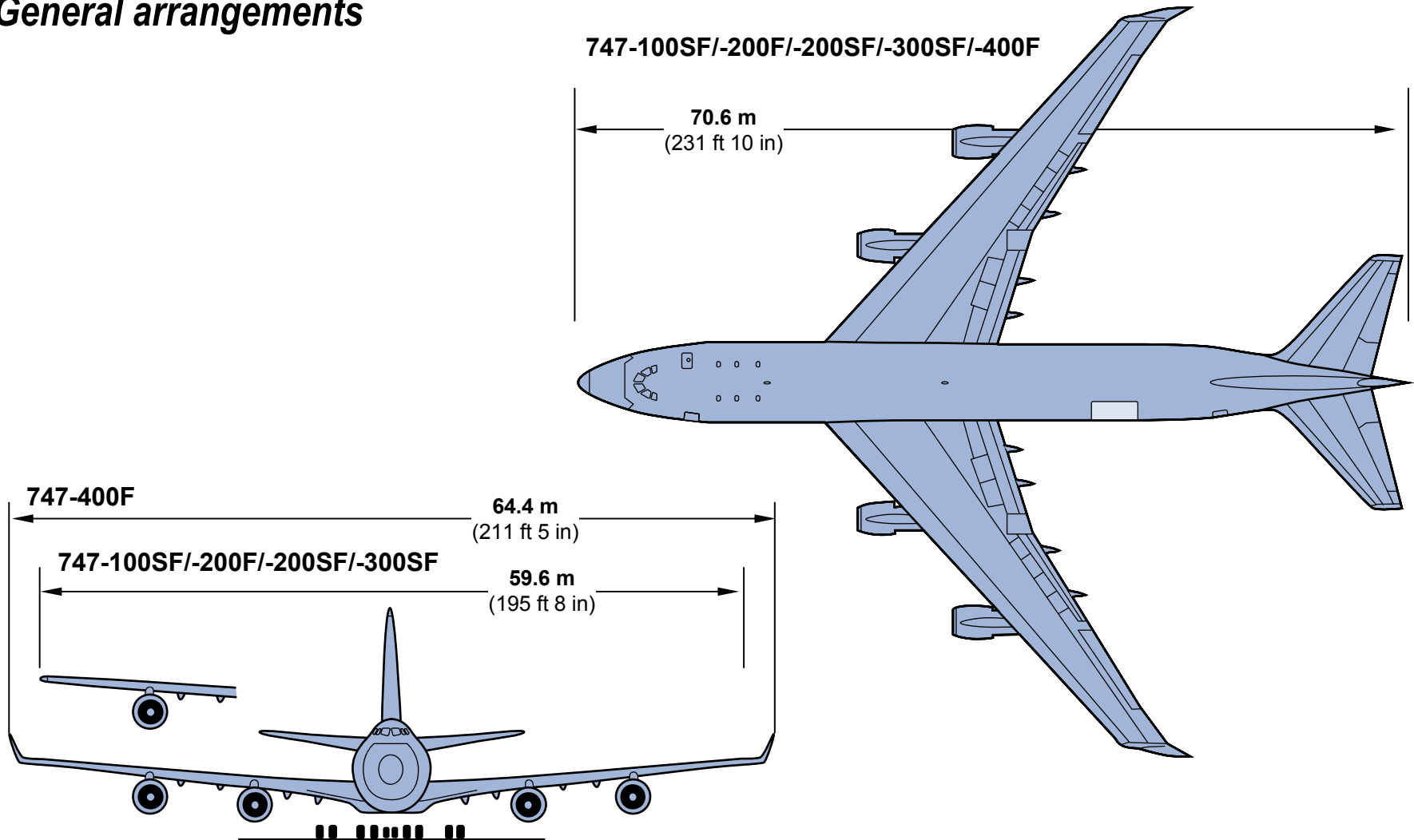


Boeing 747-100/-200/-300/-400 Freighters

General arrangements



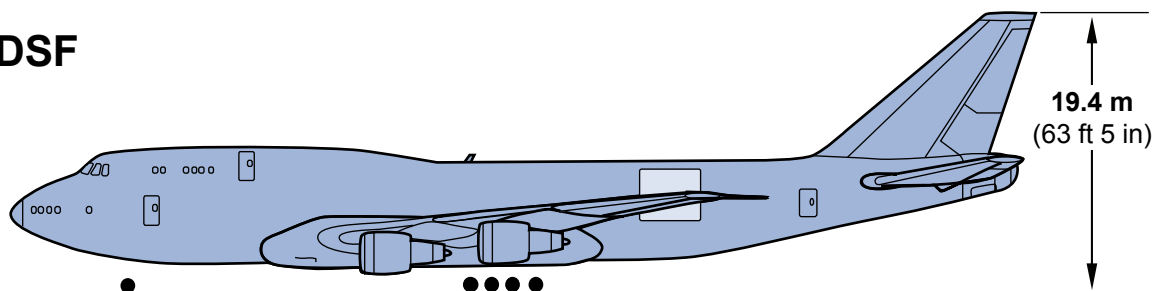
Source: Boeing data



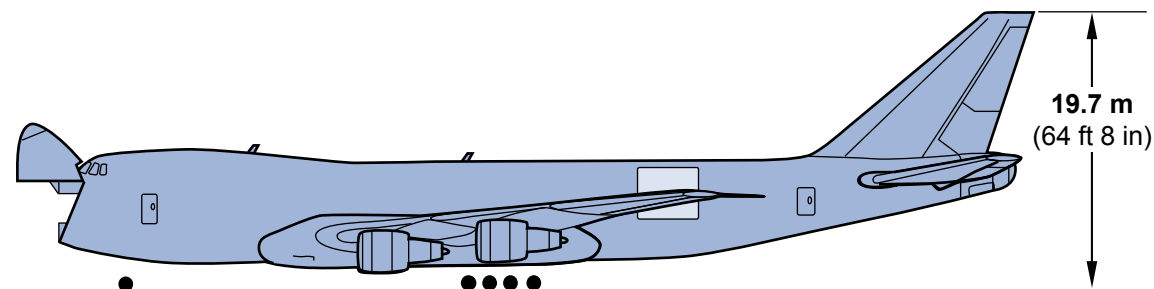
Boeing 747-100/-200 Freighters

General arrangements

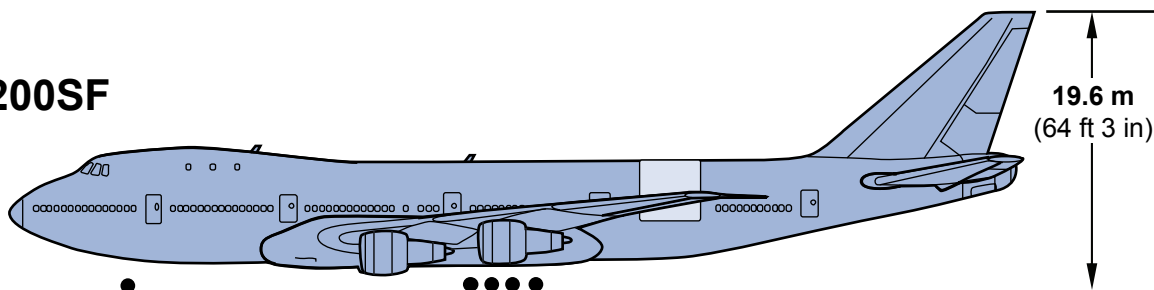
747-200BSUDSF



747-200F



747-100SF/-200SF



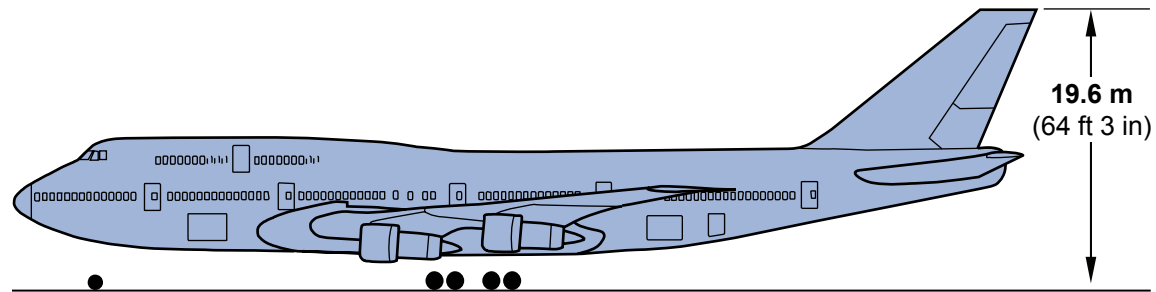
Source: Boeing data



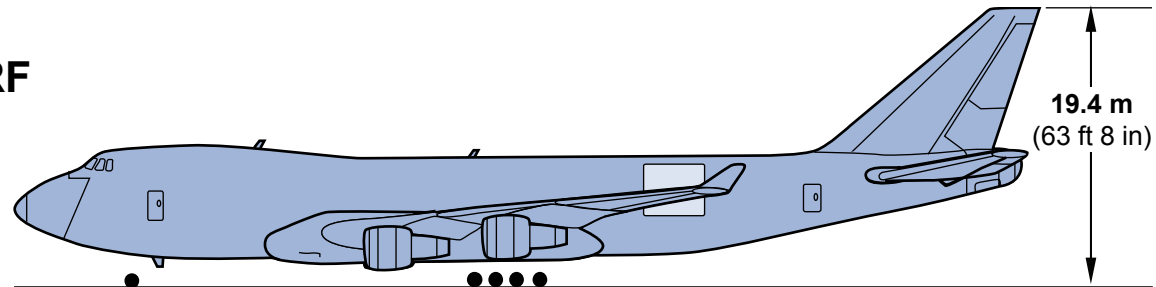
Boeing 747-300/-400 Freighters

General arrangements

747-300SF

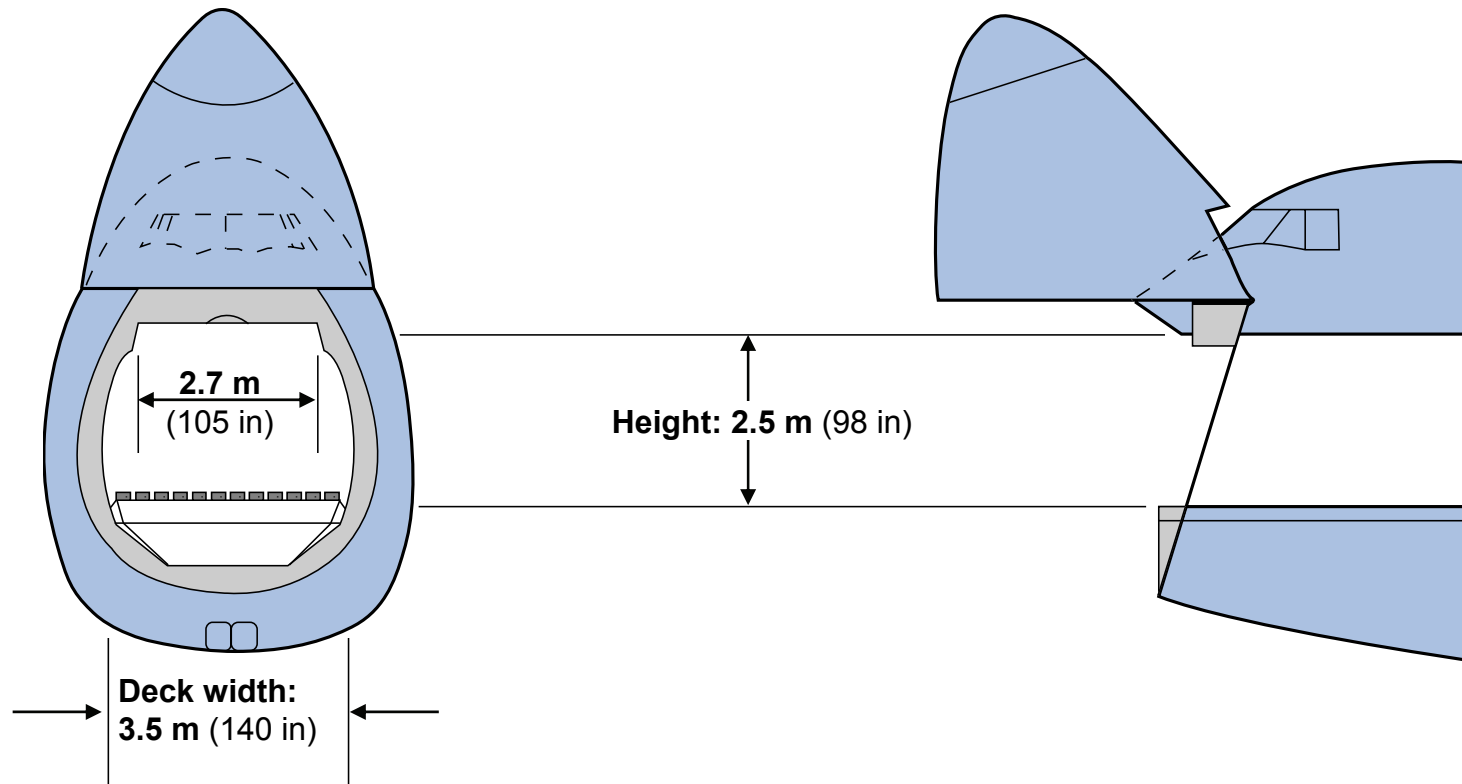


747-400F/ERF



Boeing 747-200F/-400F/-400ERF

Nose door



Source: Boeing data



Boeing 747-100SF

Performance summary, Pratt & Whitney JT9D-7A engines

747-100SF		
Main deck, (29) 2.4 x 3.2-m (96 x 125-in) pallet/container cargo capacity	m ³ (ft ³)	584.7 (20,650)
Lower hold, (9) 2.4 x 3.2-m (96 x 125-in) pallets plus bulk ^a	m ³ (ft ³)	119.9 (4,235)
Total cargo volume	m ³ (ft ³)	704.6 (24,885)
Maximum takeoff weight	kg (lb)	340,200 (750,000)
Maximum landing weight	kg (lb)	265,350 (585,000)
Maximum zero fuel weight	kg (lb)	247,210 (545,000)
Revenue payload (MZFW–OEW) ^b	kg (lb)	94,570 (208,500)
Fuel capacity	L (U.S. gal)	183,380 (48,445)
Design range (MZFW payload)	nmi (km)	2,735 (5,065)

^a Bulk hold volume, 22.7 m³ (800 ft³)

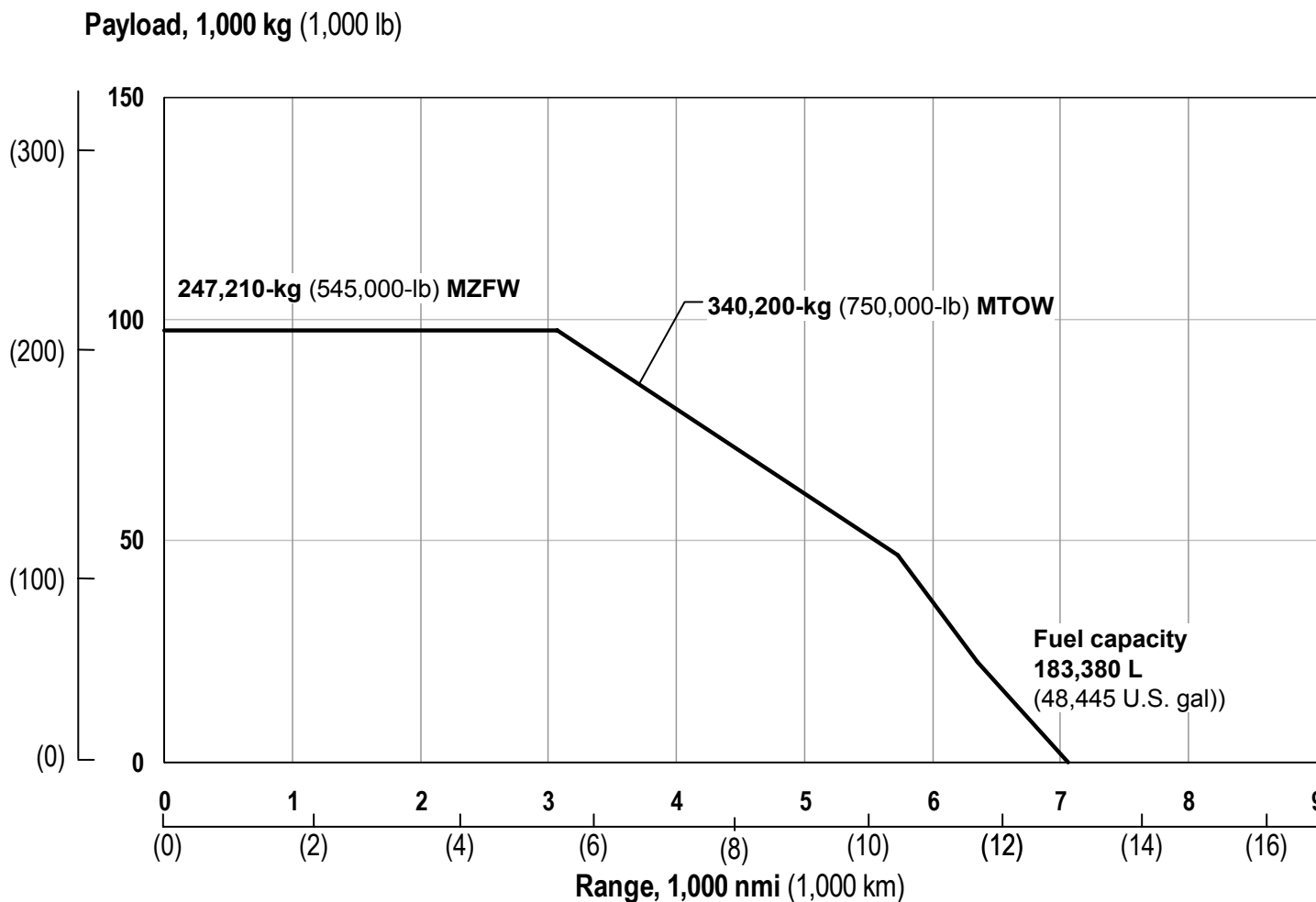
^b Does not include tare weight

Source: Boeing data



Boeing 747-100SF

Payload-range capability, Pratt & Whitney JT9D-7A engines



Source: Boeing data



Boeing 747-200F/-200SF

Performance summary, Pratt & Whitney JT9D-7Q and JT9D-7R4G2^a engines

		747-200F	747-200SF
Main deck, (29) 2.4 x 3.2-m (96 x 125-in) pallet/container cargo capacity	m ³ (ft ³)	584.7 (20,650)	567 (20,037)
Lower hold, (9) 2.4 x 3.2-m (96 x 125-in) pallets plus bulk ^b	m ³ (ft ³)	119.9 (4,235)	119.9 (4,235)
Total cargo volume	m ³ (ft ³)	704.6 (24,885)	686.9 (24,272)
Maximum takeoff weight	kg (lb)	377,840 (833,000)	371,945 (820,000)
Maximum landing weight	kg (lb)	285,760 (630,000)	285,760 (630,000)
Maximum zero fuel weight	kg (lb)	267,620 (590,000)	267,620 (590,000)
Revenue payload (MZFW-OEW) ^c	kg (lb)	110,130 (242,800)	108,360 (238,900)
Fuel capacity	L (U.S. gal)	204,355 (53,985)	204,355 (53,985)
Design range (MZFW payload)	nmi (km)	3,615 (6,695)	3,050 (5,645)

^a 747-200F model

^b Bulk hold volume, 22.7 m³ (800 ft³)

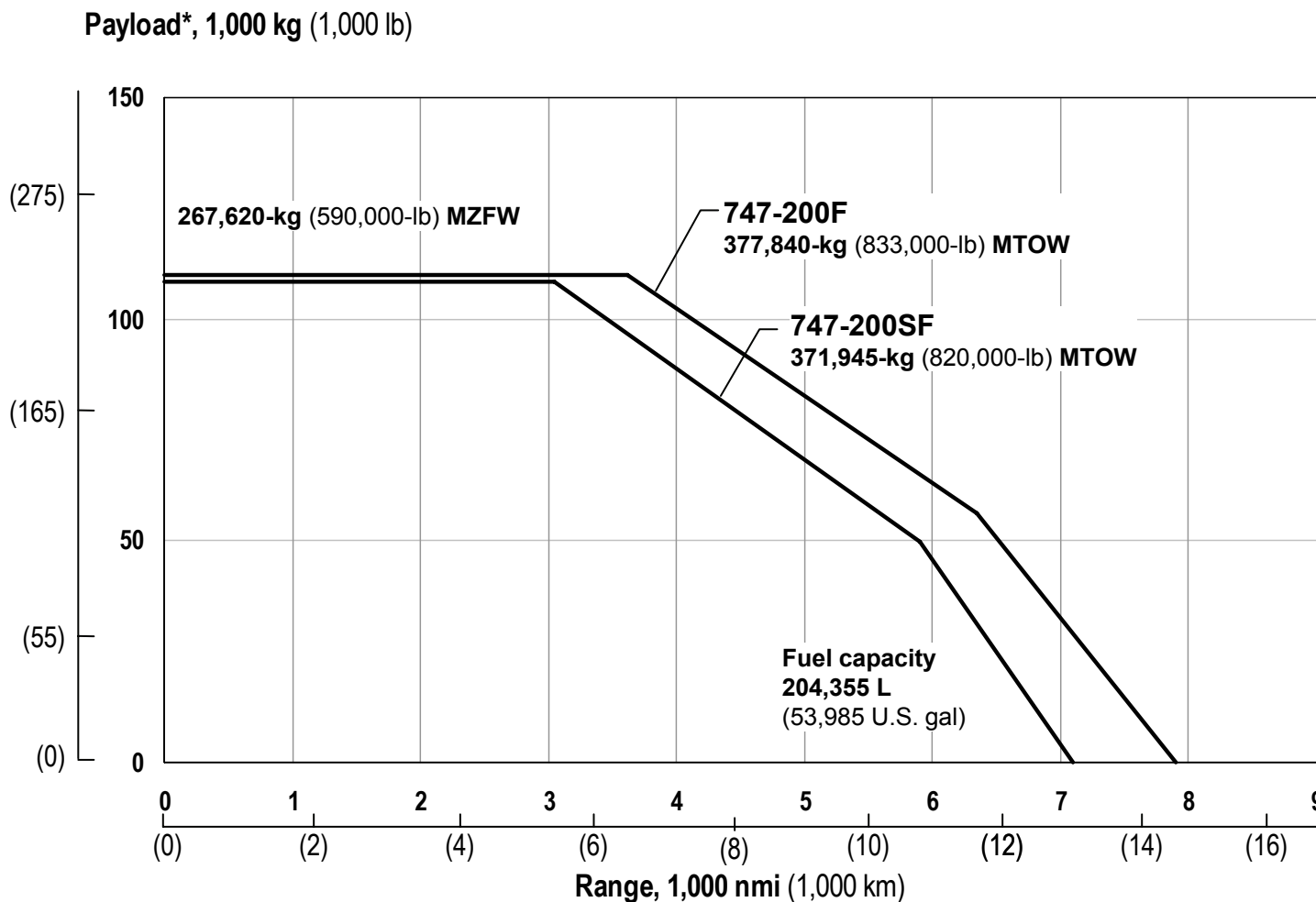
^c Does not include tare weight

Source: Boeing data



Boeing 747-200F/-200SF

Payload-range capability, Pratt & Whitney JT9D-7Q and JT9D-7R4G2* engines



* 747-200F model
Source: Boeing data

Boeing 747-300SF

Performance summary, Pratt & Whitney JT9D-7R4G2 engines

		747-300SF	
Main deck, (29) 2.4 x 3.2-m (96 x 125-in) pallet/container cargo capacity	m ³ (ft ³)	584.7	(20,650)
Lower hold, (9) 2.4 x 3.2-m (96 x 125-in) pallets plus bulk ^a	m ³ (ft ³)	119.9	(4,235)
Total cargo volume	m ³ (ft ³)	704.6	(24,885)
Maximum takeoff weight	kg (lb)	377,840	(833,000)
Maximum landing weight	kg (lb)	285,760	(630,000)
Maximum zero fuel weight	kg (lb)	267,620	(590,000)
Revenue payload (MZFW–OEW) ^b	kg (lb)	103,370	(227,900)
Fuel capacity	L (U.S. gal)	196,970	(52,035)
Design range (MZFW payload)	nmi (km)	4,635	(8,580)

^a Bulk hold volume, 22.7 m³ (800 ft³)

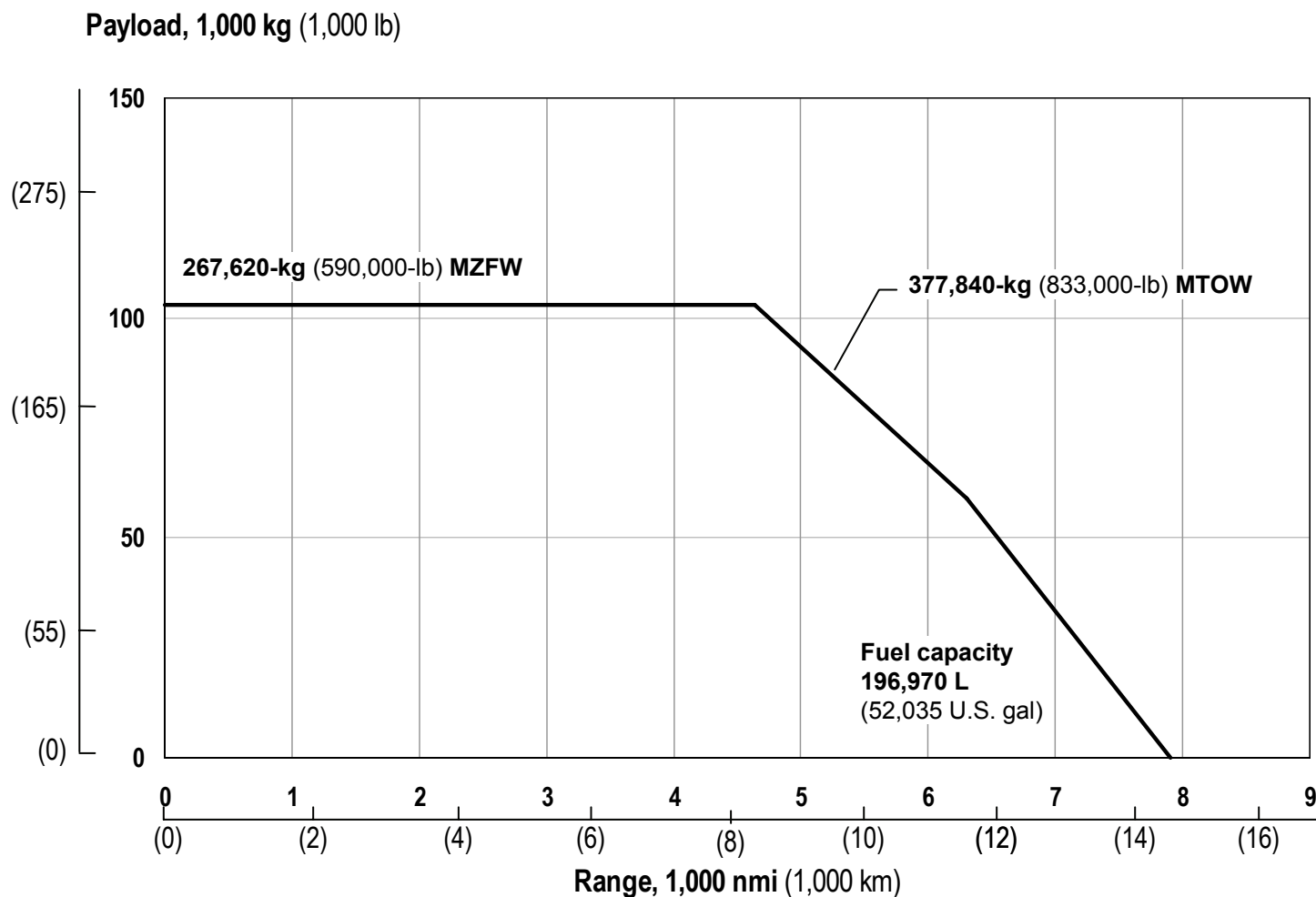
^b Does not include tare weight

Source: Boeing data



Boeing 747-300SF

Payload-range capability, Pratt & Whitney JT9D-7R4G2 engines



Source: Boeing data

Boeing 747-400F/-400ERF/-400BCF

Performance summary, General Electric CF6-80C2 engines

		747-400F	747-400ERF	747-400BCF
Main deck, (30) 2.4 x 3.2-m (96 x 125-in) pallet/container cargo capacity	m ³ (ft ³)	607.7 (21,462)	607.7 (21,462)	585.4 (20,674)
Lower hold, (9) 2.4 x 3.2-m (96 x 125-in) pallets, (2) LD-1/LD-3s, plus bulk ^a	m ³ (ft ³)	130.4 (4,605)	130.4 (4,605)	125.3 (4,423)
Total cargo volume	m ³ (ft ³)	738.1 (26,087)	738.1 (26,087)	710.7 (25,097)
Maximum takeoff weight	kg (lb)	396,900 (875,000)	412,770 (910,000)	394,630 (870,000)
Maximum landing weight	kg (lb)	295,740 (652,000)	296,200 (653,000)	295,740 (652,000)
Maximum zero fuel weight	kg (lb)	276,690 (610,000)	277,140 (611,000)	276,690 (610,000)
Revenue payload (MZFW-OEW) ^b	kg (lb)	112,990 (249,100)	113,120 (249,400)	107,840 (237,750)
Fuel capacity	L (U.S. gal)	203,520 (53,765)	203,520 (53,765)	203,520 (53,765)
Design range (MZFW payload)	nmi (km)	4,455 (8,250)	4,980 (9,220)	4,090 (7,570)

^a Bulk hold volume for 747-400F/-400ERF, 14.7 m³ (520 ft³).; bulk hold volume for 747-400BCF, 19.5 m³ (688 ft³)

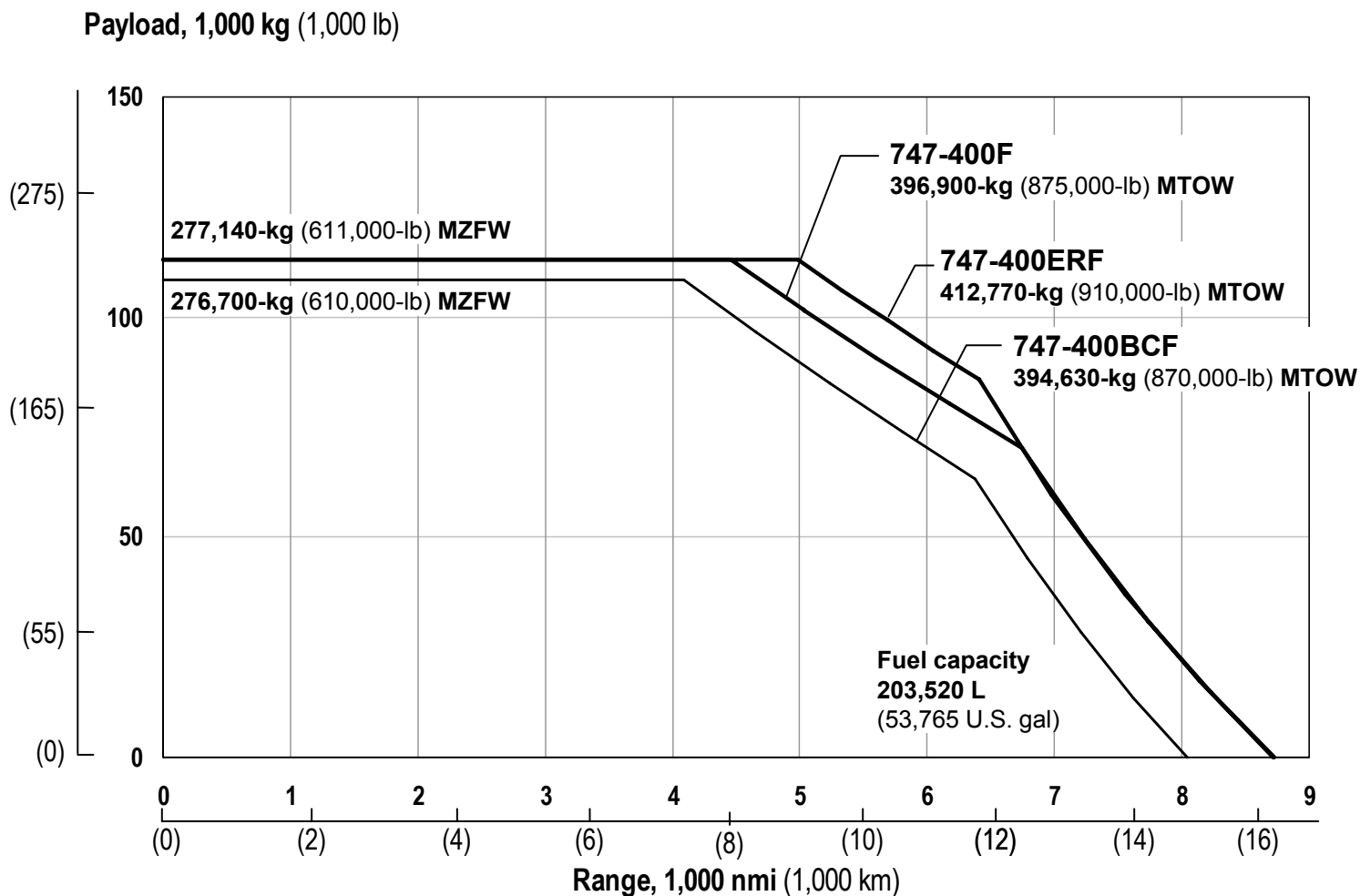
^b Does not include tare weight

Source: Boeing data



Boeing 747-400F/-400ERF/-400BCF

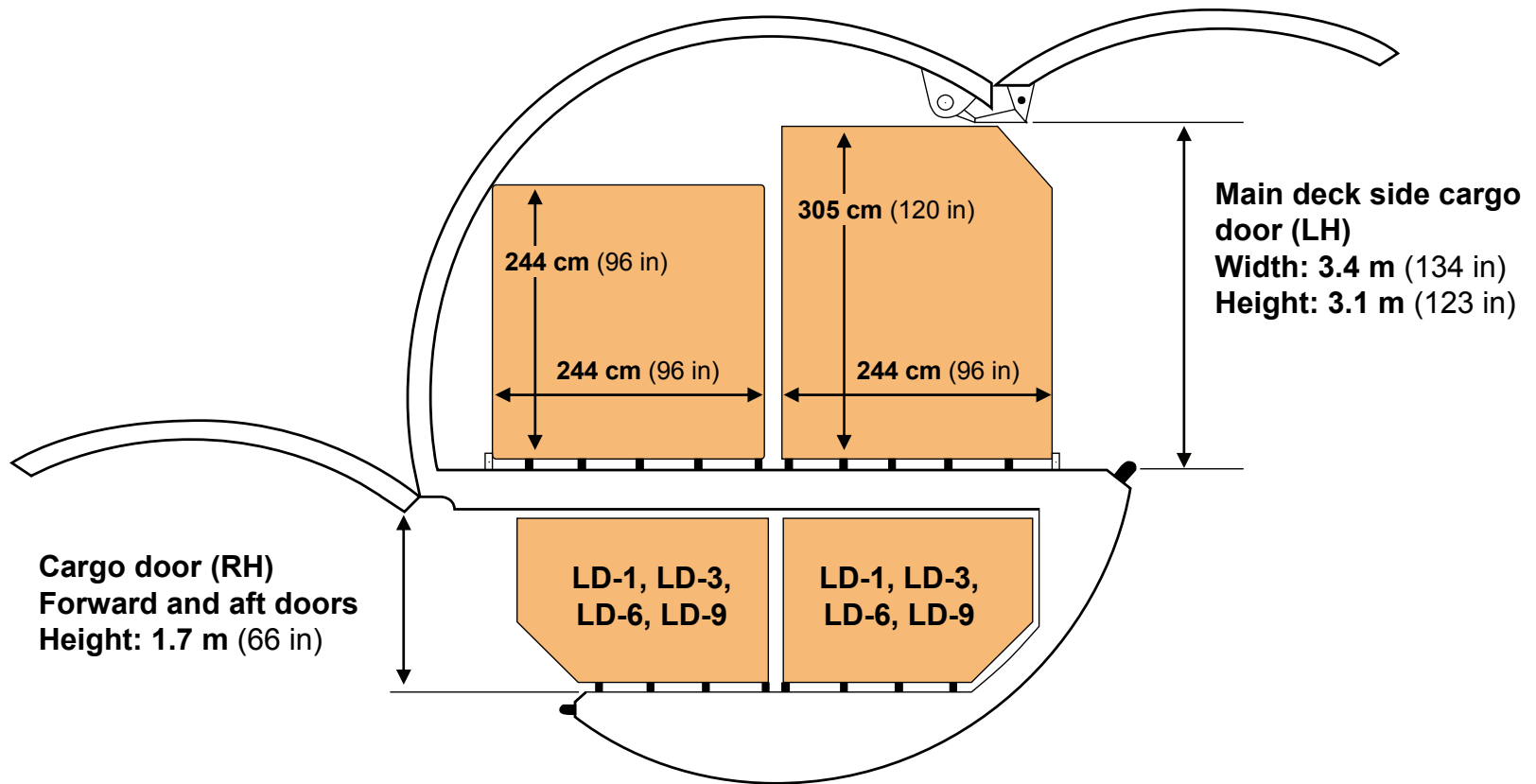
Payload-range capability, General Electric CF6-80C2 engines



Source: Boeing data

Boeing 747-100/-200/-300/-400 Freighters

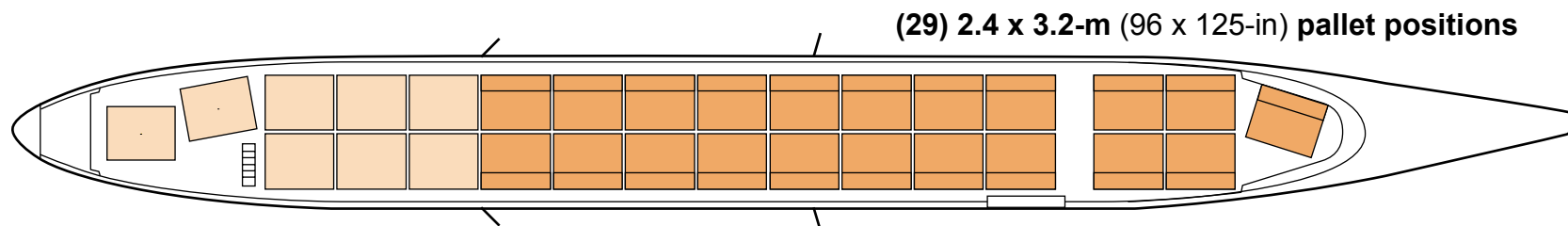
Cross section



Source: Boeing data

Boeing 747-100SF/-200SF/-300SF

Main deck cargo arrangements



(29) 2.4 x 3.2-m (96 x 125-in) pallet positions

(8) 2.4 x 3.2-m (96 x 125-in) x 2.4-m (8-ft) pallets
at 15.5 m³ (549 ft³)

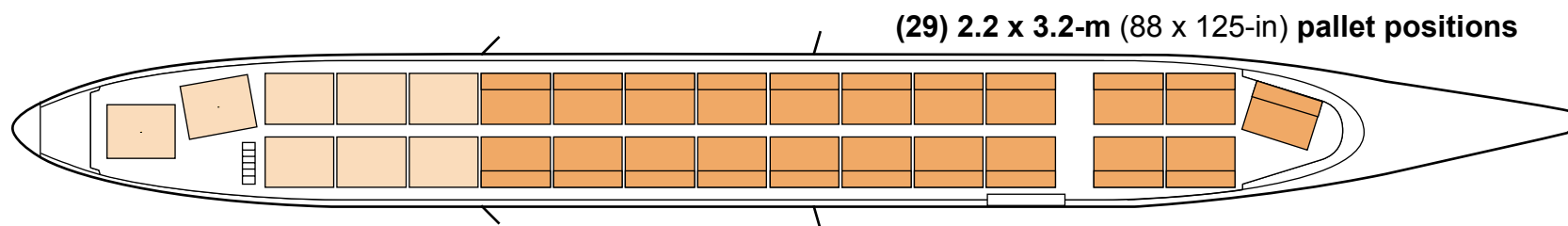
(21) 2.4 x 3.2-m (96 x 125-in) x 3.1-m (10-ft) contoured
pallets at 21.1 m³ at (745 ft³)

124.0 m³ (4,392 ft³)

443.0 m³ (15,645 ft³)

Total

567.0 m³ (20,037 ft³)



(29) 2.2 x 3.2-m (88 x 125-in) pallet positions

(8) 2.2 x 3.2-m (88 x 125-in) x 2.4-m (8-ft) pallets
at 15.9 m³ (560 ft³)

(21) 2.2 x 3.2-m (88 x 125-in) x 3.1-m (10-ft) contoured
pallets at 19.3 m³ at (680 ft³)

126.9 m³ (5,040 ft³)

404.4 m³ (15,645 ft³)

Total

531.2 m³ (20,685 ft³)

- 747-100SF, -200SF, and -300SF models do not have nose doors
- Source: Boeing data

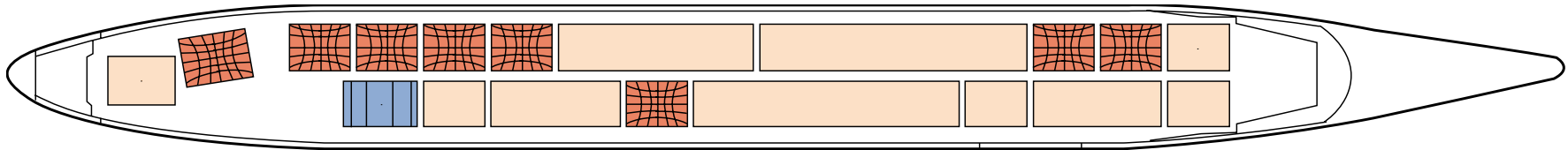
Boeing 747-200F

Main deck cargo arrangement, nose door loading



(11) containers, 2.4 x 3.1-m (96 x 120-in)

(5) containers, 2.4 x 12.2-m (96 x 480-in)



Containers:

(5) 2.4 x 3.1-m (96 x 120-in)

(2) 2.4 x 6.1-m (96 x 240-in)

(1) 2.4 x 9.1-m (96 x 360-in)

(2) 2.4 x 12.2-m (96 x 480-in)

(1) Igloo (707 / DC-8)

Pallets:

(5) 2.2 x 2.7-m (88 x 108-in)

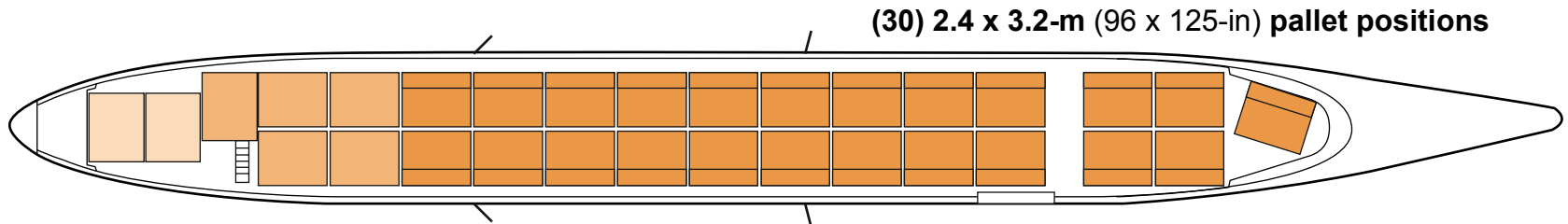
(2) 2.2 x 3.2-m (88 x 125-in)

(1) 2.4 x 3.2-m (96 x 125-in)



Boeing 747-400 Freighter

Main deck cargo arrangements

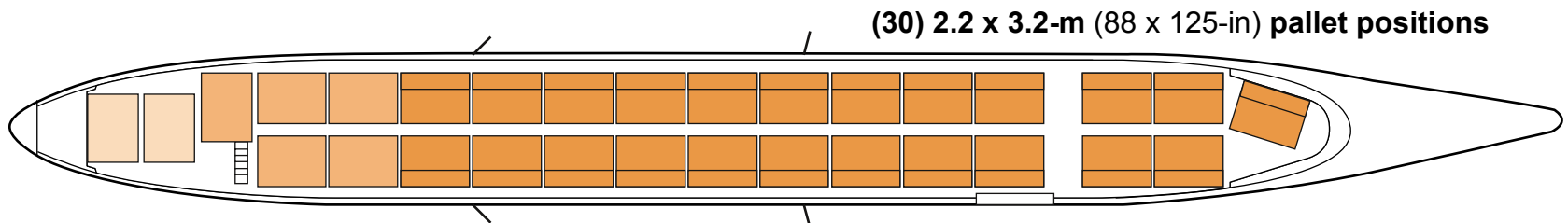


(2) 2.4 x 3.2-m (96 x 125-in) x 2.4-m (8-ft) contoured pallets at 15.3 m³ and 17.2 m³ (540 ft³ and 607 ft³)

(5) 2.4 x 3.2-m (96 x 125-in) x 2.4-m (8-ft) pallets at 17.4 m³ (613 ft³)

(23) 2.4 x 3.2-m (96 x 125-in) x 3.0-m (10-ft) contoured pallets at 21.2 m³ (750 ft³)

Total **607.7 m³** (21,462 ft³)



(2) 2.2 x 3.2-m (88 x 125-in) x 2.4-m (8-ft) contoured pallets at 13.9 m³ and 15.7 m³ (493 ft³ and 554 ft³)

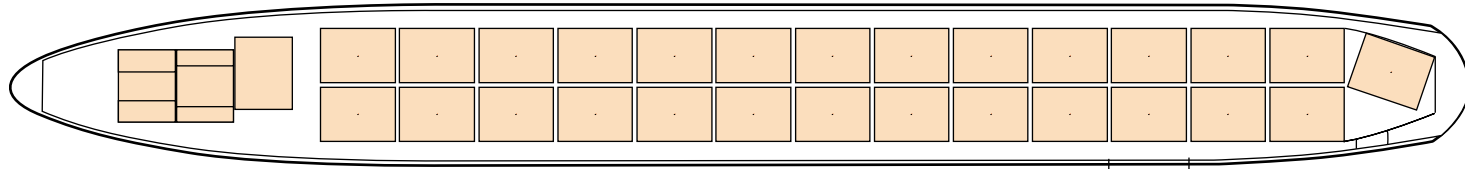
(5) 2.2 x 3.2-m (88 x 125-in) x 2.4-m (8-ft) pallets at 15.9 m³ (560 ft³)

(23) 2.2 x 3.2-m (88 x 125-in) x 3.0-m (10-ft) contoured pallets at 19.3 m³ (680 ft³)

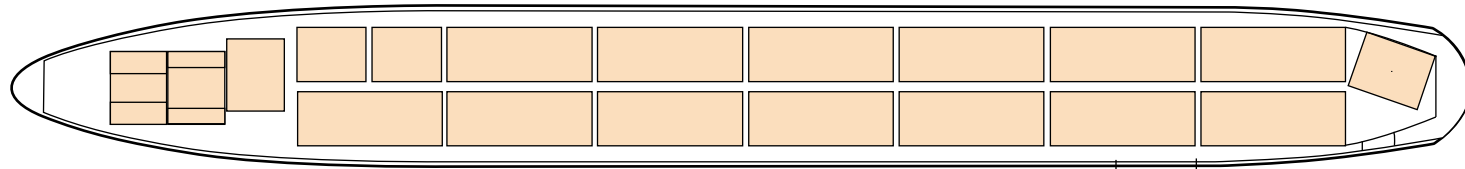
Total **553.0 m³** (19,487 ft³)

Boeing 747-400F/-400ERF

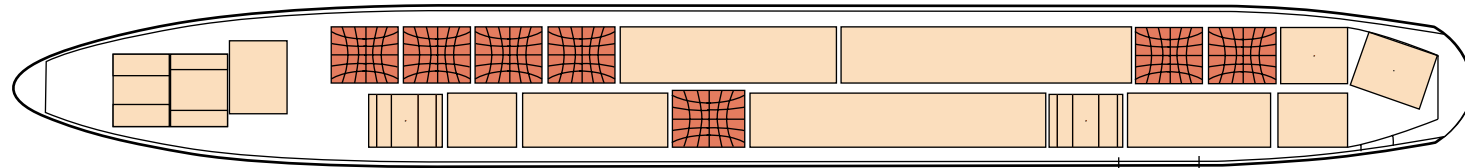
Main deck cargo arrangement, nose door loading



(29) 3.0-m (10-ft) containers



**(13) 6.0-m (20-ft) intermodal containers
(5) 3.0-m (10-ft) containers**



Random intermix, 3-, 6-, 9-, and 12-m (10-, 20-, 30-, and 40-ft) loads

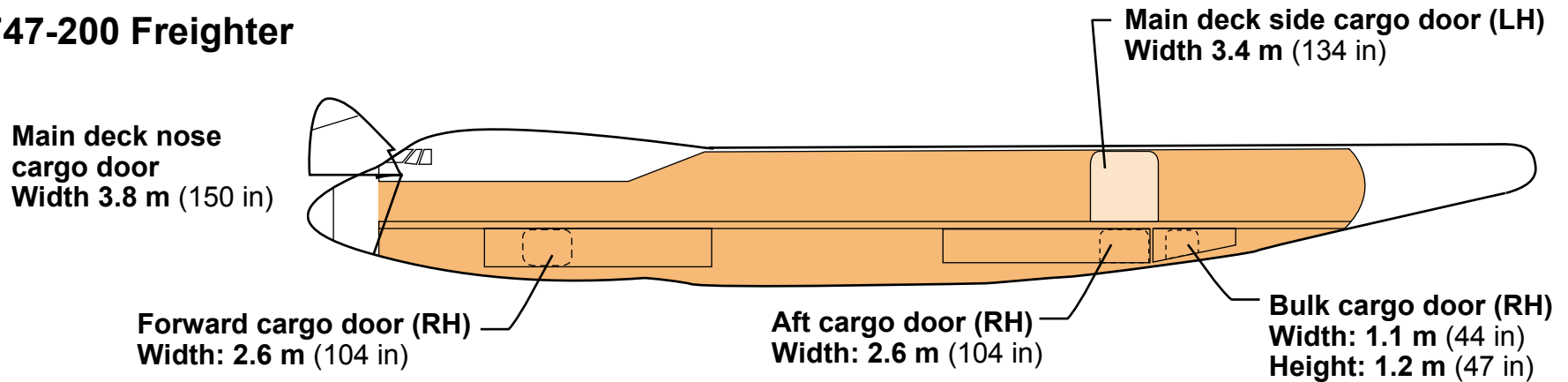
Source: Boeing data



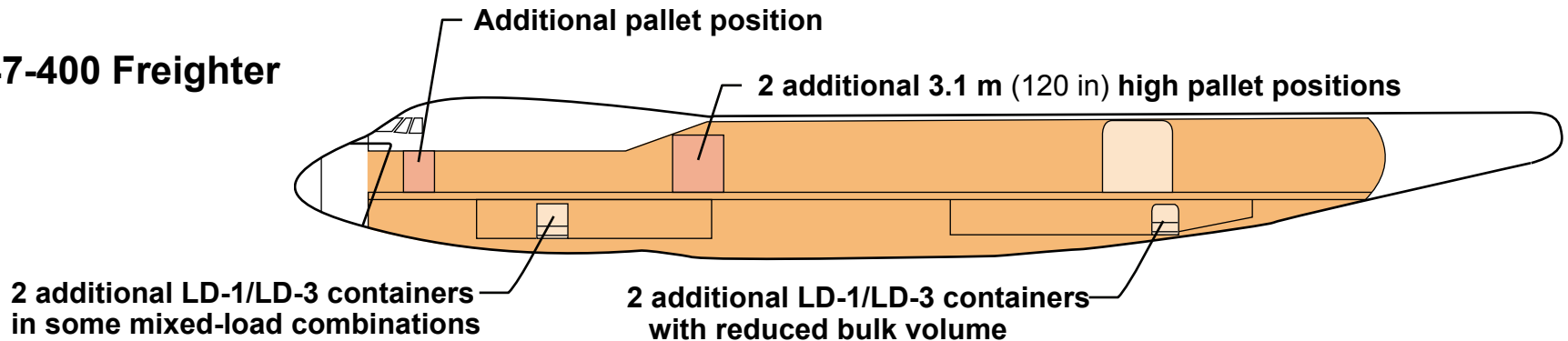
Boeing 747-200F/-400F

Door configuration

747-200 Freighter



747-400 Freighter



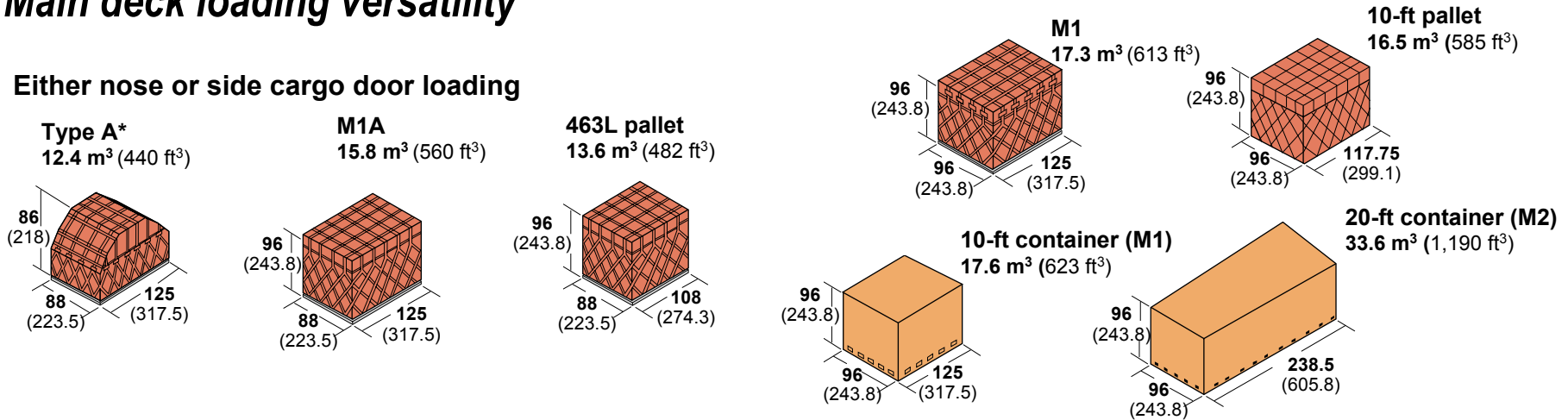
Source: Boeing data



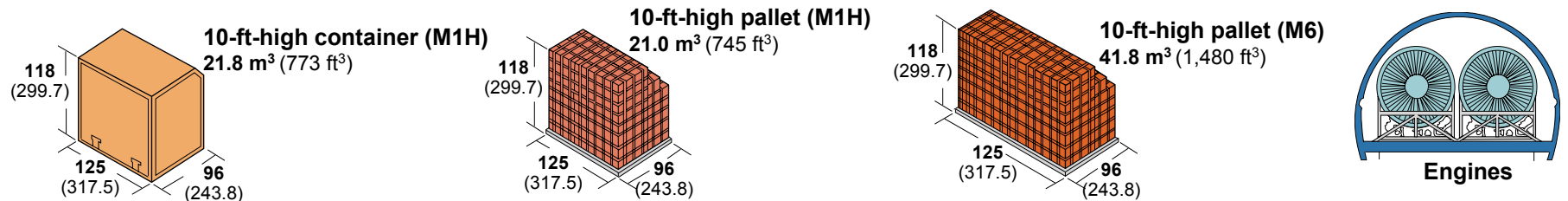
Boeing 747-100/-200/-300/-400 Freighters

Main deck loading versatility

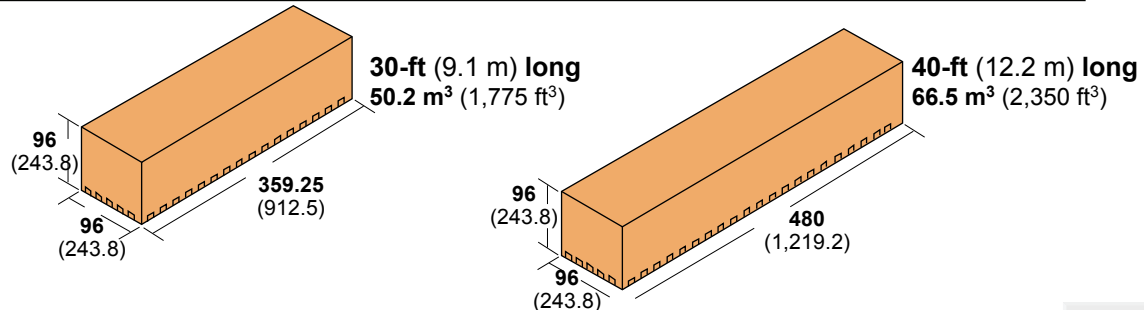
Either nose or side cargo door loading



Side cargo door loading only



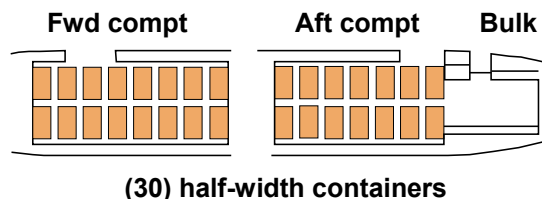
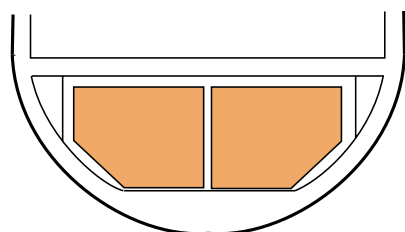
Nose cargo door loading (-200/-400F only)



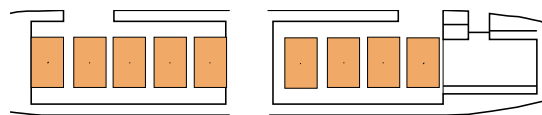
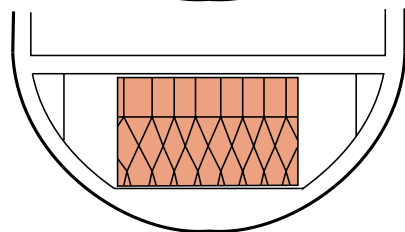
- Pallet dimensions shown in inches (centimeters)
 - Maximum height varies from 78 to 86 in (198 to 218 cm), depending on airplane type (e.g., 707, 727, 757, DC-8)
- Source: Boeing data

Boeing 747-100/-200/-300 Freighters

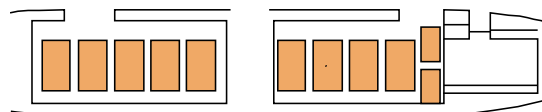
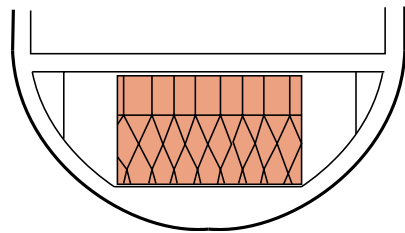
Lower hold cargo arrangements



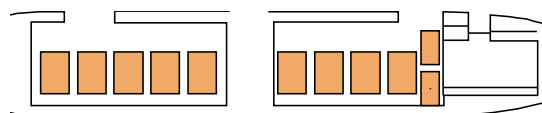
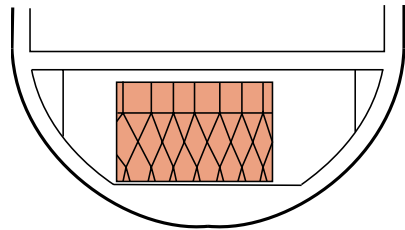
(30) half-width containers



(9) 2.4 x 3.2-m (96 x 125-in) pallets,
64 in high*



(9) 2.2 x 3.2-m (88 x 125-in) pallets,
64 in high*



(9) 2.2 x 2.7-m (88 x 108-in) pallets, 64 in high*
(2) 747 half-width containers
(military pallets shown)

	Units	Volume, m ³ (ft ³)	
		LD-1	LD-3
Lower hold		148.7 (5,250)	134.2 (4,740)
Bulk cargo		22.7 (800)	22.7 (800)
Total capacity		171.4 (6,050)	156.9 (5,540)

	Units	Volume, m ³ (ft ³)
Lower hold		105.8 (3,735)
Bulk cargo		22.7 (800)
Total capacity		128.6 (6,050)

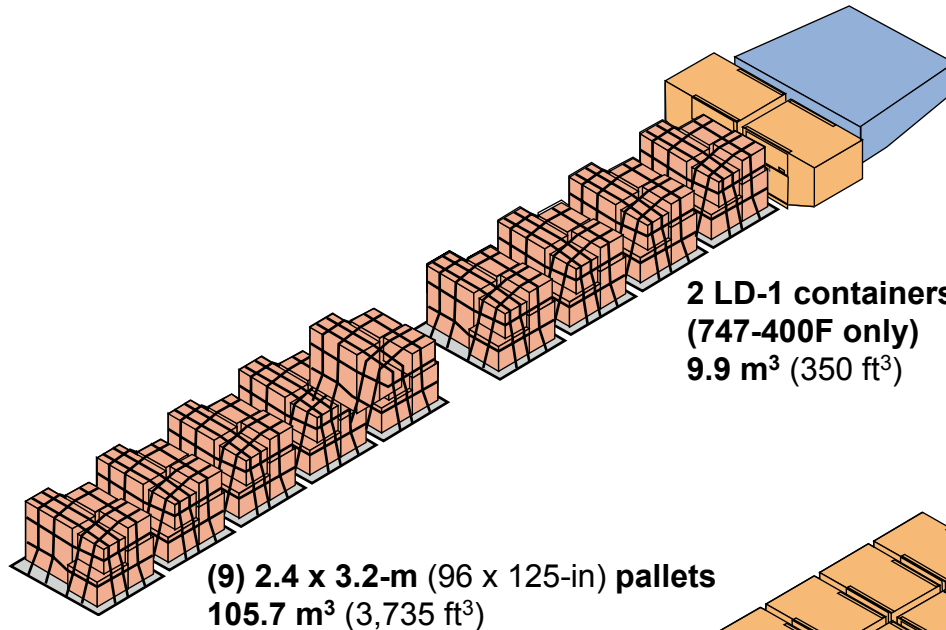
	Units	Volume, m ³ (ft ³)
Lower hold	9	97.1 (3,429)
Bulk cargo	2	9.9 (350)
Total capacity		107 (4,579)

	Units	Volume, m ³ (ft ³)	
		Commercial	Military
Lower hold	9	83.3 (2,943)	81.6 (2,880)
Bulk cargo	2	9.9 (350)	9.9 (350)
Total capacity		115.9 (4,093)	114.2 (4,030)

*Optional pallet hardware required
Source: Boeing data

Boeing 747-100/-200/-300 Freighters

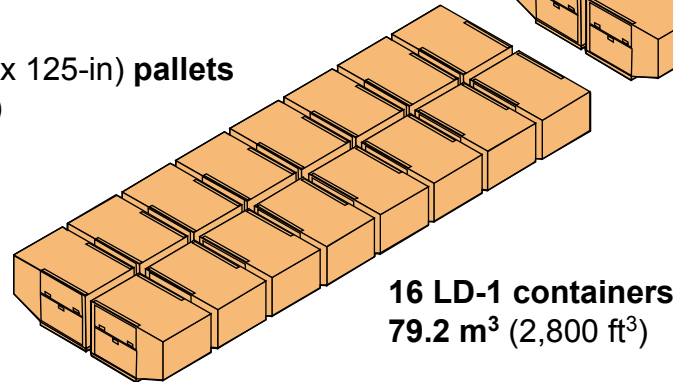
Lower hold cargo arrangements



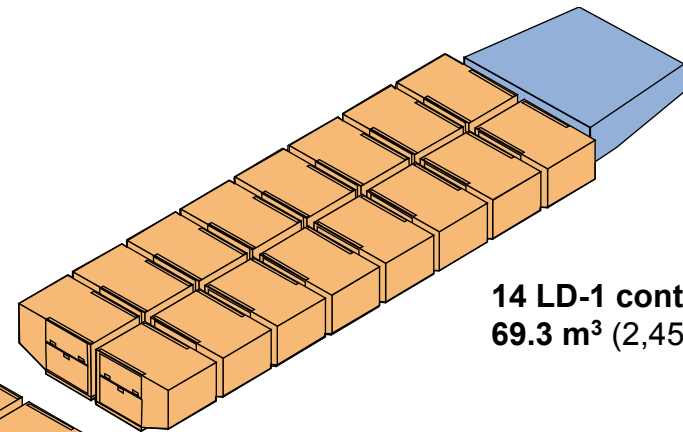
(9) 2.4 x 3.2-m (96 x 125-in) pallets
105.7 m³ (3,735 ft³)

2 LD-1 containers
(747-400F only)
9.9 m³ (350 ft³)

Bulk volume
747-100SF/-200F 22.6 m³ (800 ft³)



16 LD-1 containers
79.2 m³ (2,800 ft³)



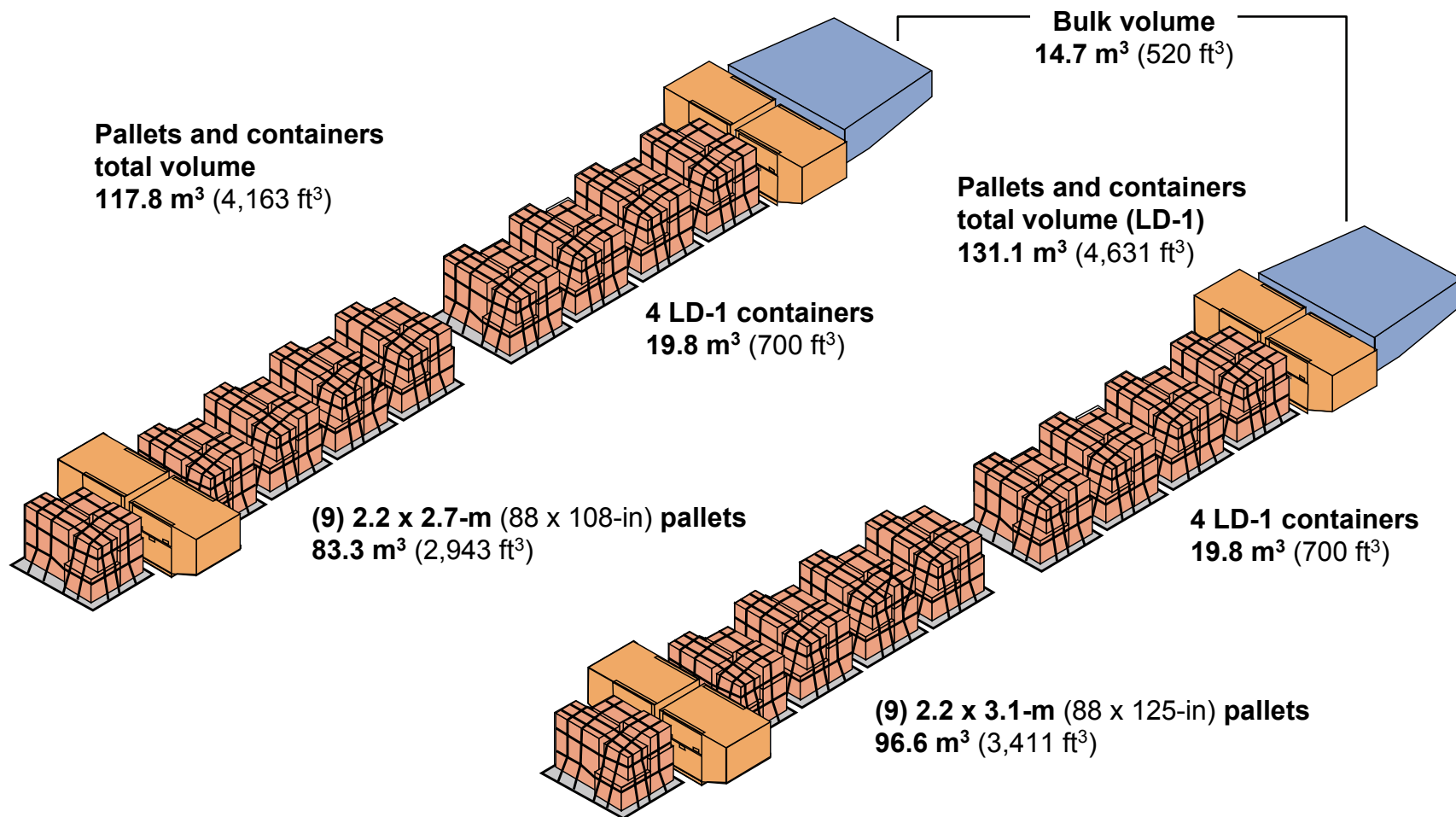
14 LD-1 containers
69.3 m³ (2,450 ft³)

2 additional LD-1 containers
(747-400F only) 9.9 m³ (350 ft³)



Boeing 747-400F/-400ERF

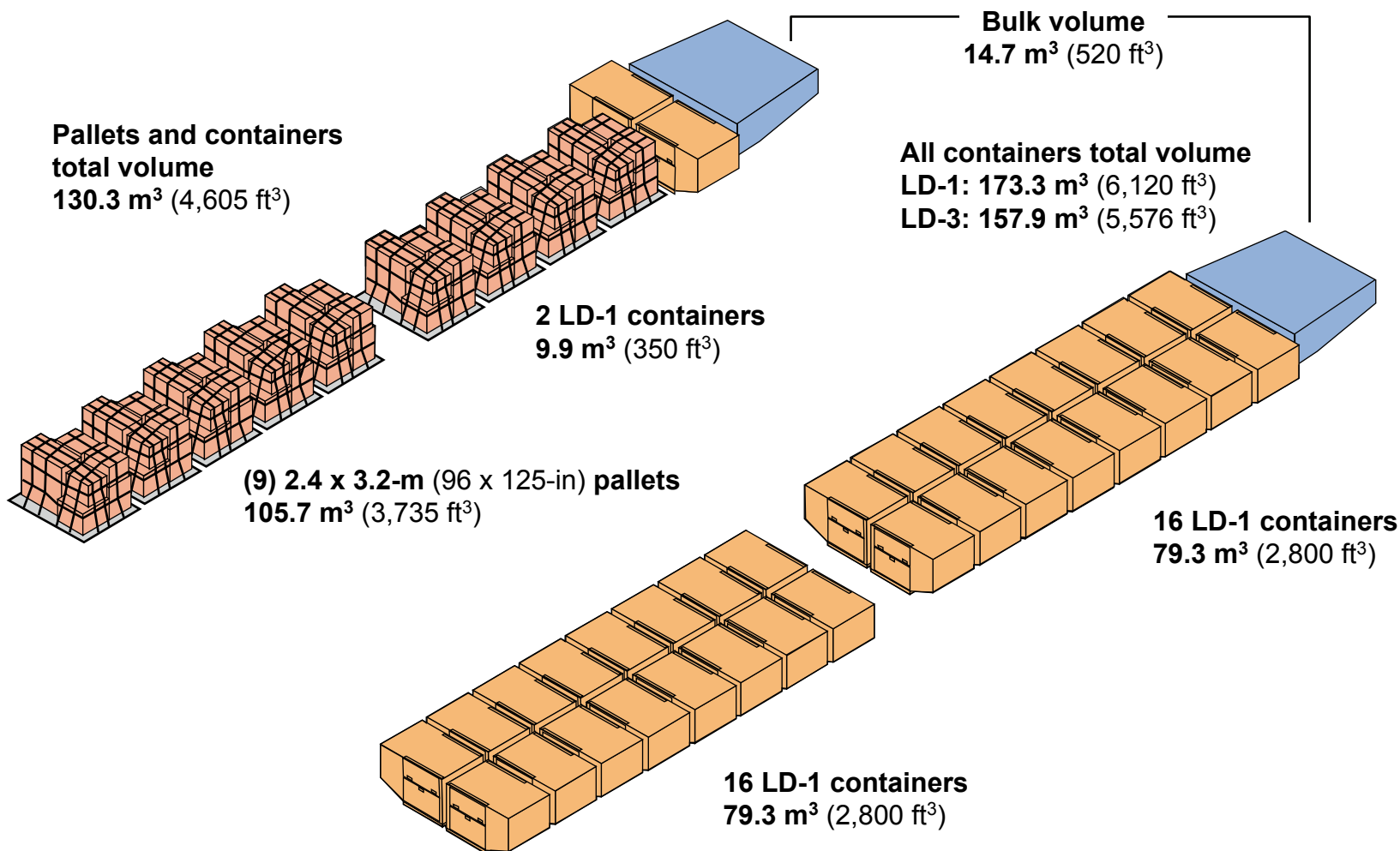
Lower hold cargo arrangements



Source: Boeing data

Boeing 747-400F/-400ERF

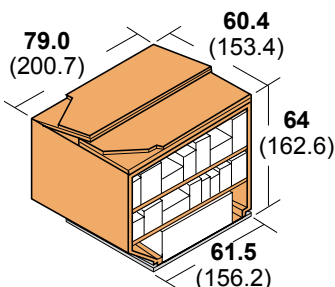
Lower hold cargo arrangements



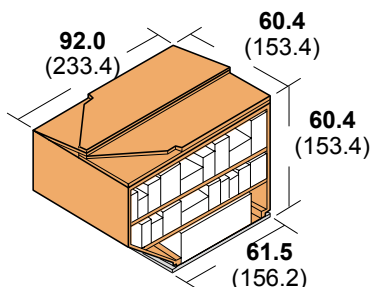
Source: Boeing data

Boeing 747-100/-200/-300/-400 Freighters

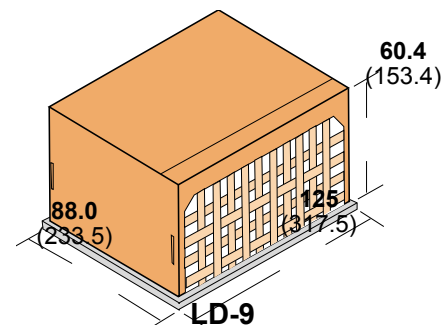
Lower hold loading versatility



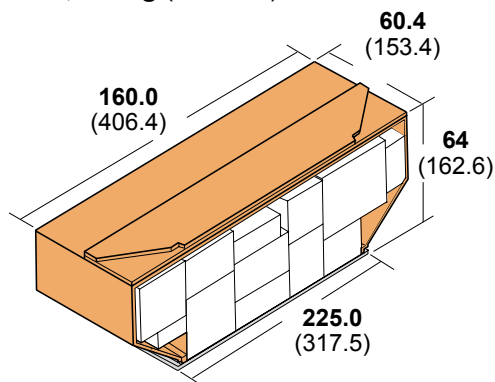
LD-3
4.5 m³ (159 ft³)
1,588-kg (3,500-lb) MGW



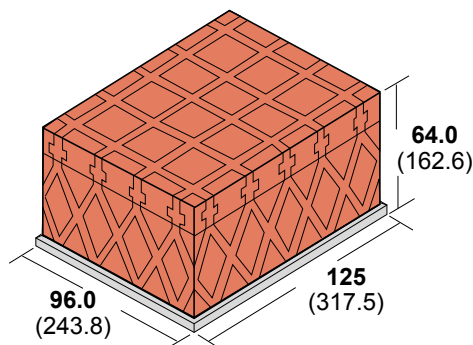
LD-1
4.9 m³ (175 ft³)
1,588-kg (3,500-lb) MGW



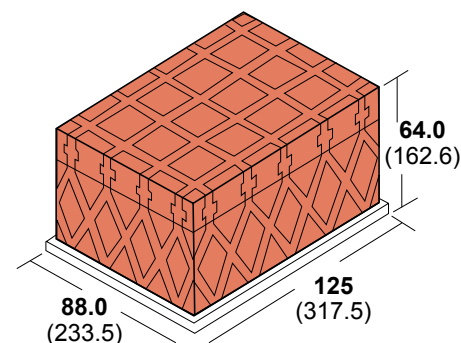
LD-9
10.8 m³ (381 ft³)
4,627-kg (10,200-lb) MGW



LD-6
9.1 m³ (322 ft³)
3,175-kg (7,000-lb) MGW



LD-1
11.8 m³ (415 ft³)
5,035-kg (11,100-lb) MGW



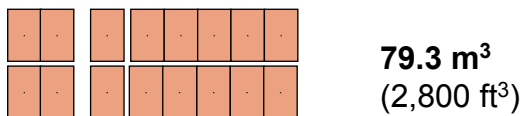
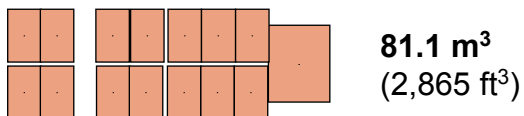
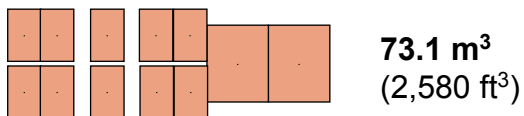
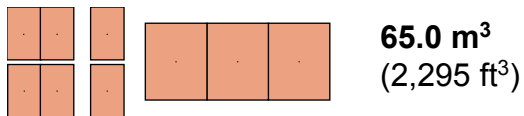
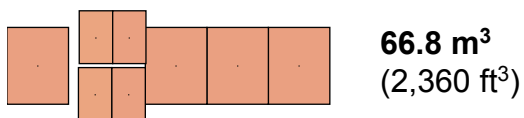
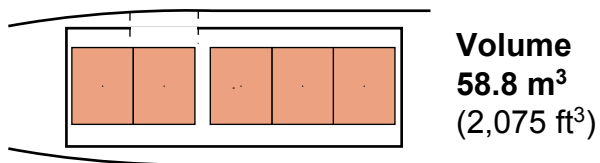
LD-9
10.5 m³ (372 ft³)
4,627-kg (10,200-lb) MGW

- Maximum gross weights shown are based on lower hold running load capability (116 lb/in), subject to overall airframe structural limits
 - Pallet dimensions shown in inches (centimeters)
- Source: Boeing data

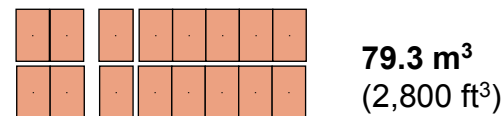
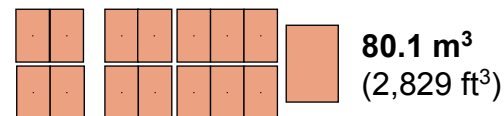
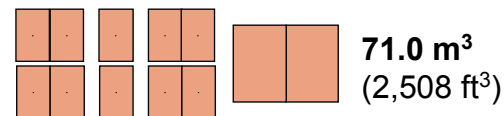
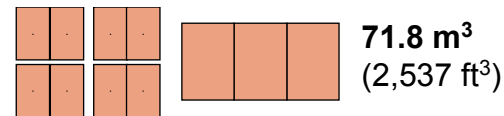
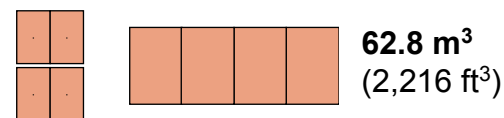
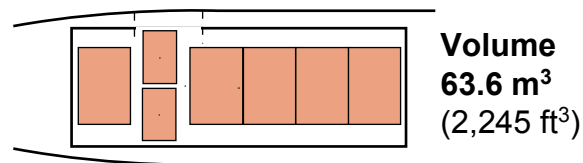
Boeing 747-400F/-400ERF

Lower hold loading versatility

96-in pallets, 11.8 m³ (415 ft³) volume
LD-1, 4.9 m³ (175 ft³) volume



88-in pallets, 10.7 m³ (379 ft³) volume
LD-1, 4.9 m³ (175 ft³) volume

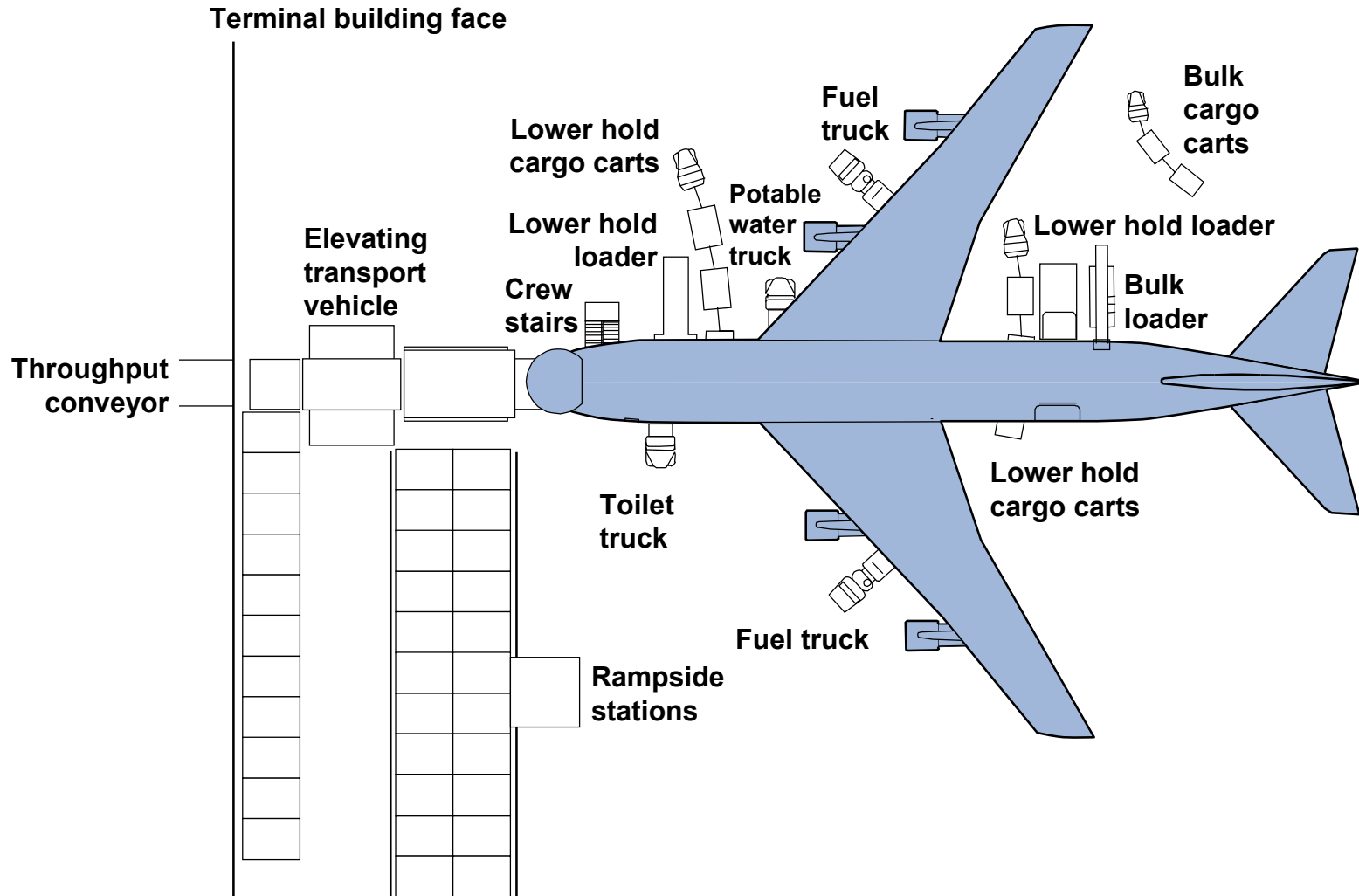


Source: Boeing data



Boeing 747-200 Freighter

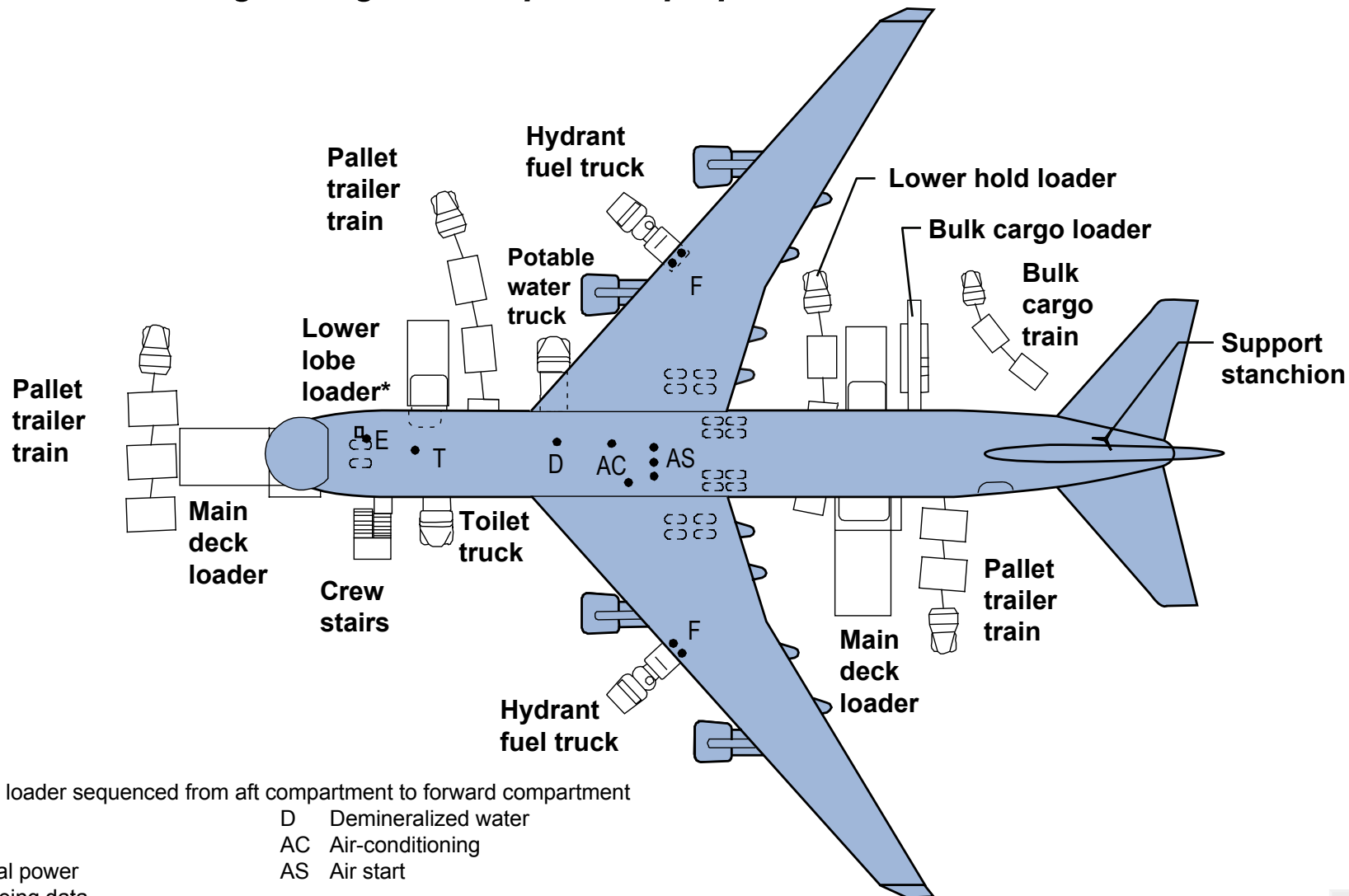
Turnaround servicing arrangement, nose loading



Source: Boeing data

Boeing 747-400F/-400ERF

Turnaround servicing arrangement, open ramp operation

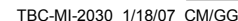


*Lower lobe loader sequenced from aft compartment to forward compartment

F	Fuel	D	Demineralized water
T	Toilet	AC	Air-conditioning
E	Electrical power	AS	Air start

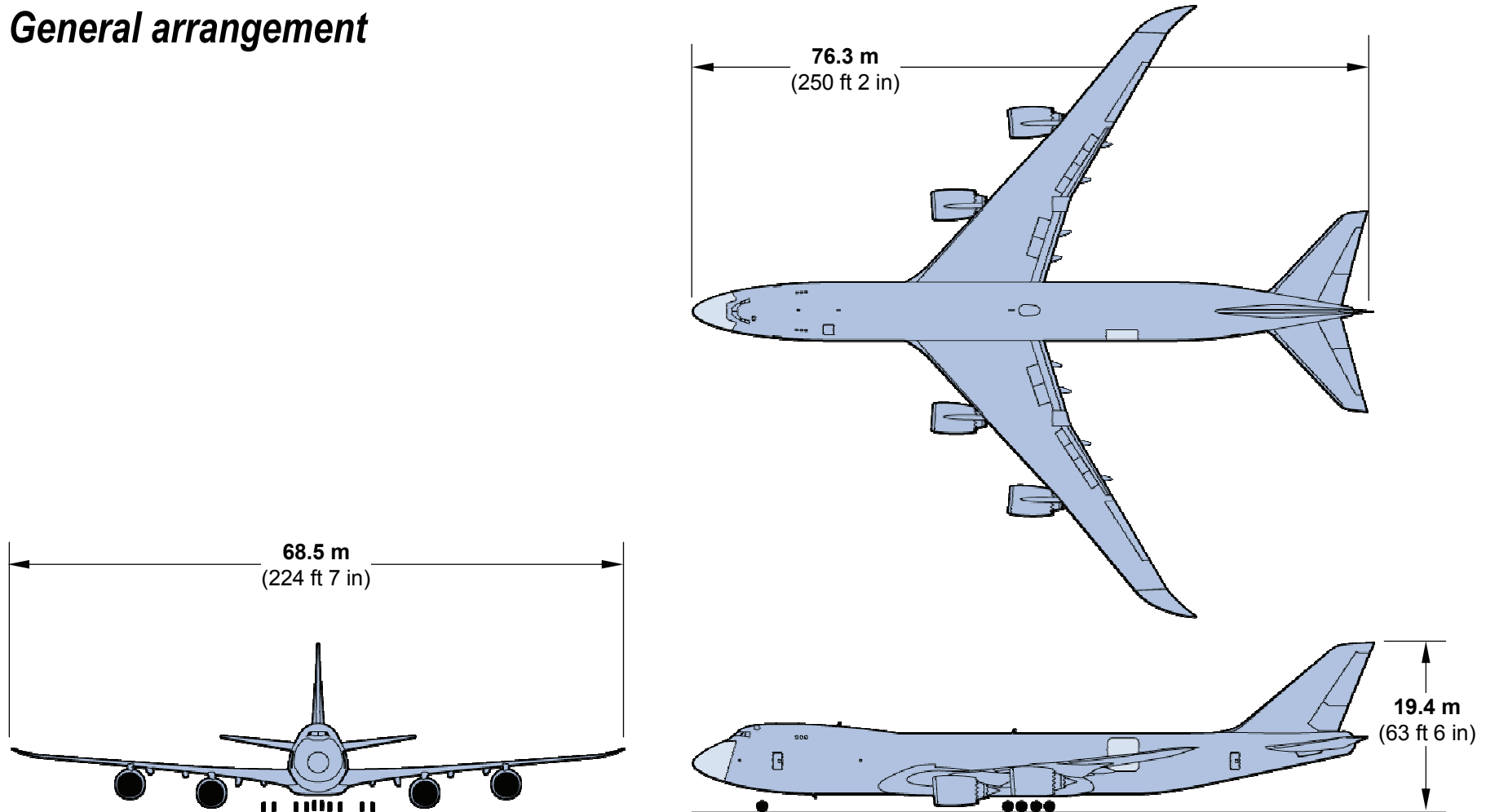
Source: Boeing data

Turnaround servicing arrangement, nose loading



Boeing 747-8 Freighter

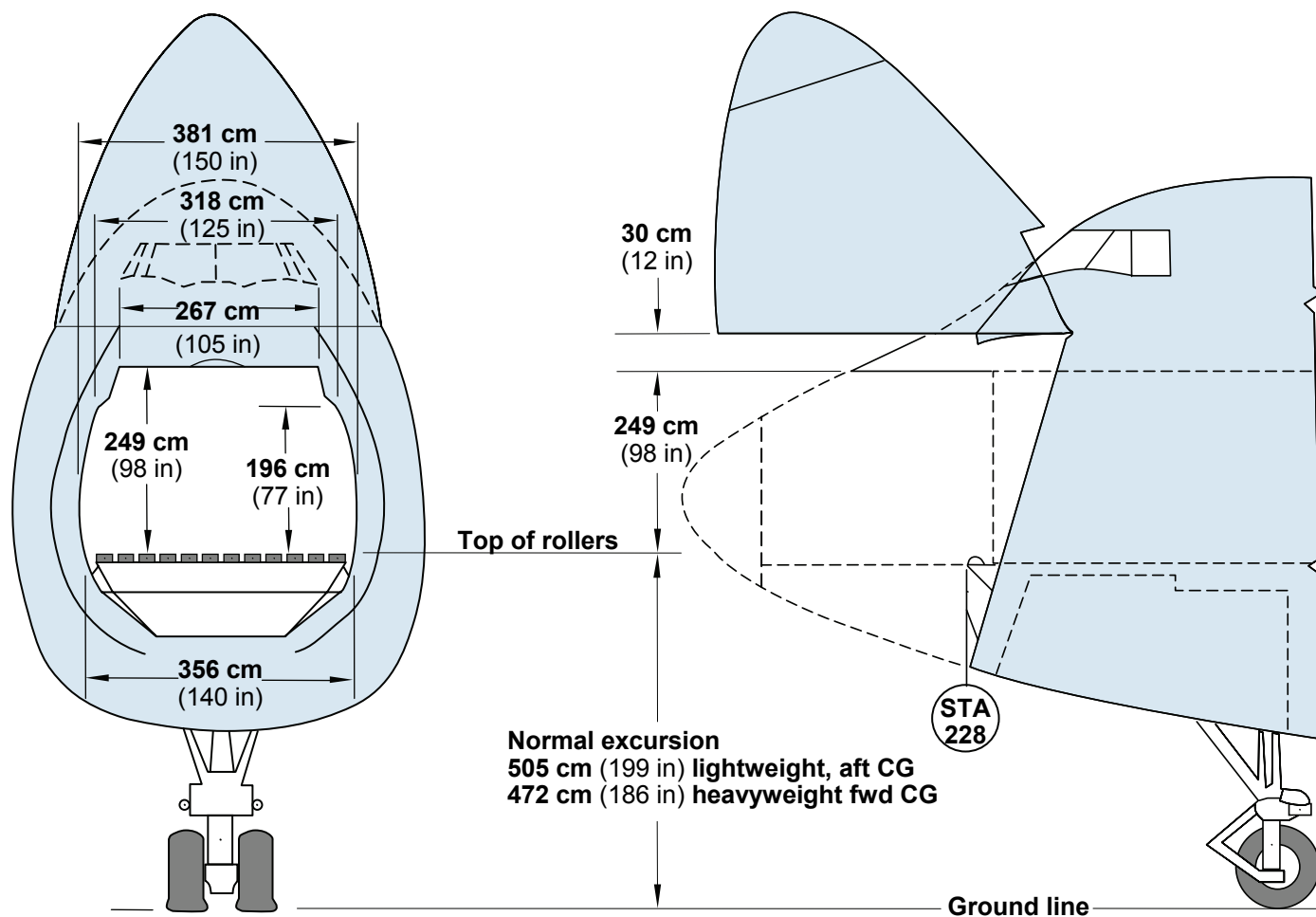
General arrangement



Source: Boeing data

Boeing 747-8 Freighter

Nose door



Source: Boeing data

Boeing 747-8 Freighter

Performance summary, GEnx-2B67 engines

		747-8 Freighter	
Main deck, (34) 2.4 x 3.2-m (96 x 125-in) pallet cargo capacity	m³ (ft³)	692.7	(24,462)
Lower hold, (12) 2.4 x 3.2-m (96 x 125-in) pallets, (2) LD-1s, plus bulk^a	m³ (ft³)	165.7	(5,850)
Total cargo volume	m³ (ft³)	858.4	(30,312)
Maximum takeoff weight	kg (lb)	442,260	(975,000)
Maximum landing weight	kg (lb)	344,280	(759,000)
Maximum zero fuel weight	kg (lb)	326,130	(719,000)
Revenue payload (MZFW–OEW)^b	kg (lb)	133,900	(295,200)
Fuel capacity	L (U.S. gal)	229,980	(60,755)
Design range (MZFW payload)	nmi (km)	4,390	(8,130)

^a Bulk hold volume, 14.7 m³ (520 ft³)

^b Does not include tare weight

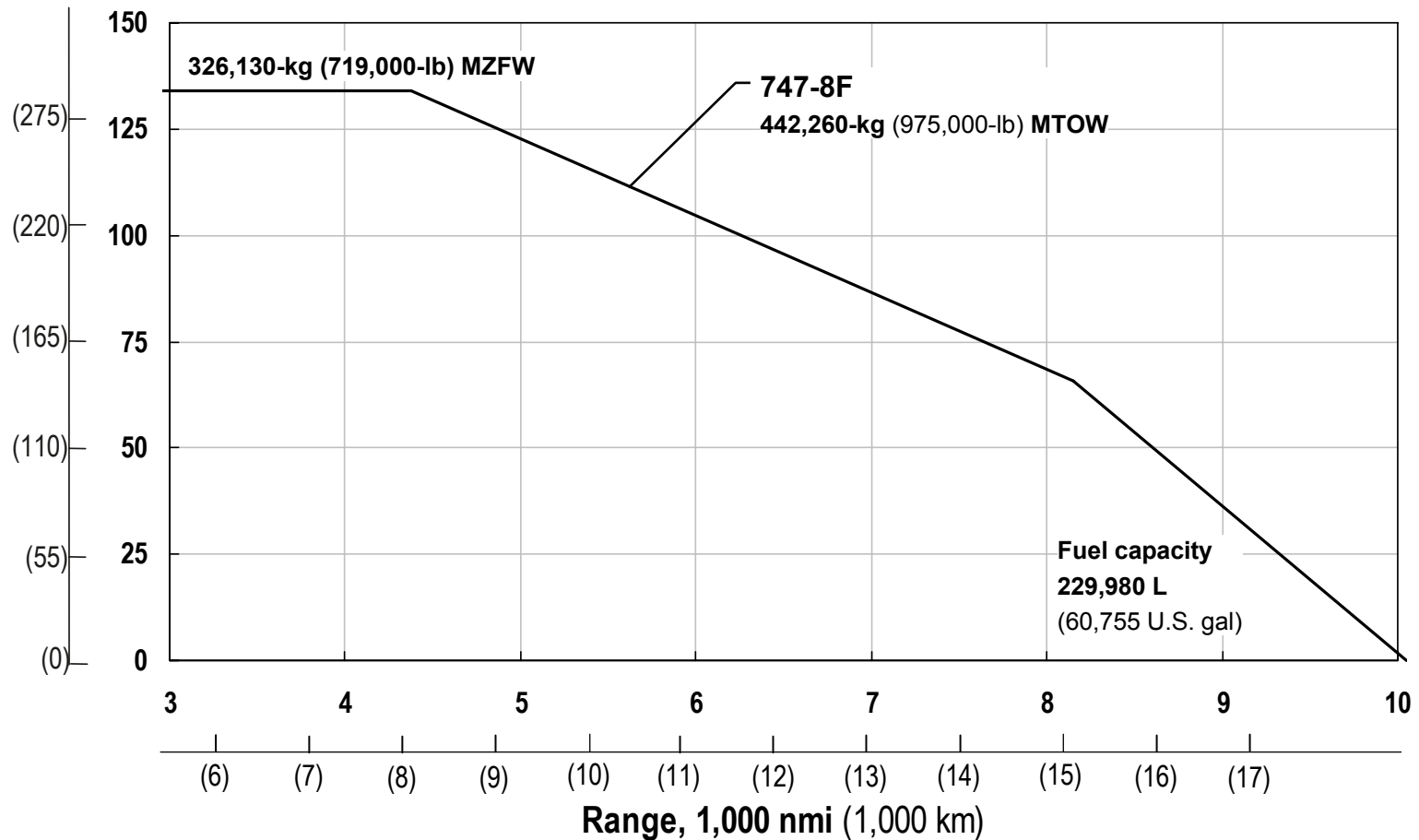
Source: Boeing data



Boeing 747-8 Freighter

Payload-range capability, GEnx-2B67 engines

Payload, 1,000 kg (1,000 lb)

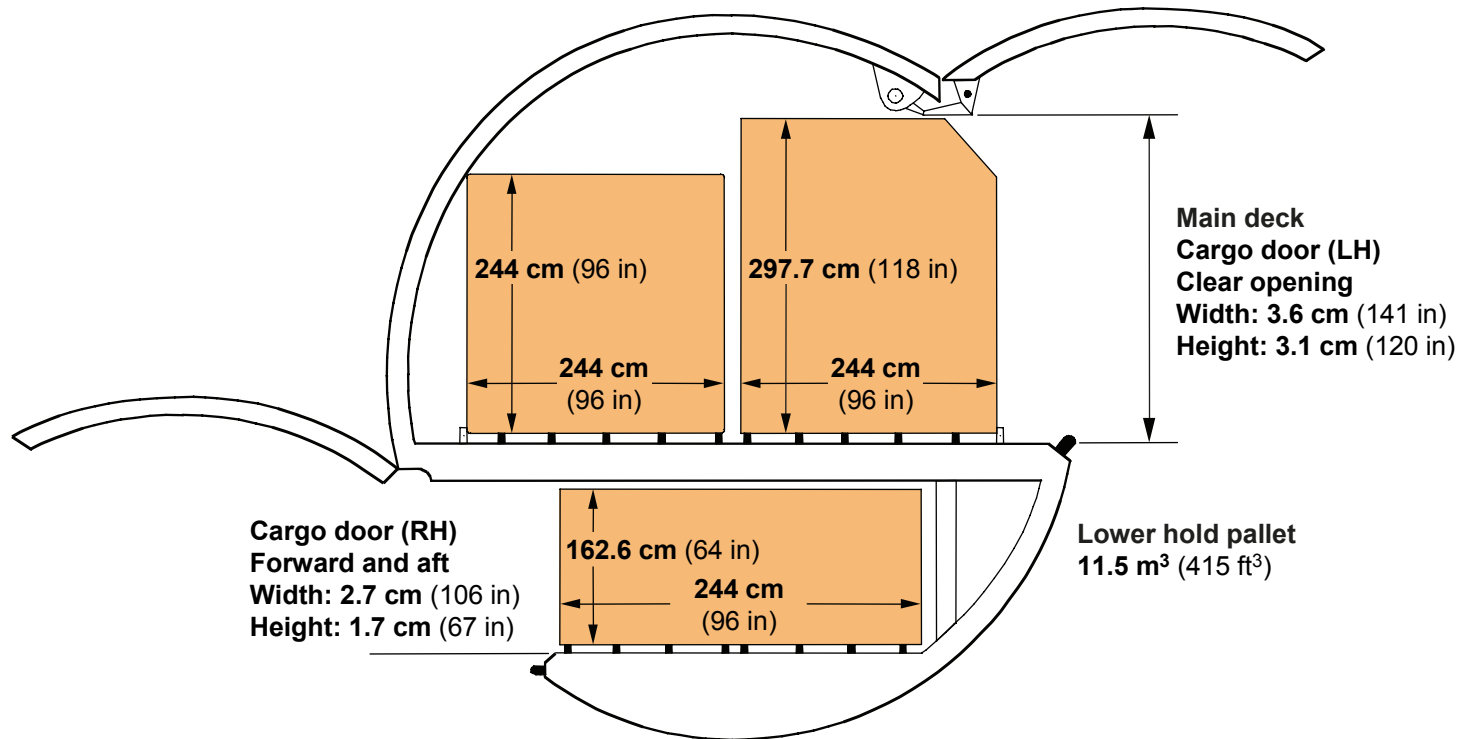


Source: Boeing data



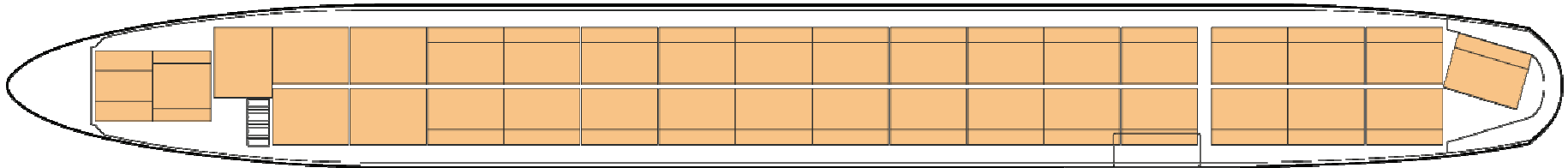
Boeing 747-8 Freighter

Cross section



Boeing 747-8 Freighter

Main deck cargo arrangement



**(34) contoured pallets or containers, 2.4 x 3.2-m (96 x 125-in),
including (27) 3.0-m (10-ft) high units**

Main deck volume, 692.7 m³ (24,462 ft³)

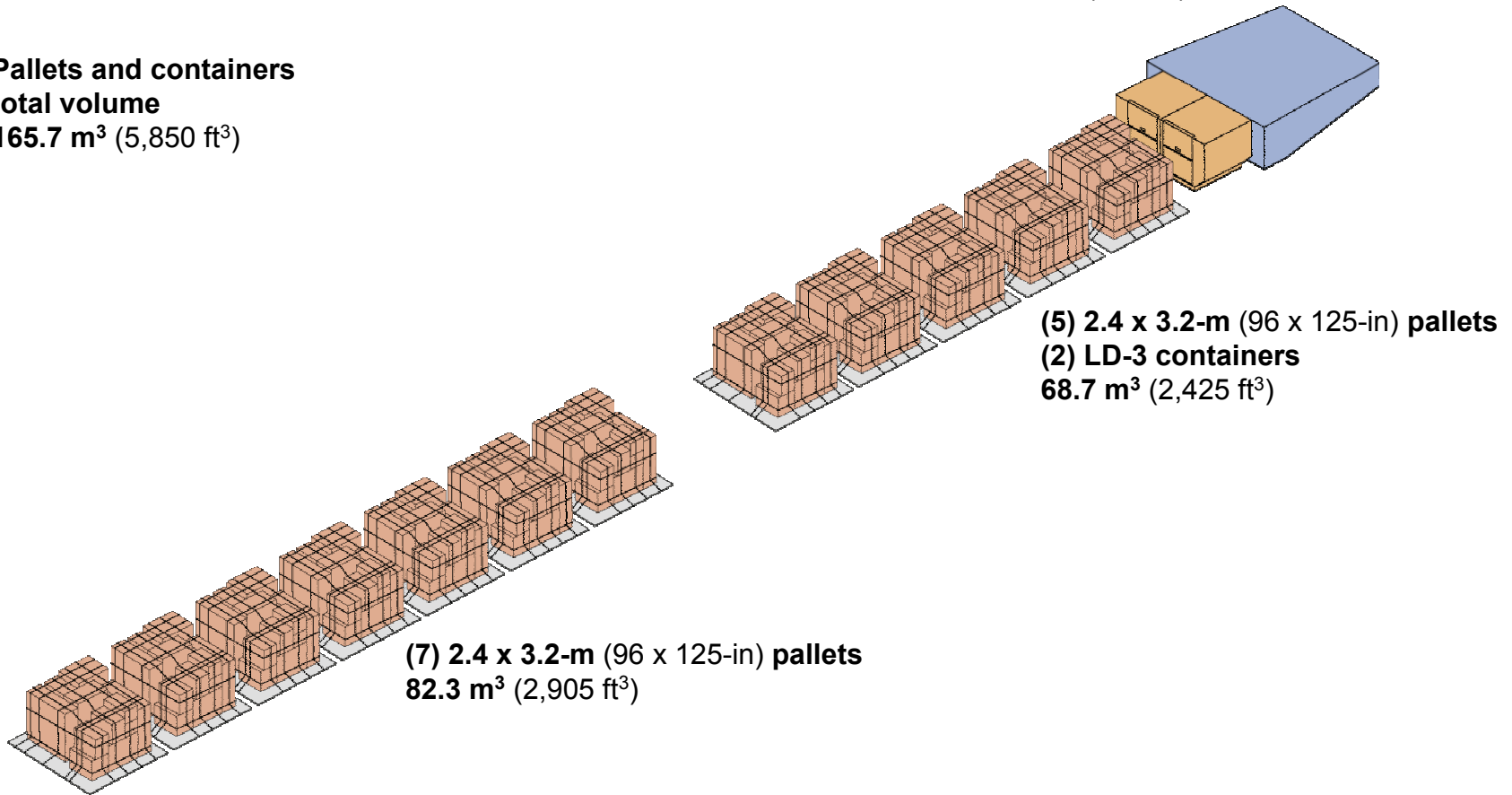


Boeing 747-8 Freighter

Lower hold cargo arrangement

**Pallets and containers
total volume**
165.7 m³ (5,850 ft³)

Bulk volume
14.7 m³ (520 ft³)

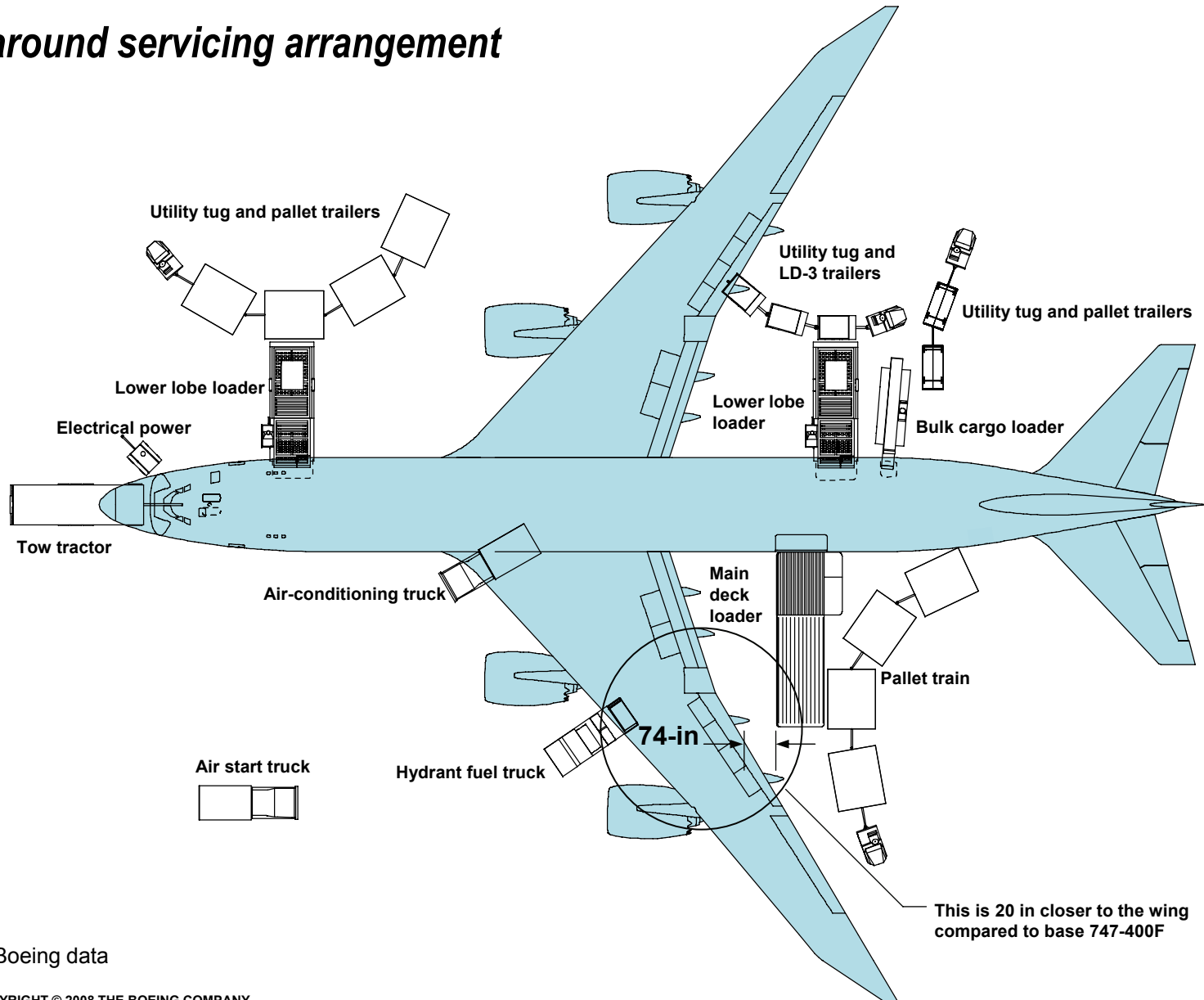


Source: Boeing data



Boeing 747-8 Freighter

Turnaround servicing arrangement



Source: Boeing data