

PART 2

CHAPTER 17 — ROLE EQUIPMENT

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AEROMEDICAL EQUIPMENT

General

1. The aircraft is basically equipped for the troop and passenger transport role but variations of cabin equipment can quickly be arranged to suit the freighter or aero-medical evacuation role.
2. If operational requirements demand both troop-carrying and freight-carrying capability during an away-from-base movement, the passenger seats can be retained in the aircraft and folded against the sidewalls. (This is not possible when later type seats are fitted).
3. The aircraft's operational capability can be increased by the use of the air-to-air refuelling equipment.

Troop and Passenger Transport Role

4. The cabin seating layout can be varied to suit requirement; normally forty-five triple seats accommodating 135 personnel are fitted but at maximum density fifty seats may be fitted, for 150 personnel.

Freight Carrying Role

5. The ALM's seat is not normally fitted in this role and passenger seats are removed. The cabin floor carpet is removed, exposing permanent lashing points

and, if the floor area normally occupied by the galley is required, the galley is also removed.

6. Hat racks are folded against the cabin side walls to allow for bulky loads and to expose additional lashing points.
7. Plastic covers in the lower sidewall panels, when removed, expose lashing points.
8. On some aircraft, the cabin freight door operating jack, together with its enclosing fairing, can be removed if a bulky load is to be accommodated in that area.
9. The aft door escape chute is repositioned to be parallel with the sidewall.
10. Detachable lashing fittings are used with all sockets; the lashing point load restrictions are specified in the Aircraft Weight and Balance Manual.
11. Floor-focussed lights, installed alternately with the lower sidewall lashing points are provided for illumination. They are controlled by switches on the ALM's panel.
12. A 115/200-volt AC HOIST SUPPLY socket, its controlling ON/OFF switch and a neon light are on panel J. Power is from the ground power bus-bar. When the switch is set ON and power is available at the socket, the neon light is on.

Table 1. Controls and Indicators—Aeromedical Equipment

<i>Item</i>	<i>Location</i>	<i>Marking/Indication</i>
Aeromedical supply switches (6)	Right wall of cabin, Stn. 464 (3) Left wall of cabin, Stn. 325 (3)	1, 2, 3 ON/OFF 1, 2, 3 ON/OFF
Lights (green) for indicating electrical supply available at sockets (6)	One light adjacent to each socket	—

Aeromedical Evacuation Role

13. Passenger seats and the cabin floor coverings are removed to expose freight lashing points in the floor for the attachment of stretcher support posts. Each post is attached to four of the lashing points.

14. Hatracks are folded to accommodate the outer two of three rows of stretchers which are mounted on the posts in tiers of three.

15. The size of the cabin aeromedical area is dependent on requirements; stretchers can be installed throughout the cabin but normally this is not necessary and a number of passenger seats remain in the aft area, separated from the aeromedical area by divider bulkheads and a concertina-door.

16. Two triple seats for medical staff are fitted, one just to the rear of the forward entrance door, facing aft, the other in front of the right divider bulkhead, facing forward. Two Flight Sister's Kits are also carried.

17. Electrical power supplies for mechanical respirators, aspirators and a humidifier are obtained from two panels, one on each side of the forward section of the cabin. Each panel carries three 28-volt DC supply sockets with associated switches and green lights. When a switch is set ON, the associated light comes on indicating that a supply is available at the socket.

18. *Controls and Indicators—Aeromedical Equipment.* (See Table 1)

Therapeutic and Aeromedical Role Oxygen Supplies

19. Oxygen supplies for therapeutic and Aeromedical Role purposes may be made available in the passenger cabin at all times. See Chap. 16, paras. 52 to 57.

Air-to-air Refuelling

20. To convert the aircraft for air-to-air refuelling, a blank access panel is removed from the upper fuselage nose and a refuelling probe, together with a faired panel, is installed connected to the permanent fuel transfer line, inside the nose.

MISCELLANEOUS ROLE EQUIPMENT

Stowages for Role and Ancilliary Equipment

21. Stowages are provided for the following equipment:

- a. Crew access ladder.
- b. Engine nacelle intake bungs.
- c. Air compressor intake bung.
- d. Air compressor spill outlet bung.
- e. APU jet pipe cover.
- f. 9 ft. nitrogen charging hoses and adaptors.
- g. Connector hose.
- h. Refuelling 'Y' branch pipes.
- i. Aerial covers (IFF, UHF, VOR, VHF).
- j. Engine nacelle jet pipe blanks.
- k. Cabin discharge outlet cover.

22. The stowage for item a. is in the forward freight hold on the door recess panel between stations 419 and 439.

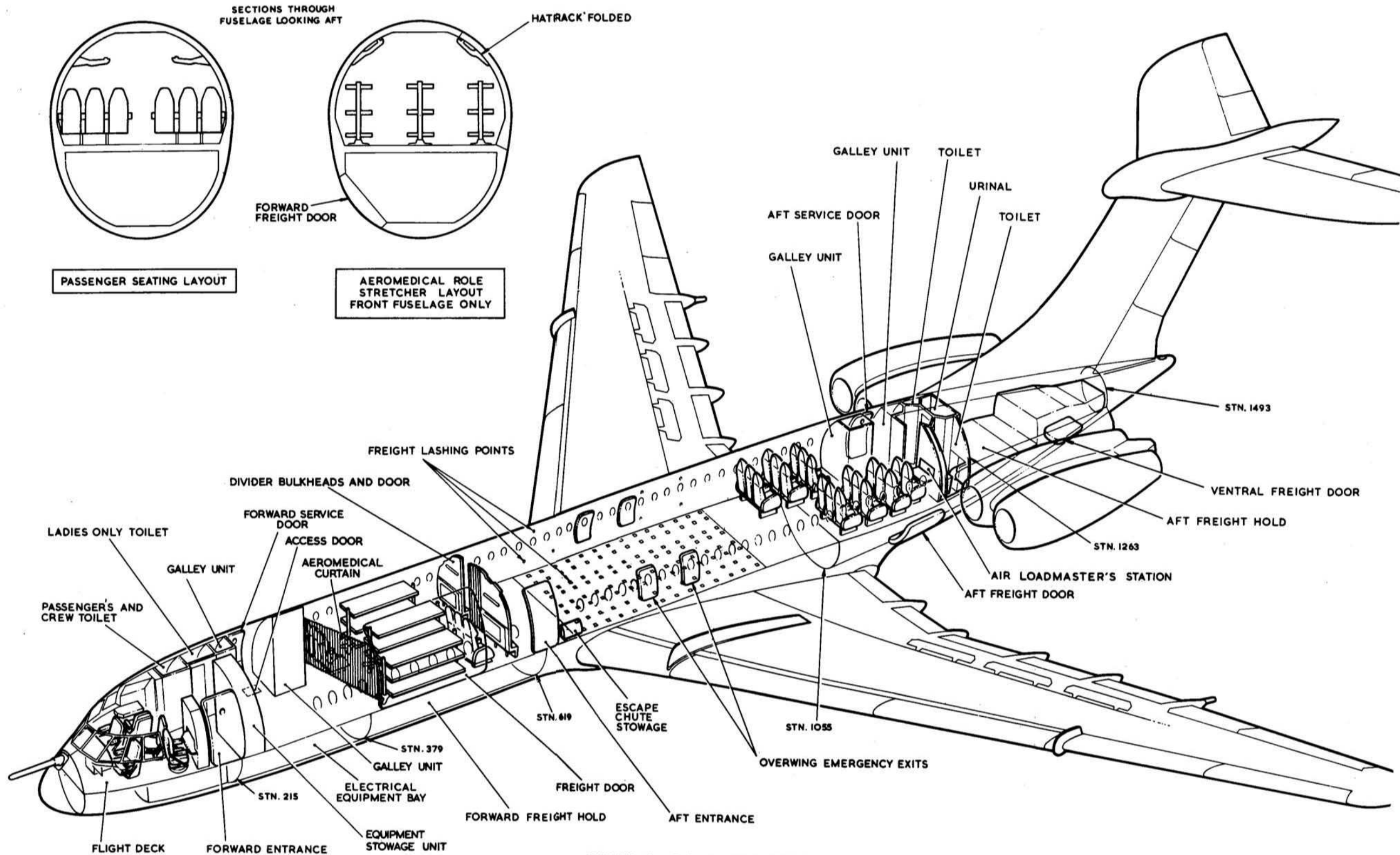
Items b. are stowed on the left side of the freight hold floor between stations 1216 and 1264, the items are covered and strapped to the floor.

Items c. to k. are stowed in a bag which is on the left side of the aft freight hold between stations 1457 and 1447.

The bag complete with support frame and stowed equipment can be removed and replaced as one unit.

ROLE LOADINGS

23. *Role Loadings* (See Table 2)



217 Fig. 1. Role Variation Diagram

VC10/134A

Table 2. Role Loadings

	135 Seat Role (Standard)	137 Seat Role (Contingency)	Aeromedical Inbound (102 Seats) (9 Stretchers)	Aeromedical Contingency (36 Stretchers) (66 Seats)	Freight Transport (Row 7-44)	146 Seat Role* (High Density)
Average VC10 basic weight	150,007	150,007	150,007	150,007	150,007	150,007
Seats	3625	3689	2759	1760	—	4680
Lifejackets	238	242	190	183	—	260
3 SARBE Lifejackets	20	20	20	20	20	20
75 Blankets	150	—	150	150	—	—
12 Pillows	12	—	12	12	—	—
14 Flotation cots	60	—	60	60	—	—
Air Publications	200	200	200	200	200	200
Bulkhead	68	68	203	203	—	—
Water in boilers in galleys	40	40	40	20	40	40
Domestic water	1500	1500	1500	1500	1500	1500
Carpet and seat rail cover strips	397	397	397	198	—	397
Skycots	65	—	65	65	—	—
Frozen food and catering equipment	2158	2158	2158	2158	100	2158
Stretcher columns	—	—	372	930	—	—
Cargo door equipment	—	—	—	—	112	—
Side guidance	—	—	—	—	1581	—
Total Role Weight	8533	8314	8126	7479	3553	9255
Total APS Weight	158,540	158,321	158,133	157,486	153,560	159,262

NOTES: All weights based on Rumbold Seats except 146 seat fit
Side guidance based on 2A equipment
Aeromedical contingency is estimated capacity — no role calculated

*High density role is of questionable feasibility due to aircraft longitudinal trim requirements

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