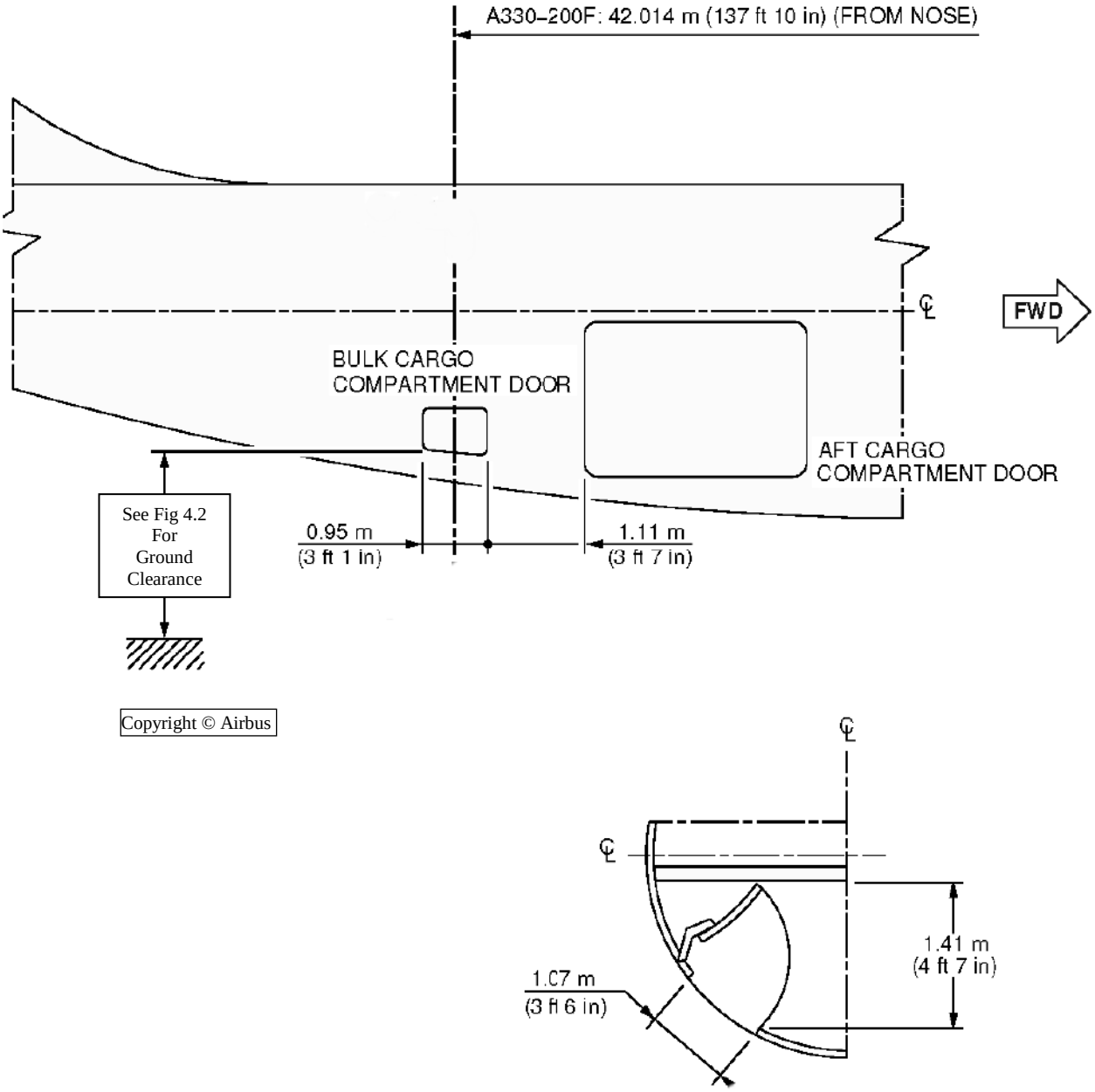
**4.2.3.2. Compartment Dimensions.**
Same as for A330-200. See: Fig. 3.9. Aft Compt. Dimensions A330-200.

**4.2.3.3. Pallets.**
**NOTE:** See Attachment 2 for contour guide for the build-up of cargo.
Four (4) 88" x 125" pallets with a max height of 64"
Same as for A330-200. See: Fig. 3.10. Aft Compt. Cargo Config's A330-200.

**4.2.4. BULK COMPARTMENT.**

**4.2.4.1. Door.**

**Figure 4.9. Bulk Compartment Door A330-200F.**






**4.2.4.2. Compartment Dimensions.**

Same as for A330-200. See: Fig. 3.12. Bulk Compt. Dimensions A330-200.

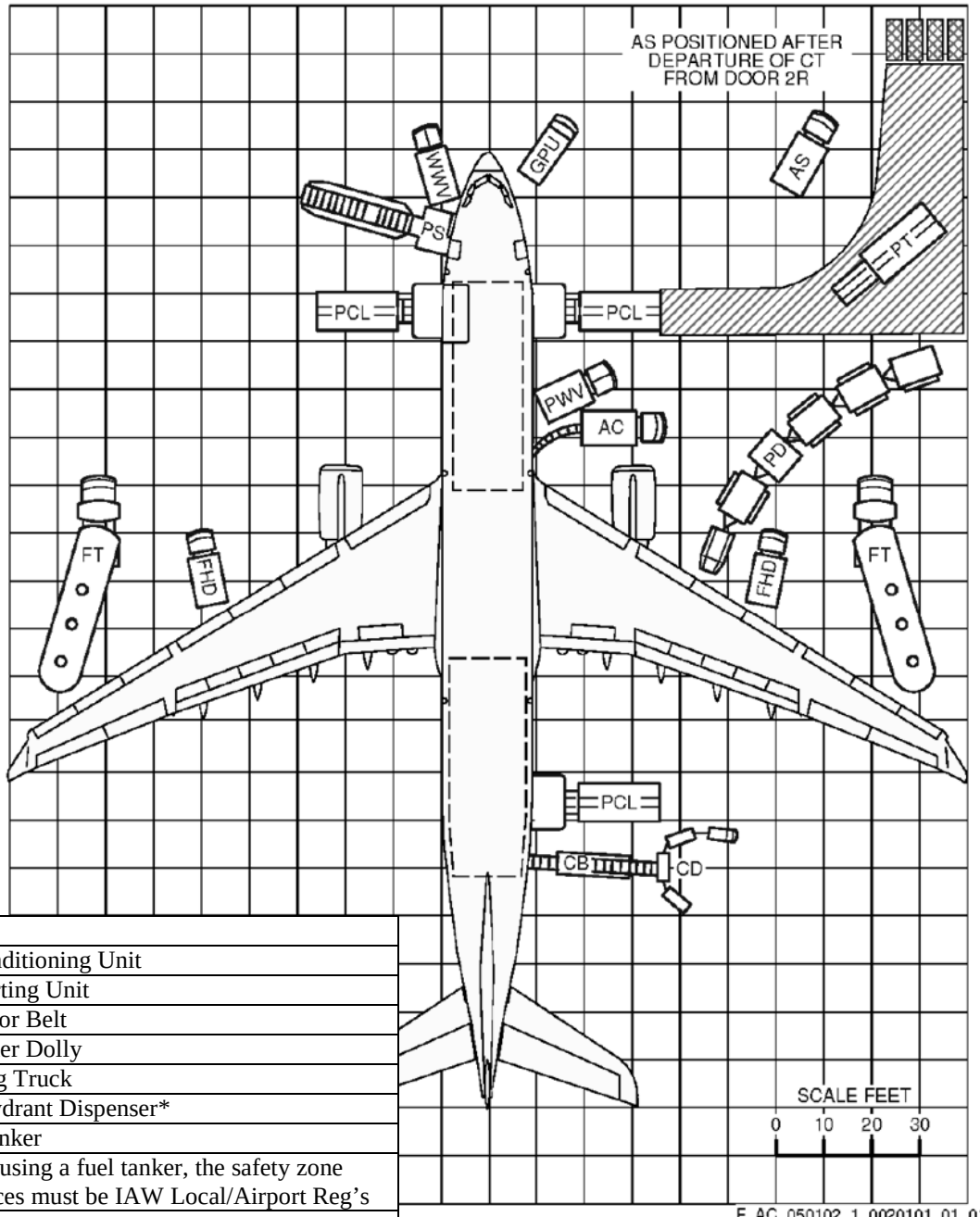
**4.2.4.3. Pallets.**

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

**4.3. SERVICING DIAGRAMS.**

**4.3.1. Servicing.**

**Figure 4.10. Typical Servicing Arrangement A330-200F.**

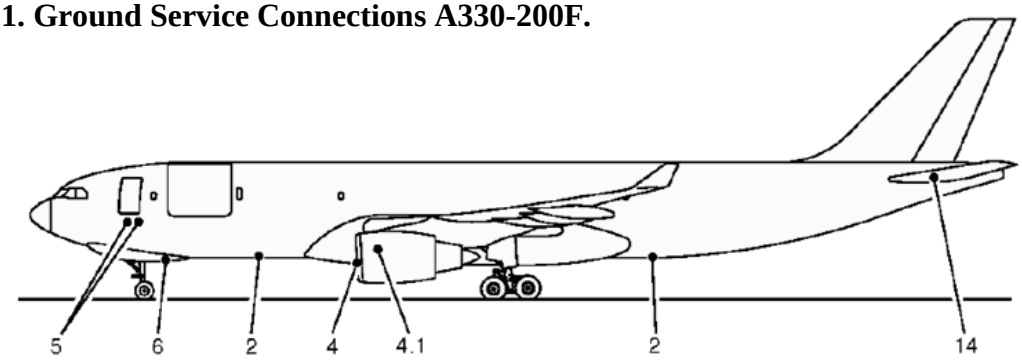


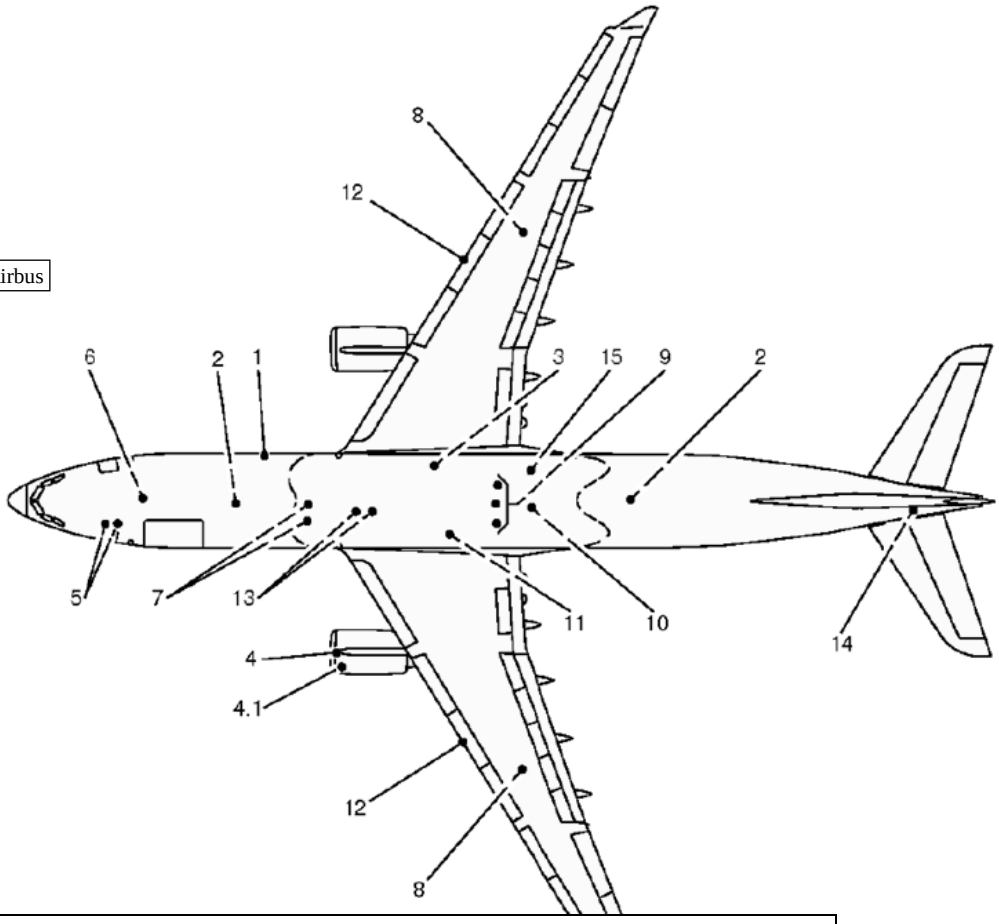



| Servicing Codes | |
|---|---|
| AC | Air Conditioning Unit |
| AS | Air Starting Unit |
| CB | Conveyor Belt |
| CD | Container Dolly |
| CT | Catering Truck |
| FHD | Fuel Hydrant Dispenser* |
| FT | Fuel Tanker |
| | *When using a fuel tanker, the safety zone clearances must be IAW Local/Airport Reg's |
| GPU | Ground Power Unit |
| LV | Lavatory Vehicle |
| PB | Passenger Bridge |
| PCL | Pallet /Container Loader |
| PD | Pallet Dolly |
| PS | Passenger Stairs |
| PT | Pallet Transporter |
| PWV | Potable Water Vehicle |
| WWV | Waste Water Vehicle |

**4.3.2. Ground Connections.**

**Figure 4.11. Ground Service Connections A330-200F.**






| Ground Connection Codes | | | |
|---|---|---|---|
| 1 | Potable Water Service Panel | 8 | Fuel Gravity Fill |
| 2 | Remote Water Drain | 9 | Air Charging (Hyd Accumulators) |
| 3 | Hyd Grnd Pwr Supply-Yellow | 10 | Hyd Reserv Fill/Grnd Pwr -Green |
| 4 | IDG Oil Filling | 11 | Hyd Reserv Air Charge/Grnd Pwr -Blue |
| 4.1 | Engine Oil Filling | 12 | Refuel/Defuel Coupling |
| 5 | Waste Water Panel | 13 | High Pressure Air |
| 6 | Electrical Ground Power | 14 | APU Oil Filling |
| 7 | Low Pressure Air | 15 | Refuel/Defuel Panel |

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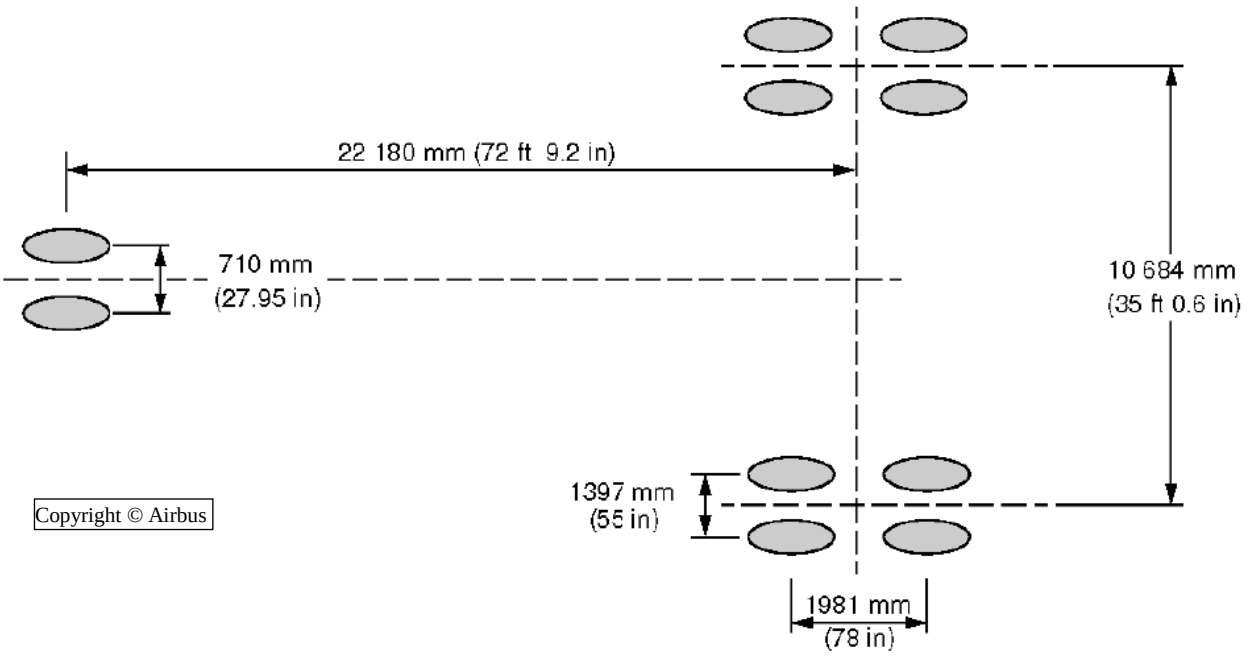
## 4.4. AIRFIELD SUITABILITY.

### 4.4.1. Landing Gear Footprint.

**Figure 4.12. Landing Gear Footprint A330-200F.**

| | | |
|---|---|---|
| Max Ramp Wt. | 227,900 kg<br>(502,425lb) | 233,900 kg<br>(515,650lb) |
| Nose Gear Tire Size | 1050 x 395 R16 | |
| Nose Gear Tire Press. | 12.7 bar<br>(184psi) | |
| Main Gear Tire Size | 1400x530R23<br>(54x21-23(bias)) | |
| Main Gear Tire Press. | 14.2 bar<br>(206psi) | |




### 4.4.2. Minimum Turning Radii.

Same as for A330-200. See: Fig. 3.16. Minimum Turning Radii A330-200.

### 4.4.3. Parking Footprint.

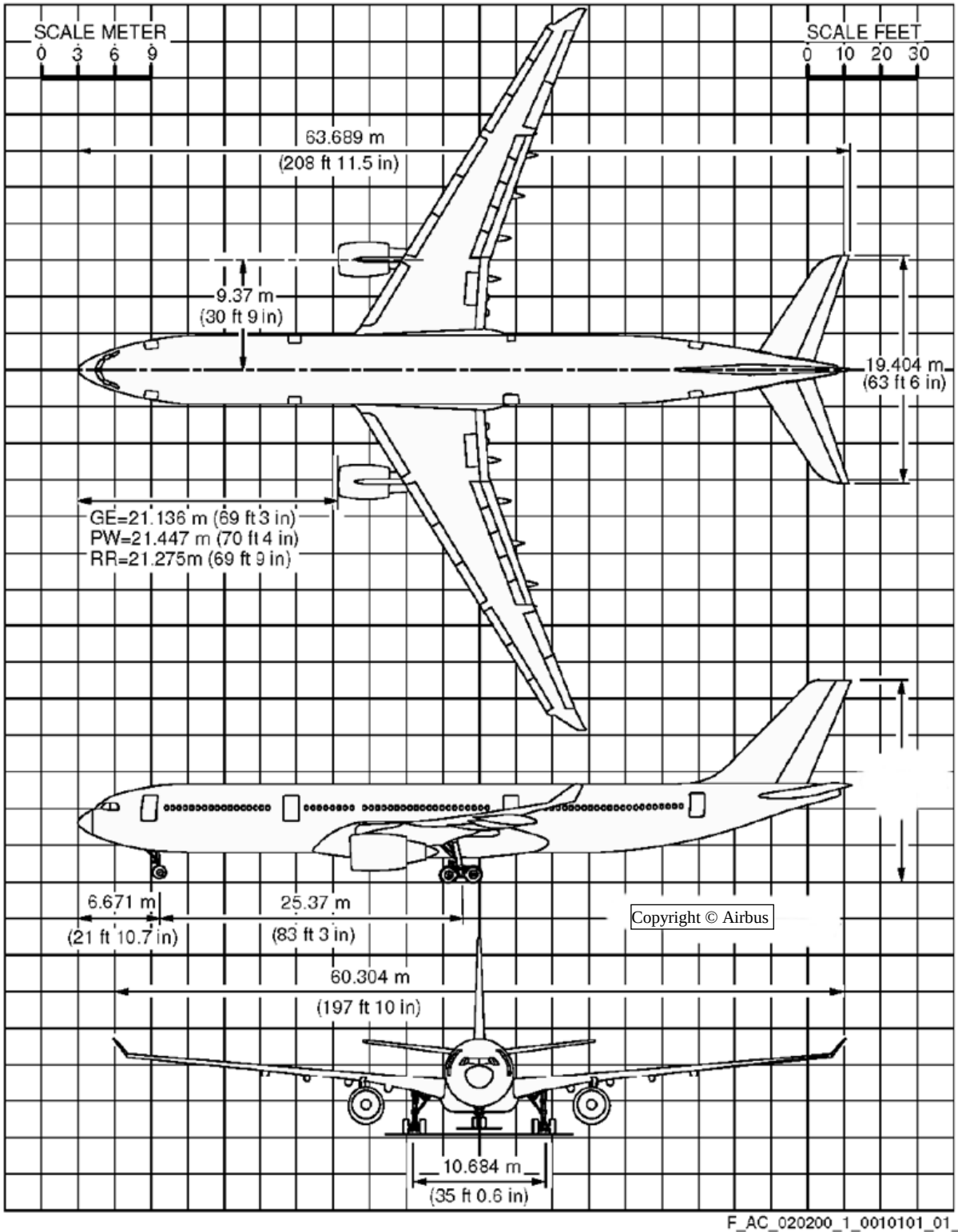
Same as for A330-200. See: Fig. 3.17. Parking Footprint A330-200.

## Chapter 5
## A330-300

### 5.1. DIMENSIONS.

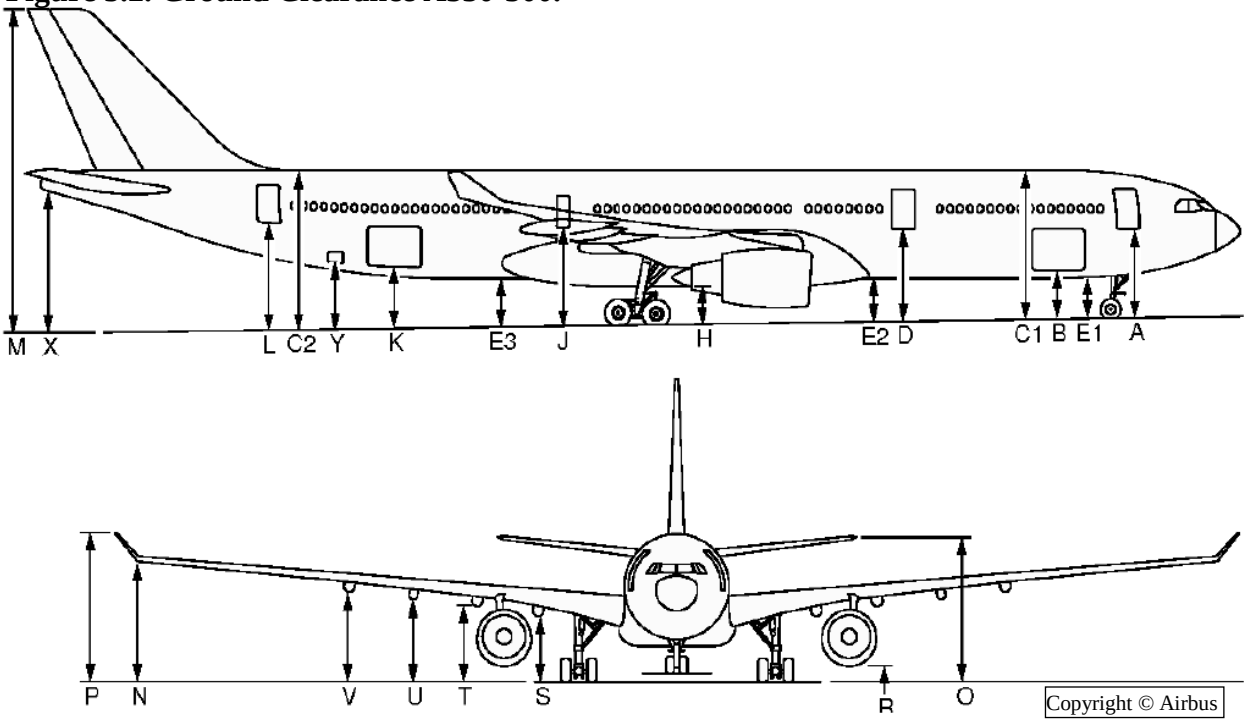
### 5.1.1. General Dimensions.

**Figure 5.1. General Dimensions A330-300.**



**5.1.2. Ground Clearance.**

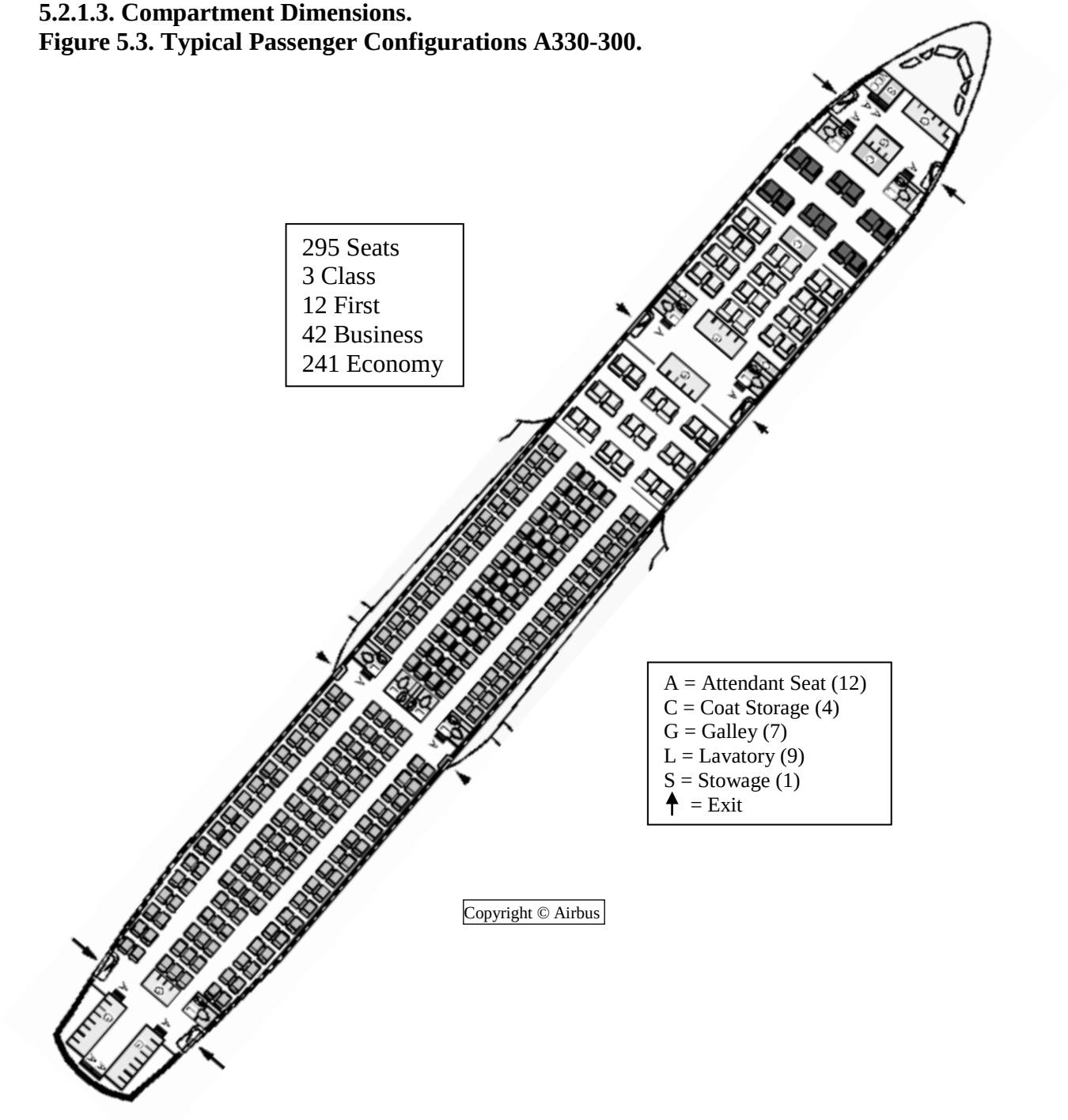
**Figure 5.2. Ground Clearance A330-300.**






| **Vertical Clearances** | | | | | |
|---|---|---|---|---|---|
| | | | **OEW** | **MRW** | |
| **DOOR** | | | **CG 26.8%** | **CG 15%** | **CG 36.5%** |
| Pax/Crew | | **A** | 14.92' | 14.46' | 14.92' |
| FWD | | **B** | 8.85' | 8.36' | 8.72' |
| | | **C1** | 25.4' | 24.86' | 25.16' |
| | | **C2** | 28.0' | 27.26' | 26.87' |
| | | **D** | 15.84' | 15.32' | 15.51' |
| | | **E1** | 6.89' | 6.39' | 6.66' |
| | | **E2** | 7.48' | 6.88' | 7.02' |
| | | **E3** | 8.99' | 8.33' | 8.03' |
| | | **H** | 6.7' | 6.1' | 6.07' |
| | | **J** | 17.5' | 17.4' | 17.06' |
| AFT | | **K** | 11.25' | 10.56' | 10.27' |
| | | **L** | 18.93' | 18.2' | 17.75' |
| | | **M** | 56.36' | 55.58' | 54.85' |
| | | **N** | 21.2' | 20.11' | 19.88' |
| | | **O** | 27.32' | 26.54' | 25.85' |
| | | **P** | 26.41' | 25.26' | 24.96' |
| | GE= | **R** | 3.08' | 2.49' | 2.59' |
| | PW= | **R** | 2.95' | 2.36' | 2.46' |
| | RR= | **R** | 2.85' | 2.26' | 2.36' |
| | | **S** | 12.7' | 12.07' | 11.94' |
| | | **T** | 14.2' | 13.55' | 13.48' |
| | | **U** | 15.22' | 14.46' | 14.33' |
| | | **V** | 16.3' | 15.48' | 15.32' |
| | | **X** | 24.54' | 23.76' | 23.06' |
| BULK | | **Y** | 12.07' | 11.35' | 11.0' |

**5.2. COMPARTMENT CONFIGURATIONS.**
**5.2.1. MAIN/PASSENGER COMPARTMENT.**
**5.2.1.1. Pax/Crew Door.**
Same as for A330-200. See: Figure 3.3 Pax/Crew Door A330-200.
**5.2.1.2. Main Door.** N/A this model
**5.2.1.3. Compartment Dimensions.**
**Figure 5.3. Typical Passenger Configurations A330-300.**




**5.2.1.4. Pallets.**
N/A this model

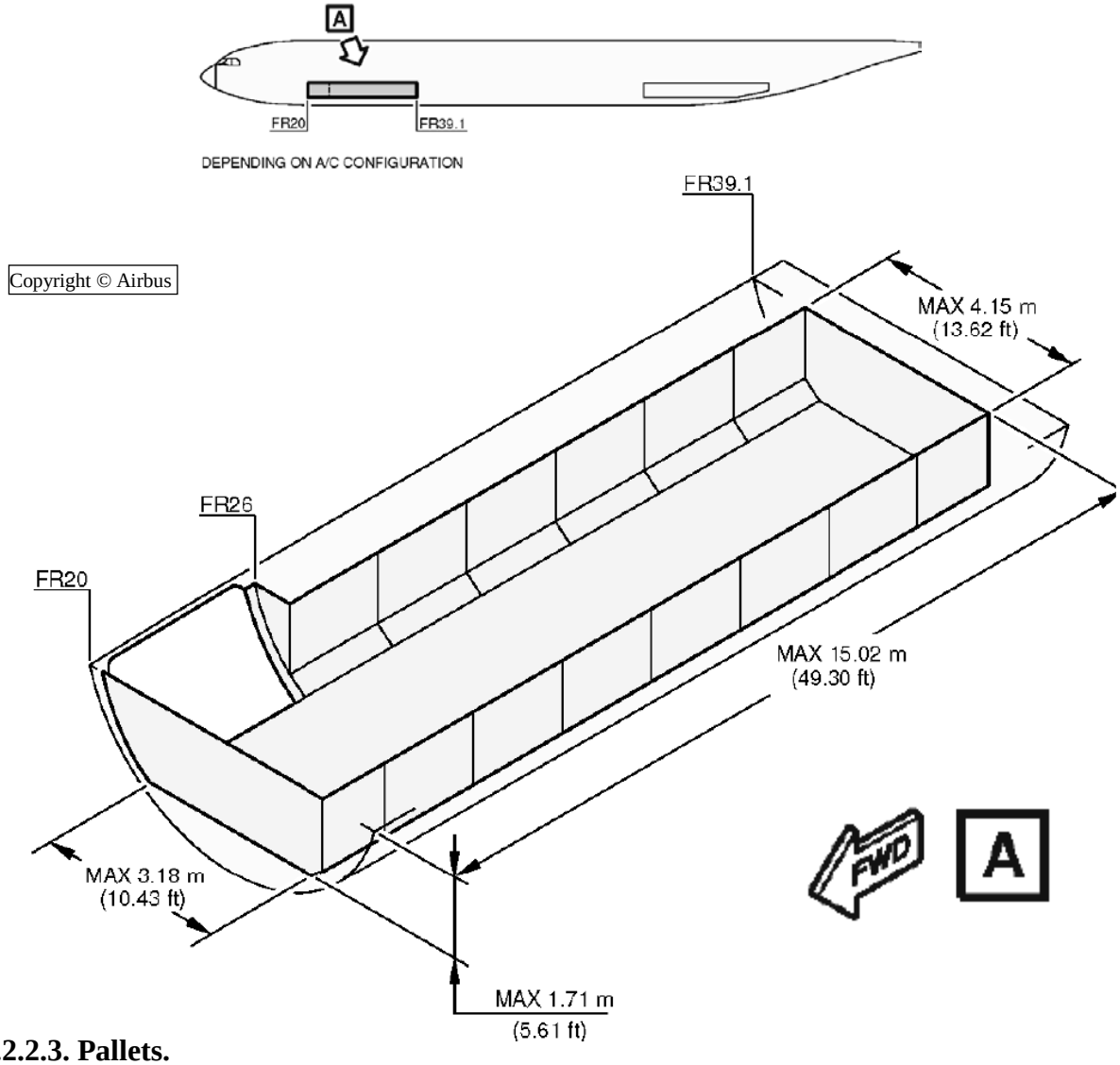
**5.2.2. FORWARD COMPARTMENT.**

**5.2.2.1. Door.**

Same as for A330-200. See: Figure 3.5. Forward Compartment Door A330-200.

**5.2.2.2. Compartment Dimensions.**

**Figure 5.4. Forward Compartment Dimensions A330-300.**

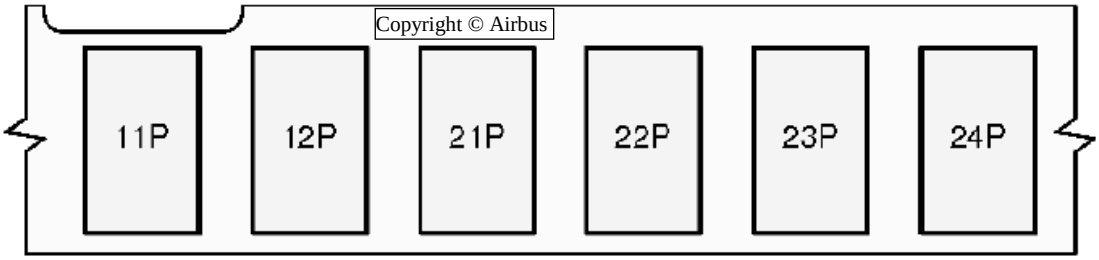



**5.2.2.3. Pallets.**

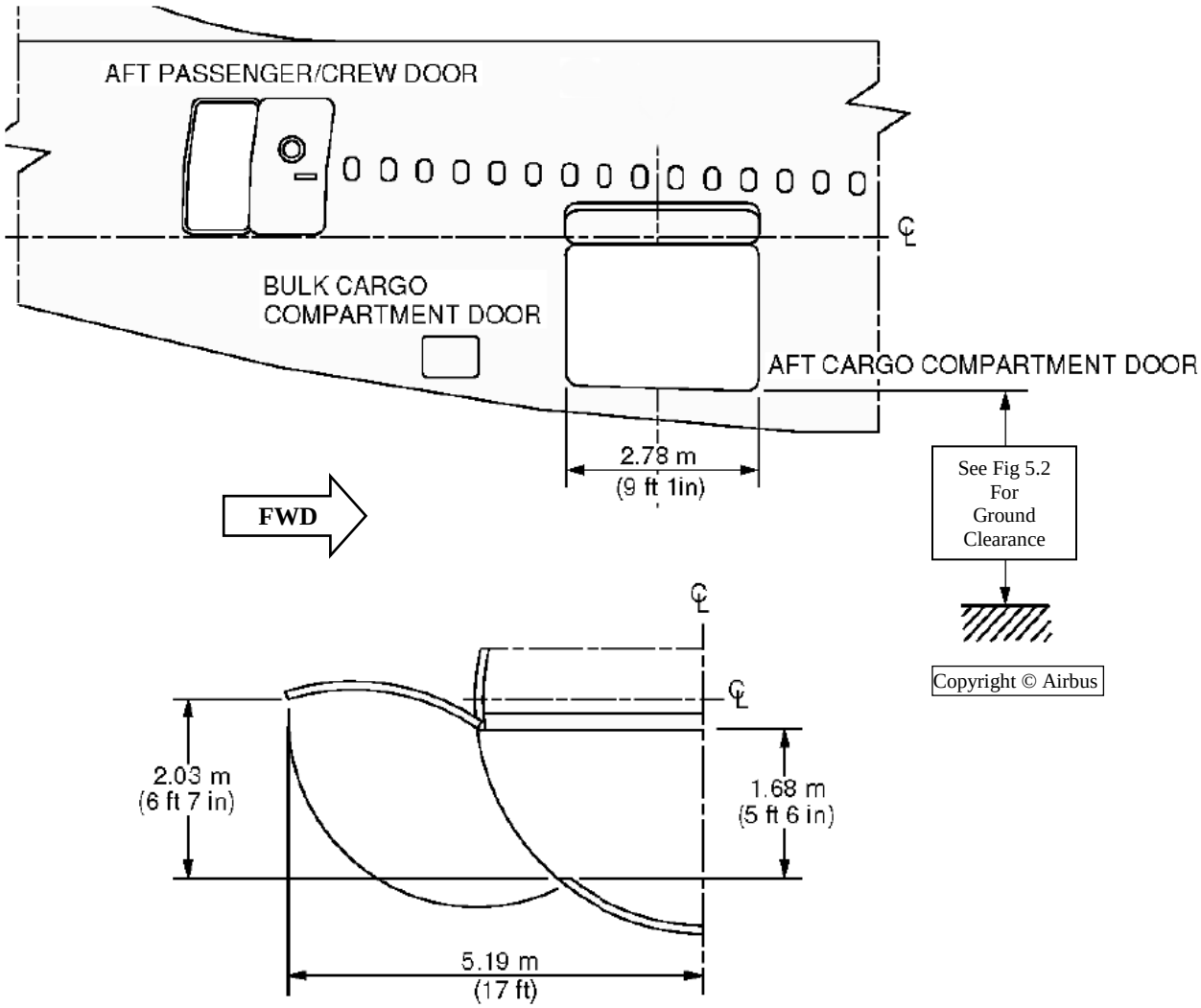
**NOTE:** See Attachment 2 for contour guide for the build-up of cargo.

Six (6) 88" x 125" pallets with a max height of 64"

**Figure 5.5. Forward Compartment Cargo Configurations A330-300.**

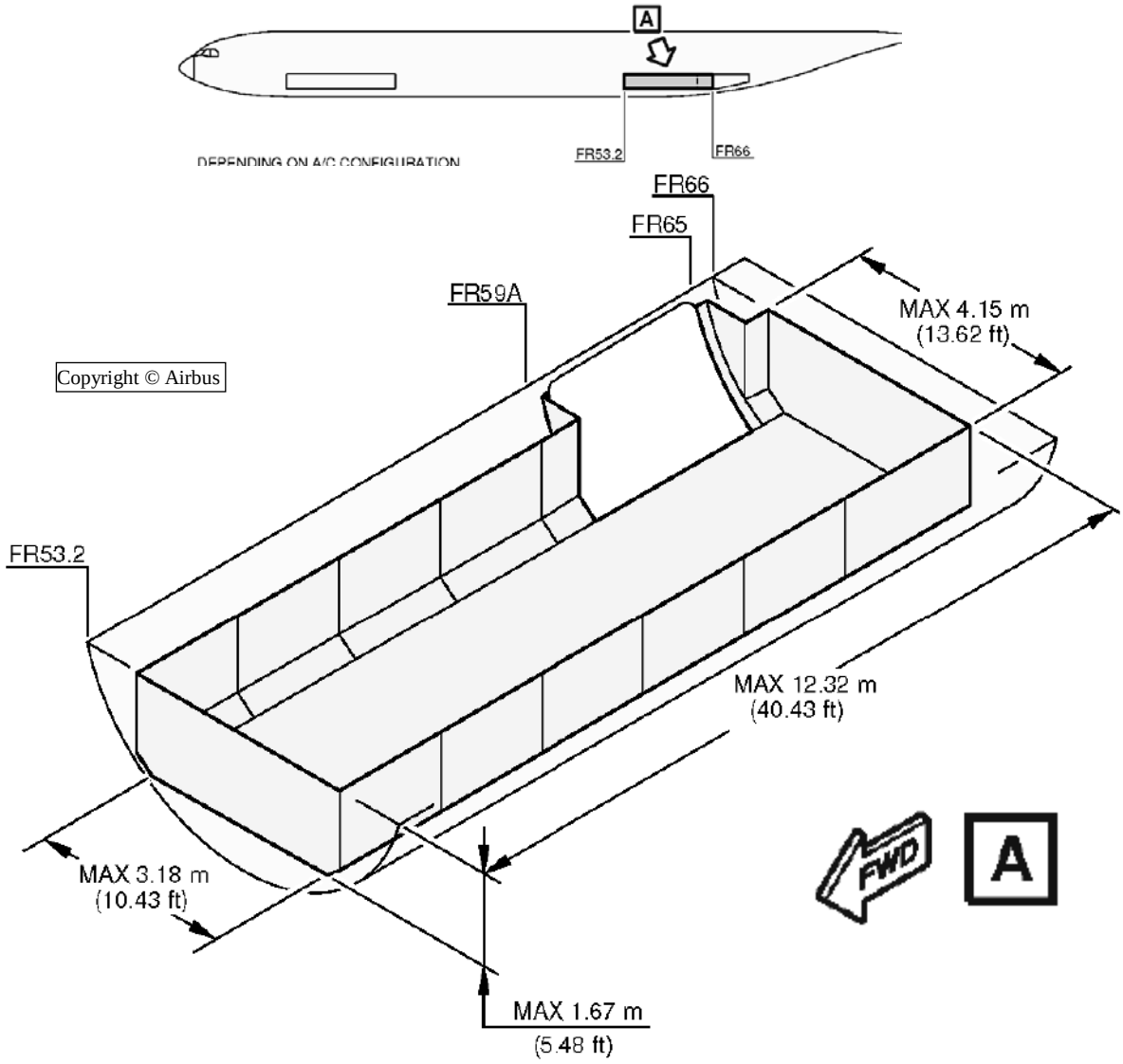


**5.2.3. AFT COMPARTMENT.**
**5.2.3.1. Door.**
**Figure 5.6. Aft Compartment Door A330-300.**



**5.2.3.2. Compartment Dimensions.**

**Figure 5.7. Aft Compartment Dimensions A330-300.**

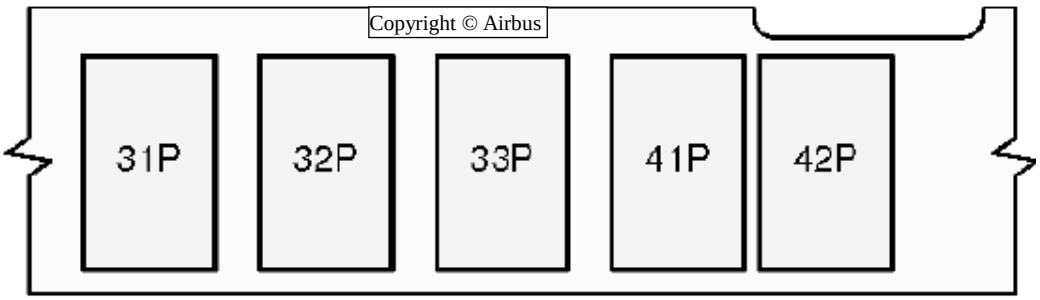



**5.2.3.3. Pallets.**

**NOTE:** See Attachment 2 for contour guide for the build-up of cargo.

Five (5) 88" x 125" pallets with a max height of 64"

**Figure 5.8. Aft Compartment Cargo Configurations A330-300.**



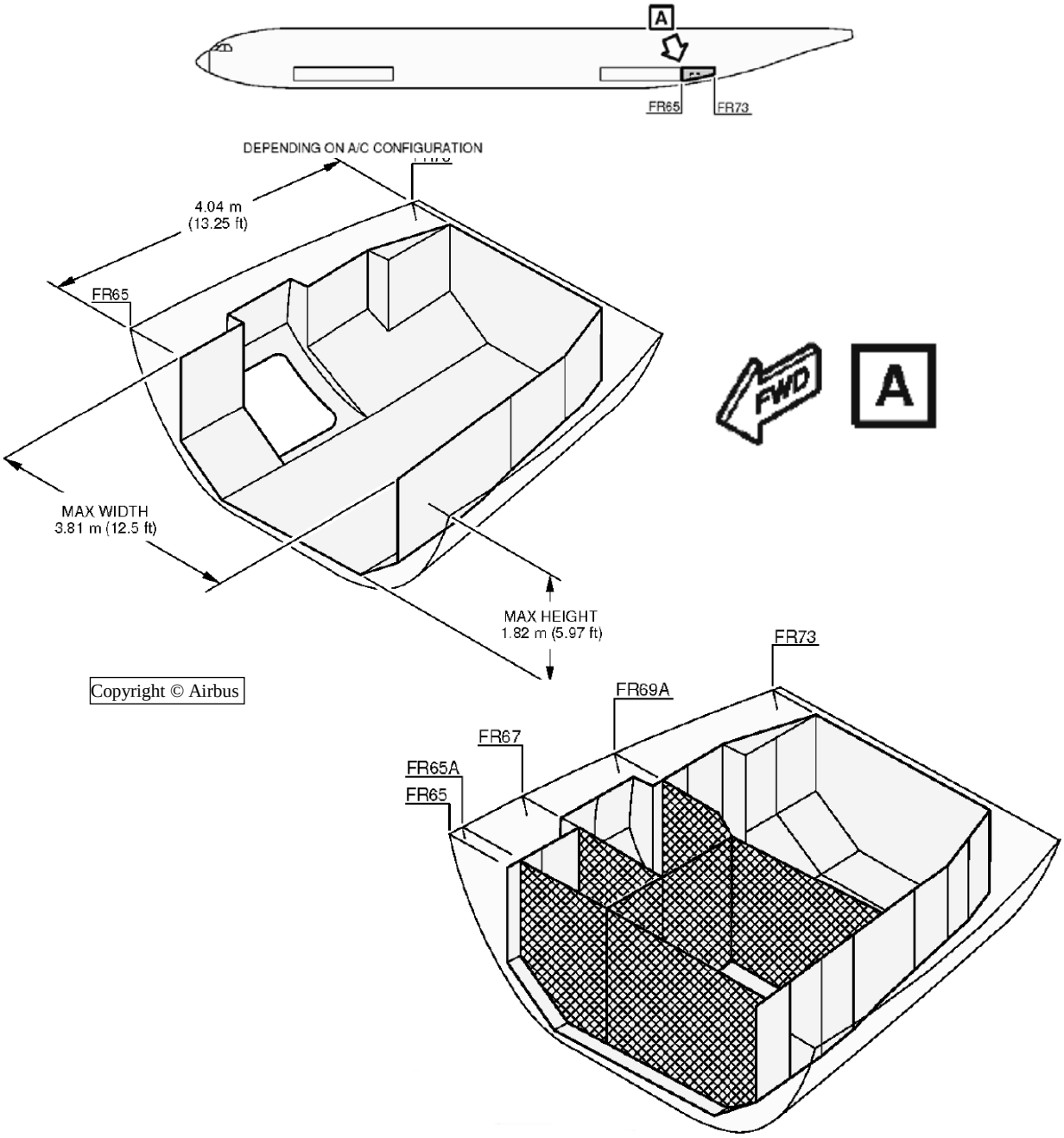
**5.2.4. BULK COMPARTMENT.**

**5.2.4.1. Door.**

Same as for A330-200. See: Figure 3.11. Bulk Compartment Door A330-200.

**5.2.4.2. Compartment Dimensions.**

**Figure 5.9. Bulk Compartment Dimensions A330-300.**




**5.2.4.3. Pallets.**

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

**5.3. SERVICING DIAGRAMS.**

**5.3.1. Servicing.**

Same as for A330-200. See: Figure 3.13. Typical Servicing Arrangement A330-200.

**5.3.2. Ground Connections.**

Same as for A330-200. See: Figure 3.14. Ground Service Connections A330-200.

## 5.4. AIRFIELD SUITABILITY.

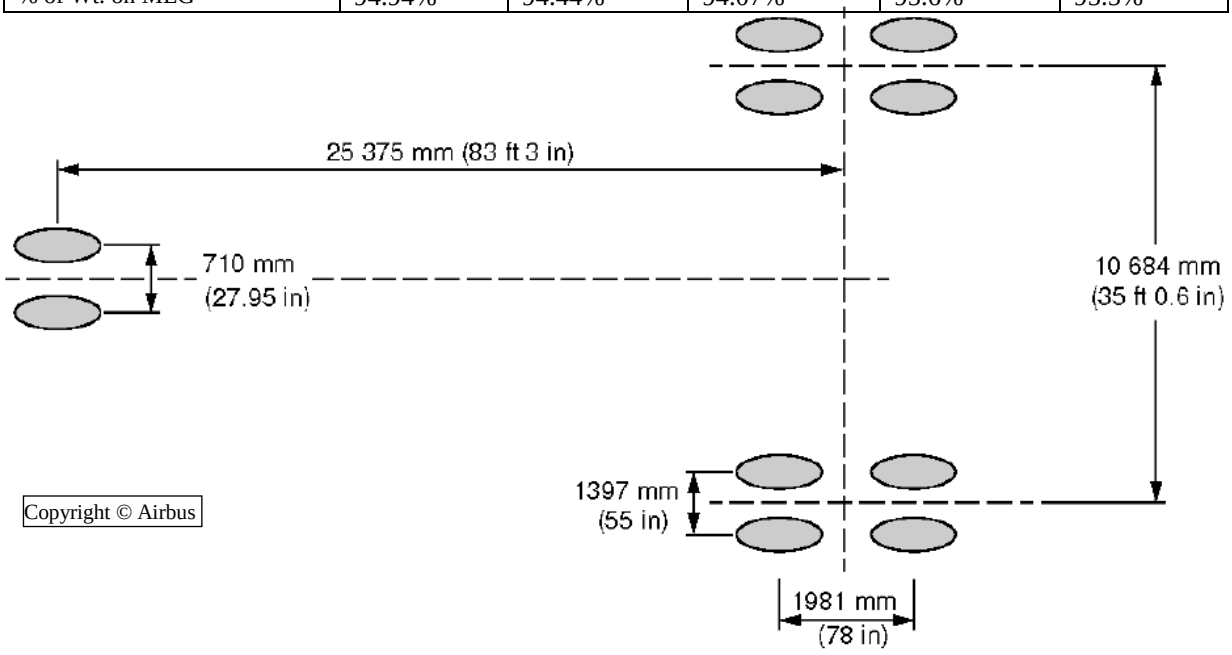
### 5.4.1. Landing Gear Footprint.

**Figure 5.10. Landing Gear Footprint A330-300.**

| Max Ramp Wt. | 184,900 kg (407,625lb) | 205,900 kg (453,925lb) | | | 212,900 kg (469,755lb) | | | 215,900 kg (475,975lb) |
|---|---|---|---|---|---|---|---|---|
| NLG Tire Size | 1050 x 395 R16 | | | | | | | |
| NLG Tire Press. | 10.7 bar (155psi) | 10.9 bar (158psi) | 11.4 bar (165psi) | 11.6 bar (168psi) | 10.7 bar (155psi) | 10.9 bar (158psi) | 11.6 bar (168psi) | 10.9 bar (158psi) |
| MLG Tire Size | 1400x530R23 (54x21-23(bias)) | | | | | | | |
| MLG Tire Press. | 13.1 bar (190psi) | 13.3 bar (193psi) | 14.2 bar (206psi) | 14.5 bar (210psi) | 13.1 bar (190psi) | 13.3 bar (193psi) | 14.5 bar (210psi) | 13.3 bar (193psi) |

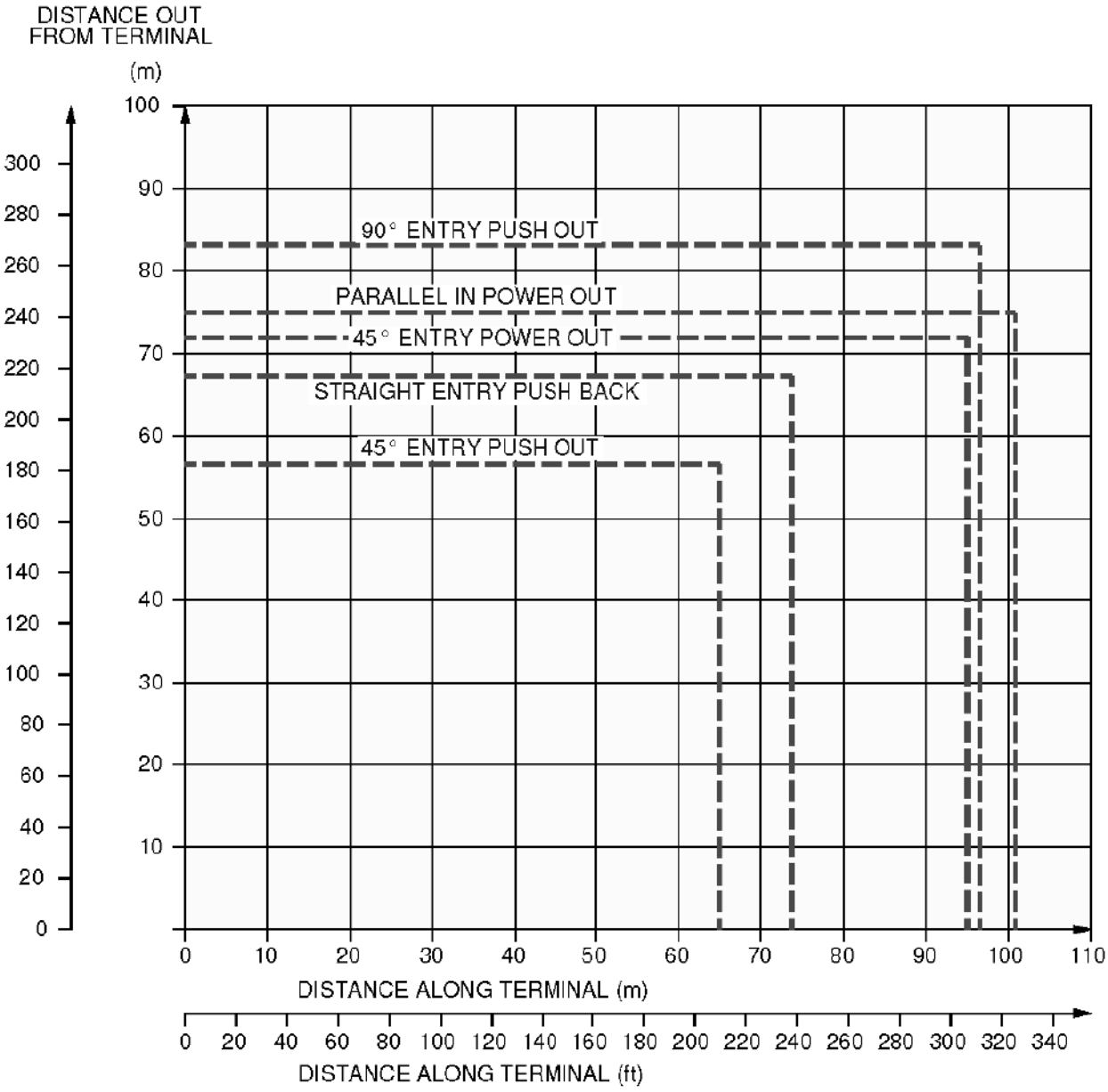
| Max Ramp Wt. | 217,900 kg (480,375lb) | | 218,900 kg (486,600lb) | 230,900 kg (509,050lb) | | 233,900 kg (519,650lb) |
|---|---|---|---|---|---|---|
| NLG Tire Size | 1050 x 395 R16 | | | | | |
| NLG Tire Press. | 10.9 bar (158psi) | 11.4 bar (165psi) | 10.9 bar (158psi) | 11.4 bar (165psi) | 11.6 bar (168psi) | 11.6 bar (168psi) |
| MLG Tire Size | 1400x530R23 (54x21-23(bias)) | | | | | |
| MLG Tire Press. | 13.3 bar (193psi) | 14.2 bar (206psi) | 13.3 bar (193psi) | 14.2 bar (206psi) | 14.5 bar (210psi) | 14.5 bar (210psi) |

| Max Ramp Wt. | | 212,900 kg (469,364lb) | 215,900 kg (475,978lb) | 217,900 kg (480,387lb) | 230,900 kg (509,050lb) | 233,900 kg (519,650lb) |
|---|---|---|---|---|---|---|
| NLG Tire Size | | 1050 x 395 R16 | | | | |
| NLG Tire Press. | Unloaded | 10.2 bar (149psi) | 10.5 bar (152psi) | 10.5 bar (152psi) | 10.2 bar (149psi) | 11.2 bar (162psi) |
| | Loaded | 10.7 bar (155psi) | 10.9 bar (158psi) | 10.9 bar (158psi) | 10.7 bar (154psi) | 11.6 bar (168psi) |
| MLG Tire Size | | 1400x530R23 (54x21-23) | | | | |
| MLG Tire Press. | Unloaded | 12.6 bar (183psi) | 12.8 bar (186psi) | 12.8 bar (186psi) | 13.6 bar (198psi) | 13.9 bar (202psi) |
| | Loaded | 13.1 bar (189psi) | 13.3 bar (194psi) | 13.3 bar (194psi) | 14.2 bar (206psi) | 14.5 bar (210psi) |
| % of Wt. on MLG | | 94.94% | 94.44% | 94.07% | 95.6% | 95.5% |



**5.4.2. Minimum Turning Radii.**
Same as for A330-200. See: Figure 3.16. Minimum Turning Radii A330-200.

**5.4.3. Parking Footprint.**
**Figure 5.11. Parking Footprint A330-300.**






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

## Attachment 1

## GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

***References***

***Department of Defense / Unified Combatant Commands***

DTR 4500.9-R, *Defense Transportation Regulation – Part III Mobility*
Appendix J *– Hazardous Materials (HAZMAT) Certification and Mobility Procedures*
Appendix K *– Hazardous Materials (HAZMAT) Special Permits (SP)*
Appendix V*– Aircraft Load Planning and Documentation*
Appendix BB*– Procedures for Transporting Weapons, Ammunition and Hazardous Materials (HAZMAT) Aboard Commercial Aircraft in Scheduled Service and Department of Defense (DOD) – Owned or Controlled Aircraft*
DD Form 2130-5, DC 10-10/*30CF Load Plan*
DD Form 2130-8, *DC 8-50 Series F/CF Load Plan*
DD Form 2130-9, *DC 8-61/71-63/73F/CF Load Plan*
DD Form 2130-10, *DC 8-62CF Load Plan*
DD Form 2130-11, *B707-300C Load Plan*
DD Form 2130-12, *B747-100F/200C/200F Load Plan*
DD Form 2130C, *Aircraft Load Plan Continuation*
JP 3-17, *Joint Doctrine and Joint Tactics, Techniques, and Procedures for Air Mobility Operations*

***Air Force***

AFDD 2-6, *Air Mobility Operations*
AFMAN24-204(I), *Preparing Hazardous Materials for Military Air Shipments*
AFPAM 10-1403, *Air Mobility Planning Factors*

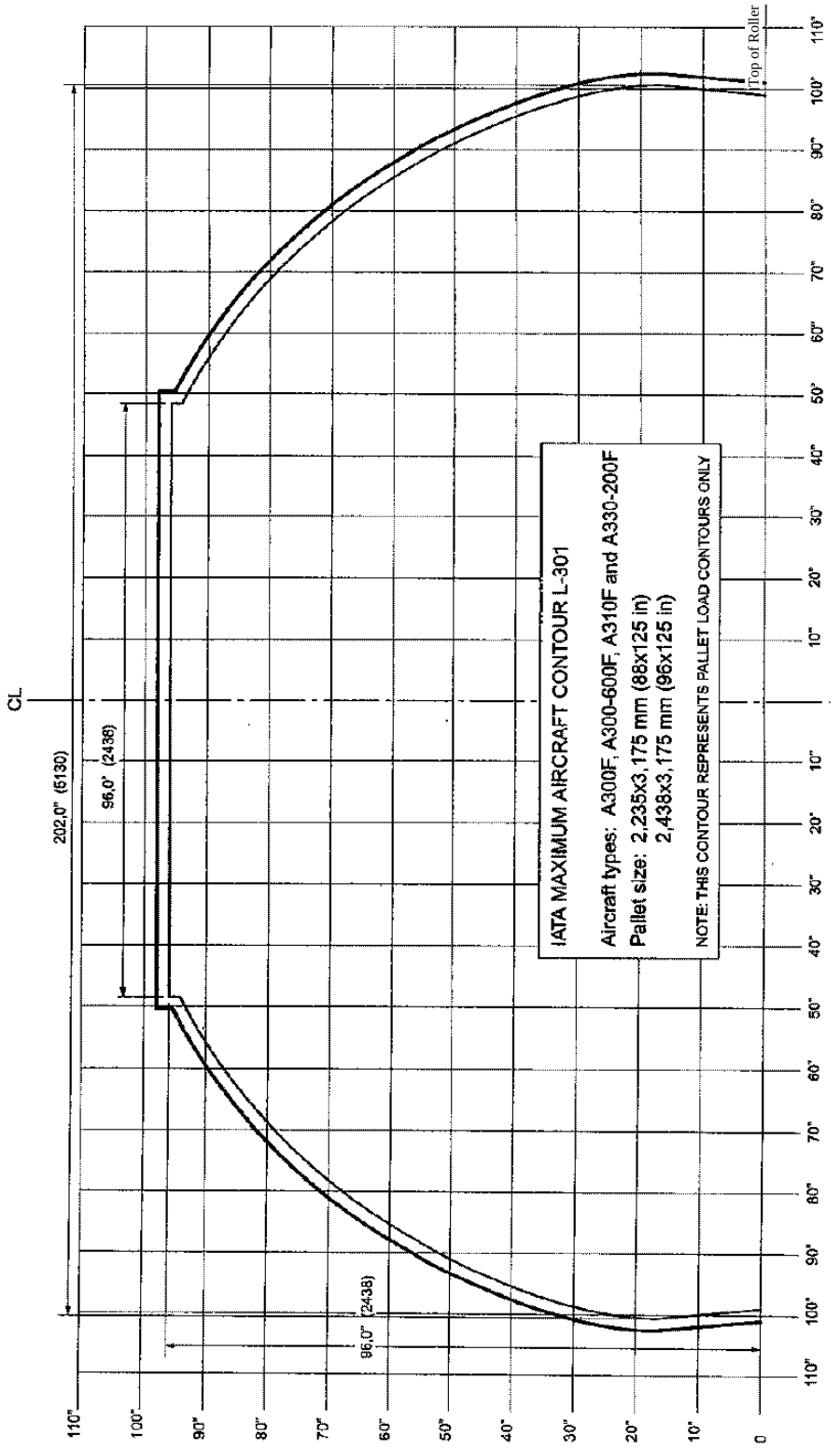
***Air Mobility Command***

AMCI 10-202V4, CL-1, *Expeditionary Air Mobility Support Operations – Checklist*
AMCI 10-402, *Civil Reserve Air Fleet (CRAF)*
AMCI 24-201, *Commercial Airlift Management – Civil Air Carriers* ***(NOTE: Potential change)***
AMC Affiliation Workbook 36-101 Volume I, *Equipment Preparation Course*
AMC Affiliation Workbook 36-101 Volume II, *Airlift Planner's Course*

***Other Agencies***

ATTLA, MIL-HDBK-1791, *Designing for Internal Aerial Delivery in Fixed Wing Aircraft*
IATA, *ULD Technical Manual (ULD)*
Airbus, *198 Van Buren Street Suite 300 Herndon, VA 20170*
Boeing, *P. O. Box 3707 Seattle, Washington 98124*

**Attachment 2**
**MAIN COMPARTMENT CONTOUR CHART A330-200F**

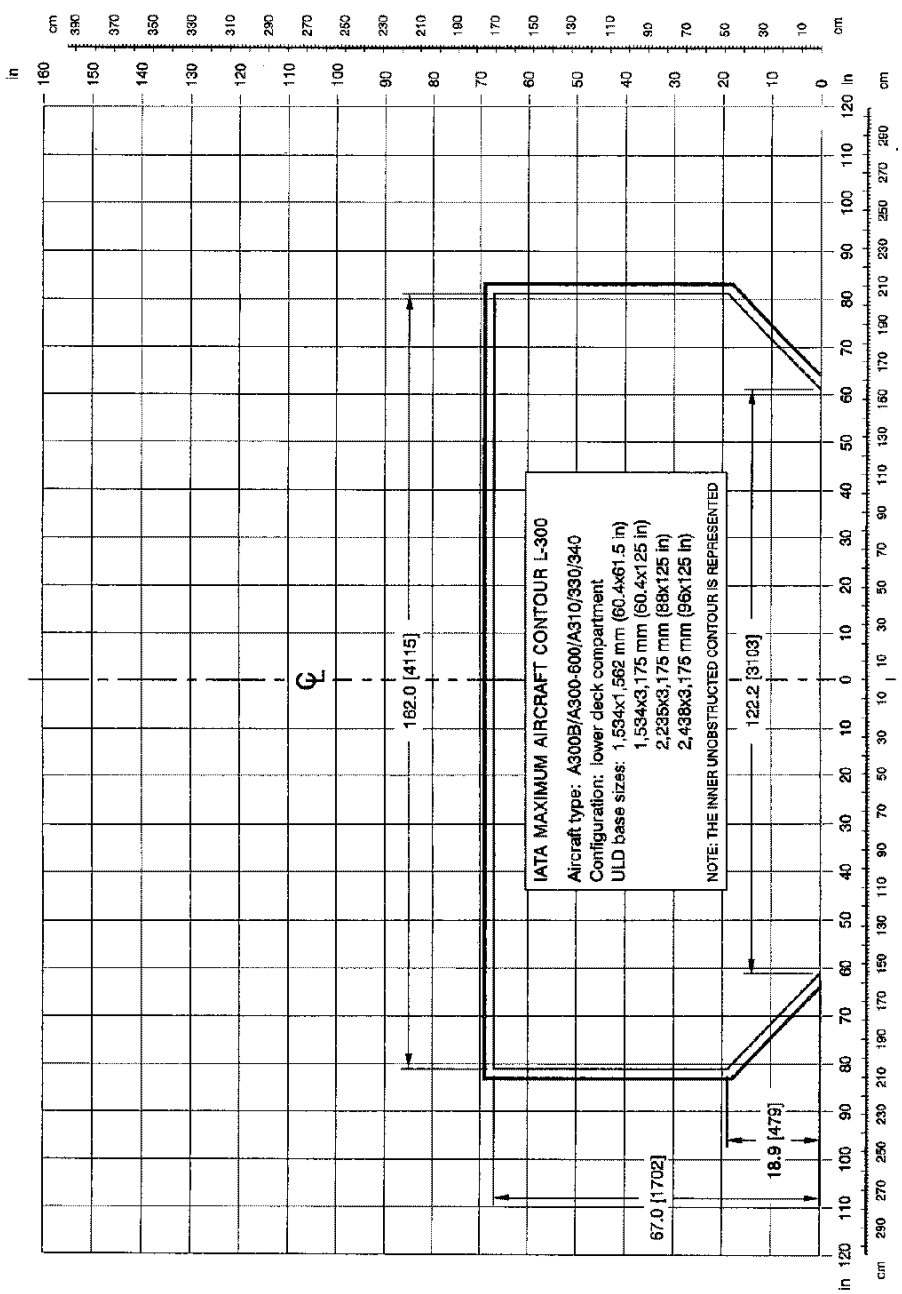





**Notes:**

1) Shows inside dimensions where cargo compartment has a constant cross-section (internal contour measured perpendicular to the aircraft length - excludes any tapered section of the fuselage).
2) Minimum **2 inches of clearance** must exist between aircraft contour and maximum payload contour (represented by inner solid line of the contour drawing).
3) All horizontal dimensions are measured left or right of aircraft centerline (CL).
4) All vertical dimensions are measured from the top of the conveyor plane.
5) Reference number of **L301** for this contour assigned by IATA for easy identification.
6) The specifications of airframe manufacturer and/or carrier will **ALWAYS** take precedence over this chart.

## Attachment 3
## LOWER COMPARTMENT CONTOUR CHART A330




**Notes:**

1) Shows inside dimensions where cargo compartment has a constant cross-section (internal contour measured perpendicular to the aircraft length - excludes any tapered section of the fuselage).
2) Minimum **2 inches of clearance** must exist between aircraft contour and maximum payload contour (represented by inner solid line of the contour drawing).
3) All horizontal dimensions are measured left or right of aircraft centerline (CL).
4) All vertical dimensions are measured from the top of the conveyor plane.
5) Reference number of **L300** for this contour assigned by IATA for easy identification.
6) The specifications of airframe manufacturer and/or carrier will **ALWAYS** take precedence over this chart.