

LEARSTAR CL600-106

INTERIORS DOCUMENT

Document # LR 1,106
January 31, 1977

Author D. Bloxam

Approved _____



4.6 Security Package Stowage

4.7 Aircraft Accessory Stowage

5.0 CARGO HANDLING AND RESTRAINT

5.1 General Description

5.2 Cargo Airplane

5.3 Cargo Container

5.4 Cargo Handling System

5.5 Onboard Cargo Handling System



1.0 INTRODUCTION

The main cabin of the LearStar 600-106 stretches from the cockpit bulkhead to the aft pressure bulkhead and has the capability of accommodating various types of interiors. The cabin has a length of 34 feet, a floor width of 7 feet 2 inches and a headroom at the centerline of 6 feet 2 inches.

Interior arrangements for two long range executive airplanes, a passenger airplane and a cargo version are presented here as an example of the airplane's versatility.

Of the many possible executive configurations available, two are outlined as being representative of the executive airplane.

2.0 EXECUTIVE CONFIGURATIONS

2.1 Executive Configuration No.1

Drawing SK600-0067 shows an interior with a maximum seating for 14 passengers. A main passenger cabin aft of the entrance door contains 3 berthable divans which are spaced throughout the length of the cabin, one divan is facing forward at the rear pressure bulkhead. Stowages are provided beneath the divans for blankets, pillows, etc. The divan near the overwing exit will contain the stowage for emergency liferafts.

Five swivel seats are installed in the cabin, arranged in two facing pairs with a folding leaf table between. A single seat is also installed on the left hand side with a similar table.

A bar cabinet for the stowage and dispensing of beverages is located at the forward right hand side of the cabin.

Passenger oxygen, lights, air, etc., is provided in an overhead service fairing which runs along the length of cabin on both sides.

The passenger cabin conforms to the latest Federal Aviation Regulations regarding emergency exits, evacuation, exit markings, lighting and fire protection, etc.

2.2 Crew Stowage

Aft of the pilot's compartment on the left hand side is a crew stowage. This is intended for crew baggage, uniforms and miscellaneous aircraft stores and emergency equipment.

2.3 Coat Closet

On the right hand side aft of the pilot's compartment is a coat closet and upper stowage bin. This is intended for the stowage of passengers' coats, garment bags and hats, etc.

2.4 Buffet

Aft of the coat closet is a buffet which provides stowage for food and beverages to suit passengers' flight requirements.



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2.5 Carry-on Baggage Compartment

On the right hand side opposite the passenger entrance door is a carry-on baggage compartment. This is for the stowage of passengers' baggage, and consists of a compartment with a shelf, closed off by a web gate or door to retain baggage during flight or emergency landing conditions.

2.6 Lavatory

Forward of the entry door is a lavatory containing a flushing toilet. In addition to the toilet, the lavatory compartment contains a washbasin, mirror and stowages for new and used towels, etc.

2.7 Attendant's Seat

A folding attendant's seat is installed facing aft of the lavatory bulkhead. Seat has padding to support back and head, and is provided with a safety belt and shoulder harness.

2.8 Belly Baggage Compartment

A belly baggage compartment is provided in the forward lower fuselage for stowing the passengers' oversize baggage.

2.9 Executive Configuration No. 2

Drawing SK600-0048 shows an executive interior where the main passenger cabin is divided and contains a private compartment in the aft end.

The private compartment has a berthable divan on the right hand side containing a stowage for blankets and pillows. Two swivel seats are arranged facing each other on the left hand side with a folding leaf table between.

A lavatory is installed forward of the rear pressure bulkhead. The lavatory compartment contains a toilet, washbasin, mirror and miscellaneous stowages.

A stowage is provided for hanging garments and other personal items. A curtain can be pulled across the aisle to give privacy from the forward cabin.

The forward compartment contains a berthable divan on the right hand side. Stowage area beneath the divan contains an emergency liferaft. Three swivel seats are installed on the left hand side, one pair facing each other with a folding leaf table between.

A bar cabinet for the stowage and dispensing of beverages is located at the forward right hand side of the cabin.

Oxygen, lights, air, etc., is provided in an overhead passenger service fairing which runs along the length of cabin on both sides.



3.0 PASSENGER CONFIGURATION

3.1 Passenger Arrangement

Drawing SK600-0047 shows a passenger interior arrangement with a main cabin seating for 30 passengers. Seats are installed on tracks with a double seat on each side of the aisle, fore and aft spacing is approximately 34 inches.

The passenger cabin is provided with thermal and accoustical insulation and is fully lined with a decorative liner.

An overhead stowage is installed along both sides of the passenger cabin, at each seat row a passenger service unit is provided consisting of an oxygen mask, reading light, attendant call button, etc.

The passenger cabin conforms to Federal Aviation Regulations Part 25 regarding emergency evacuation, exit markings, ordinance signs, lighting and fire protection.

3.2 Passenger Coat Stowage

A closet and stowage area is located on the right hand side behind the cockpit for the stowage of passengers' coats and garment bags.

3.3 Flight Crew Stowage

A flight crew stowage area is located behind the cockpit partition on the left hand side for stowage of crew baggage, uniforms, miscellaneous aircraft stores and emergency equipment.

3.4 Lavatory

A lavatory compartment is installed on the left hand side forward of the passenger entrance door. The lavatory contains a flushing toilet, washbasin, mirror, waste containers, towel containers, etc.

3.5 Galley

A galley is located on the right hand side forward of the Type I exit (service door). The galley has stowages for food containers, beverage containers, tray carriers, waste containers and miscellaneous stowages for supplies.

3.6 Cabin Attendant's Station

A folding attendant's seat is installed in the forward entrance area facing aft on the lavatory compartment bulkhead. Adjacent to the seat is an attendant's control panel containing the controls for the passengers' compartment heating/ventilating, compartment lighting, crew and passenger communications. Emergency equipment is located in a stowage beneath the seat.

3.7 Carry-on Baggage Compartment

An enclosure for the stowage of the passengers' carry-on baggage is located on the right hand side aft of the Type I door. The enclosure contains web gates and doors to retain the baggage during flight or crash conditions.



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3.8 Belly Baggage/Cargo Compartment

A compartment is located beneath the floor forward of the wing for the stowage of passengers' oversize baggage and items restricted from passenger cabin stowage.



4.0 CARGO CONFIGURATION

4.1 Cargo Arrangement

Drawing SK600-0046 shows a cargo interior arrangement with five cargo containers and one cargo pallet loaded in the airplane. A crash barrier net is located forward of the cargo to protect the crew in the event of a crash. The hazardous cargo pallet is located directly aft of the crash barrier net so that it can be observed by the crew and if necessary be accessible to the crew in an emergency.

A description of the cargo compartment, cargo container and the handling and retention system is given in paragraph 5.0.

4.2 Flight Crew Stowage

A stowage is provided aft of the cockpit on the left hand and right hand sides for the flight crew baggage, coats and miscellaneous supplies. Items of emergency equipment, first aid kit, crowbar, axe, CO₂ fire extinguishers, portable oxygen cylinder and smoke masks, etc., are stowed with easy access to the crew members.

4.3 Courier Station

An aft facing courier seat is located on the left hand side forward of the entrance door. The courier station is supplied with oxygen, lighting and communications with flight crew.

4.4 Crew Toilet

A nonrecirculating chemical toilet is installed on the right hand side aft of the crew stowage.

4.5 Food and Beverage Provisions

A small stowage for snacks, water and coffee, etc., is located just aft of the crew toilet area.

4.6 Security Package Stowage

A lockable stowage is provided forward of the entrance door and adjacent to the courier's seat, for the carrying of classified and high dollar value small packages.

4.7 Aircraft Accessory Stowage

A stowage is provided forward of the right hand emergency door for aircraft servicing items, engine covers, jacking pads, pitot head covers, etc.



5.0 CARGO HANDLING AND RESTRAINT

5.1 General Description

The Palletized Cargo Handling System is comprised of equipment designed to efficiently handle and move the pallet/container from reception at the cargo terminal to discharge into the aircraft or vice versa. An onboard system handles the pallet/container within the aircraft and provides restraint for airborne and emergency landing conditions.

5.2 Cargo Airplane

The basic cargo airplane consists of a compartment of 1090 cubic feet completely lined with a fire and scuff resistant liner. A hydraulically operated cargo door hinged at the top is provided on the forward right hand side for loading and unloading cargo. Four seat rails are installed along the length of the compartment floor. Light floor panels are installed between the rails designed for loads of 75 pounds per square foot.

A smoke detection system is installed in the cargo compartment with an indicator in the cockpit to give the flight crew warning of a fire.

The cargo compartment complies with Federal Aviation Regulations, Part 25 and is classified as a "Class E" compartment.

5.3 Cargo Container

The cargo container consists of a light-weight contoured shell with an integral pallet base. The primary purpose of the container is to increase the aircraft cube utilization and reduce loading man-hours. The container also protects the aircraft interior as well as providing weather and pilfer-proof protection to the customers' cargo.

The container dimensions are 88" wide x 48" long x 66" high with a usable volume of 150 cubic feet. The material and method of construction used is capable of restraining cargo loads to 3G with the minimum of deflection.

5.4 Cargo Handling System

The cargo handling system is basically two systems:

- (a) Ground Handling - which moves the cargo through the cargo terminal operations and onto the aircraft.
- (b) Onboard Handling - which moves the cargo inside the aircraft and provides the necessary retention.

The ground handling system consists of mobile units and storage racks for the loaded cargo pallet/containers. The containers are moved to and from the aircraft by means of cargo transporters. A lift platform raises the container to the aircraft doorsill height from which position it enters the airplane.

5.5 Onboard Cargo Handling System (Dwg. SK600-0049)

The onboard cargo handling system consists of a container handling and restraint



system designed for 3G loads, with a crash barrier net installed forward of the cargo, designed for 9G loads to protect the crew in the event of a crash. A flame/smoke resistant curtain is installed between the cargo and the flight crew, adjacent to the crash barrier to prevent smoke or noxious fumes reaching the crew.

Equipment items for handling and restraining the cargo containers are installed to the seat tracks. This equipment consists of a ball mat located on the cargo door area, designed to maneuver the containers in two directions. Four rows of roller assemblies are installed along the entire length of the cargo compartment to move the containers forward or aft.

Retractable locks are located as required to restrain the pallet/containers in their respective flight positions.

Guide rails along each side of the compartment, guide the pallet/container and prevent damage to airplane interior and possible structural damage. A stowable doorsill and threshold protector is installed at the cargo door to prevent damage to aircraft structure from ground handling equipment.



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SK600-0049	Onboard Cargo Handling System



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INTERIORS DOCUMENT LR 1.106

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JANUARY 1977

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1.0 INTRODUCTION

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Interior arrangements for two long range executive airplanes, a passenger airplane and a cargo version are presented here as an example of the airplane's versatility.

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Five swivel seats are installed in the cabin, arranged in two facing pairs with a folding leaf table between. A single seat is also installed on the left hand side with a similar table.

A bar cabinet for the stowage and dispensing of beverages is located at the forward right hand side of the cabin.

Passenger oxygen, lights, air, etc., is provided in an overhead service fairing which runs along the length of cabin on both sides.

The passenger cabin conforms to the latest Federal Aviation Regulations regarding emergency exits, evacuation, exit markings, lighting and fire protection, etc.

2.2 Crew Stowage

Aft of the pilot's compartment on the left hand side is a crew stowage. This is intended for crew baggage, uniforms and miscellaneous aircraft stores and emergency equipment.

2.3 Coat Closet

On the right hand side aft of the pilot's compartment is a coat closet and upper stowage bin. This is intended for the stowage of passengers' coats, garment bags and hats, etc.

2.4 Buffet

Aft of the coat closet is a buffet which provides stowage for food and beverages to suit passengers' flight requirements.



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2.5 Carry-on Baggage Compartment

On the right hand side opposite the passenger entrance door is a carry-on baggage compartment. This is for the stowage of passengers' baggage, and consists of a compartment with a shelf, closed off by a web gate or door to retain baggage during flight or emergency landing conditions.

2.6 Lavatory

Forward of the entry door is a lavatory containing a flushing toilet. In addition to the toilet, the lavatory compartment contains a washbasin, mirror and stowages for new and used towels, etc.

2.7 Attendant's Seat

A folding attendant's seat is installed facing aft of the lavatory bulkhead. Seat has padding to support back and head, and is provided with a safety belt and shoulder harness.

2.8 Belly Baggage Compartment

A belly baggage compartment is provided in the forward lower fuselage for stowing the passengers' oversize baggage.

2.9 Executive Configuration No. 2

Drawing SK600-0048 shows an executive interior where the main passenger cabin is divided and contains a private compartment in the aft end.

The private compartment has a berthable divan on the right hand side containing a stowage for blankets and pillows. Two swivel seats are arranged facing each other on the left hand side with a folding leaf table between.

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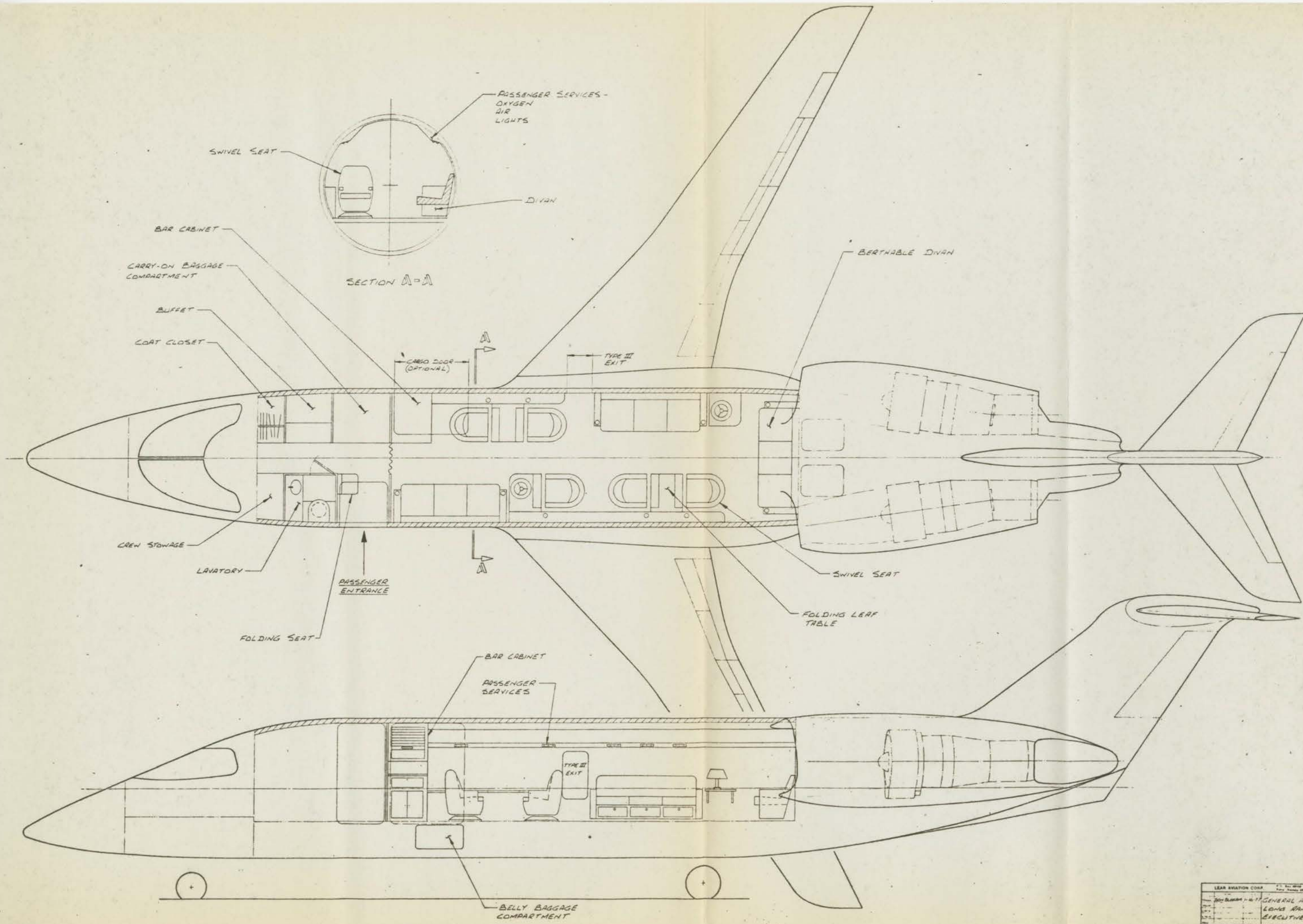
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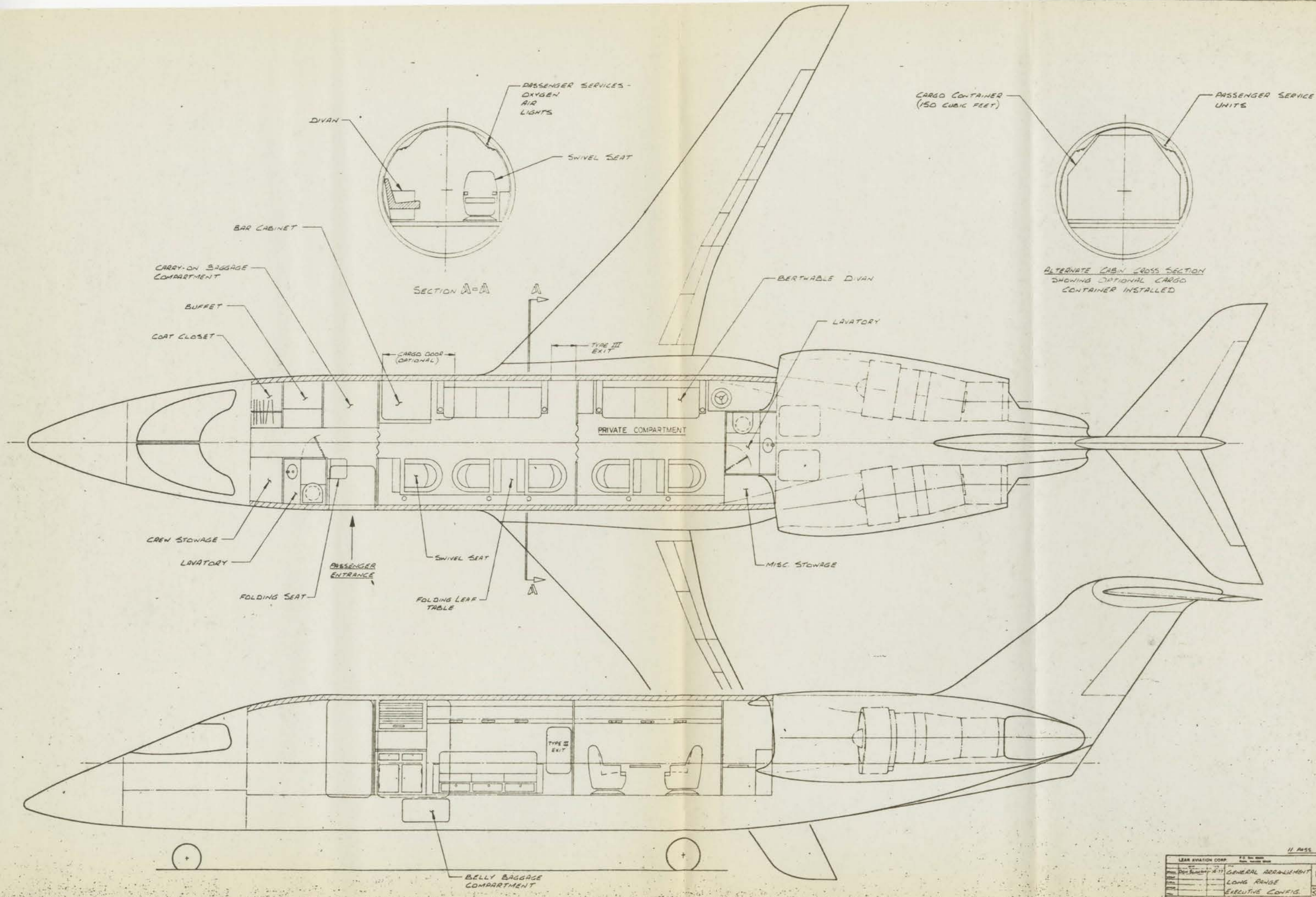
Oxygen, lights, air, etc., is provided in an overhead passenger service fairing which runs along the length of cabin on both sides.





14 PASS SEATS

LEAR AVIATION CORP.		171, 181, 191
GENERAL ARRANGEMENT		LearStar 600
LONG RANGE		51600-0067
EXECUTIVE CONFIG.		51600-0067



11 PASSENGERS

LEAR AVIATION CORP.		P.O. Box 1000 St. Louis, Missouri 63101
Model	600	GENERAL ARRANGEMENT
Year	1977	LONG RANGE
Engine	2	EXECUTIVE CONFIG.
Capacity	11	51600-0048

LearStar 600

3.0 PASSENGER CONFIGURATION

3.1 Passenger Arrangement

Drawing SK600-0047 shows a passenger interior arrangement with a main cabin seating for 30 passengers. Seats are installed on tracks with a double seat on each side of the aisle, fore and aft spacing is approximately 34 inches.

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3.5 Galley

A galley is located on the right hand side forward of the Type I exit (service door). The galley has stowages for food containers, beverage containers, tray carriers, waste containers and miscellaneous stowages for supplies.

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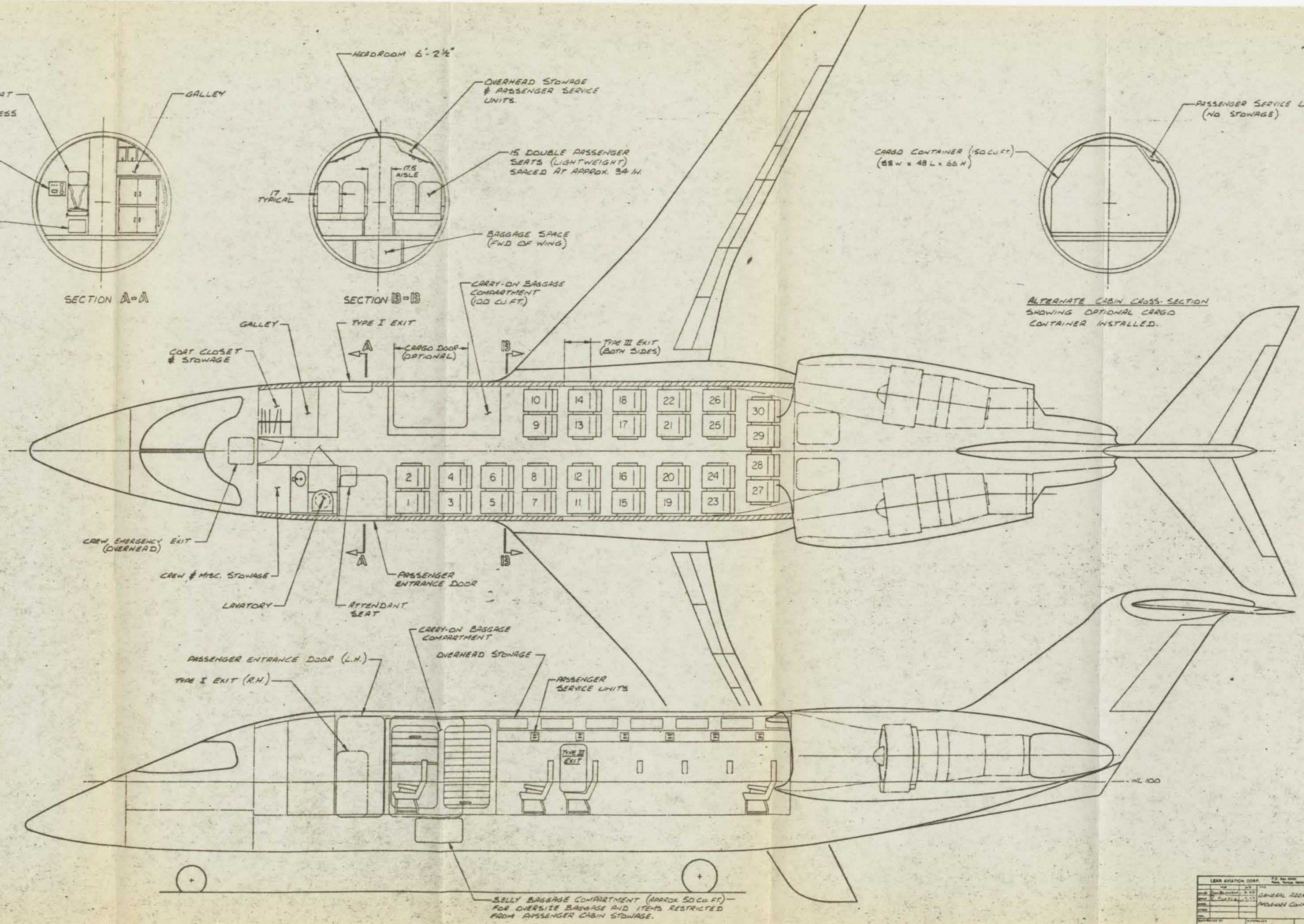
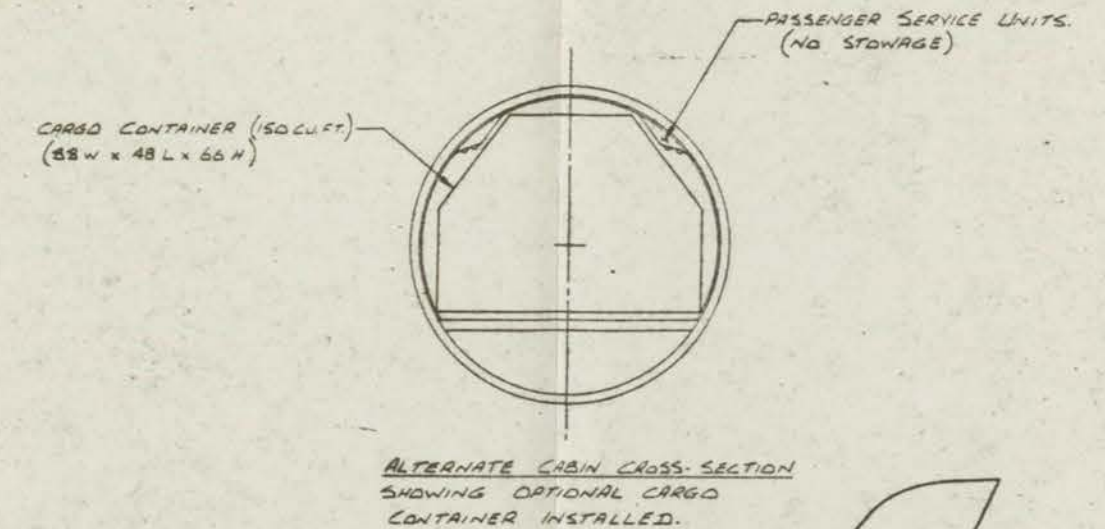
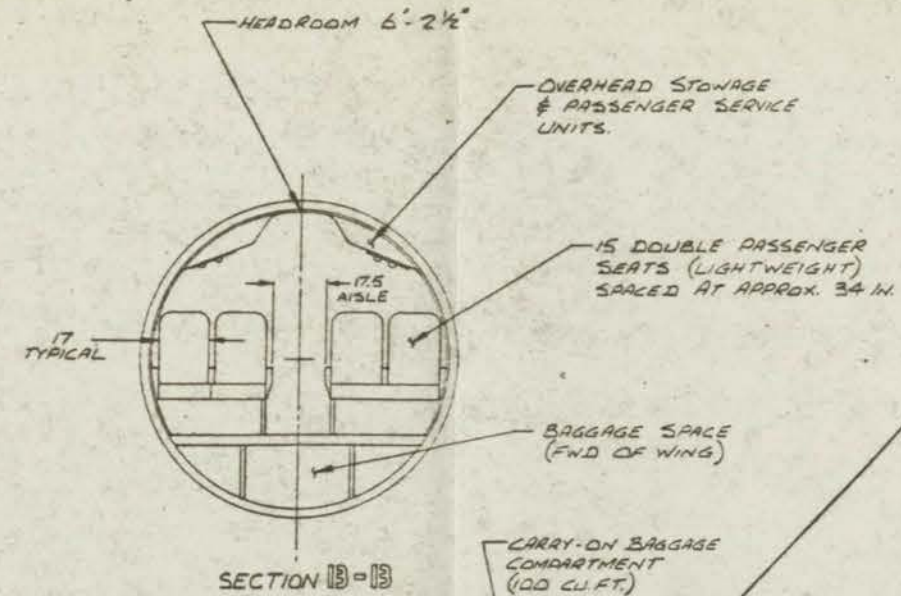
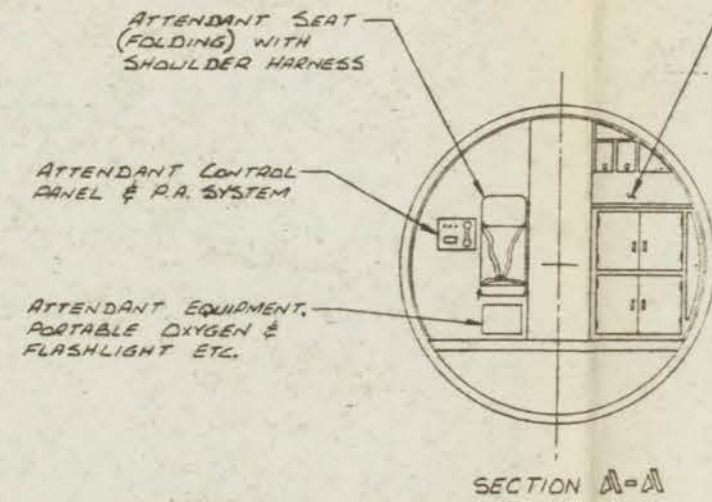
An enclosure for the stowage of the passengers' carry-on baggage is located on the right hand side aft of the Type I door. The enclosure contains web gates and doors to retain the baggage during flight or crash conditions.



3.8 Belly Baggage/Cargo Compartment

A compartment is located beneath the floor forward of the wing for the stowage of passengers' oversize baggage and items restricted from passenger cabin stowage.





4.0 CARGO CONFIGURATION

4.1 Cargo Arrangement

Drawing SK600-0046 shows a cargo interior arrangement with five cargo containers and one cargo pallet loaded in the airplane. A crash barrier net is located forward of the cargo to protect the crew in the event of a crash. The hazardous cargo pallet is located directly aft of the crash barrier net so that it can be observed by the crew and if necessary be accessible to the crew in an emergency.

A description of the cargo compartment, cargo container and the handling and retention system is given in paragraph 5.0.

4.2 Flight Crew Stowage

A stowage is provided aft of the cockpit on the left hand and right hand sides for the flight crew baggage, coats and miscellaneous supplies. Items of emergency equipment, first aid kit, crowbar, axe, CO₂ fire extinguishers, portable oxygen cylinder and smoke masks, etc., are stowed with easy access to the crew members.

4.3 Courier Station

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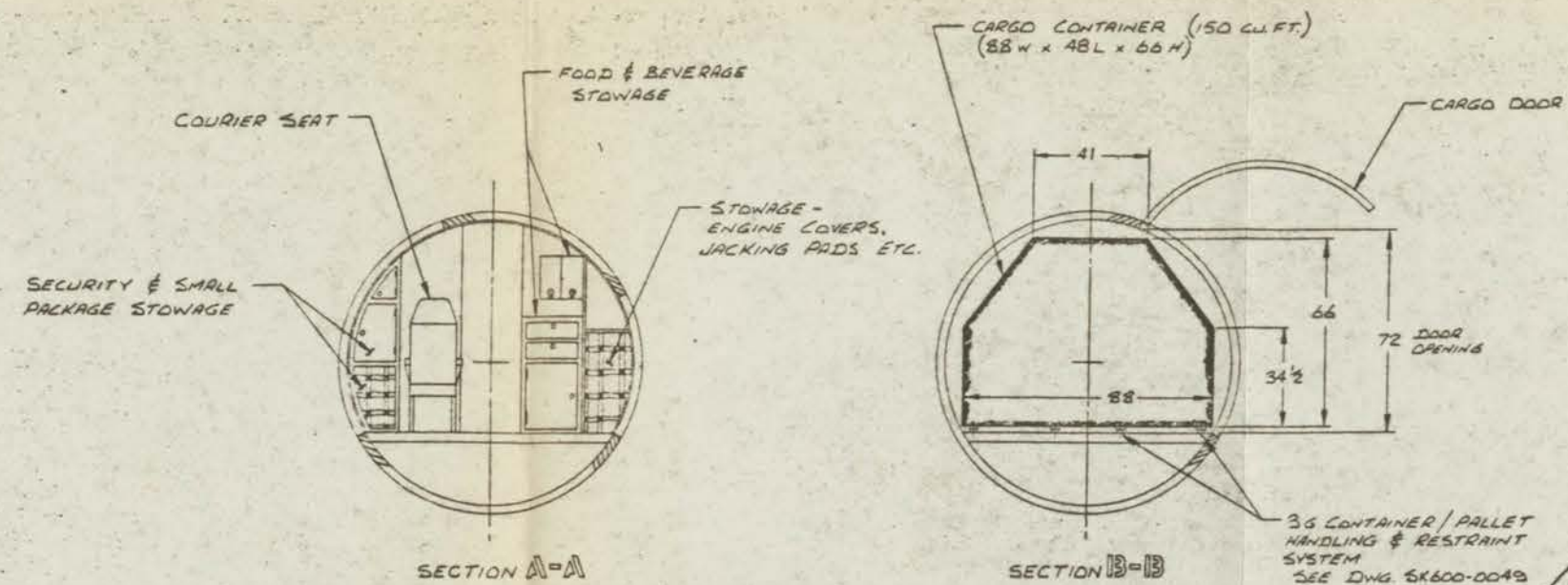
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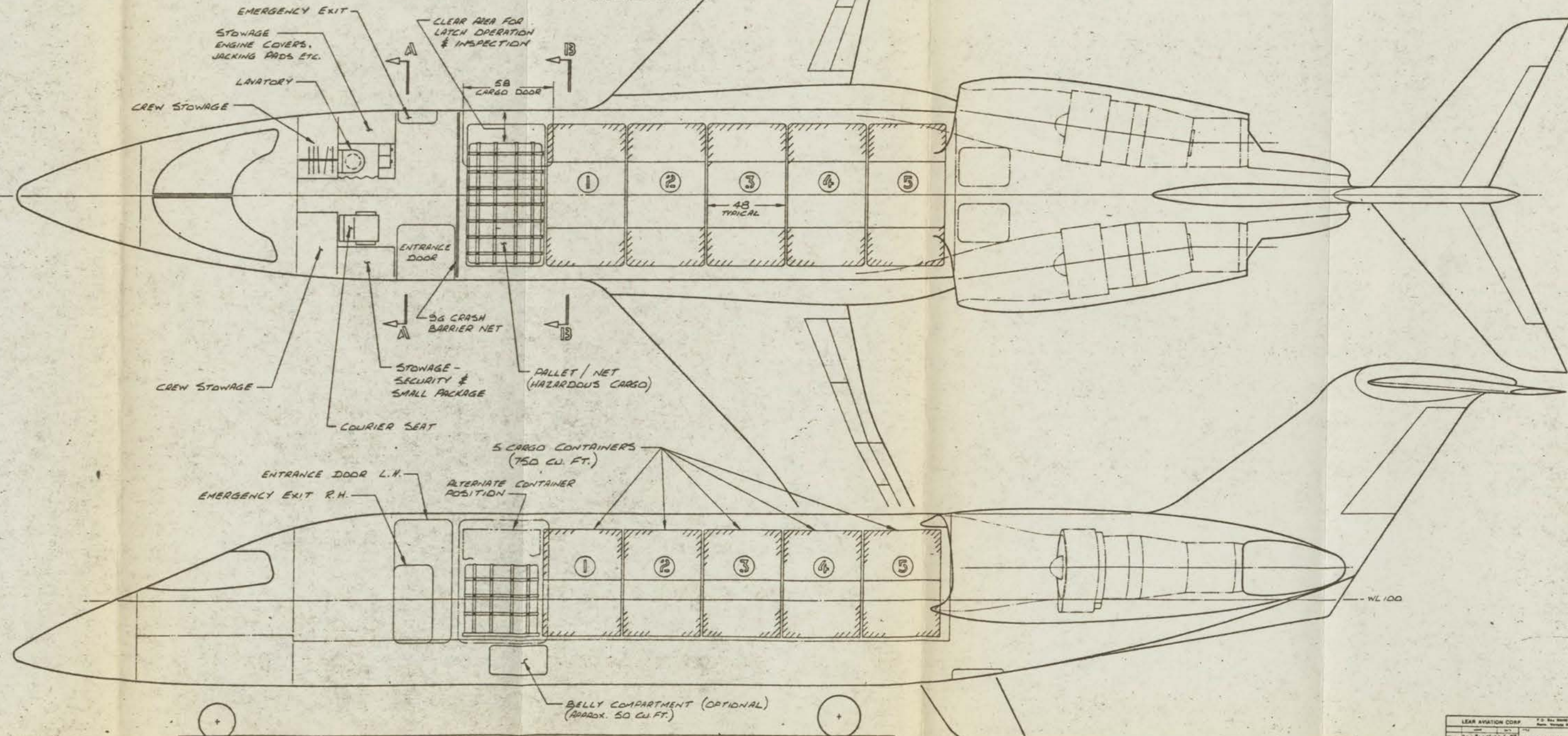
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A stowage is provided forward of the right hand emergency door for aircraft servicing items, engine covers, jacking pads, pitot head covers, etc.





CONTAINERIZED CARGO VOLUMES
6 CONTAINERS 150 CU. FT. EACH
TOTAL 900 CU. FT.
-OR-
5 CONTAINERS 150 CU. FT. EACH
TOTAL 750 CU. FT.
PLUS 1 PALLET (HAZARDOUS CARGO)
VOLUME OF CARGO COMPARTMENT
(CRASH BARRIER TO PRESSURE BULKHEAD)
1090 CU. FT.
TOTAL VOLUME OF CABIN
(COCKPIT BULKHEAD TO PRESSURE BULKHEAD)
1415 CU. FT.



5.0 CARGO HANDLING AND RESTRAINT

5.1 General Description

The Palletized Cargo Handling System is comprised of equipment designed to efficiently handle and move the pallet/container from reception at the cargo terminal to discharge into the aircraft or vice versa. An onboard system handles the pallet/container within the aircraft and provides restraint for airborne and emergency landing conditions.

5.2 Cargo Airplane

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5.5 Onboard Cargo Handling System (Dwg. SK600-0049)

The onboard cargo handling system consists of a container handling and restraint



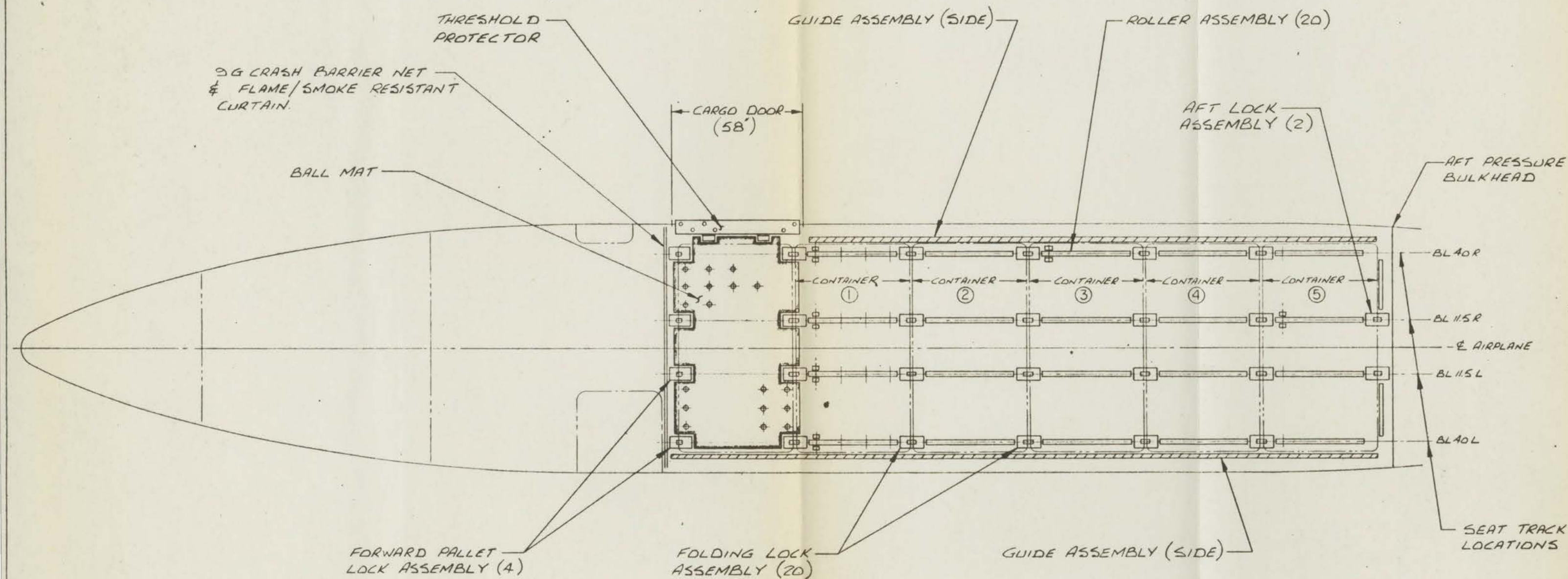
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Equipment items for handling and restraining the cargo containers are installed to the seat tracks. This equipment consists of a ball mat located on the cargo door area, designed to maneuver the containers in two directions. Four rows of roller assemblies are installed along the entire length of the cargo compartment to move the containers forward or aft.

Retractable locks are located as required to restrain the pallet/containers in their respective flight positions.

Guide rails along each side of the compartment, guide the pallet/container and prevent damage to airplane interior and possible structural damage. A stowable doorsill and threshold protector is installed at the cargo door to prevent damage to aircraft structure from ground handling equipment.





CONTAINER/PALLET LOCK ASSEMBLIES, ROLLER ASSEMBLIES & BALL MAT ARE SECURED TO SEAT TRACKS PROVIDING A 3G RESTRAINT SYSTEM.

LEAR AVIATION CORP.		P.O. Box 80008 Reno, Nevada 89508	
NAME	DATE	TITLE	LearStar 600 ONBOARD CARGO HANDLING SYSTEM. DWS NO. SK600-0049
DESIGNED BY	1-7-77		
CHECKED BY			
APPROVED BY			
SUPERSEDED BY			
SUPERSEDER		SCALE 1/20	SHEET 1 OF 1

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