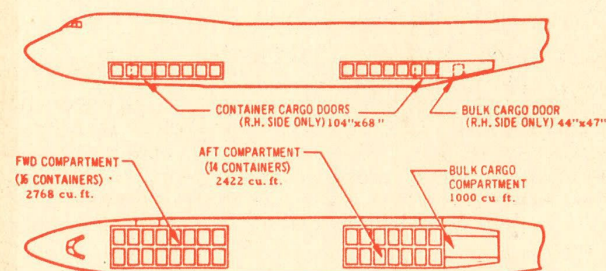


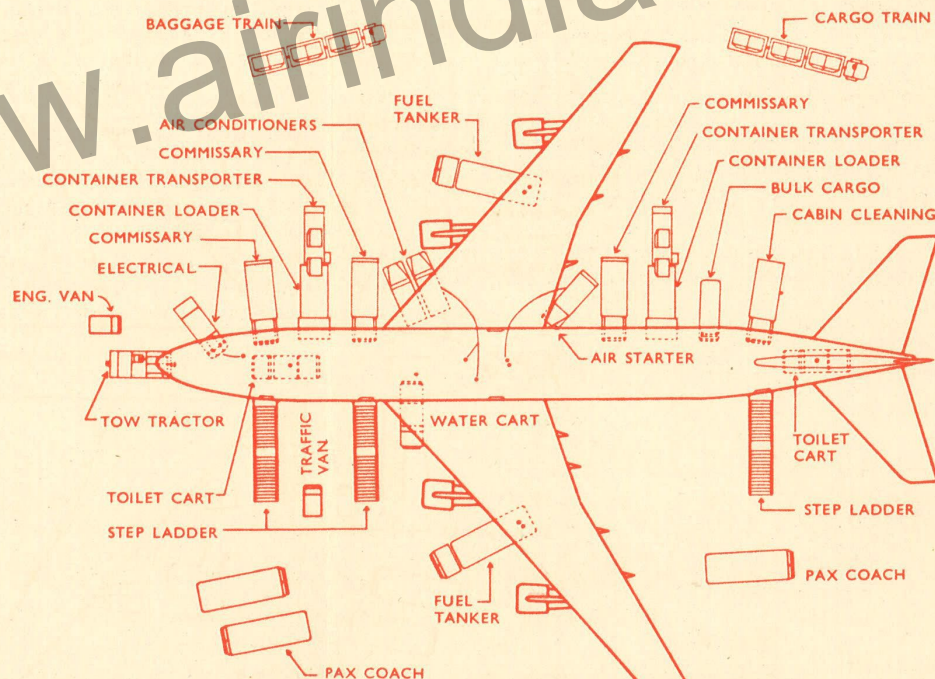
LOWER LOBE

The lower lobe is divided into 3 compartments. Forward and aft for pre-loaded containers, and the third for bulk cargo. Usually mail and light cargo will be carried in the latter compartment. The temperature and ventilation in the aft and bulk cargo compartment will be suitable for livestock. Mechanical handling equipment will be used for loading and unloading containers.



GROUND SUPPORT EQUIPMENT IN SERVICE

The 747 aircraft, when it comes to a stop on the airport apron, will be attended by the largest fleet of support vehicles ever assembled for any aircraft. (See diagram.)



BAGGAGE HANDLING

Baggage loading on the 747s will be quicker and more efficient due to the container system, which will enable fast handling of the large volume of baggage.

Instead of individual loading of bags, loading will be done in 30 containers - approx. size 5 ft. cube - and loads for separate destinations will be put in different containers. Baggage and cargo will also be separately loaded, according to destination.

Several baggage claim devices are possible of which our choice may be a rotating turntable or race track (endless conveyors) on to which the baggage will be manually loaded directly from the containers.

APR. 23 1972

JUN. 29 1972



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VITAL INFORMATION ON MY 747s

The introduction of the 747 heralds a new era in the field of commercial aviation. The 747 provides a level of comfort and luxury, so far unknown in air transportation.

Although Air-India will be commencing 747 operations later than some airlines, the special features such as our interior decor and famous inflight service will more than compensate for the delay.

Here are some interesting facts for your information. (Facts given below should be of interest to all our Staff. Since many aspects have not yet been finalised, this information should not be published.)

Aircraft ordered	Three
Expected dates of delivery in India.	Two in March/April 1971 One in April/May 1972
Cost per Aircraft (Including spares, custom duties etc.)	Rs. 2382.00 Lakhs (First two aircraft) Rs. 2762.00 Lakhs (third aircraft) (@ Rs. 7.50 per US\$)
Provisional list of Stations to be served in 1971-72	Bombay, New Delhi, Kuwait, Beirut, Rome, Paris, Frankfurt, Geneva/Zurich, London and New York.

EXTERIOR COLOURS

Air-India has introduced a completely new look on the aircraft exterior. The treatment of the windows is the special feature. Fashioned into graceful Rajasthani style arches, they will give the effect of a row of "Jharoka" type balconies reminiscent of the Hawai Mahal at Jaipur. This will distinguish at a glance Air-India's 747 from those of the other airlines and inspire an eager anticipation of the breathtaking Indian decor inside. The massive length of the aircraft will be painted silver and white with the red Air-India colours and logo in English and Hindi. Our 747s will be named after the mighty Indian Emperors, because they match their grandeur and stateliness.

SPECIAL FEATURES

The chief distinguishing feature of the 747 is the feeling of spaciousness and luxury provided by its gigantic size and built-in comforts.

The cabin is 19½ ft. wide, 200 ft. long and 8 ft. high. Wide windows, flat ceiling and almost vertical walls give the impression of a room rather than a tube.

The 747 is the only commercial U.S. aircraft with an upper deck. The front part of the upper deck houses the flight deck which has place for five crew members. The rear portion is converted into a stateroom - a luxurious bar/lounge for 1st class passengers.

Contrary to expectations, the process of embarkation and disembarkation of the larger number of passengers is much easier and faster. The Aircraft has a total of 10 doors - 5 on each side. Boarding/disembarkation in the Economy Cabin will be through two doors at airports with Aerobridges, and doors 2L and 5L at other airports. The boarding/disembarkation in the 1st Class will be from doors 1L or 1R. As many as 10 doors will be usable as emergency exits. The doors are wider than the 707 - 42" wide and 76" high - enough to allow two passengers to enter abreast.

Advanced technology has contributed many extra reliability factors for the 747s. e.g. the Initial Navigation System is a major innovation over current navigation systems. This system is based on the one which guided the Apollo 11 on its lunar trip.

INTERIOR DECOR

The typically Indian decor will be the distinguishing feature of the Air-India 747. The emphasis is on creating a luxurious Indian atmosphere - in colour and design - truly a "palace in the sky", befitting the Maharajah. Air-India is the only airline to have designed the entire interior decor themselves.

Among the highlights are the decorative window panels, which create a series of graceful Rajasthani-style arches on both sides of the cabin. Delicately traced within these in the traditional miniature style, are episodes from the eventful life of the Hindu God Krishna.

Our own Art Studio was responsible for these outstanding panels.

Diffused coloured lights, couched above each window, are designed to animate the panels and spread a muted glow throughout the cabin.

Zones A & B (First Class) are predominantly pink, the Economy cabins are alternately pink and blue.

To increase the effect of a palace interior - a two toned, deep purple carpet and rich tapestry in attractive traditional colours will be used. The bulk head partitions dividing the cabins will be decorated with antique wooden temple carvings, heirloom tapestries, folk art etc.

Intricate golden motifs, inspired by the Kashmir shawl embroideries, will glamourize the galley and toilet partitions.

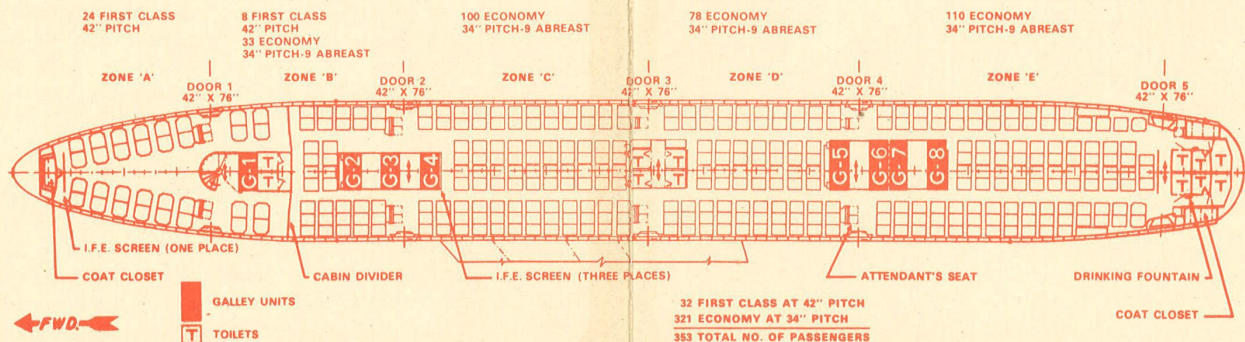
The Maharajah Lounge/Bar on the upper deck is dominated by a large semi-circular mural, which reproduces an imposing Ajanta Fresco. The delicate floral and elephant design found in so many of the Ajanta caves, is echoed in the quietly glowing colours of the seating area - under stately richness and superlative comfort.

SEATING ARRANGEMENTS

Starting from the nose, the aircraft is divided into 5 zones - A, B, C, D & E. Zone A and Part of Zone B are earmarked for First Class with a 4 abreast seating arrangement and a broad spacious aisle. The rest of Zone B and Zones C, D & E accommodate Economy seats in 9 abreast seating arrangement with a 3-4-2 division and 2 broad aisles.

Although the 747 aircraft is capable of carrying 490 passengers, Air-India plans to carry 353 - configuration 32F/321 Economy. The total number of 747 Ey. passengers exceeds those in the 707 by nearly 200%. However, because of the seating zones which are partitioned off by the galleys and toilets, each individual zone will be smaller and more compact - a totally separate, self-contained entity. Partitioning creates the effect of spacious individual living rooms rather than a long tunnel. In Economy Class the arrangement of 3-4-2 seating means that passengers never have to overstep more than one seat to reach the aisle, except on the side with 3 seats.

Economy seats are approx. 1½" wider than those of the 707s and the aisles in the Ey. cabin are 20" wide as against 18" in the 707. This means precious



HOSTESS UNIFORMS

Indian, European; Asian hostesses will attend to the passengers in their graceful sari and other uniforms designed to match and blend with the colour scheme of the 747 interior.

INFLIGHT SERVICE

With wider aisles, additional galleys which are conveniently situated, and larger number of crew, inflight service is expected to be quicker and more efficient with service possible simultaneously in both aisles.

The First Class service will continue to be "table setting" service. We plan to use tray carts or trolleys for economy class service.

INFLIGHT ENTERTAINMENT

Audio-visual entertainment system will be installed on our aircraft in addition to boarding music. Screens for inflight movies will be positioned at the bulkhead partitions of each cabin and there will be 2 sound channels controllable by each passenger. In addition, 10 channels (3 Stereo, 4 Mono) with taped music are available, also controllable by each passenger.

The Upper deck lounge will only be equipped with music.

COMMUNICATIONS

PSU units fitted to each seat have "Fasten seat belt" and "No smoking" signs and reading lights within easy reach of the passengers.

CARRY COT

Carry cot fittings are provided on the aft faces of partitions and bulkheads forward to passenger seats.

HAT RACKS

Hand baggage will not be visible as it can all be put in the new style overhead lockers - giving the interior a neater look. These lockers will be available adjacent to each passenger for blankets, pillows and lighter hand baggage, including coats.

COAT COMPARTMENTS

Coat compartments will be provided in the First Class cabin (zone A) and Economy cabin (zone E).

MAIL LOCKER

The Diplomatic mail and precious freight locker nearly twice the present capacity, will be available, conveniently located near one of the main entry doors.

GALLEYS

There will be 3 galley complexes on the main deck, mounted between the cabins, opposite doors 1, 2 & 4 as in the diagram. Each complex consists of one or more galley units positioned on the centre line of the cabin, to serve the cabins with maximum speed and efficiency and to use both aisles simultaneously for serving passengers.

We propose to acquire galley units with arrangements to uplift 2 pre-set meals and snack and bar service. The meals accordingly will be more sumptuous and attractive than was possible on the 707.

TOILETS

There are 12 toilets on the main deck, 10 for Economy Class and 2 for First Class. In addition there are 2 toilets on the upper deck available to 1st Class passengers.

The toilet walls in pink and blue have an attractive floral design in white and gold. The usual toilet amenities will be provided.

AIR CONDITIONING

Three identical airconditioning systems are installed in the aircraft for ventilation, temperature control, and cabin pressurisation. Each zone will have an independently controlled temperature.

The system is capable of heating or cooling the main deck and upper deck to an average temperature of 75° F. Individual outlets to the passenger service units will also supply cool air and can be adjusted for flow, quantity and direction.

Mobile airconditioning units will supply conditioned air while the aircraft is on ground.

PRESSURISATION

The cabin pressurisation system will be capable of maintaining normal cabin to ambient pressure differential of 8.9 PSI at all flight altitudes between sea level and 45,100 ft. The sea level cabin will be possible up to 23,100 ft.

extra space for inflight cabin attendants as well as passengers.

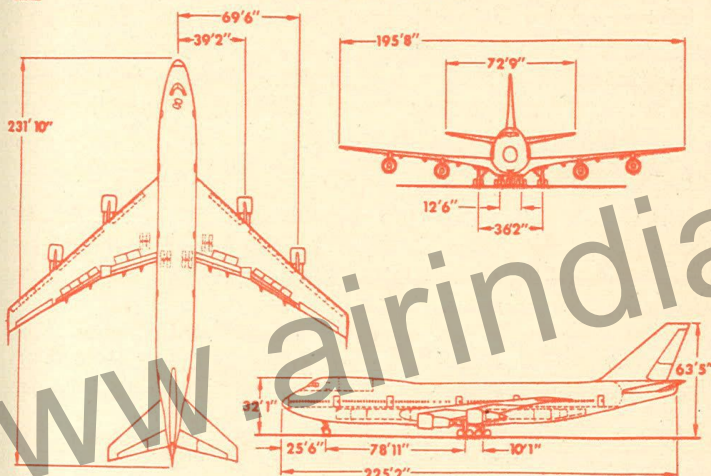
The Upper Deck consists of a lounge for the sole use of 1st. Class passengers. A spiral staircase takes them to the lounge, where they can stretch their legs and relax with fellow passengers.

The lounge will have total seating arrangements for 15. It will also be possible to partition the lounge when necessary, so that one part is a seating area and the other a Stateroom with beds for the use of V.I.Ps.

SIZE

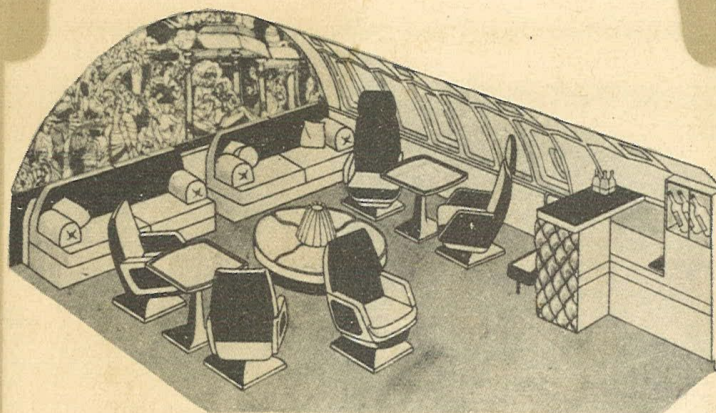
The 747 is almost twice the size of the 707. Its length is three-quarters the size of a football field while the tail is taller than an average six storey building. The Stateroom is at third storey level. The main deck volume is 3.8 times that of the 707.

EXTERNAL DIMENSIONS



COMPARATIVE TABLE

	747	707
Length	231' 10"	152' 11"
Wing Span	195' 8"	145' 9"
Tail Height	63' 5"	35' 0"
Long Range Cruise Speed Mach.	0.86	0.82
Max. Passenger Load	353 (32F + 321Y)	132 (24F + 108Y)
Max. Cargo Volume cu.ft.	6190	1770
Max. Payload (C.P.L.) - lbs.	119,400	43,900
Passenger Cabin Height	8' 4"	6' 11"
Passenger Deck width	20' 0"	11' 8"
Engines	4 Pratt & Whitney JT9D-7W	a) 4 Rolls Royce Conway or b) 4 Pratt & Whitney JT 3D-3B
Engine Thrust	47,000 lbs. each	a) 17,500 lbs. each b) 18,000 lbs. each



THE UPPER DECK LOUNGE

THE MOCK-UP

For training of the cabin crew, a special mock-up of the 747 cabin is being fabricated at our Santa Cruz base, Bombay. This mock-up will be 103 ft. long (actual cabin length is 188 ft.) and will be made up of part of the First Class and Economy Cabins and the upper deck lounge. The decor of the mock-up cabin will be a replica of the decor of the 747s (including exterior markings) and it will be completely fitted with all PSU fittings, galley complexes etc., for a thorough training of the crew and to acquaint them properly with 747 equipment.

The complete mock-up is estimated to cost approximately Rs. 20 lakhs.

THE SIMULATOR

For training of the flight crew, Air-India has placed an order for a 747 simulator, cost of which is approx. Rs. 2.21 crores. The Simulator employs the latest technology, with digital computers, 6-degree motion system and provision for a visual system, and is capable of simulating, on the ground, all normal manoeuvres and emergency conditions that might arise on a 747 flight. It will provide comprehensive training facilities for flight crew in all aspects of operating the 747, including landing and emergency procedures.