

747-8I

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Advanced technology for improved performance

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Technology that matters



747-8 New wing design inspired by the 787

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Efficient composite raked tip design

Fly-by-wire composite spoilers and outboard ailerons

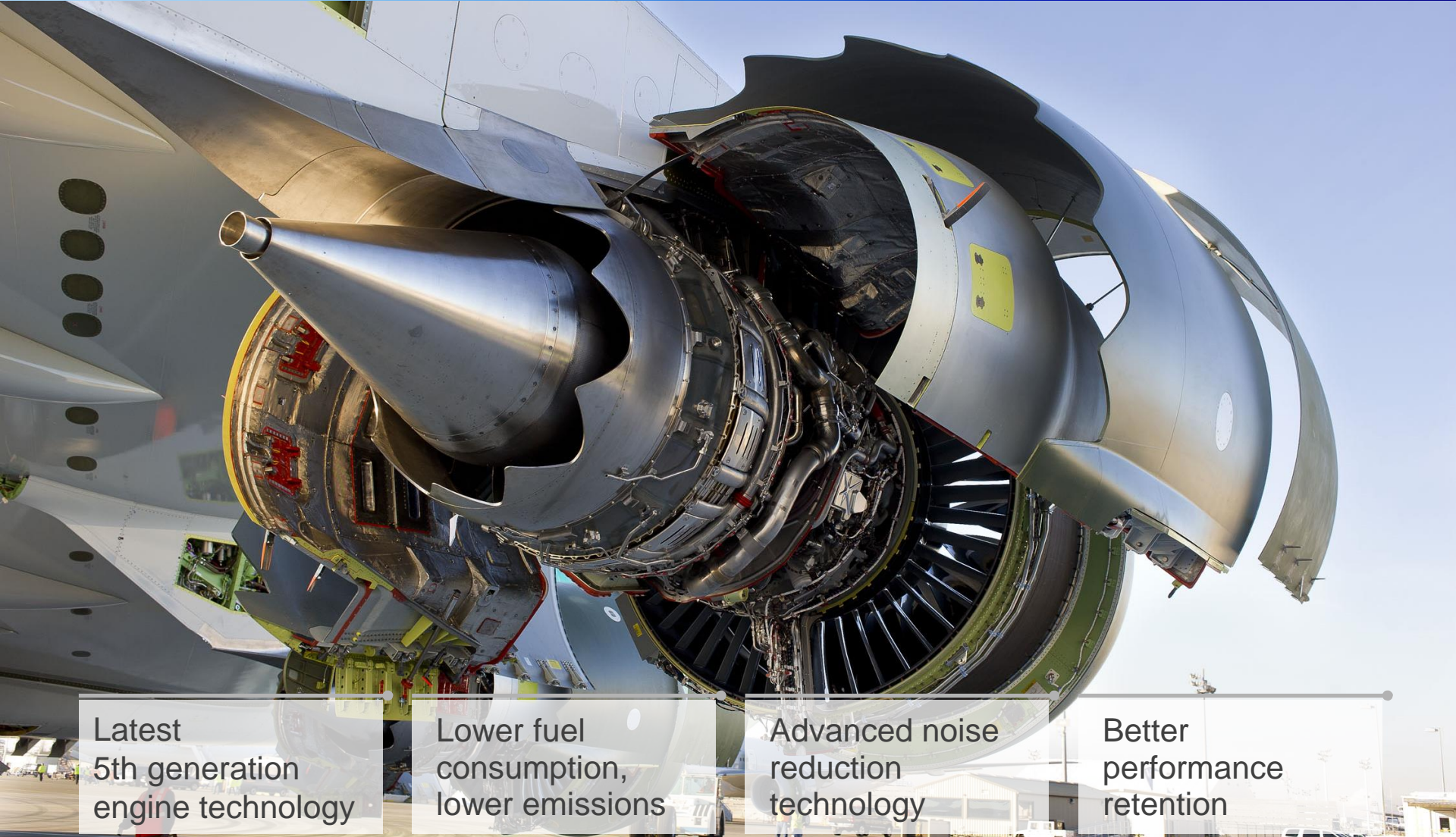
Advanced technology airfoil

Increased wingspan and optimized wing twist

Simplified composite flaps

787 generation engines improve fuel efficiency

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Latest
5th generation
engine technology

Lower fuel
consumption,
lower emissions

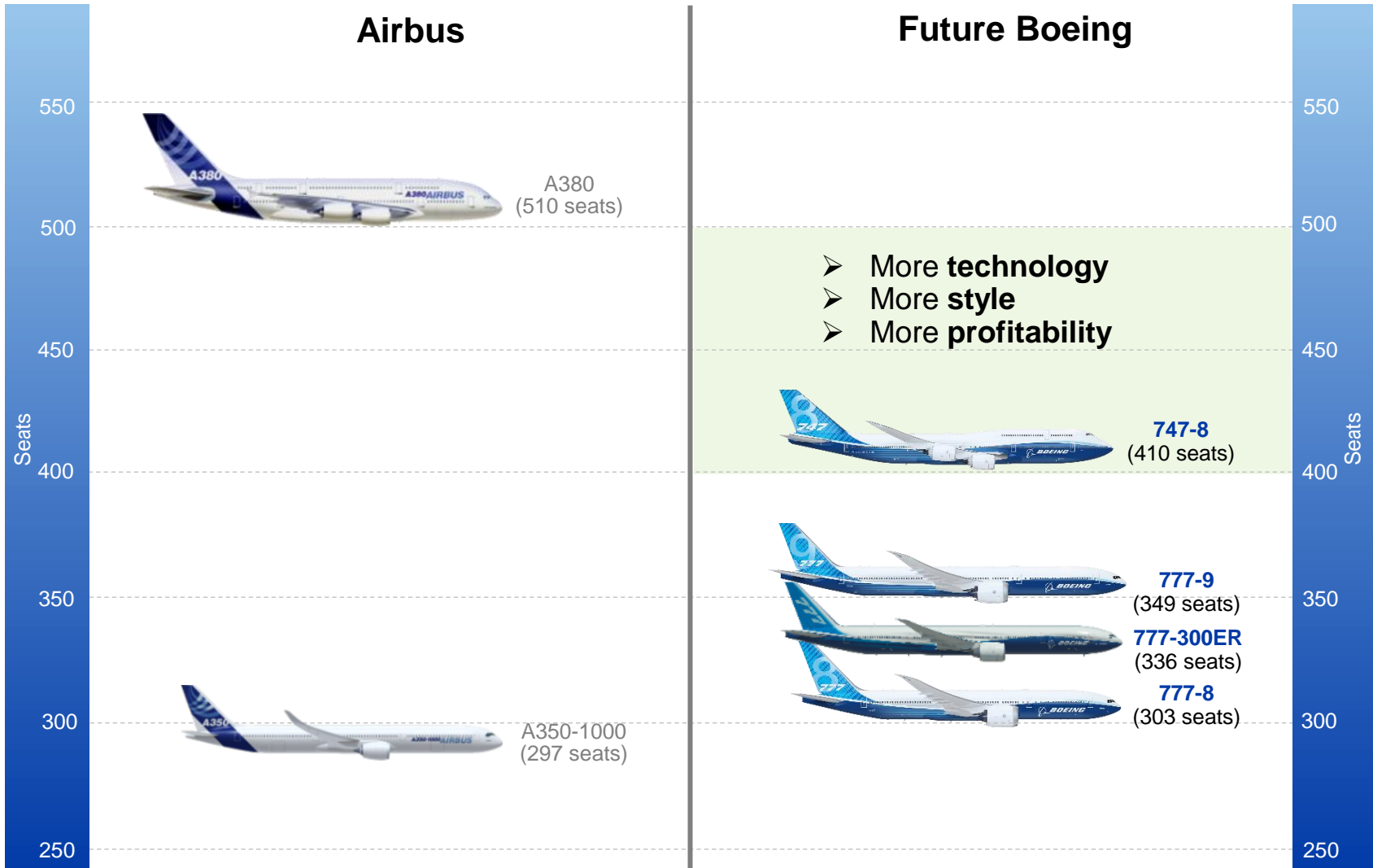
Advanced noise
reduction
technology

Better
performance
retention

The Boeing widebody airplane family

747-8 Intercontinental is in a class of its own

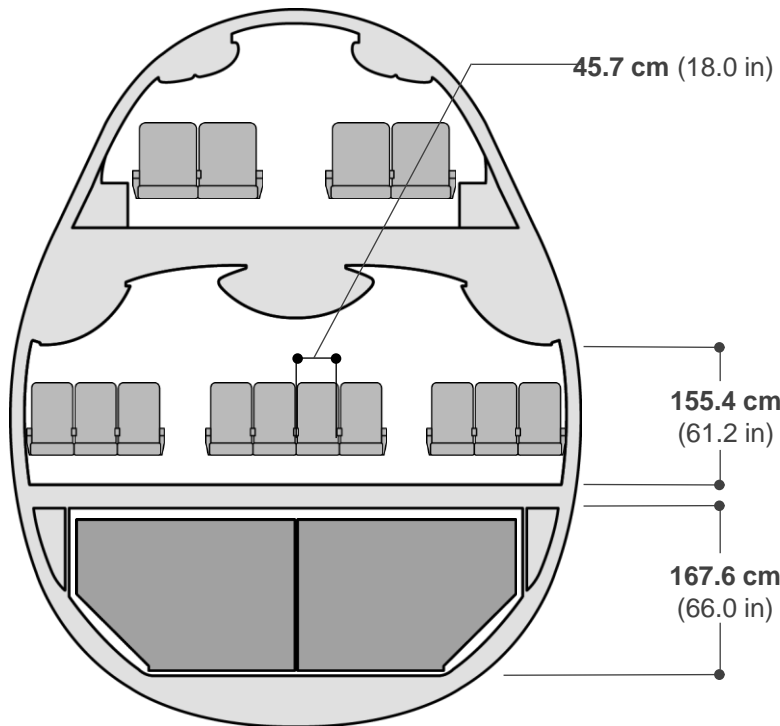
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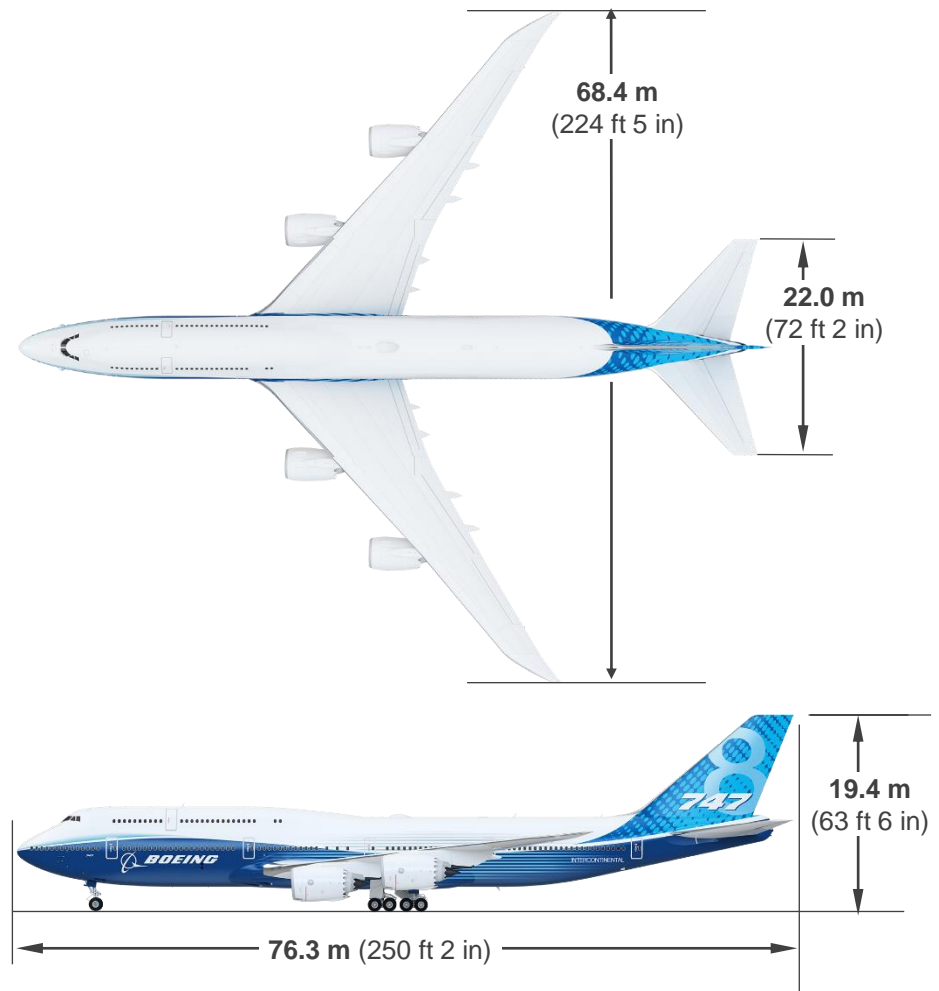
- More **technology**
- More **style**
- More **profitability**

747-8 cross section and dimensions

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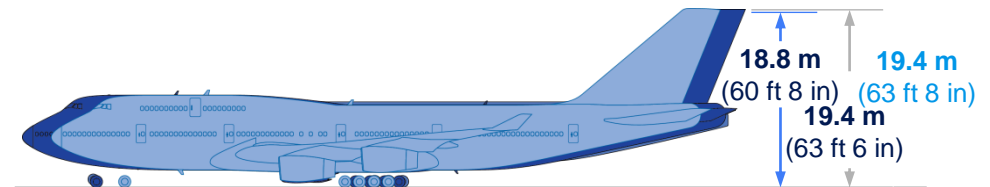
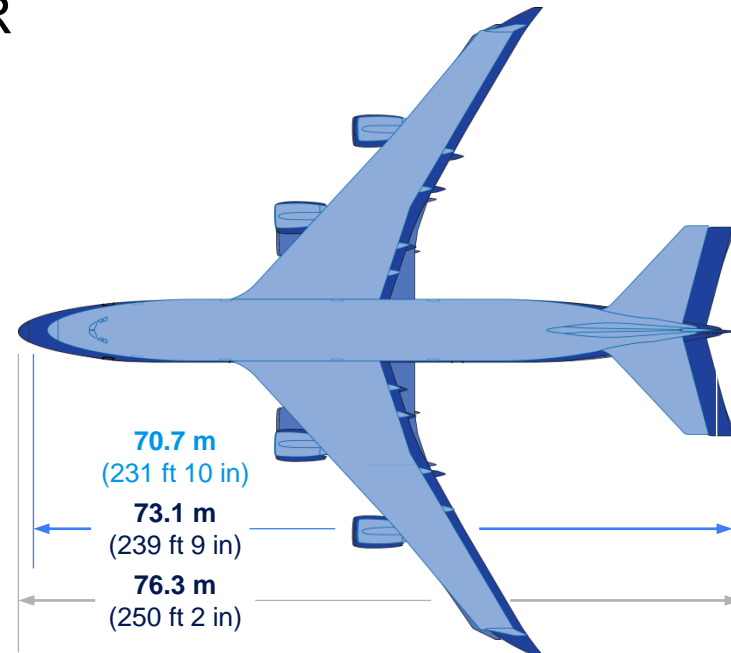
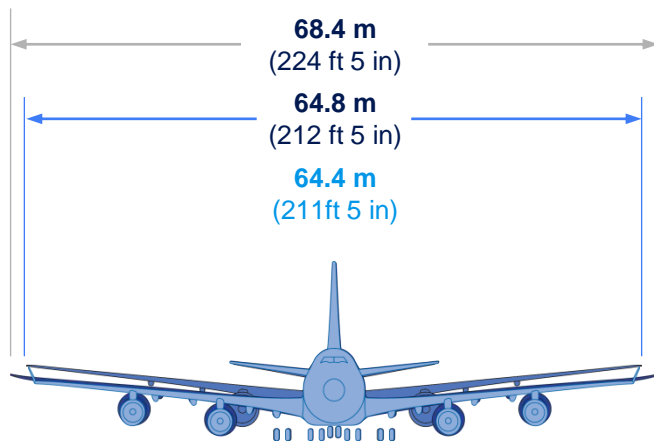
747-8 Intercontinental



Size comparison

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747-400, 747-8, and 777-300ER

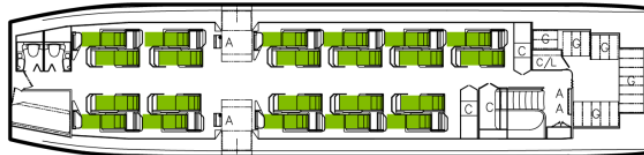


747-8 Interior arrangement

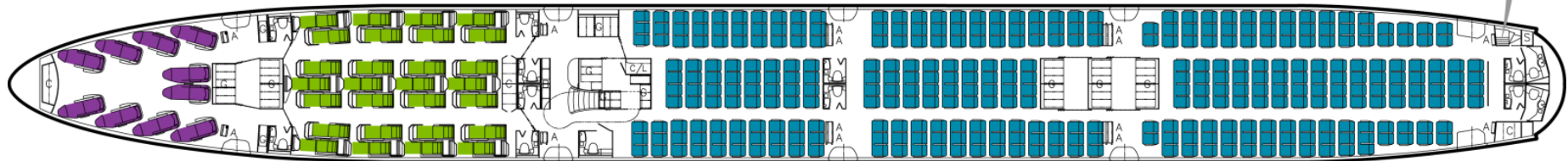
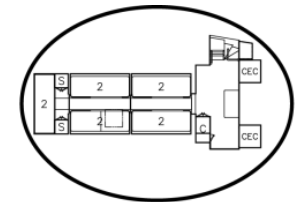
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747-8 Intercontinental

- 10 first-class seats
- 50 business-class seats
- 350 standard-economy seats



Overhead cabin crew rest



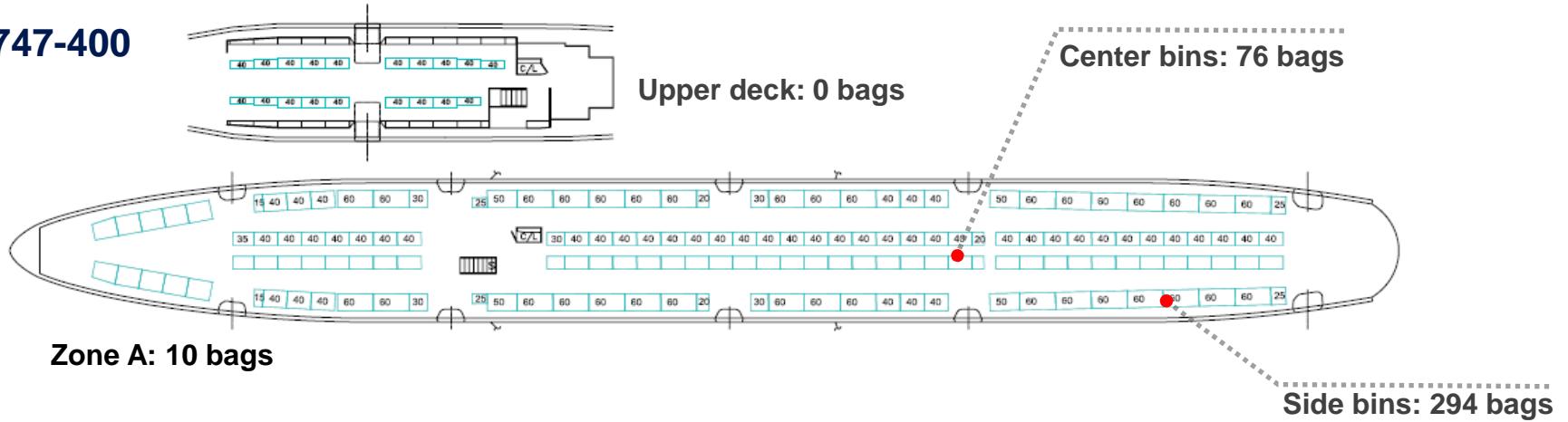
410 passengers

747-8 carries 58% more bags overhead than 747-400

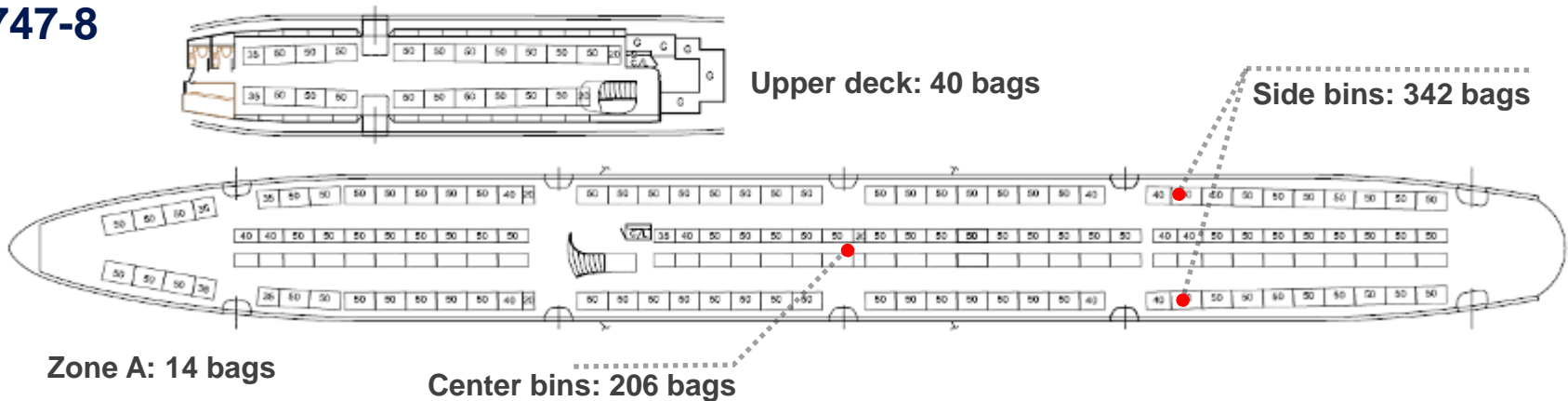
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A place for everyone's bag

747-400



747-8



Increased cabin area for greater passenger comfort

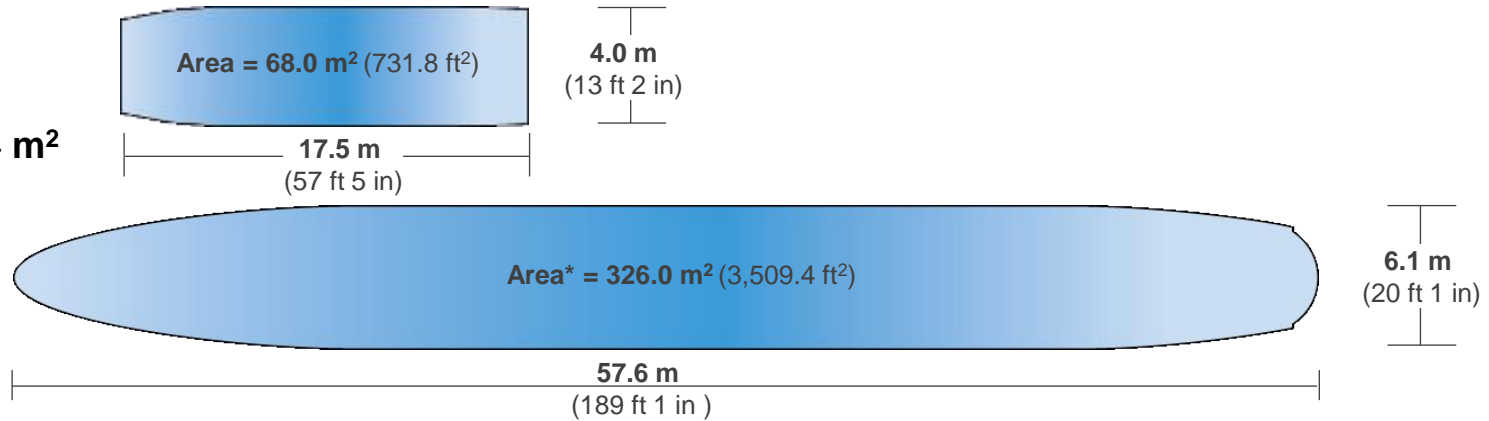
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13% more cabin area than the 747-400

747-400

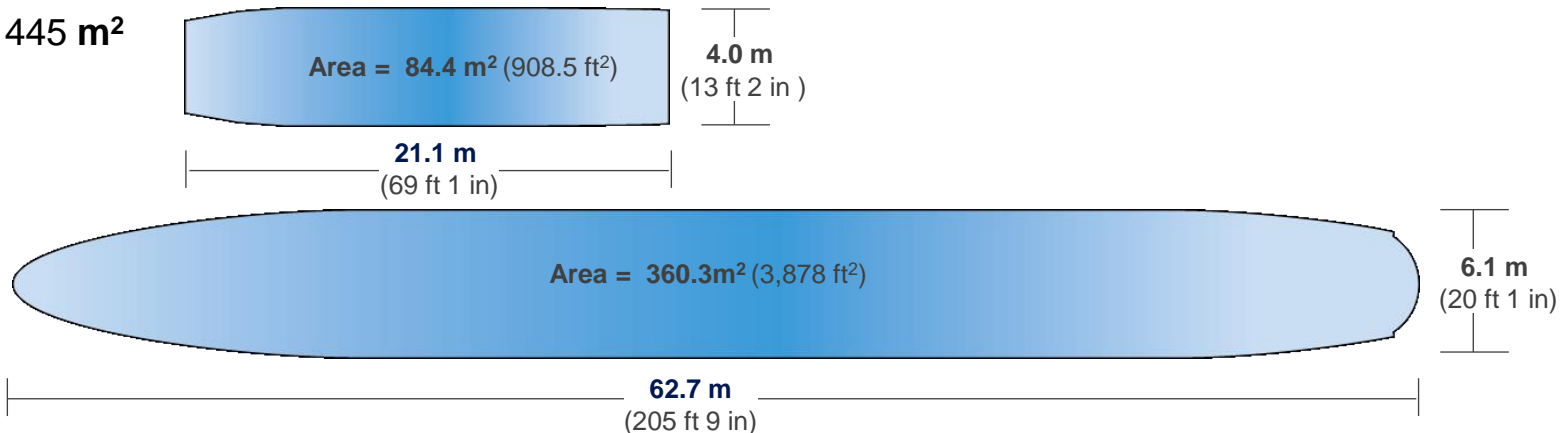
747-400ER

Total area 394 m²



747-8

Total area 445 m²



* Area measured at 25-in off the floor

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Interior design with the passengers in mind

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787- inspired architecture

Large overhead bins

Advanced lighting design

Exclusive upper deck

Open and inviting architecture

Elegant entryway

Latest generation IFE

Unmatched and private first class experience

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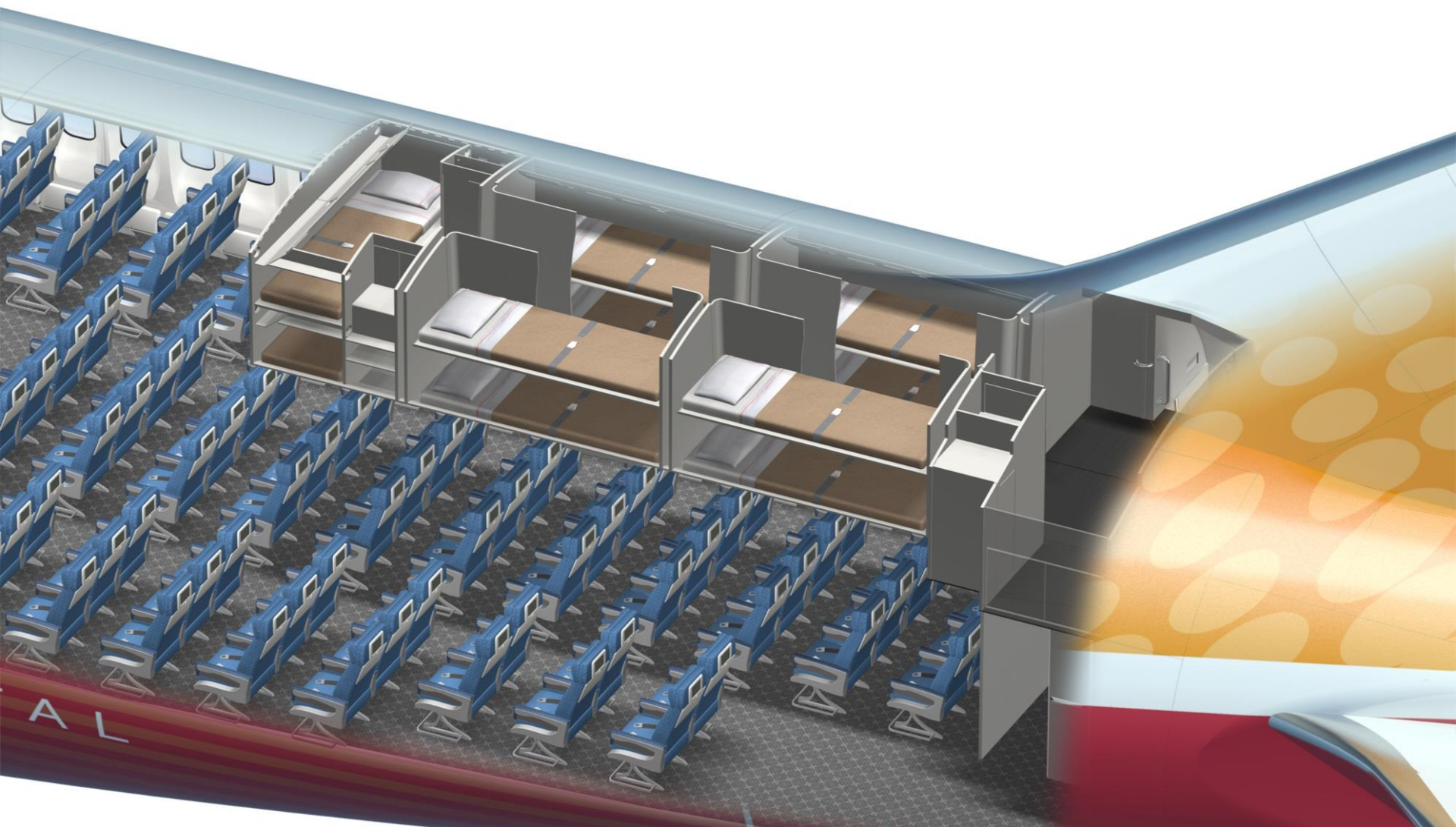






747-8 cabin crew rest similar to the 777

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Lower hold cargo door arrangement

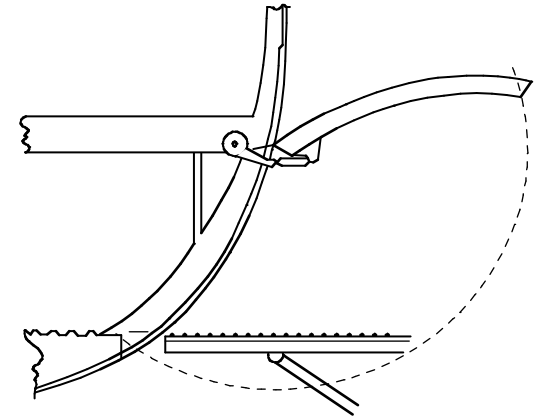
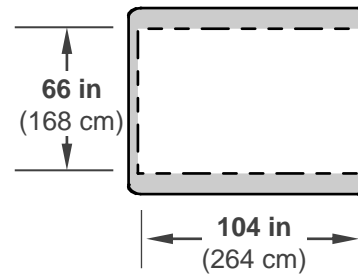
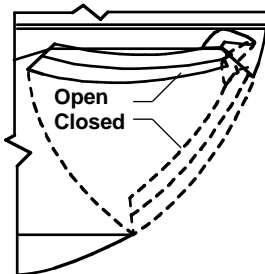
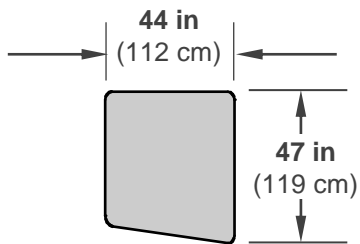
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Bulk cargo compartment door

Aft cargo compartment door

Forward cargo compartment door



Bulk cargo compartment door

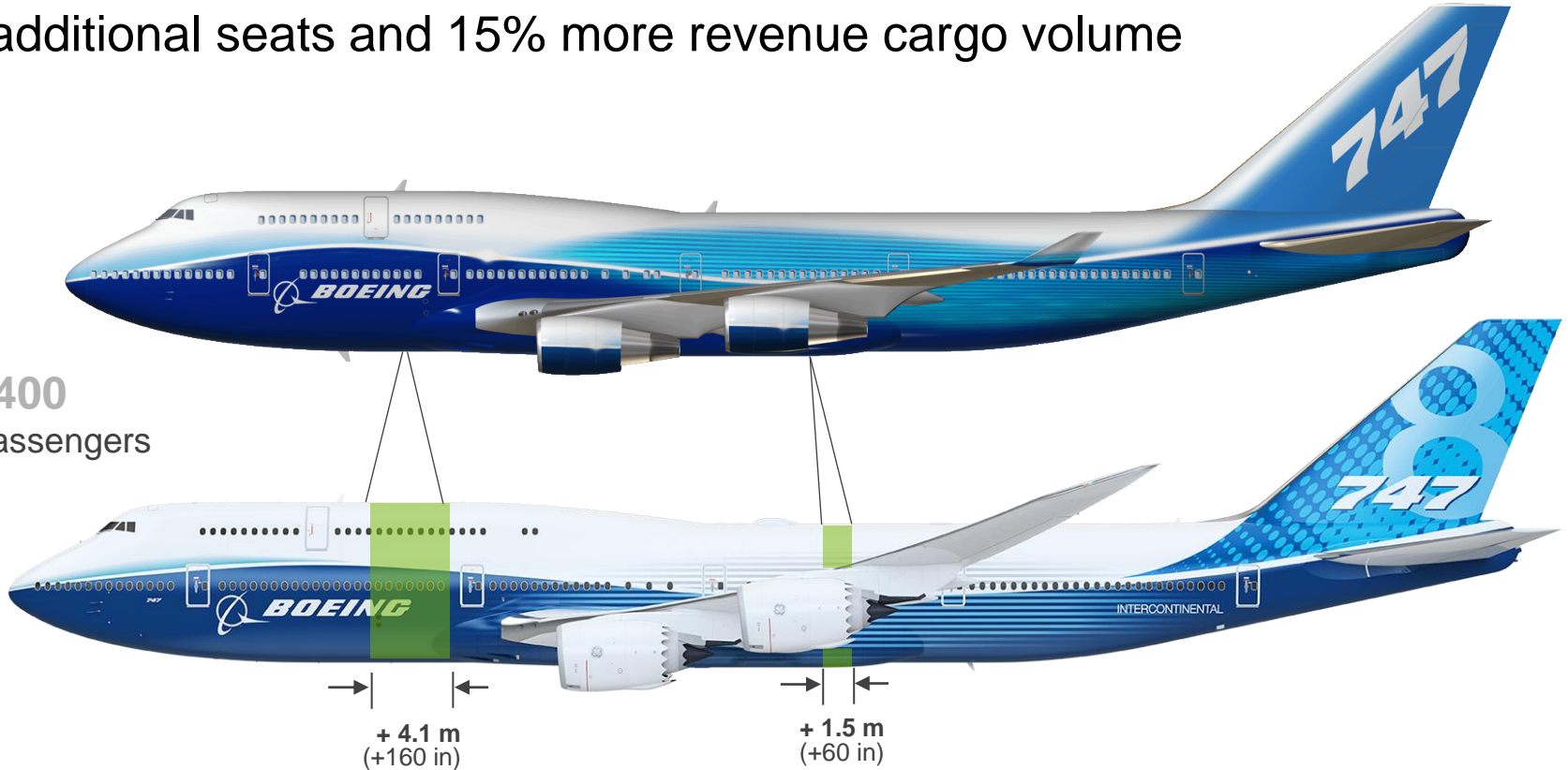
Forward/aft cargo compartment door—view looking forward

Strategically sized to maximize revenue

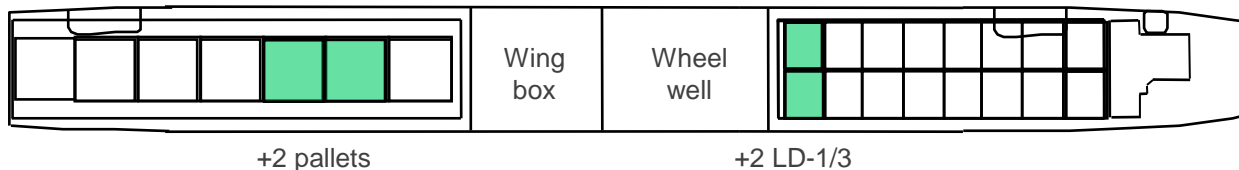
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66 additional seats and 15% more revenue cargo volume

747-400
344 passengers



747-8 Intercontinental
410 passengers



- Standard Rules
- Three-class seating

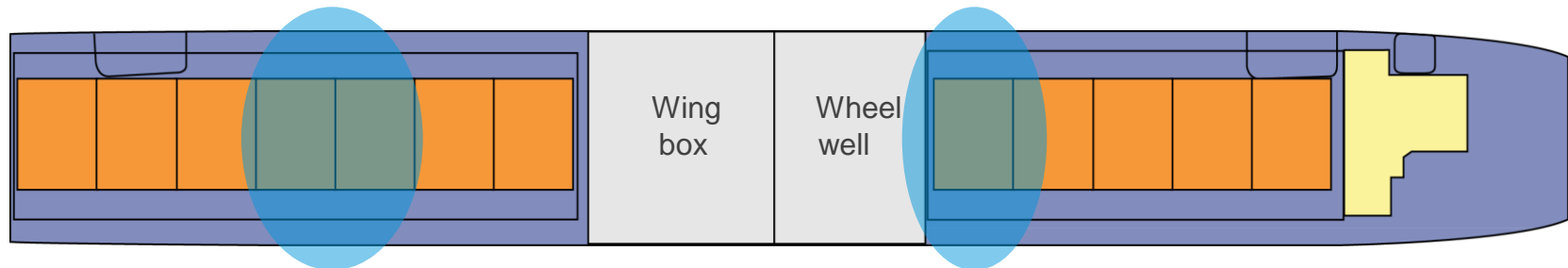
Additional cargo volume for more revenue-generating opportunity

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747-8 Intercontinental carries 15% more revenue cargo than the 747-400

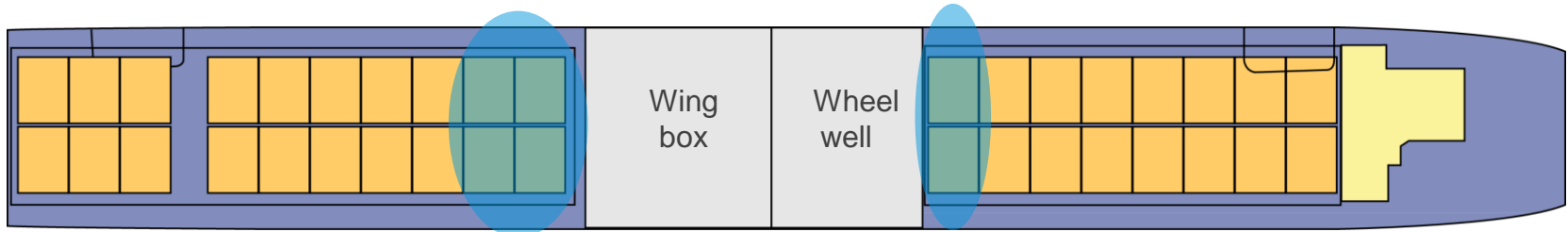
Forward lower hold

Aft lower hold



(7) 96- x 125-in pallets

(5) 96- x 125-in pallets + bulk cargo



(20) LD-1/LD-3 containers

(16) LD-1/LD-3 containers + bulk cargo

Additional volume versus 747-400

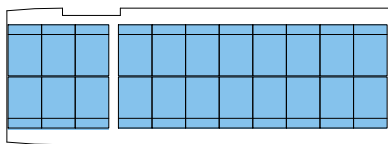
	Forward cargo volume m ³ (ft ³)	Aft cargo volume m ³ (ft ³)	Bulk cargo volume, m ³ (ft ³)	Total cargo volume, m ³ (ft ³)	Total cargo volume for passenger bags, m ³ (ft ³)	Revenue cargo volume after passenger bags, m ³ (ft ³)
747-400	58.8 (2,075)	69.4 (2,450)	23.6 (835)	151.8 (5,360)	50.6 (1,789)	101.2 (3,571)
747-8	82.3 (2,905)	79.3 (2,800)	14.7 (520)	176.3 (6,225)	60.4 (2,132)	115.9 (4,093)

Flexible cargo arrangements increase revenue capabilities

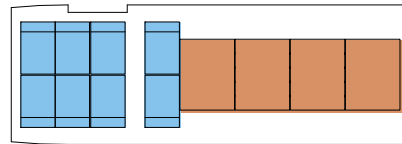
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747-8 Intercontinental lower hold cargo arrangements

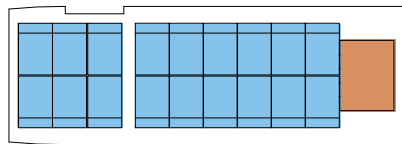
Forward



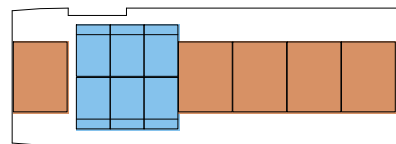
22** LD-1/-3



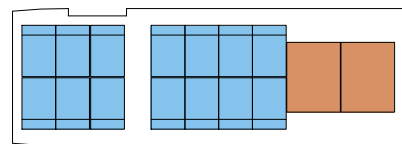
4 pallets and 8 LD-1/-3



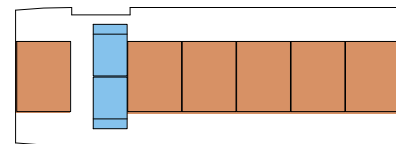
1 pallet and 18 LD-1/-3



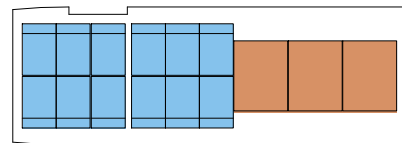
5 pallets and 6 LD-1/-3



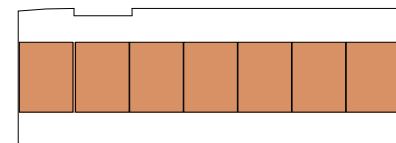
2 pallets and 14 LD-1/-3



6 pallets and 2 LD-1/-3

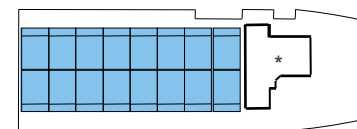


3 pallets and 12 LD-1/-3

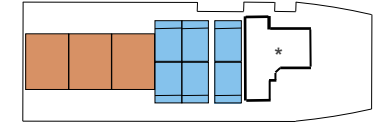


7 pallets

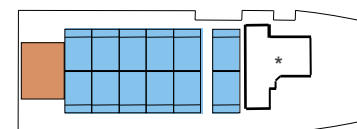
Aft



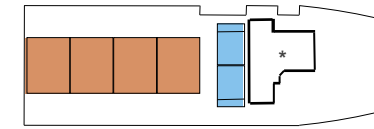
16 LD-1/-3



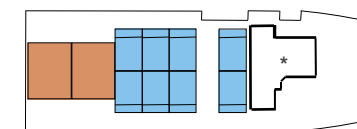
3 pallets and 6 LD-1/-3



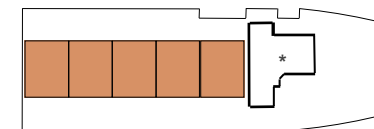
1 pallet and 12 LD-1/-3



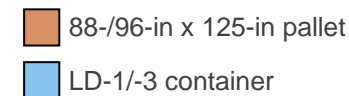
4 pallets and 2 LD-1/-3



2 pallets and 8 LD-1/-3



5 pallets



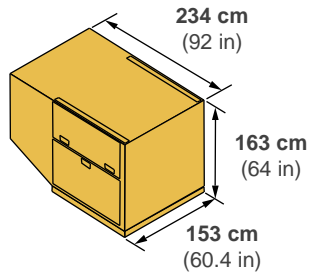
* Bulk cargo is 14.7 m³ (520 ft³)

** Uses nonstandard load arrangement; standard arrangement is 20 containers

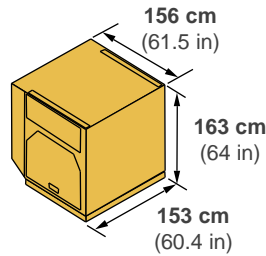
747-8 lower hold capability

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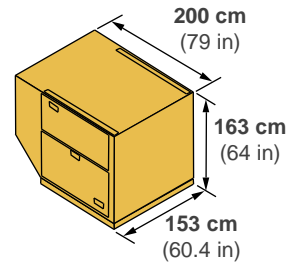
Containers and pallets



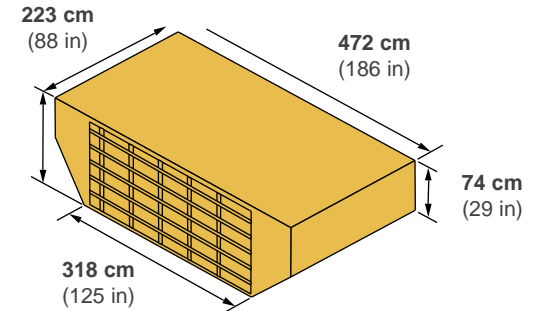
1,588-kg (3,500-lb)
4.9 m³ (175 ft³)
(LD-1)



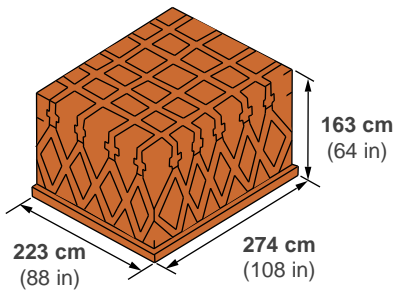
1,225-kg (2,700-lb)
3.5 m³ (125 ft³)
(LD-2)



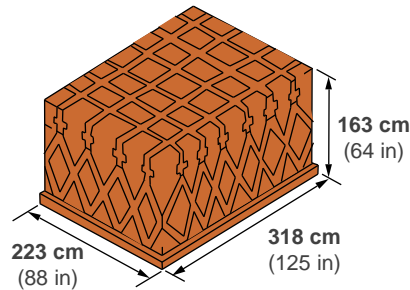
1,588-kg (3,500-lb)
4.5 m³ (160 ft³)
(LD-3)



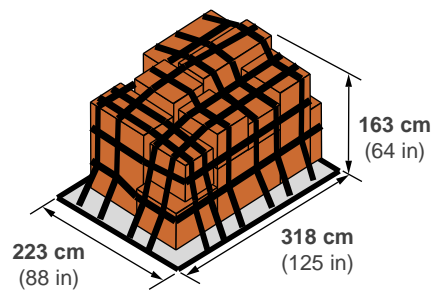
4,536-kg (10,000-lb)
14.6 m³ (516 ft³)
(LD-29)



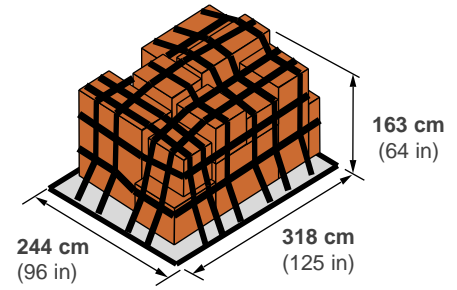
4,627-kg (10,200-lb)
9.0 m³ (320 ft³) (military)
9.2 m³ (327 ft³) (commercial)



4,627-kg (10,200-lb)
10.8 m³ (381 ft³)
(LD-7)



4,627-kg (10,200-lb)
10.7 m³ (379 ft³)
(pallet)



5,035-kg (11,100-lb)
11.7 m³ (415 ft³)
(pallet)

747-8 Intercontinental performance summary

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		747-8
Passengers	(FC/BC/EC)	410 (10/50/350)
Cargo	pallets/containers ²	7/16
Engines		GEEx-2B67
Boeing equivalent thrust/Flat-rated temperature	lb/°F	66,500 / 86
Maximum taxi weight	kg (lb)	449,050 (990,000)
Maximum takeoff weight	kg (lb)	447,700 (987,000)
Maximum landing weight	kg (lb)	312,050 (688,000)
Maximum zero fuel weight	kg (lb)	295,300 (651,000)
Operating empty weight	kg (lb)	223,850 (493,500)
Fuel capacity	L (U.S. gal)	238,610 (63,034)
Design range	(MTOW, full passenger payload) nmi (km)	7,730 (14,310)
Cruise mach		0.86
Takeoff field length	(SL, 86°F, MTOW) m (ft)	3,260 (10,650)
Initial cruise altitude	(MTOW, ISA + 10°C) ft (m)	30,800 (9,350)
Landing field length	(MLW) m (ft)	2,000 (6,550)
Approach speed	(MLW) kias	152
Fuel burn/seat 3,000 nmi	kg (lb)	138.6 (305.6)
Fuel burn/seat 6,000 nmi	kg (lb)	295.7 (652.0)

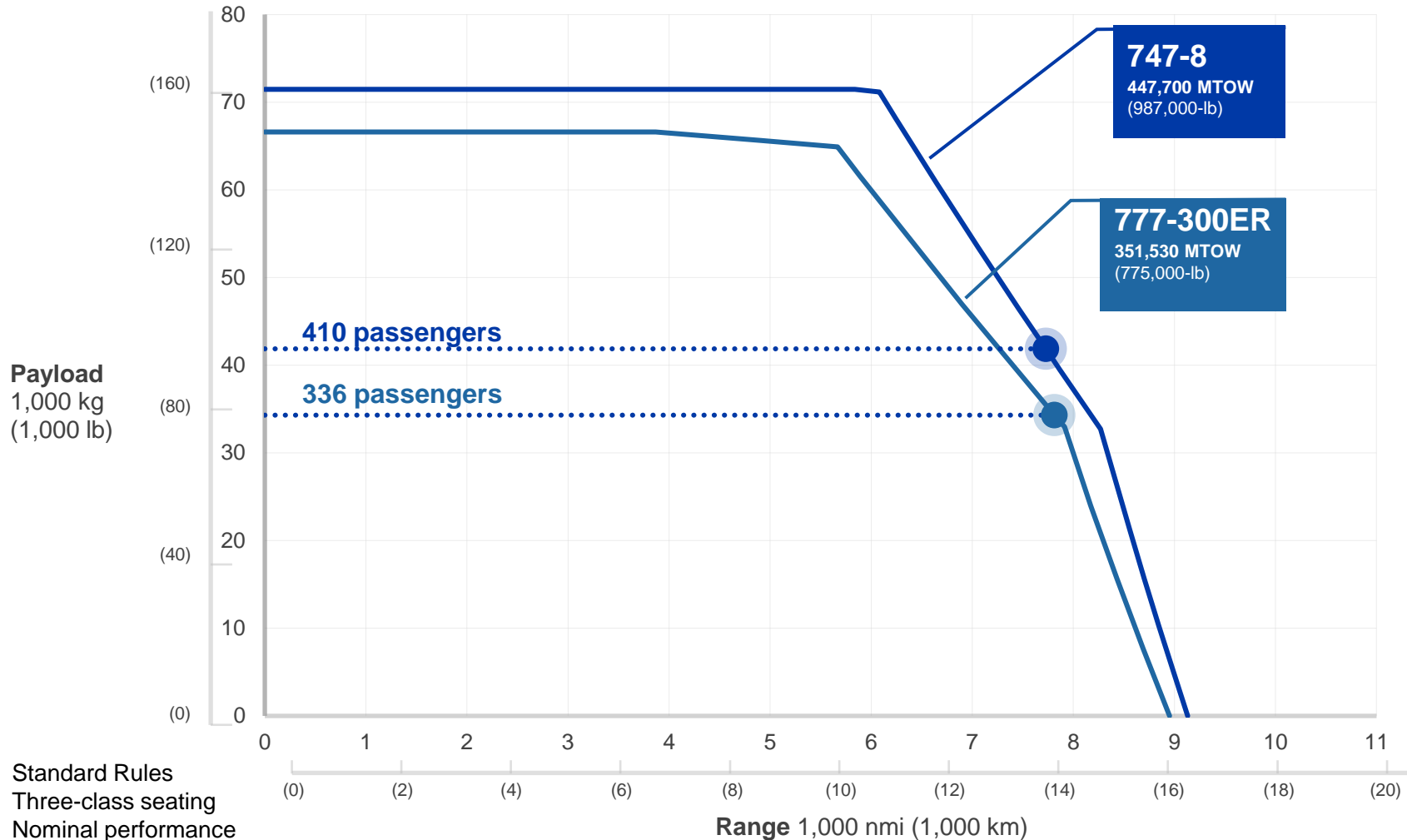
- Standard Rules
- Three class seating

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747-8 Intercontinental carries more passengers

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- Standard Rules
- Three-class seating
- Nominal performance
- 225 lb per passengers
- 6.7 lb/US gal fuel density

747-8 same range as the A380 with less risk

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Full passenger payload

747-8

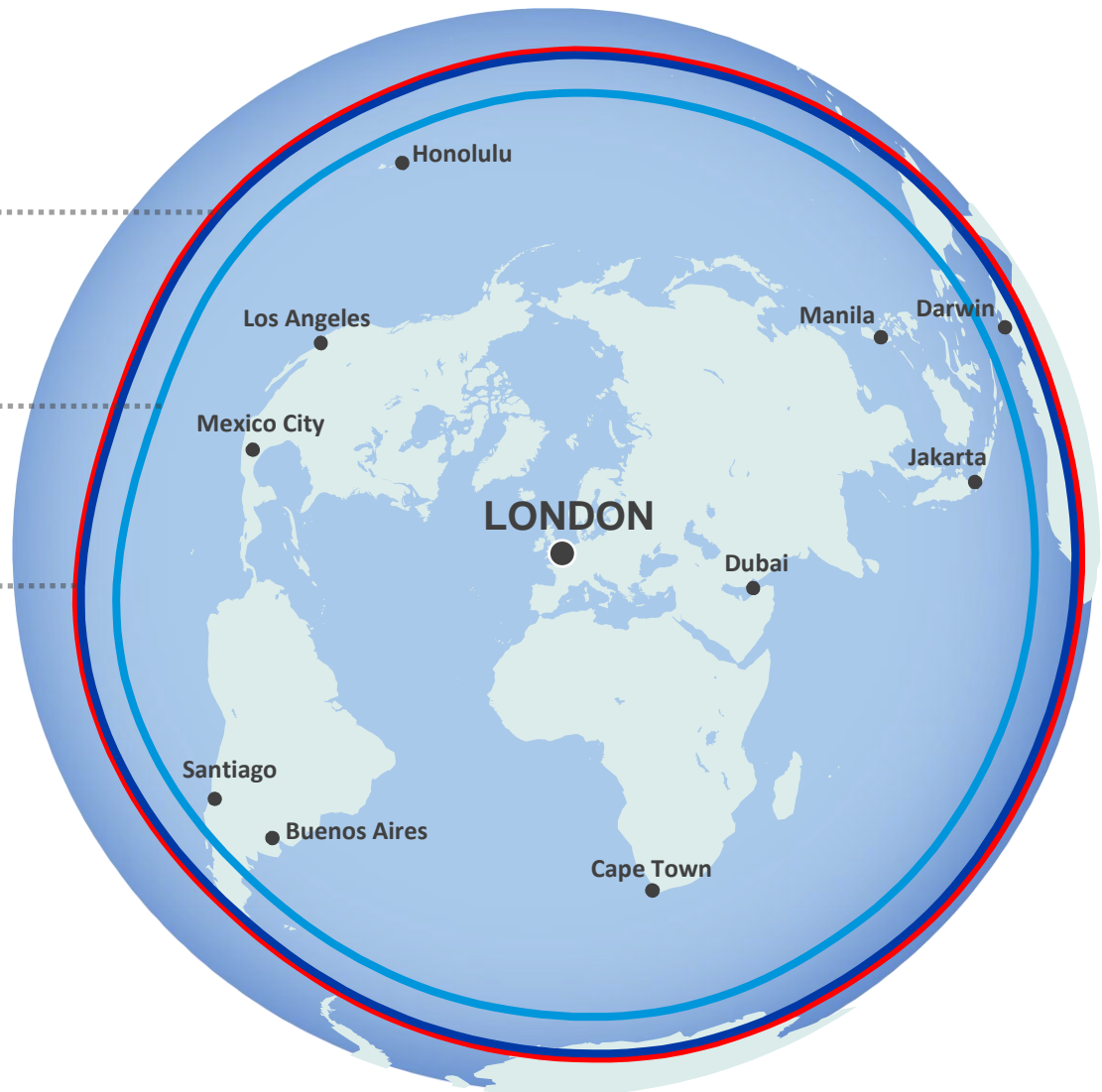
447,700-kg (987,000-lb) MTOW
410 three-class passengers

747-400

396,900-kg (875,000-lb) MTOW
344 three-class passengers

A380-800

575,000-kg (1,267,700-lb) MTOW
510 three-class passengers



- Standard Rules
- 85% annual winds
- Airways and traffic allowances included
- Range capability from London

747-8 advanced flight deck offers operational commonality

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Same type rating as the 747-400

3 days

difference training

Customizable
electronic checklist

Airport Moving
Map

Advanced
navigation aids

New flight
management
computer

777 and 747-8 crew scheduling and flexibility

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Instrument format and location are virtually identical



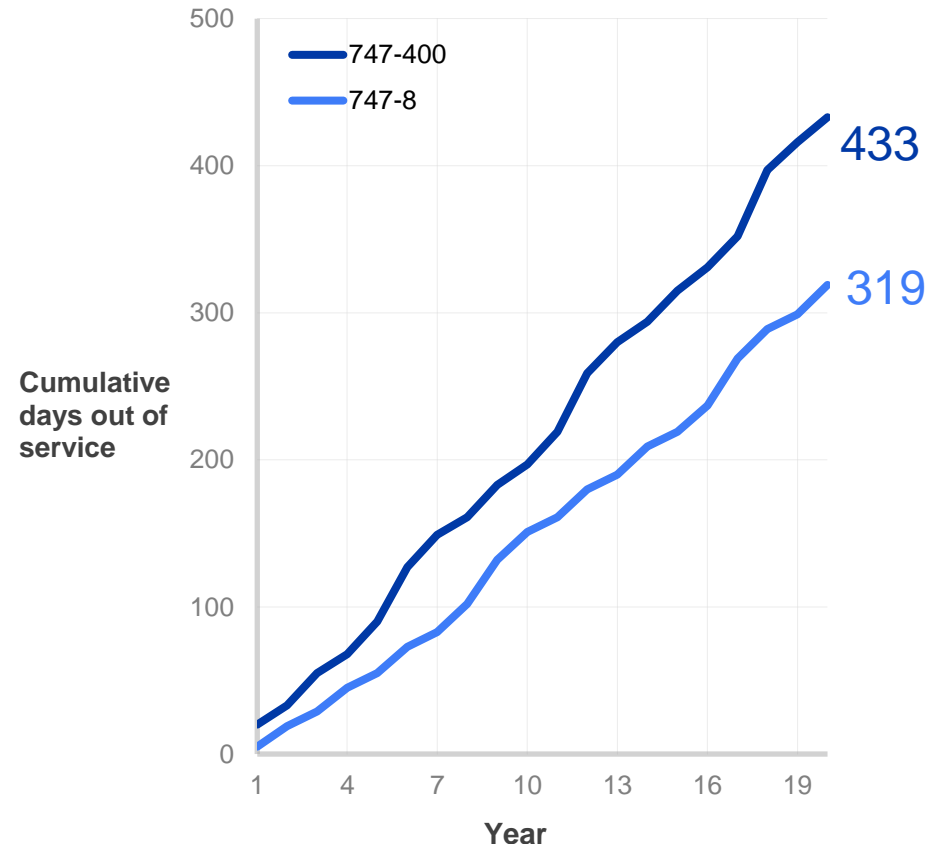
- STAR curriculums can be used for obtaining both Type Ratings.
- Similar Boeing flight deck configuration and flight crew procedures facilitate easy transition.¹
- Comparable Takeoff and Landing currency enables crew scheduling flexibility.

Proven airframe increases check intervals

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747-8 enables greater asset utilizations

	747-400 original	747-400 current	747-8
A-check interval (typical duration)	750 hrs (2 days)	1,000 hrs (2 days)	1,000 hrs (1 day)
C-check interval (typical duration)	7,500 hrs 18 mo (12 days)	10,000 hrs 24 mo (12 days)	10,000 hrs 24 mo (9 days)
D-check interval (typical duration)	6 years (22 days)	8 / 8 / 6 / 6 years (22 days)	8 / 8 / 6 / 6 years (20 days)



New material and system fine tuning reduces check duration

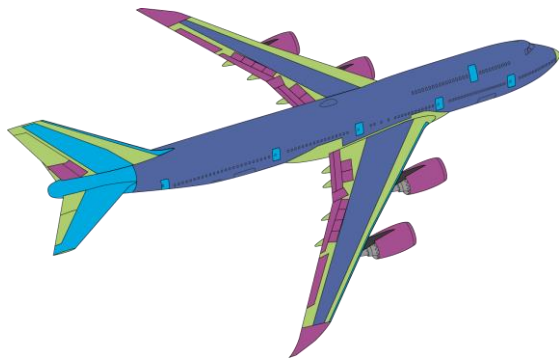
Less maintenance tasks for a more capable airplane

Letter checks noted above for 747-8 are given for reference only. All tasks are parameter-driven.

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747-8 is cleaner, quieter, and more efficient

StartupBoeing



- Advanced materials



- New GEnX Engines



- New wing

18% reduction in carbon emissions and fuel used

Below CAEP/6 limits for NOx*

Quieter than Chapter 4 requirements

Compared with the 747-400, except for NOx and noise

