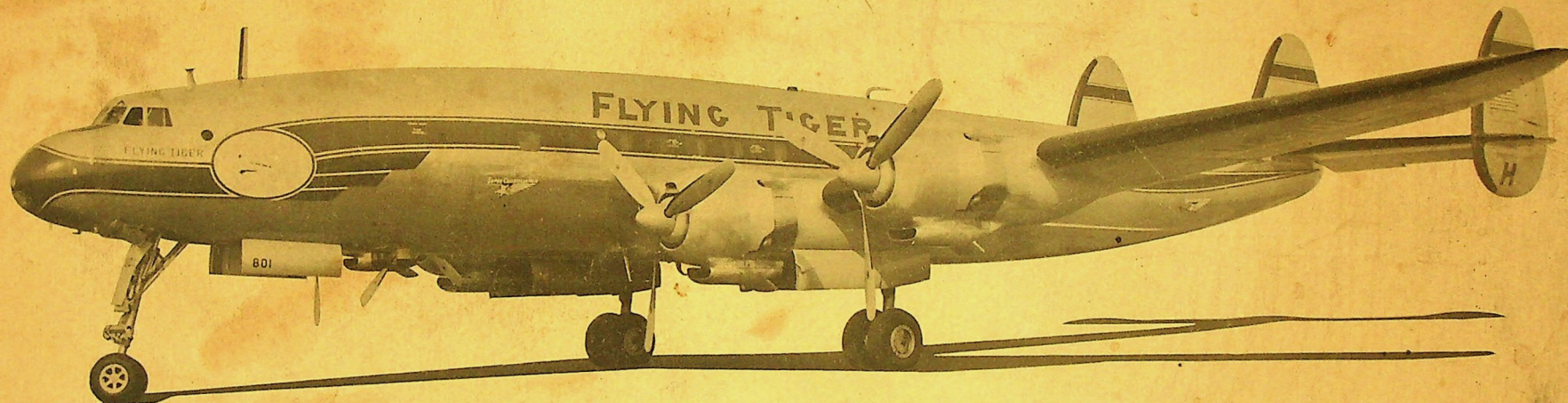


720 7-9
100 8-17/11
Cur. Super Constellation

Today's Leader in Flexibility and
Low Cost Performance for Maximum Airline Profits



Elavie
model

model 1049H cargo/passenger Super Constellation

SUPER CONSTELLATION 1049H—OUTSTANDING FOR ITS MISSION

Lockheed's Super Constellation Model 1049H is the most flexible airplane available today for cargo/passenger operation. Primarily designed as a cargo carrier, the 1049H also incorporates complete convertibility for mixed, medium or hi-density passenger service. It is unsurpassed in cargo and passenger payload, in speed and in range for maximum airline profits in domestic or international operation.

From an aerodynamic standpoint, the 1049H is identical to the 1049G passenger airplane. However, the fuselage structure has been specifically designed for the transportation of cargo, and therefore, incorporates major differences structurally from its passenger counterpart. The airplane type and model is as follows:

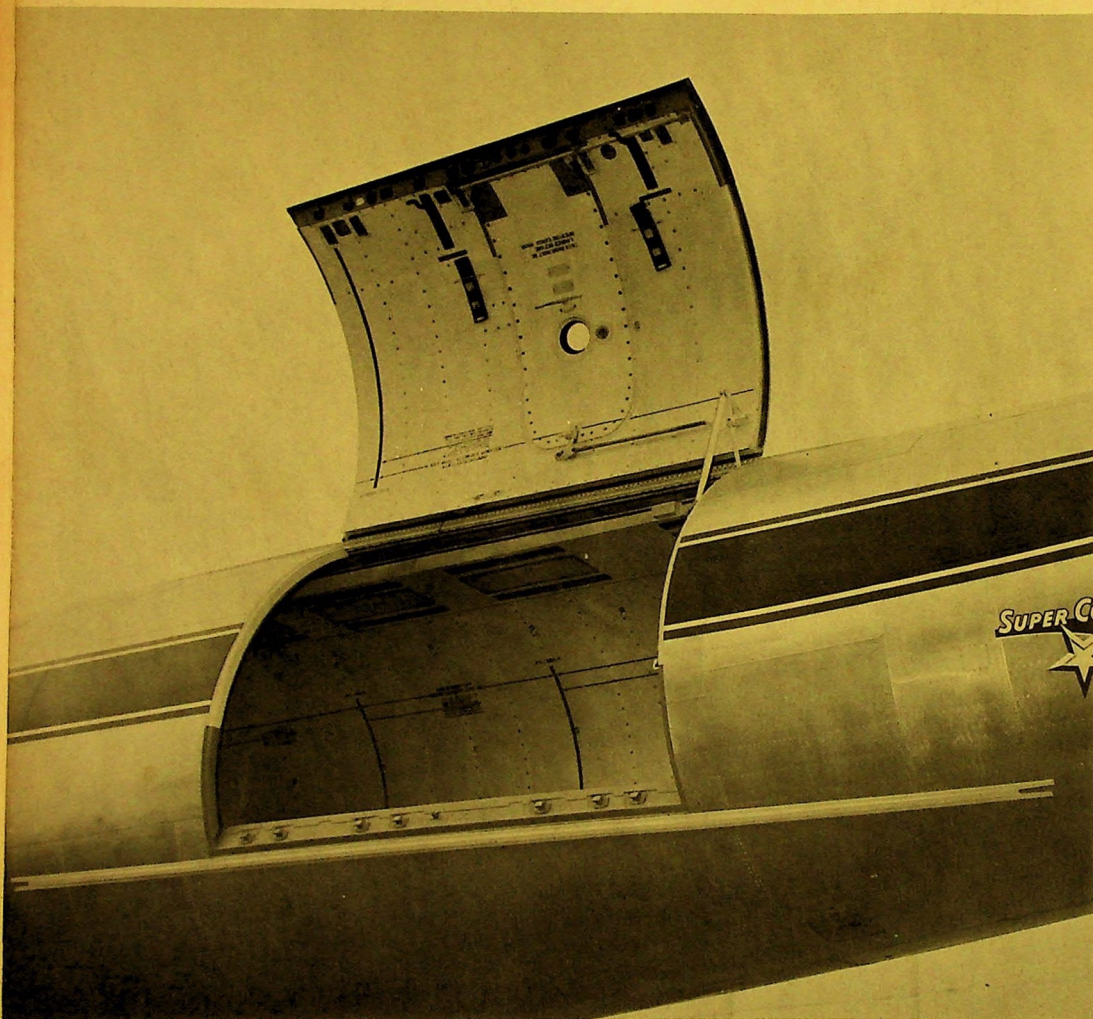
Basic Type	Commercial Cargo Transport
Designation	Model 1049H/01
Engines	Wright, Turbo-Compound 988TC18EA3



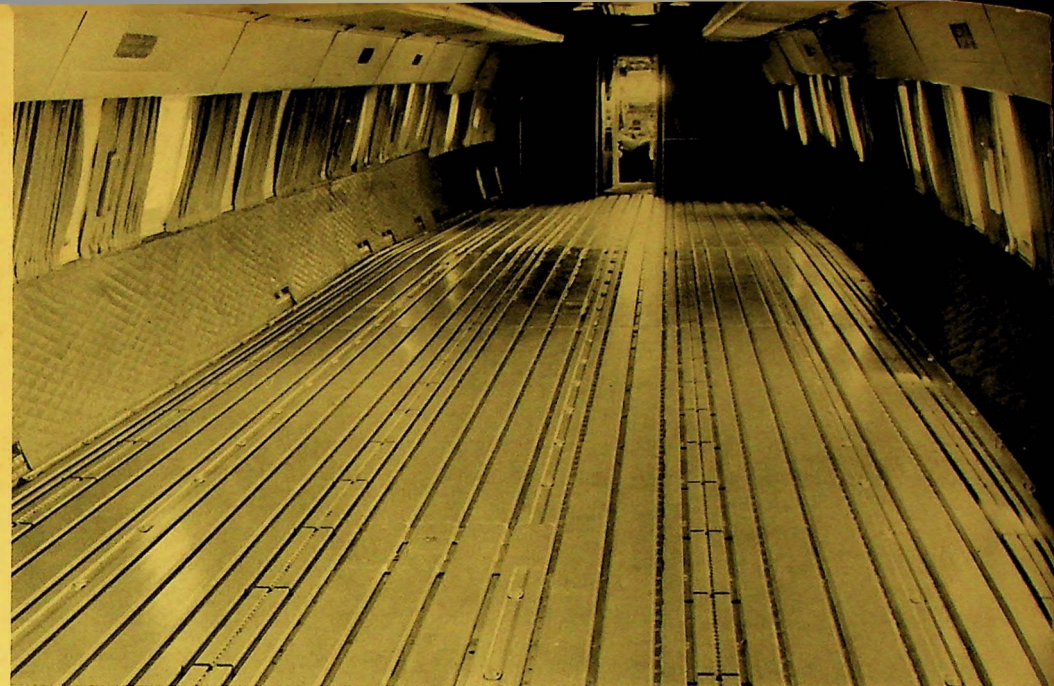
Aircraft Serial Number 4801, the first Lockheed 1049H, takes off on its delivery flight to Qantas Empire Airways.

The tip tank installation is clearly shown in this flight view of one of California Eastern's 1049Hs.

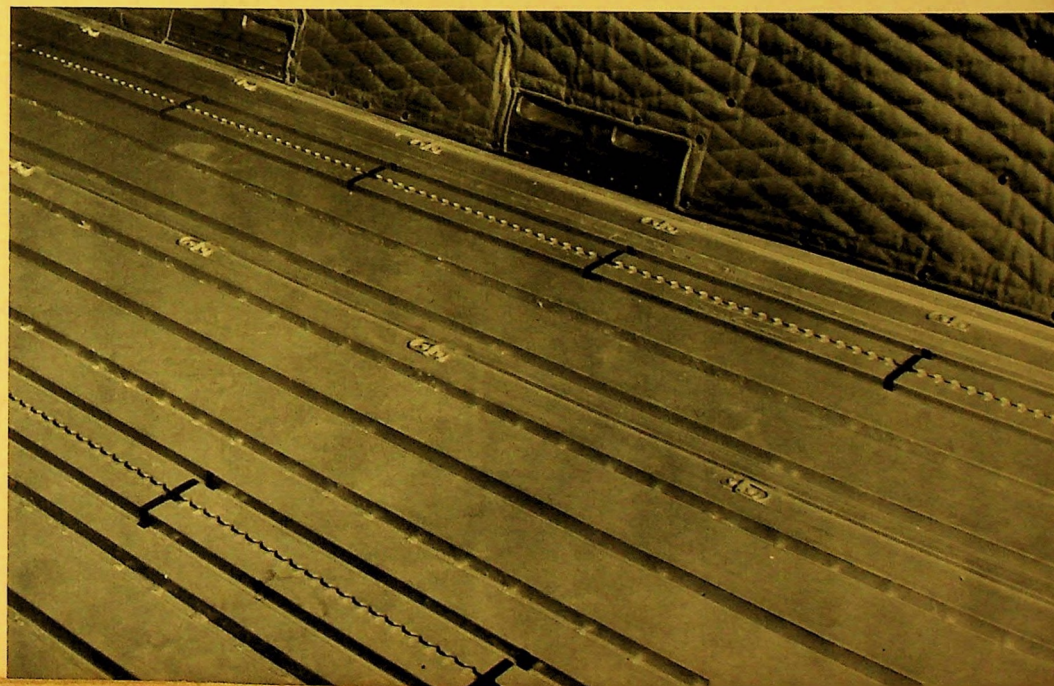




The huge main cargo door opens wide to provide unobstructed opening to the main cabin.



These two interior views of the cargo floor in the 1049H emphasize its cleanness and versatility of design and rugged characteristics. Removable passenger interior linings are shown installed.





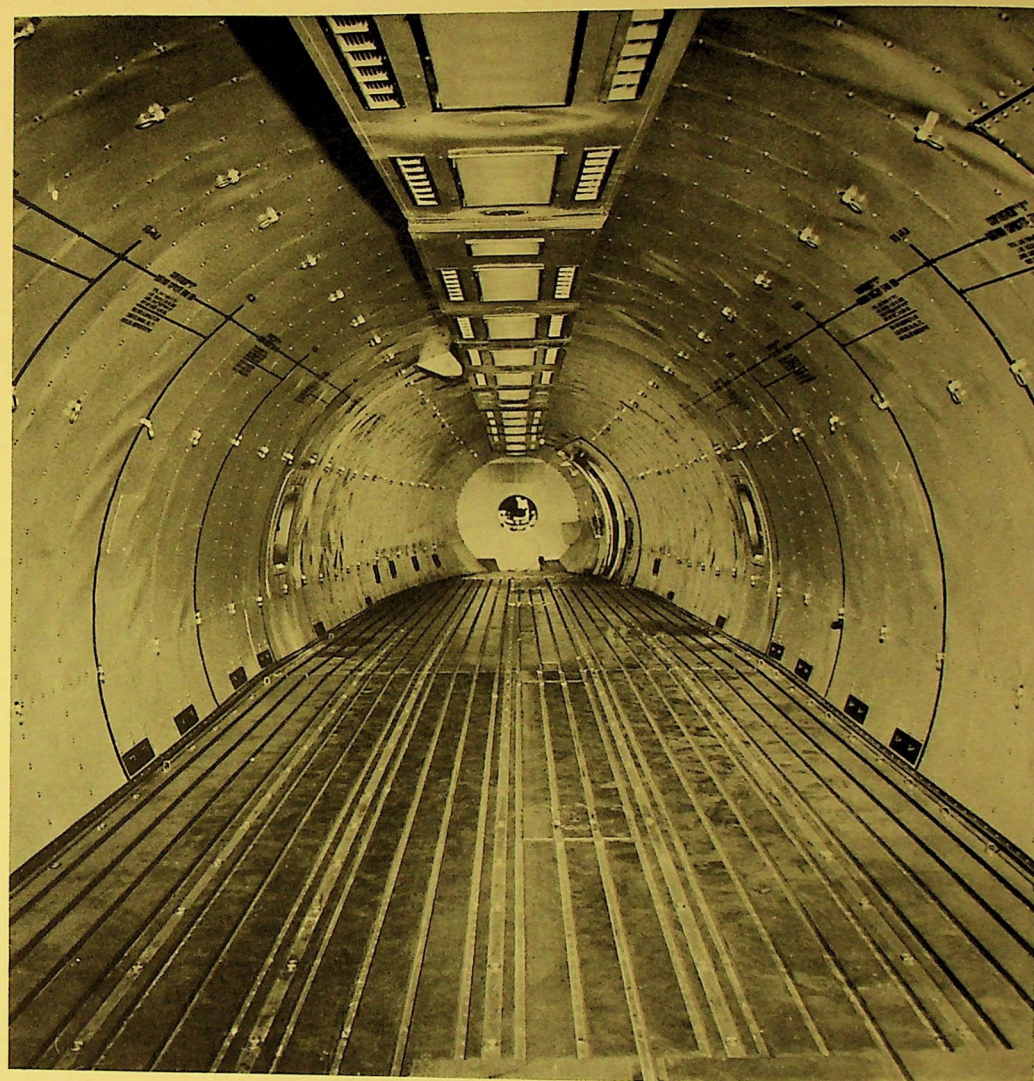
1049G type lavatory specified for the 1049H with convertible passenger facilities.



A view looking aft in the main cabin of a Seaboard & Western 1049H passenger interior equipped with the 1049G type ceiling and permanent vinyl headlining.

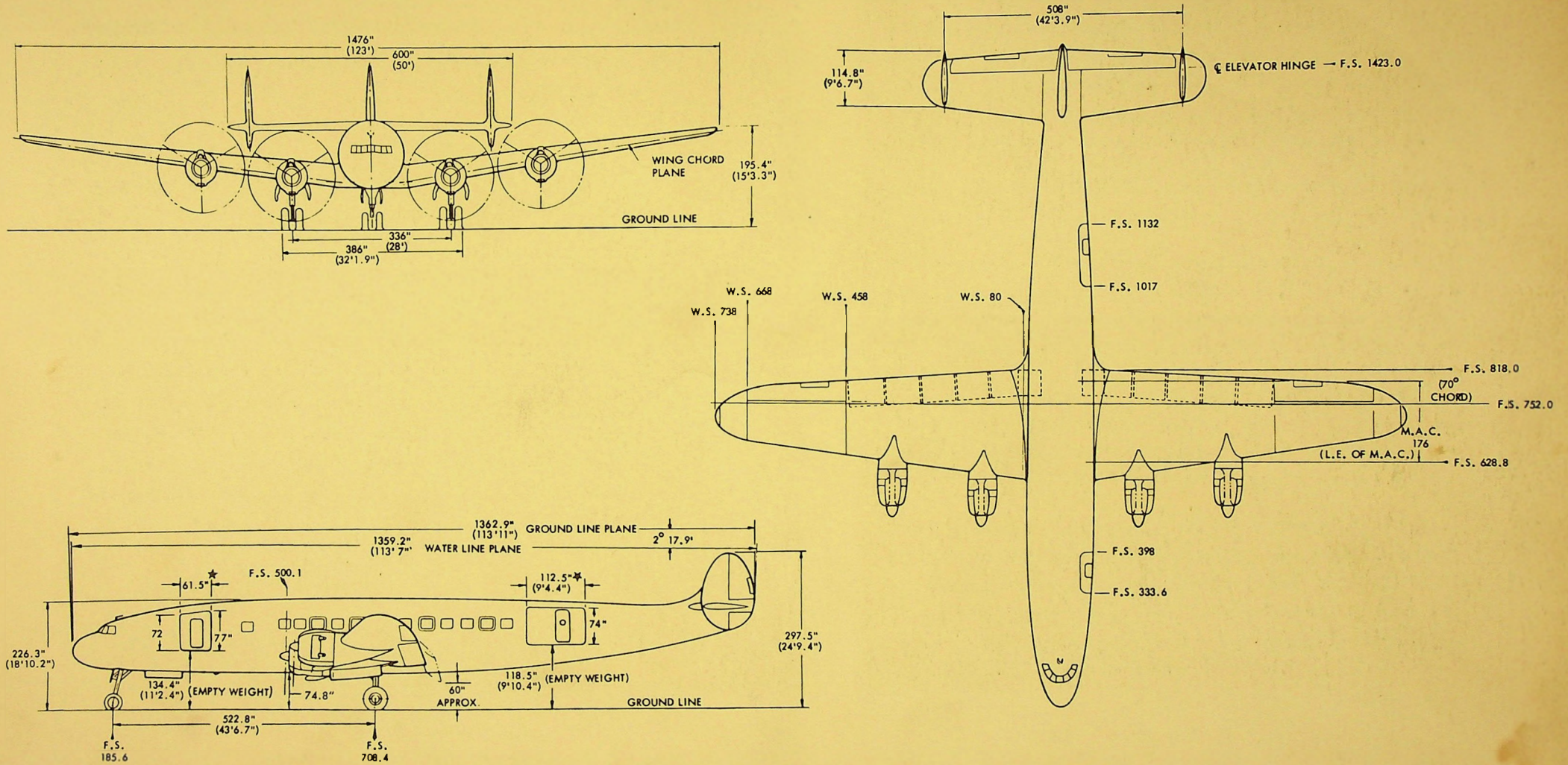


A detailed view of the removable hat rack equipped with individual passenger reading lights and stewardess call buttons.



This interior view looking aft graphically illustrates the 83-foot cabin length of the domestic all-cargo 1049H.

GENERAL ARRANGEMENT



INTERIOR ARRANGEMENTS

The Super Constellation Model 1049H for cargo, is a four engined airplane which combines the fundamental characteristics of high speed, long range and high load carrying ability. It is the product of a long period of development of military and commercial cargo transports and incorporates the most advanced features for handling cargo quickly and economically.

The basic design provides for the rapid conversion to a medium or high density coach interior with all required passenger facilities.

Either of these interiors are easily altered to the overland or overwater configuration. This change is readily accomplished by the use of quick disconnect fasteners and fittings that are a part of the bulkhead stations and general design of the crew operating sections of the airplane.

In a matter of a few hours, the 1049H cargo interior can be converted into a roomy passenger configuration with all the styling, comfort features and conveniences that have made the name of the Super Constellation synonymous with luxury air travel the world over.

In the passenger conversion, seats are readily installed because of the flush, integrally extruded seat tracks provided in the basic airplane. In this interior, all of the required passenger service facilities and conveniences such as lavatories, buffets, coat racks, special passenger compartment linings and floor coverings are installed in the conversion process. The estimated time to convert the aircraft from passenger to cargo configuration is 24 to 30 man-hours.

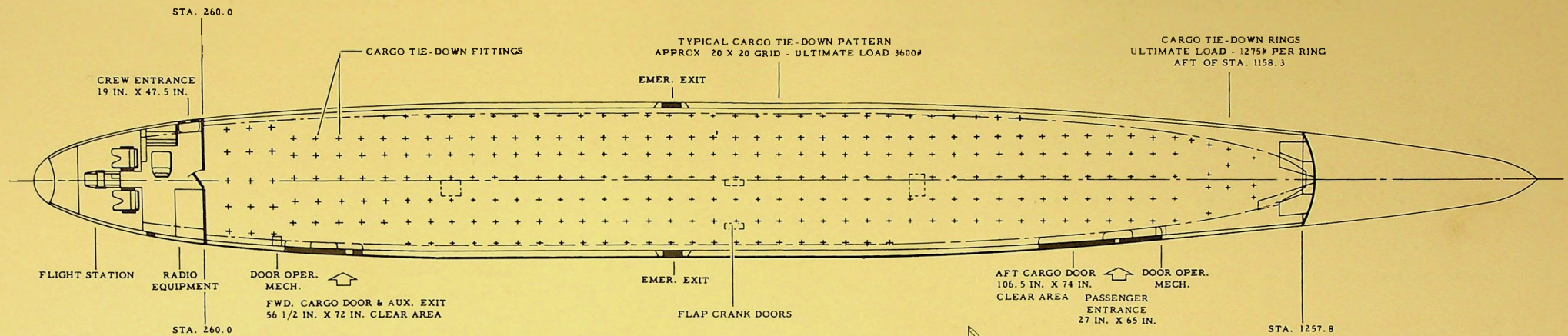
DOMESTIC CARGO INTERIOR

The Domestic Cargo Interior of the 1049H is attained by incorporating the following Constellation Master Changes to the Basic Model Specification, LR/10530.

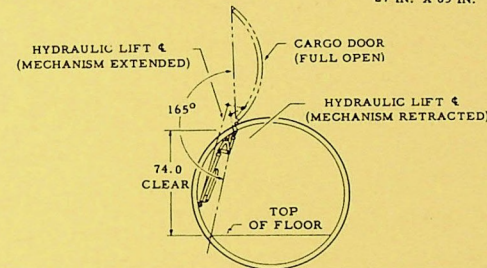
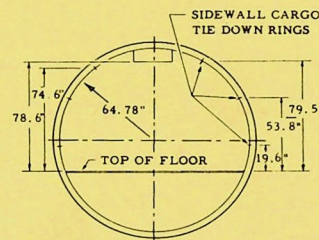
C. M. C. NO.	TITLE	WEIGHT CHANGE
762	Changes for Production Version of Stripped Cargo Airplane	—1862 lbs.
811	Maximum Gross Take-off Weight Increased to 140,000 Pounds.	+ 40

The Wing Tip Fuel Tank installation requires the incorporation of Option 6143, with a weight gain of 587 pounds. An Integrated Flight System, White Enamel Top Fuselage, Flight Station lens Window, Spare Hydraulic Tank, Periscopic Sextant Outlet, Spare Wires to Engine Nacelles, and a revised Radio Installation may be obtained by the addition of C.M.C. 775 with a weight gain of 132 pounds.

DOMESTIC ALL-CARGO INTERIOR

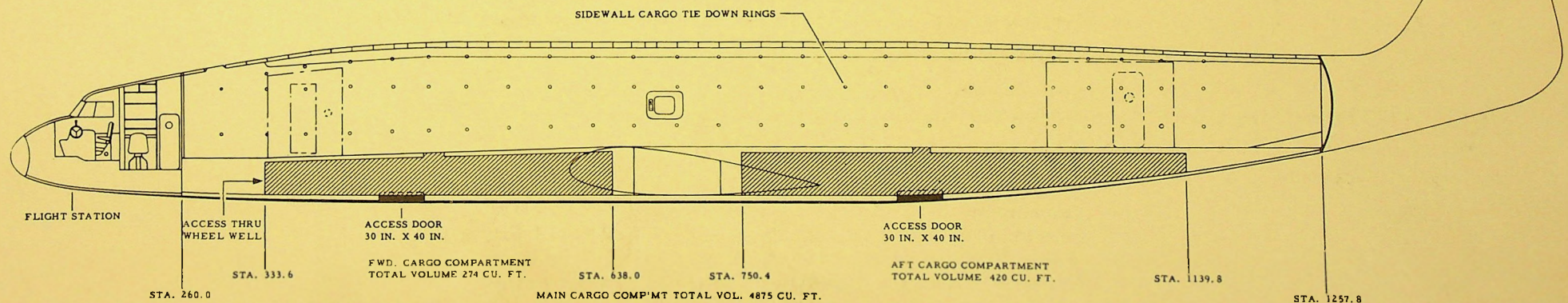


**Section Looking Forward
Showing Maximum Cross Section
at Sta. 582.8**



**Section Looking Forward
Showing Cross Section Aft
of Cargo Door at Sta. 1132.55**

Flooring is constructed with extruded aluminum sections between Stations 333 and 1158. Forward and aft of this area metal covered plywood is used.



DOMESTIC COACH INTERIOR

The interior shown herewith is obtained by applying the following Constellation Master and Customer Changes to the Basic Model Specification, LR/10530.

C. M. C. NO.	TITLE	WEIGHT CHANGE
775	Production Changes for the Model 1049H Cargo Airplane	+ 132
739	Passenger Facilities for Cargo Airplanes	+3416
801	CRAF Provisions and Goodyear Brakes	+ 119.4
811	Maximum Gross Take-off Weight Increased to 140,000 Pounds.	+ 40
C. C. C.		
6992	Station 311.8 Window L. H. Side	+ 25
6985	Forward Compartment Modification	— 408
6986	Interior Changes — Main Cabin, including Vinyl Headlining, Scuff Trim, additional Seat Tracks, etc.	+ 53.4

The above additions to the Basic Specification provide for a domestic coach interior with a capacity of 104 passengers. Seats are customer furnished and installed. Galleys are customer furnished and Lockheed installed. C. M. C. 739, which includes the installation of the Type 1 exit in the aft portion of the cabin, contains a weight allowance of 700 pounds for the customer furnished galley. Seat weights are not included. While the C. C. C.'s listed above are changes designed for a particular customer, they may also be negotiated as to price and delivery schedule for other customers. The vinyl headlining installed under C. C. C. 6986 is of the permanent type and is not rapidly removable. Conversion of this interior to an all cargo transport will, therefore, require rework of the side wall linings. Temporary use as a cargo airplane may be provided for by the installation of removable cargo linings to protect the passenger interior.

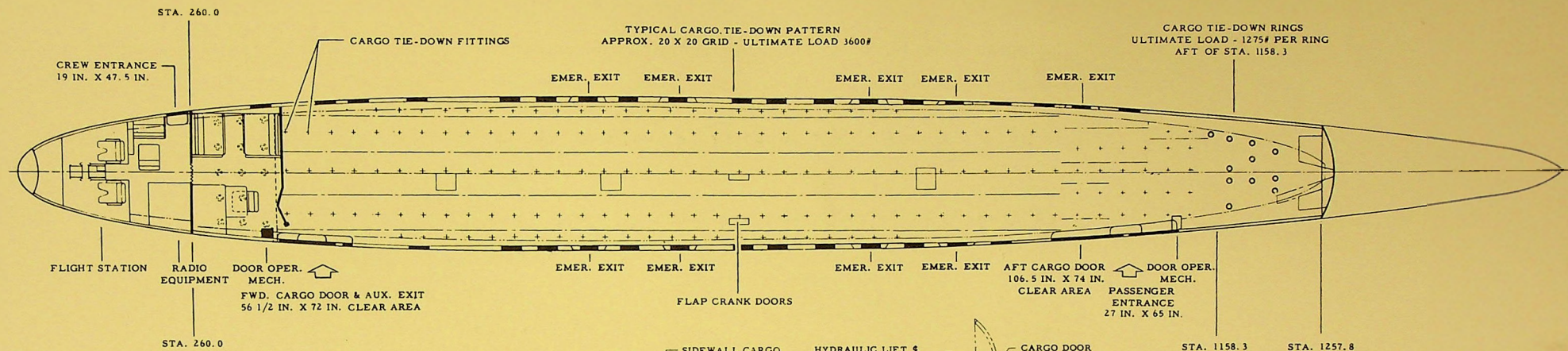
INTERNATIONAL CONVERTIBLE CARGO INTERIOR

The interior shown herewith is attained by applying the following Constellation Master Changes to the Basic Model Specification, LR/10530.

C. M. C. NO.	TITLE	WEIGHT CHANGE
775	Production Changes for the Model 1049H Cargo Airplanes	+ 132
811	Maximum Gross Take-off Weight Increased to 140,000 Pounds.	+ 40

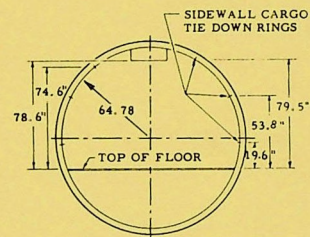
The aircraft so configured, incorporates no passenger facilities except for the flush seat track installation and all windows, including nine Type IV emergency exits. The Type I exit, at the aft cabin, is not installed.

INTERNATIONAL CONVERTIBLE CARGO INTERIOR

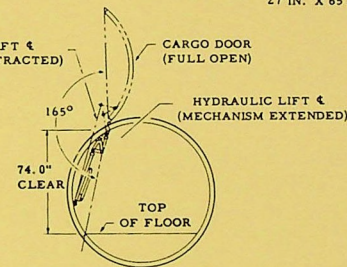


NOTE: REMOVABLE CARGO TIE DOWN FITTINGS
AVAILABLE FOR USE WITH SEAT RAILS

Section Looking Forward
Showing Maximum Cross Section
at Sta. 582.8

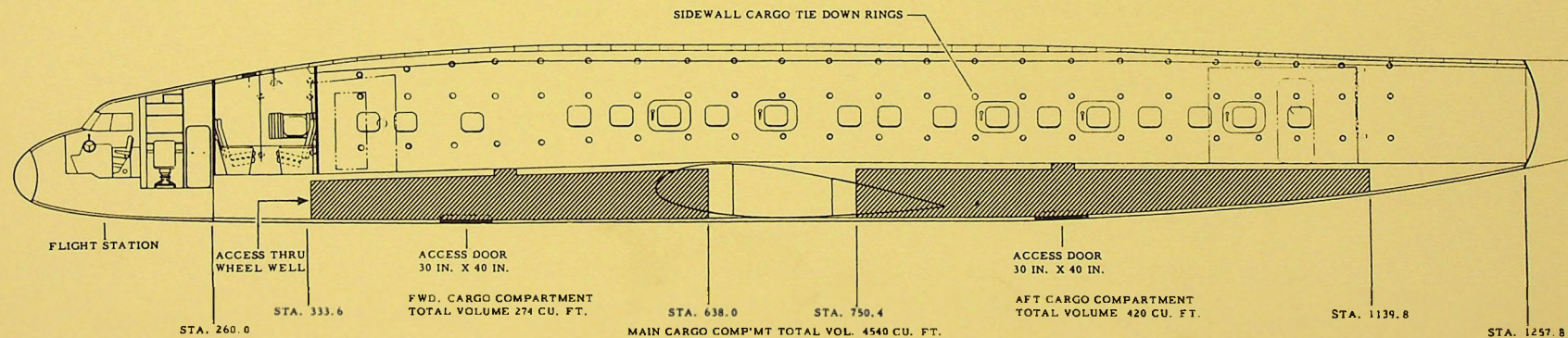


HYDRAULIC LIFT (MECHANISM RETRACTED)



Section Looking Forward
Showing Cross Section Aft
of Cargo Door at Sta. 1132.55

Flooring is constructed with extruded aluminum sections
between Stations 333 and 1158. Forward and aft of this area
metal covered plywood is used.



INTERNATIONAL COACH INTERIOR

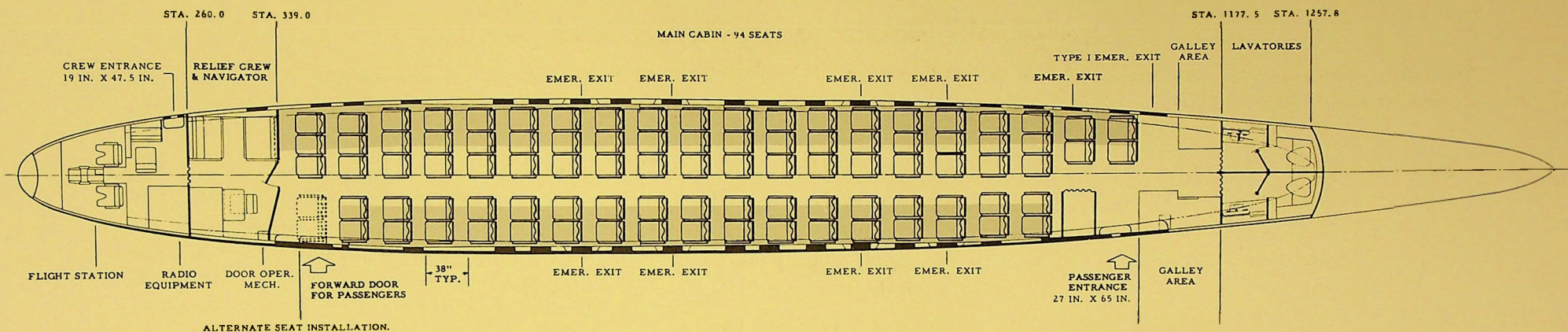
The interior shown herewith is attained by applying the following Constellation Master Changes to the Basic Model Specification, LR/10530.

C. M. C. NO.	TITLE	WEIGHT CHANGE
775	Production Changes for the Model 1049H Cargo Airplanes	+ 132
739	Passenger Facilities for Cargo Airplanes	+3416
811	Maximum Gross Take-off Weight Increased to 140,000 Pounds.	+ 40

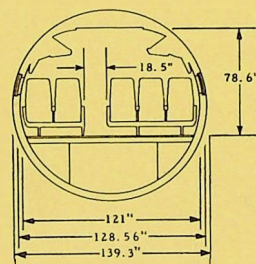
The above additions to the Basic Specification provide for a passenger interior of 92 passengers. Seats are customer furnished and installed. Galleys are customer furnished and Lockheed installed. C. M. C. 739, which includes the installation of the Type I exit in the aft portion of the cabin, and the passenger facilities indicated on the drawing, contains a weight allowance of 700 pounds for the customer furnished galley. Seat weights are not included.

If a 94 passenger configuration is desired, two additional seats may be installed by the airline in front of the forward cargo door, which must then be rendered inoperable for passenger or cargo use. AMC 8570 may also be negotiated as to price and delivery schedule to provide a hat rack and reading lights in this area; Sta. 338 to 392 on the left-hand side of the airplane.

INTERNATIONAL COACH INTERIOR



Section Looking Forward
Showing Maximum Cross Section



NOTES:

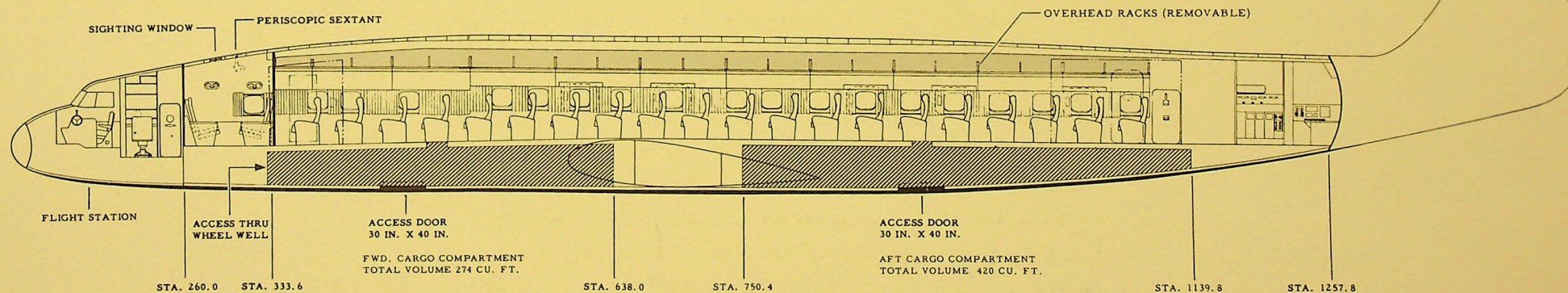
PROPOSAL SUBJECT TO C. A. A. APPROVAL.

SEAT DESIGN SHALL BE SUCH THAT THEY CONFORM TO C. A. A. EMERGENCY EXIT REQUIREMENTS. (FREE BACK FOLDING)

SEATS CUSTOMER FURNISHED AND INSTALLED.
GALLEY CUSTOMER FURNISHED AND LOCKHEED INSTALLED.

OCCUPANTS -- 92 PASSENGER & 8 CREW.

Flooring is constructed with extruded aluminum sections between Stations 333 and 1158. Forward and aft of this area metal covered plywood is used.



INTERNATIONAL HI-DENSITY COACH INTERIOR

The interior shown herewith is attained by applying the following Constellation Master Changes to the Basic Model Specification, LR/10530.

C. M. C. NO.	TITLE	WEIGHT CHANGE
775	Production Changes for the Model 1049H Cargo Airplanes	+ 132
739	Passenger Facilities for Cargo Airplanes	+3416
811	Maximum Gross Take-off Weight Increased to 140,000 Pounds.	+ 40

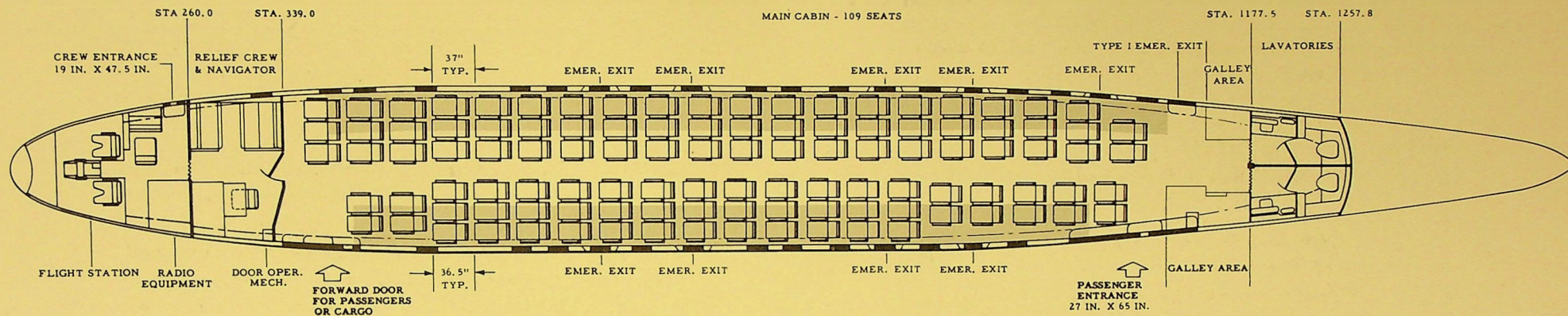
The above additions to the Basic Specification provide a passenger interior, less seats, identical to that shown on the Preceding Page. At airline option, six abreast seats may be installed in the main portion of the cabin to achieve a 105 passenger interior with 38 inch seat pitch. In this arrangement, no seats are installed in front of the forward cargo door, five abreast seats are used in the first row aft of the forward door and the first three rows

forward of the rear cargo door. Because seat spacing, 38 inches, has not been changed from the 92 passenger version, reading lights and call buttons conform, location wise, to fore and aft seat positions, but laterally for five abreast only.

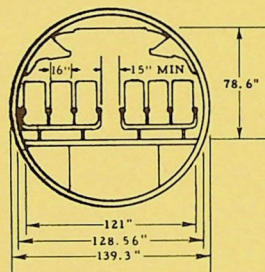
The 1049H when equipped with the Type I exit (included in C. M. C. 739) is C.A.A. approved for 120 occupants. To make maximum use of this approval, one 1049H purchaser proposes to install the 109 passenger interior shown on the Facing Page. In this arrangement, a 37 inch seat pitch is used on the right-hand side of the aircraft and a 36.5 inch pitch on the left-hand side, slightly displaced from the window and reading light locations. As mentioned, the basic C. M. C. 739 installs reading lights for the five abreast arrangement only.

While preliminary C.A.A. approval of this arrangement has been received by the airline in question, final C.A.A. approval of this interior arrangement is required after seat installation. This arrangement contemplates eleven crew members, including three stewardesses, to reach the maximum approved occupancy of 120 persons.

INTERNATIONAL HI-DENSITY COACH INTERIOR



Section Looking Forward
Showing Maximum Cross Section



NOTES:

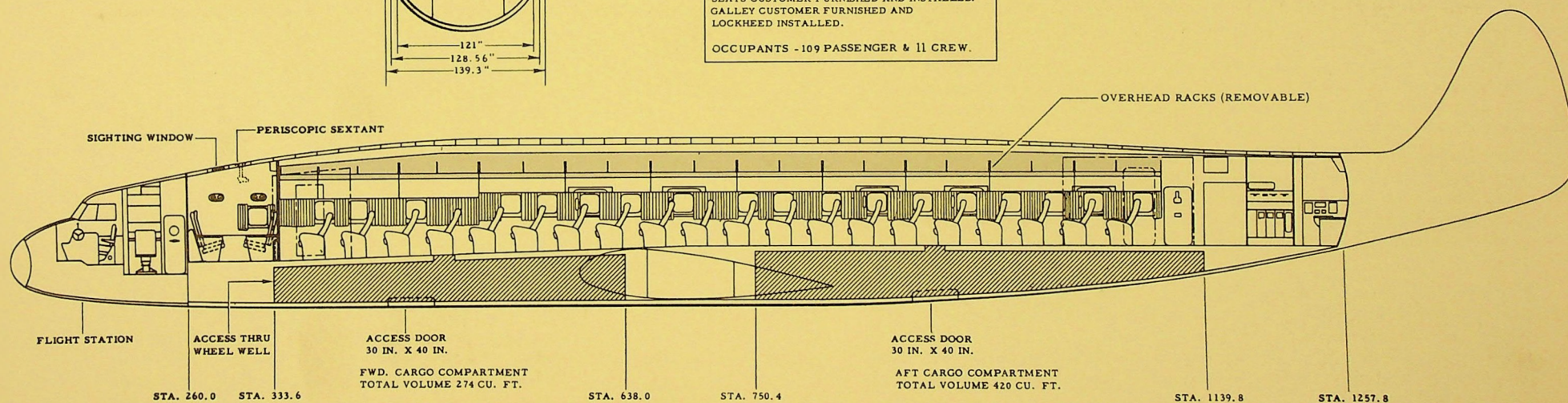
PROPOSAL SUBJECT TO C. A. A. APPROVAL.

SEAT DESIGN SHALL BE SUCH THAT THEY CONFORM TO C. A. A. EMERGENCY EXIT REQUIREMENTS. (FREE BACK FOLDING)

SEATS CUSTOMER FURNISHED AND INSTALLED. GALLEY CUSTOMER FURNISHED AND LOCKHEED INSTALLED.

OCCUPANTS - 109 PASSENGER & 11 CREW.

Flooring is constructed with extruded aluminum sections between Stations 333 and 1158. Forward and aft of this area metal covered plywood is used.



FLOORING

The all aluminum cargo floor installed in the 1049H Super Constellation meets all known requirements for a heavy duty cargo floor. Commercial and military operators who have inspected the floor call it the finest structure of its type installed in any commercial air transport today.

The 1049H floor was the result of a large amount of research conducted by Lockheed's engineers who desired a floor and flooring material which would meet the following requirements:

- * contribute to loading efficiency
- * eliminate costly load shoring operations
- * bear concentrated wheel loads without penalty
- * provide a safe, smooth working surface
- * absorb shocks, concentrated loads and rough handling
- * provide a hard wearing surface
- * require a minimum of maintenance
- * provide a waterproof deck that may be hosed down
- * provide for easy sectional replacement of damaged areas

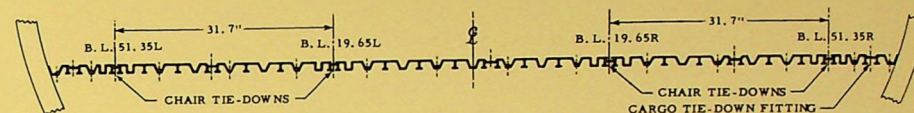
Due to the rigidity of the floor design, the cargo operators of the 1049H airplanes face far less loading restrictions than encountered in the past. Restrictions on wheel loads have, in many cases, prevented the proper application of wheeled dollies, carts and similar loading devices. Very few restrictions of this nature apply to the 1049H floor. Wheel loads of 1,125 pounds per 6 inch x 1½ inch rubber tired wheel may be applied and still maintain an adequate safety factor.

Concentrated loads from skids, machine legs and similar items are easily carried by the 1049H floor. In actual tests on prototype floors, loads of 1,500 pounds per square inch have been applied to small areas with no failure being experienced. For practical purposes, a concentrated load of 500 pounds per square inch may be used up to a limit load of 2,000 pounds per floor beam. This load will provide a very adequate safety factor in the floor and substructure.

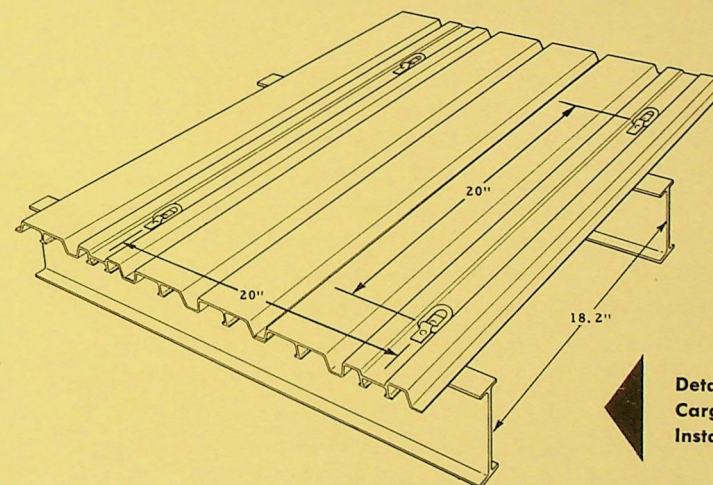
Floor loading of 1,000 pounds per linear foot or 300 pounds per square foot may be applied to the Super Constellation floor in the main cabin area. These limits allow great latitude in load placement and arrangement, especially in handling skidded loads. The floor has enough rigidity to carry concentrated loads imposed by skids within the limitations noted above.

The main cabin floor of the basic airplane is constructed with aluminum extruded integral seat tracks between stations 333 and 1158. These sections provide ease of conversion to the passenger carrying interior and are readily removable for repair or replacement. Forward and aft of this area, metal covered plywood flooring with a limit loading of 500 pounds per linear foot is installed.

MAIN CARGO FLOOR DETAILS

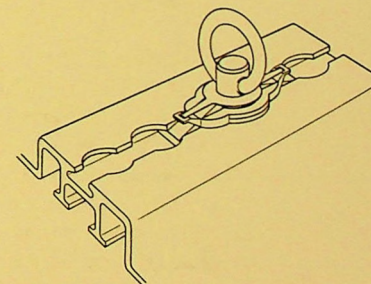


View Looking Fwd.
(Floor Cross Section at
Maximum Floor Width)



Detail —
Cargo Tie-Down
Installation

Detail — Seat Track
Rail Showing
Removable Cargo
Tie-Down Fitting



PASSENGER ACCOMMODATIONS

In designing the 1049H, the primary consideration was to provide an aircraft that would meet varying operational requirements, whether operating domestically or internationally, in cargo, passenger, or in combination service. To meet these criteria, interior features were designed to serve a dual purpose, or to be easily and quickly removable, if of a single purpose nature.

Seat tracks, for example, while an integral part of the cargo floor, are designed to accommodate cargo tie down or passenger chair fittings. The cargo doors incorporate passenger loading or emergency exit doors, while the cargo interior side walls provide for the quick attachment of passenger interior linings, curtains and baggage racks.

The basic Constellation Master Change (C. M. C. 739) furnishes or provides for the following passenger equipment:

AMC 6431	Aft Lavatories Provided
*AMC 6574	Buyer Furnished Galley Installed
*AMC 6229	Coat Closet Provided Including Portable Oxygen Units
*AMC 6230	Passenger Type Partition — Sta. 338
*AMC 6231	30-Ounce Carpet Provided
*AMC 6579	Removable Vinyl Side Wall Blankets Provided
*AMC 6232	Overhead Racks, Reading Lights, Emergency Ditching Lights and Cabin Attendant Call Facilities Provided
*AMC 6233	Window Curtains Provided
*AMC 6569	Ditching Ropes Provided
*AMC 6513	English Passenger Information Signs Provided
AMC 6438	Passenger Individual Air Outlet Risers Provided
AMC 6225	Cargo Floor Scuff Plates Deleted
AMC 6558	Trimmed Flat Ceiling Provided
AMC 6236	Type I Emergency Exit Provided

In addition to the above special passenger comfort items, the basic airplane (Specification LR/10530) includes wing life raft compartments for four 20-25 man life rafts, seat tracks, nine Type VI emergency exits and a cabin public address system. Items indicated by * are designed to be readily removable and under normal circumstances, these items, plus all passenger seating, are removed from the aircraft when converting from passenger to cargo usage. Minimum conversions, for one or two cargo trips, may be accomplished by the removal of seats, floor covering and galley.

The entire C. M. C. 739 adds 3416 pounds to the basic aircraft weight. If all items marked with * are removed this weight is reduced to 1106 pounds. If the aft lavatory is removed and the cargo scuff plates re-installed the non removable weight items amount to approximately 550 pounds. This weight, therefore, represents the maximum weight penalty to the aircraft when it is converted to a cargo airplane for extended use in that service, while still maintaining the capability of being re-converted to a passenger interior.

Seating for the 1049H is furnished and installed by the airline. Due to the versatility of this aircraft, manufacturers have developed special seating that provides the maximum in comfort for passengers and yet allows for full folding and stowage features, a most important capability for a multi-purpose airplane. One typical seat has the following characteristics:

Width between arm rests — 16 inches
Weight per passenger — 22 pounds
Back recline — 45 degrees
Load Rating — 9 G
Aisle Width, minimum, with 6 abreast seating — 15 inches
Leg adjustment — 8½ inches laterally
Stowage Capability — Folds into 10 inch thick package.
Comfort Features — Excellent
Appearance — Excellent

A seat of this nature makes maximum use of the superior width of the 1049H cabin. Competitive aircraft with the same seat width and a 15" minimum aisle can only achieve a five abreast arrangement. The Super Constellation can accommodate a six abreast arrangement, and can, therefore, carry a superior number of passengers without decreasing seat spacing.

The lavatories and ceilings installed with the 1049H passenger conversion kit are identical with those of the Super Constellation Model 1049G, which has established a world wide standard for passenger comfort. Baggage racks, recessed passenger reading lights and call buttons, continuous curtains and window valences and full buffet facilities all carry out the Super Constellation Standard of service.

When desired, a customer may negotiate the installation of a permanent type vinyl headlining, which provides for the maximum of passenger appearance.

The interiors shown in this volume are typical, but due to the flexibility of the 1049H design, may be altered to suit day to day airline needs, whether in cargo or passenger operations.

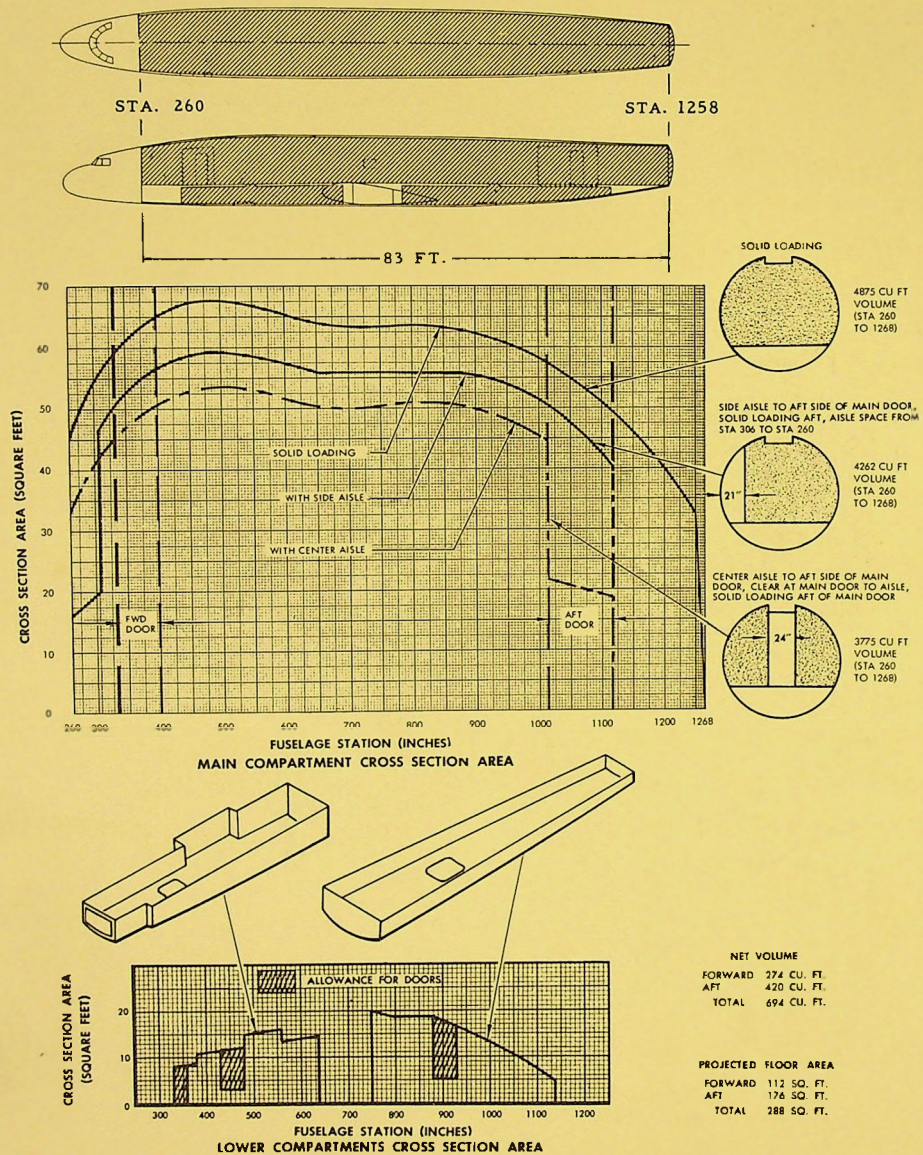
VOLUMES, AREAS AND CARGO DENSITIES

The charts on the following pages illustrate graphically the interior dimensions of the Lockheed 1049H airplane. Volumes and areas for various points in the cargo compartments are easily determined from the curves and demonstrate the superior loadability of the Super Constellation.

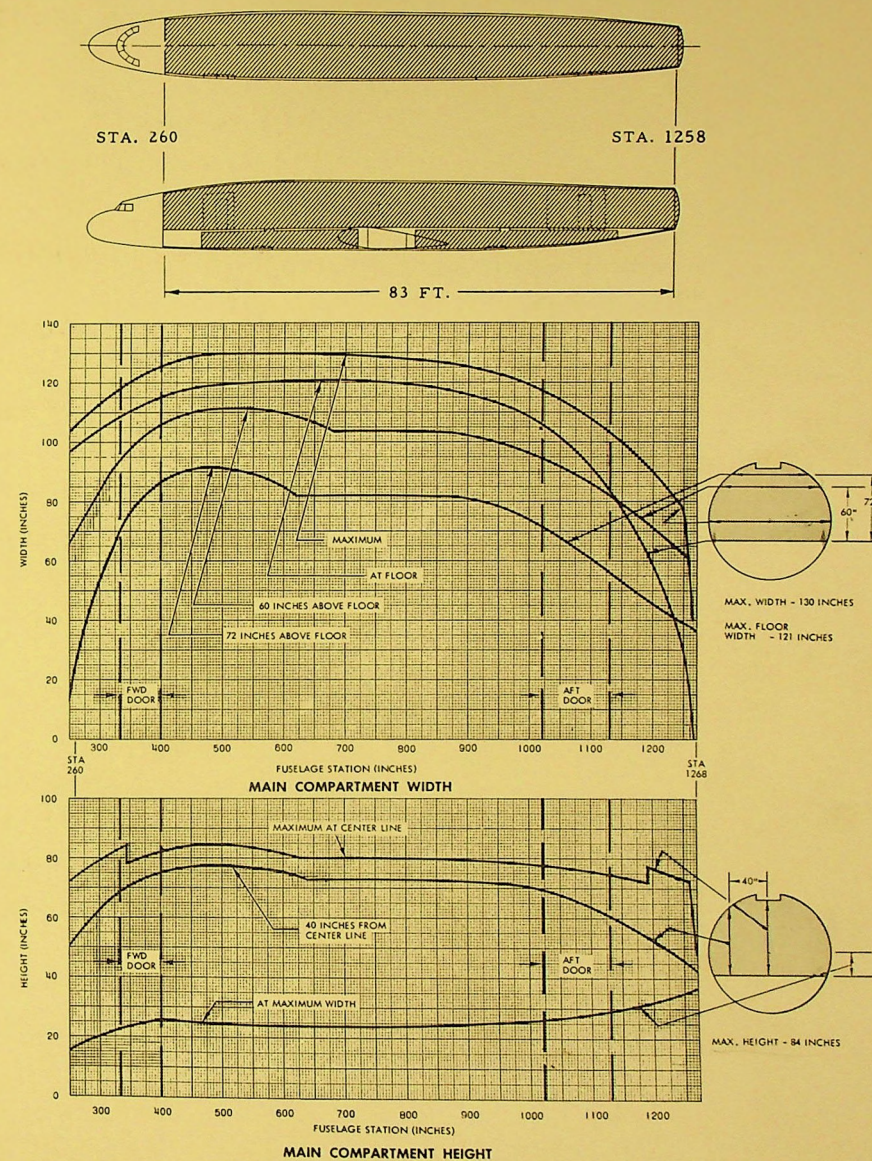
The fuselage contours of the Super Constellation have frequently given the mistaken impression that cargo loading may be aggravated by the curved lines of main compartment. It should be pointed out that actually the 1049H interior is considerably larger than any competitive cargo transport. The maximum floor width is 121 inches, or 16 inches greater than that of the nearest competitive airplane. The cargo compartment of the 1049H is 83 feet long, (STA 260 aft) of which 58 feet has a greater or equal width than the closest competitor.

Main cabin floor area of the 1049H is especially outstanding, with a total available floor area of 744 square feet. The floor area of the Constellation in relation to cabin volume is considerably greater than competitive transports. This relationship materially adds to the loading ease of this aircraft, since more floor area is available for loading which reduces stacking height required for full volume or weight utilization.

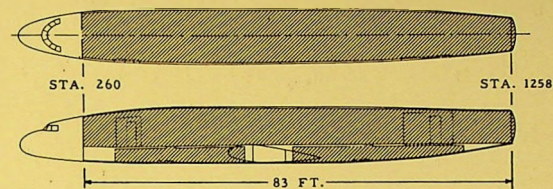
CROSS SECTION AREAS AND VOLUMES OF CARGO COMPARTMENTS



MAIN CARGO COMPARTMENT DIMENSIONS



FLOOR AREA AND VOLUME OF MAIN CARGO COMPARTMENT



TOTAL VOLUME - ALL COMP'TS.

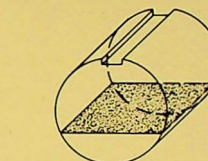
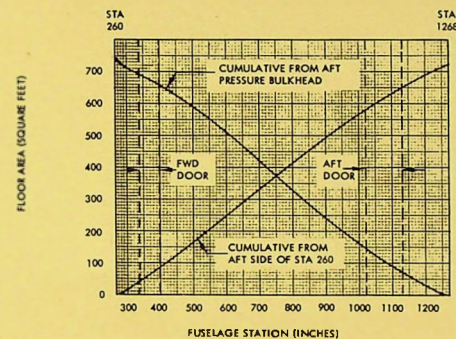
Main Cabin	4875 cu. ft.
Lower Compartments	694 cu. ft.

Total 5569 cu. ft.

NET VOLUME LOWER COMPARTMENTS

Forward	274 cu. ft.
Aft	420 cu. ft.

Total 694 cu. ft.

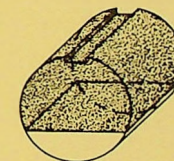
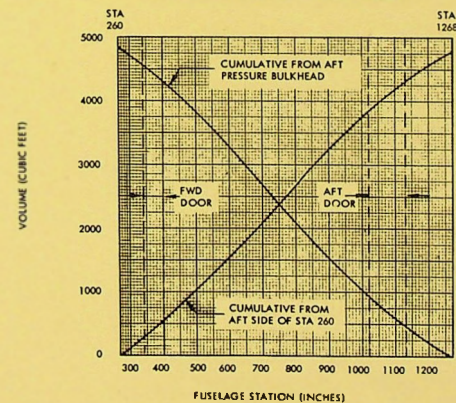


TOTAL MAIN COMPARTMENT
FLOOR AREA—744 SQUARE FEET

NOTE

MAIN COMPARTMENT FLOOR
AREA IS 700 SQUARE FEET
WHEN NAVIGATOR, RELIEF
CREW STATION AND BULKHEAD
AT STA. 338 ARE INSTALLED

MAIN COMPARTMENT FLOOR AREA



SOLID LOADING
TOTAL VOLUME
4875 CU. FT.

NOTE

MAIN COMPARTMENT VOLUME IS
4540 CU. FT. WHEN NAVIGATOR,
RELIEF CREW STATION AND BULK-
HEAD AT STA. 338 ARE INSTALLED.

MAIN COMPARTMENT VOLUME

AIR CONDITIONING AND PRESSURIZATION

The air conditioning system provides cabin pressurization, auxiliary ventilation, heating and cooling.

The pressurized portion of the airplane includes all of the crew and cargo compartments contained within the fuselage structure. The 1049H can be pressurized so that its interior remains at sea level pressure and at a comfortable temperature while the airplane is flying at altitudes up to 12,300 feet. Even while the airplane is cruising at an altitude of 20,000 feet, the pressure inside corresponds to a 5,000 foot pressure altitude. The fully automatic pressurization system maintains the following cabin air pressure altitudes at the airplane altitudes noted.

AIRPLANE ALTITUDE	CABIN PRESSURE ALTITUDE
5,000 feet	Sea Level
10,000 feet	Sea Level
12,300 feet	Sea Level
20,000 feet	5,000 feet
22,800 feet	8,000 feet
25,000 feet	10,600 feet

Pressurizing necessitates hermetically sealing the entire fuselage from the flight compartment through to the circular dome-shaped bulkhead that forms the rear wall of the cabin.

Air pressure in the cabin is produced by means of centrifugal compressors driven by each of the outboard engines. Each supercharger is capable of supplying the entire air quantity needed for full pressurization. The speed of the compressors or superchargers is varied automatically so that they operate at peak efficiency throughout the flight. The superchargers supply a quantity of air to maintain proper air density in the cabin as well as forced fresh air ventilation flow, which changes the air in the cabin approximately every 2½ minutes.

DOORS AND WINDOWS

The basic 1049H airplane is equipped with 32 rectangular windows, each with a clear view of approximately 18 x 16 inches. The basic window arrangement incorporates nine Type IV emergency exits, five being provided on the right-hand side and four on the left-hand side of the airplane.

All windows consist of an inner and outer pane separated to provide air space for circulation of hot air between the panes. In the area adjacent to the periscopic sextant location, an observation window, approximately 6½ inches in diameter, is included.

When the aircraft is constructed solely for all cargo use, all windows are omitted except those provided in two emergency exits, one of which is located on each side of the airplane at approximately the center line of the wing.

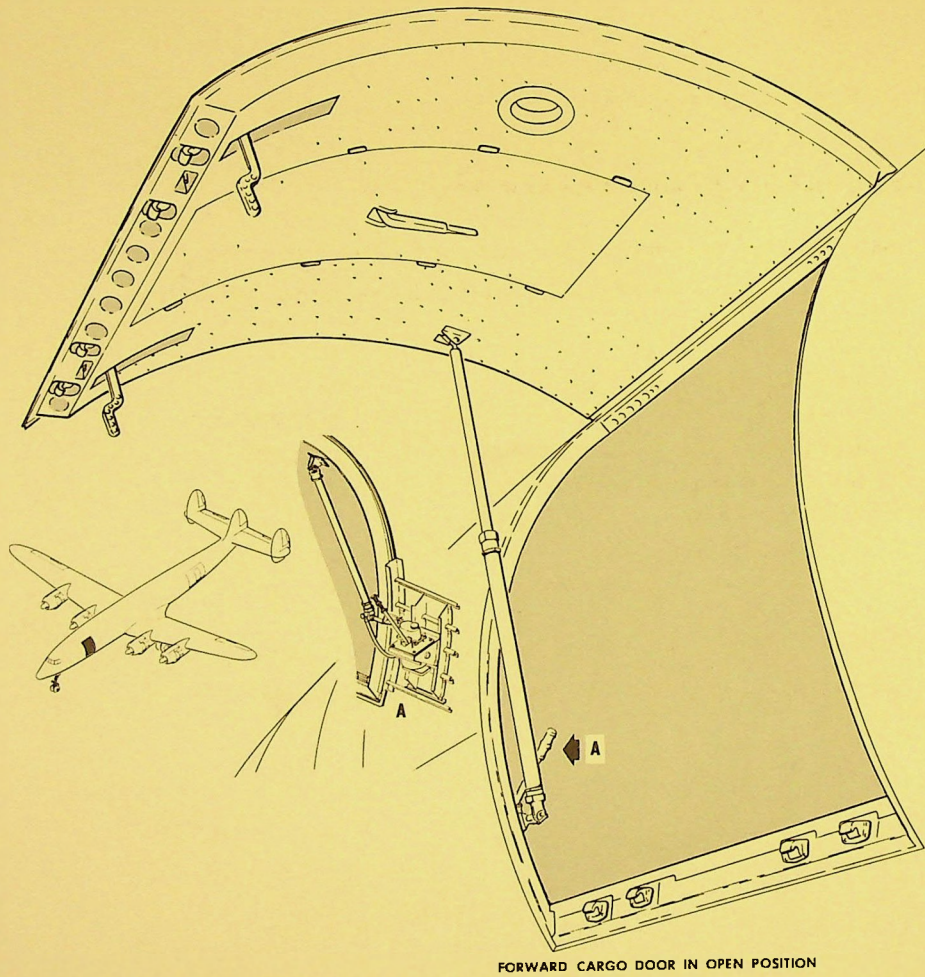
When the fully convertible interior is provided in the airplane, an additional Type I (door type) emergency exit is also provided in the aft portion of the fuselage opposite the main cargo door.

Large doors to provide for ease of loading and unloading of cargo and personnel are provided as follows: Openings indicated are maximum clear areas rather than door size.

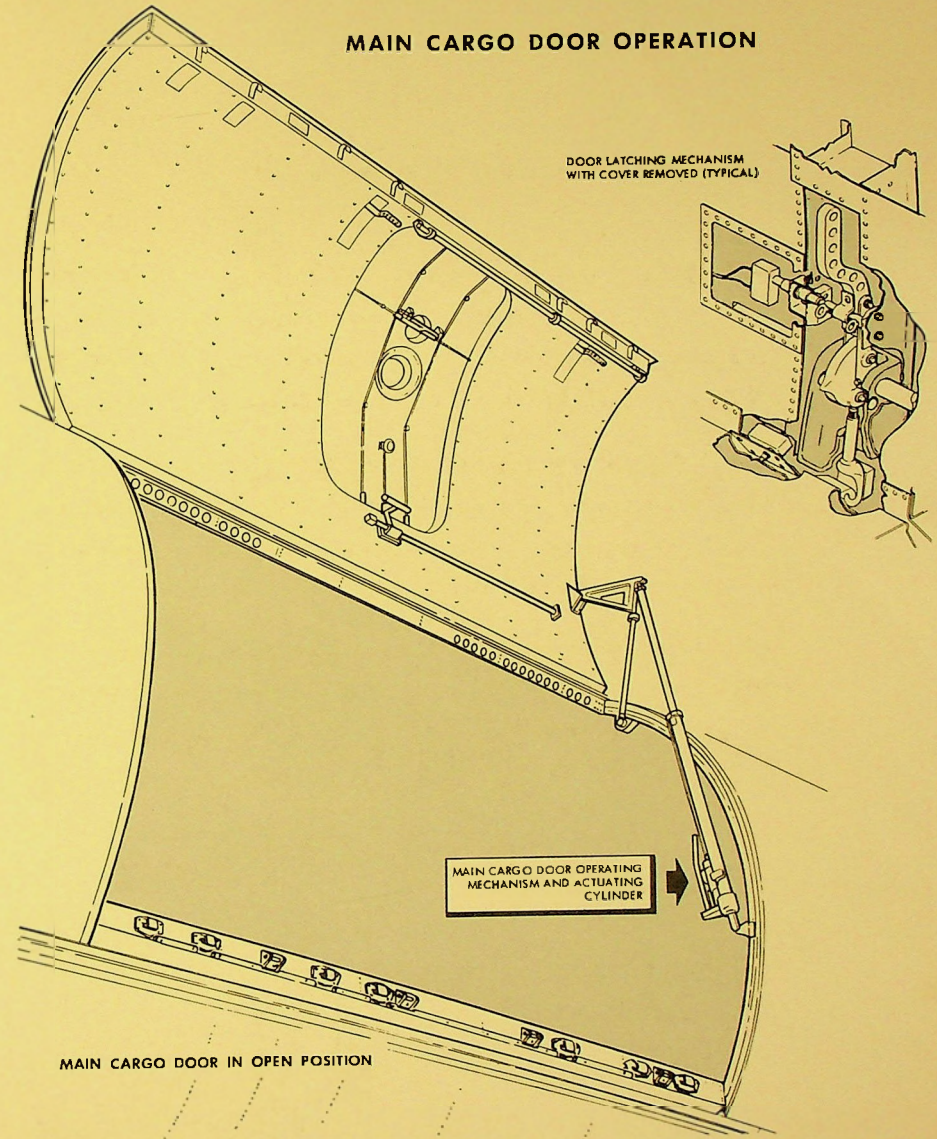
Main Cargo Door (clear area)	106.5" x 74"
Forward Cargo Door (clear area)	56.5" x 72 - 77"
Emergency Exit Door — in forward cargo door	22" x 66"
Emergency Exit Door — aft fuselage	24" x 48"
Aft Personnel Door — in main cargo door	27" x 65"
Crew Entrance Door	19" x 47.5"
Lower Compartment Access Doors	30" x 40"

The main cargo door opens upward to an angle of 165 degrees to provide full vertical clearance for loading and unloading large objects.

FORWARD CARGO DOOR OPERATION

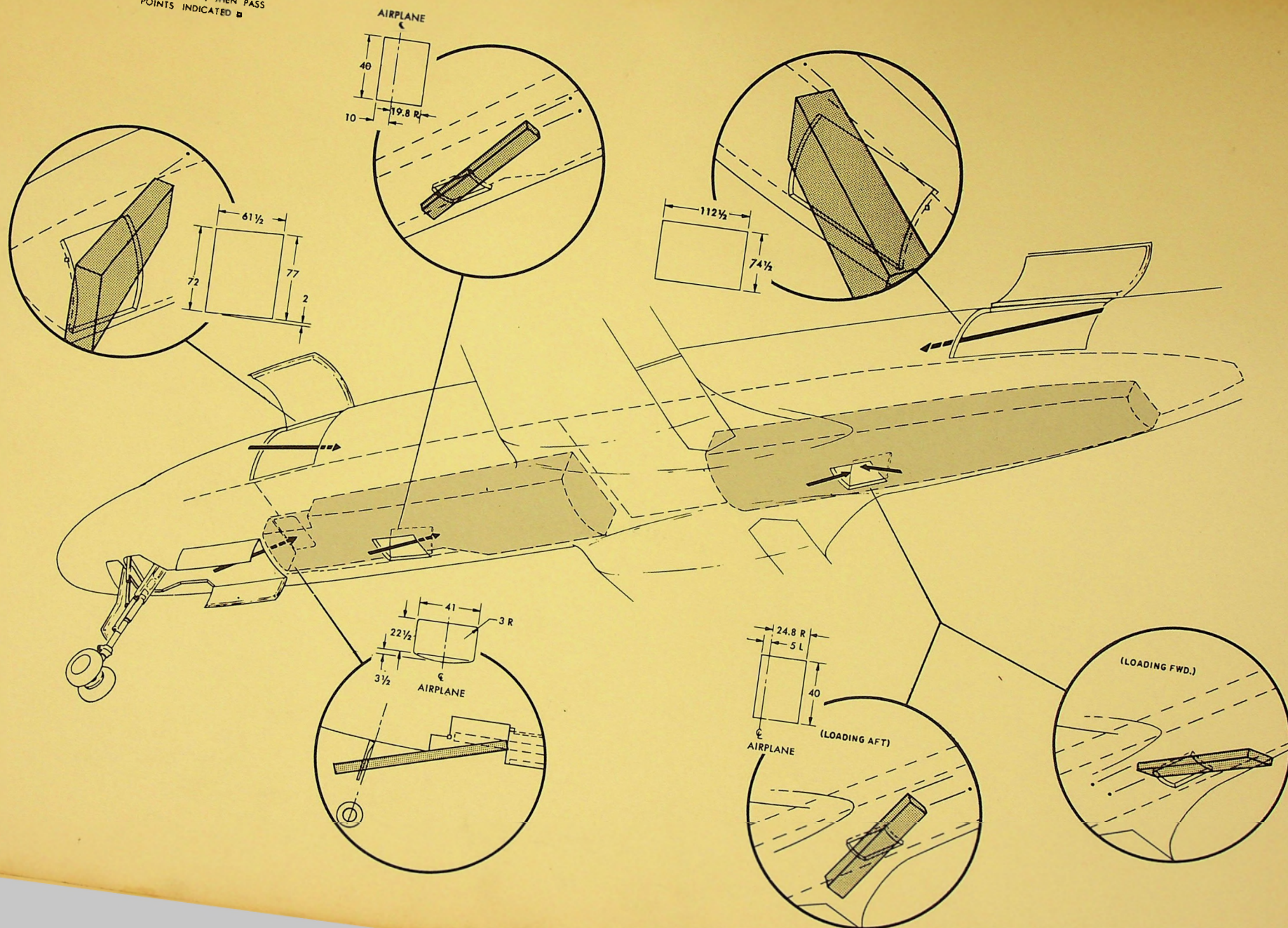


MAIN CARGO DOOR OPERATION



CARGO DOOR LOCATION AND DIMENSIONS

NOTE
PACKAGES MUST CLEAR POINTS
INDICATED ●, THEN PASS
POINTS INDICATED ■



PERFORMANCE

LOOK TO LOCKHEED FOR LEADERSHIP

SLR/1502 • FEBRUARY 15, 1957

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