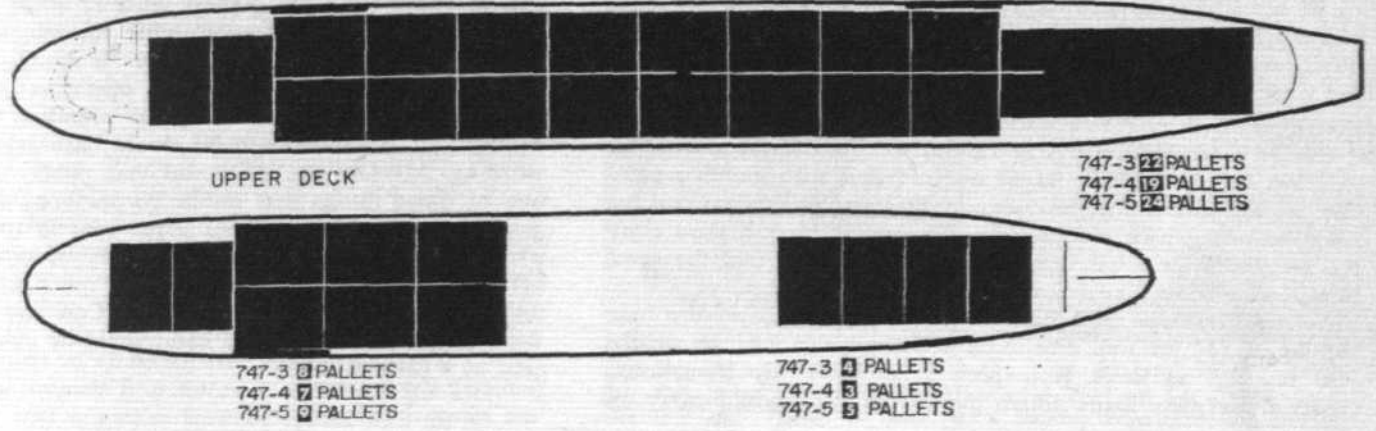


The 747 can carry up to 363 passengers in an all-economy class layout as shown here at 34in seat pitch. Corresponding figures for the -4 and -5 are 311 passengers and 433 passengers respectively. The figures on the diagram represent the seats in each section of the cabin. Built-in stairs connect the decks; the flight deck leads off the top cabin

In an all-freight layout the 747-3 can carry a grand total of 34 125in x 88in pallets. Pallets for the lower decks could be square-loaded but on the top deck where they are placed side-by-side they would be tapered because of the fuselage curvature



factor on a 2,000-mile stage with a common revenue rate of 5.1 cents per mile would be 96 passengers, or 30.9 per cent (747-4), 100 passengers, or 27.6 per cent (747-3), and 108 passengers, or 24.8 per cent (747-5). Estimated selling prices of the 747 variants are: \$15.8 million (£5.65 million) 747-3; \$15.1 million (£5.4 million) 747-4; \$16.6 million (£5.94 million) 747-5; \$16.3 million (£5.82 million) 747-3C; \$15.6 million (£5.57 million) 747-4C; \$17.1 million (£6.1 million) 747-5C. The 707-320B, incidentally, costs \$7.25 million (£2.6 million).

The twin-deck interior, with a third level right at the bottom for baggage, is capable of many combinations of passenger and mixed-traffic layout. The lower deck in particular offers good use of volume for pallets loaded squarely. With a change of fuselage section called for, it is interesting to note that Boeing have not chosen to propose larger sizes of freight pallet. All the interior drawings reproduced show the standard 125in x 88in pallet.

In the case of the largest 747, the -5, the upper deck volume of 11,500cu ft would accommodate 24 125in x 88in pallets, while the further 4,200cu ft on the forward lower deck would take nine pallets and five more pallets would go into the

2,200cu ft aft lower deck. The lower pit volume of 3,700cu ft would bring the total freight volume to no less than 21,600cu ft to give an average structural-limited maximum loading volume of 9.17lb per cu ft. The 747-5 in an all-freight version would have an operating empty weight of 261,400lb while the design zero-fuel weight would be 459,400lb, bringing the maximum payload to 198,000lb.

Characteristics of the 8 : 1 by-pass turbofans

Sea-level thrust (lb)	32,500	35,000	40,000
Basic engine weight (lb)	5,720	6,230	7,350
Thrust at 150kt at sea level (lb)	25,000	27,000	30,800
Climb thrust at 30,000ft Mach 0.8 (lb)	9,150	9,850	11,280
Cruise thrust (Mach 0.8 at 35,000ft) (lb)	7,260	7,830	8,950
Cruise s.f.c. (Mach 0.8 at 35,000ft) (lb)	0.633	0.633	0.633
Max cruise thrust (Mach 0.9 at 40,000ft) (lb)	5,820	6,280	7,180
Max cruise s.f.c. (Mach 0.9 at 40,000ft) (lb)	0.662	0.662	0.662

Estimates of community noise level from even the largest of the 747s suggest that the aircraft will be no noisier (in fact slightly quieter) during take-off, climb and landing approach than the existing 707-320B.

Fuselage cross-section of the 747 compared with the 707-320B (left) and with the all-freight 707-320C (right)

