



**5601 WILKINSON BOULEVARD
CHARLOTTE, NORTH CAROLINA 28208
(704) 359-4000**

**RFP AVIA 24-17 PBB PAINTING
ADDENDUM #1
FEBRUARY 19, 2024**

This Addendum is hereby made a part of the specifications, as applicable, of the above referenced project. All other requirements of the original plans and specification shall remain in effect in their respective order. Acknowledge receipt of this addendum by inserting its number and date on Form #1 of your proposal.

Please find attached:

- 1. Q&A**
- 2. Additional PBB Supporting Docs**
- 3. Slide deck from the pre-proposal meeting**

Charlotte Douglas International Airport (CLT), a City of Charlotte department does not discriminate on the basis of disability. We will provide auxiliary aids and services, written materials in alternative formats, and reasonable modifications in policies and procedures to persons with disabilities upon request. To make a request, please email andrew.buckner@cltairport.com.

Q&A

Is there pictures available to view the layout of each bridge to be painted? **See attached.**

Is it a requirement for this contract for the contractor to provide Pollution Liability Insurance Policy? **No.**

Is it a requirement for this contract for the contractor to provide Builder's Risk Insurance Policy? **No.**

Please confirm, per the RFP and in accordance with NC Statutes, if each bidding Contractor is required to be a licensed Contractor in North Carolina at time of bid. **GC license not required for this service contract.**

Does the Roofs of any PBB's or WW's have Coating Systems Previously installed? **No, none have a coating system.**

Are Badging Fees included in contract? **Yes, as part of your proposed compensation.**

Will the contract allow for more than a 3 day duration per PBB? **No, Must be completed within 3 days.**

Can you Clarify what parts get painted what color on the PBB Exterior? **Exterior = Lift columbs, rotunda, wheel bogie, cab curtain shrouds all get painted Gray. Exterior walls, cab get painted off white. Interior = Cab interior, rutunda interior, get painted off white.**

Are the Front Saloon Doors and Service Door Included or out of scope? **Both are included within the scope.**

Some PBB Gutters have no Tape and some have Yellow/Black Tape, is the gutters included and if so will there be a standard for each PBB? **The gutters are not included within the scope of work and they will be maintained by CLT.**

Can you clarify what locations and what will get repainted on PBB's and WW's for each manufacture? **All wallboards, stainless, and brushed aluminum DO NOT get painted.**

Are Terminal Doors Included or out of scope? **The terminal wall and terminal door is not included in the scope.**

Should PBB side of door be painted or both building side and PBB side? **No, the terminal door is not included in the scope.**

How should Placards/Signage/Data Plates/Logos of all types be handled . Should they be taped and painted around, remove and replace with existing, remove and replace with new? **All should be taped and painted around, CLT will be responsible for any signage or placard that needs to be replaced.**

Is the Safety Hoop Included or out of scope? **Out of scope.**

Are Galvanized/Stainless touchup/cleaning such as Stairs/Landing/Roof Hand Rails included or out of scope. **Out of scope.**

Are Lifts, Conveyors, Bagslides included or are they out of scope? **Out of scope.**

Is any ancillary equipment or its bracketry need to be included. **The PC Air and GPU mounting brackets are included within the scope, but NOT the equipment.**

Can you provide documents for the bridges that are going to be painted. Blueprints/Diagrams of the sizes and layout of the bridges? **See attached.**

I apologize for not being clearer; on the bid forms description #1-5 mention the different types of the bridges. Are there any pictures available of the different types of bridges, to cross reference? **See attached.**

Since this is a maintenance contract, how many bridges annually will need to get done; will all of them be done over the course of the 3 years? **We try to budget for 6 to 10 bridges per year.** How many are there in total ? **There will be 29 PBB's in total that will need to be painted. There will only be one fixed walkway that will need to be painted, the walkway is 70 feet long. Due to a project that was just approved, a certain amount of bridges will be replaced with new PBB's and no longer will need to be painted. The DEW bridges have been completely removed for they will be replaced within this upcoming project.**

are we allowed to spray on the exterior & interior?? **No to both.**

do we have to contain the exterior steel when washing & painting? **You will be responsible for all cleanup and any debris created from job.**

Is the contractor to be QP1 / QP2 certified? **Not required.**

GATE	Bridge Manf	Bridge SERIAL	MFG Date	MODEL	TYPE	Maximum Extended Length
A-6	FMC Jetway	OG36431	2015	A3-58/110	3-Tunnel	141 Ft
A-9	JBTAerotech	OG32869	2015	A3-60/116-125R	3 Tunnel	141 Ft
A-11	JBTAerotech	OG32870	2015	A3-60/119-125R	3 Tunnel	141 Ft
A-12	FMC Jetway	OG39410	2000	A3-64/131-125R	3-Tunnel	141 Ft
A-13	JBTAerotech	OG32871	2015	A3-60/119-125R	3-Tunnel	141 Ft
B-4	FMC Jetway	OG32000	2011	A3-58/110	3 Tunnel	141 Ft
B-6	FMC Jetway	OG32001	2011	A3-58/110	3 Tunnel	141 Ft
B-14	FMC Jetway	OG32002	2011	A3-68/141	3 Tunnel	141 Ft
C-2	JBT Aerotech	OG32357	2013	A2-65/99-125R	2 Tunnel	111 Ft
C-4	JBT Aerotech	OG32251	2012	A2-63/95-125R	2 Tunnel	111 Ft
C-7	FMC Jetway	OG35150	1984	A2-65/99	2 Tunnel	111 Ft
C-11	JBT Aerotech	OG32252	2012	A2-61/91-125R	2 Tunnel	111 Ft
C-13	JBT Aerotech	OG32358	2013	A2-61/91-125R	2 Tunnel	111 Ft
C-17	JBT Aerotech	OG32426	2014	A3-68/141-125R	3 Tunnel	141 Ft
C-19	JBTAerotech	OG32427	2014	A3-68/141-125R	3 Tunnel	141 Ft
D-5	Thyssen	0507TB412830	2001	TB41/24.5-2	2-Tunnel	178 Ft
D-10	Thyssen	05057TB333831	2001	33/17.0-3	3-Tunnel	165 Ft
D-12	Thyssen	05057TB393828	2001	39/19.0-3	3-Tunnel	165 Ft
D-13	Thyssen	05057TB392829	2001	39/22.5-2	2-Tunnel	178 Ft
E-13	JBTAerotech	OG31214	2008	A2-57/84-125R	2-tunnel	111 Ft
E-20	JBTAerotech	OG31642	8/1/2010	A2-57/84-125R	2-tunnel	111 Ft
E-22	JBTAerotech	OG31211	11/1/2008	A2-55/80-125R	2-tunnel	111 Ft
E-24	JBTAerotech	OG31215	11/1/2008	A2-57/84	2-tunnel	111 Ft
E-25	JBTAerotech	OG31216	12/1/2008	A2-57/84	2-tunnel	111 Ft
E-26	JBTAerotech	OG31212	11/1/2008	A2-55/80	2-tunnel	111 Ft
E-27	JBTAerotech	OG31210	11/1/2008	A2-53/77	2-tunnel	111 Ft
E-28	JBTAerotech	OG31213	11/1/2008	A2-55/80	2-tunnel	111 Ft
E-30	JBTAerotech	OG31209	11/1/2009	A2-49/70	2-tunnel	111 Ft
E-32	JBTAerotech	OG31641	8/1/2010	A2-57/84	3 Tunnel	141 Ft



A6

CLT

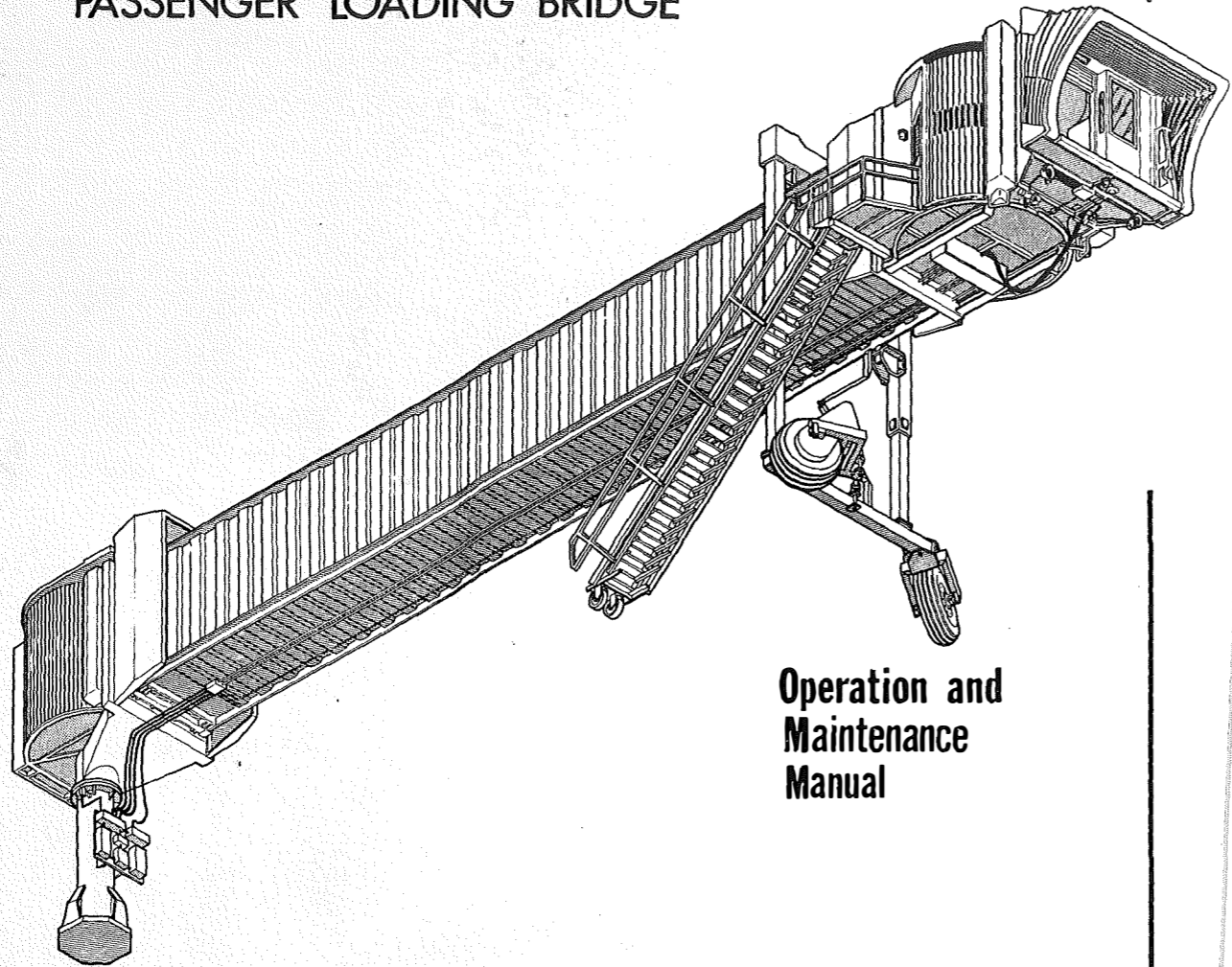
333

1392
162

JETWAY®

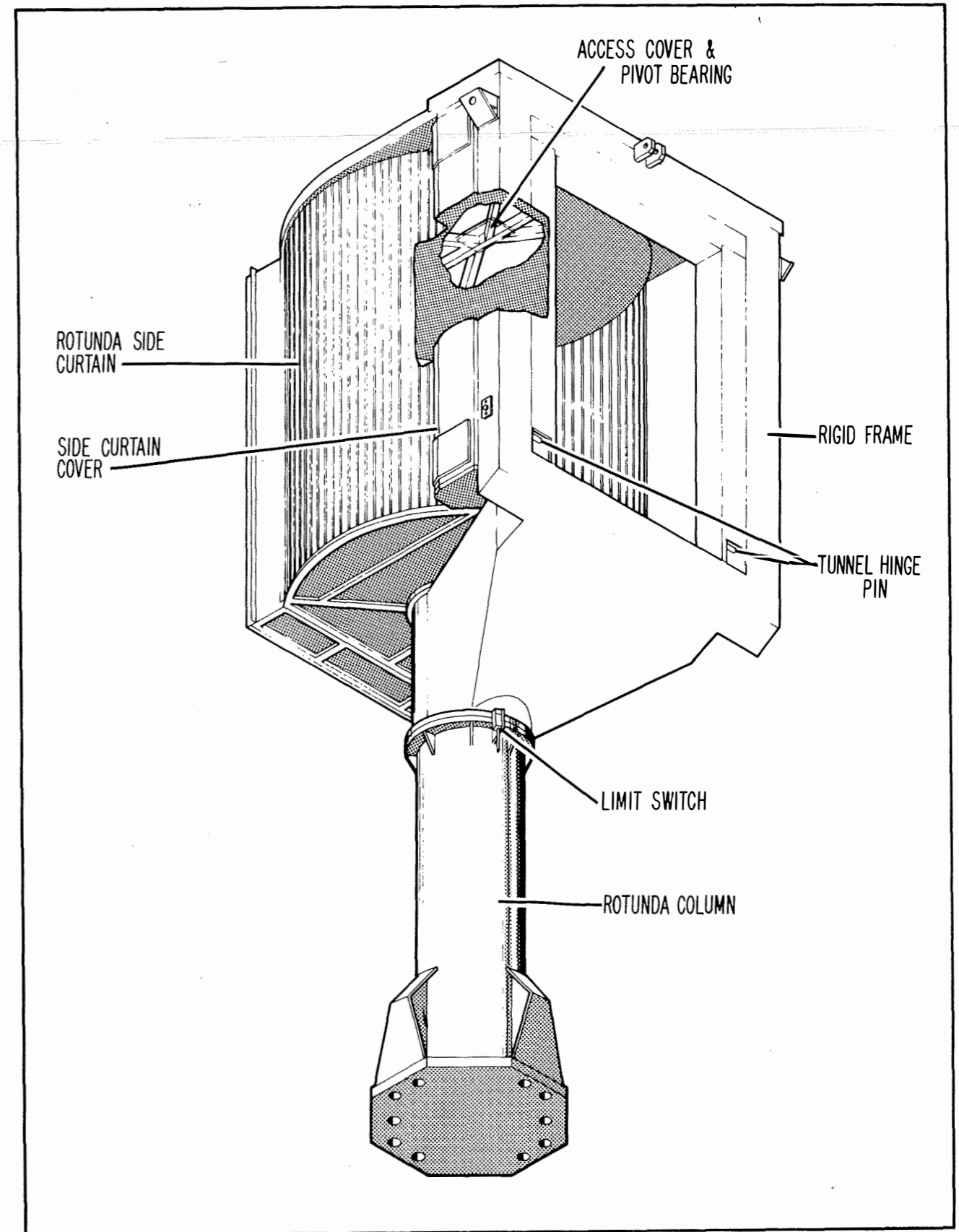
449

**FULL SERVICE RADIAL
PASSENGER LOADING BRIDGE**



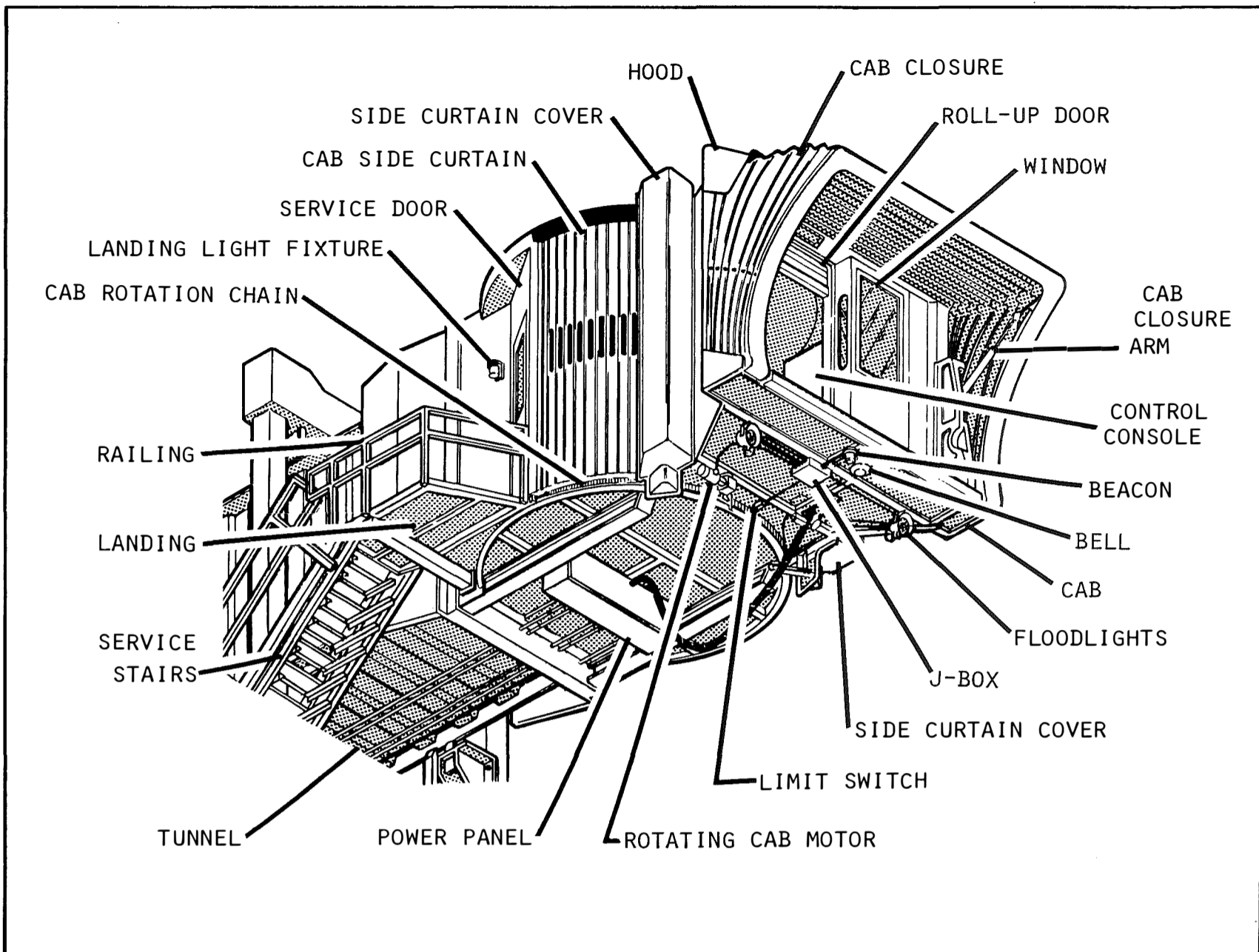
**Operation and
Maintenance
Manual**

 <p>Abex An IC Industries Company</p>	<p>JETWAY DIVISION</p>
---	-----------------------------------



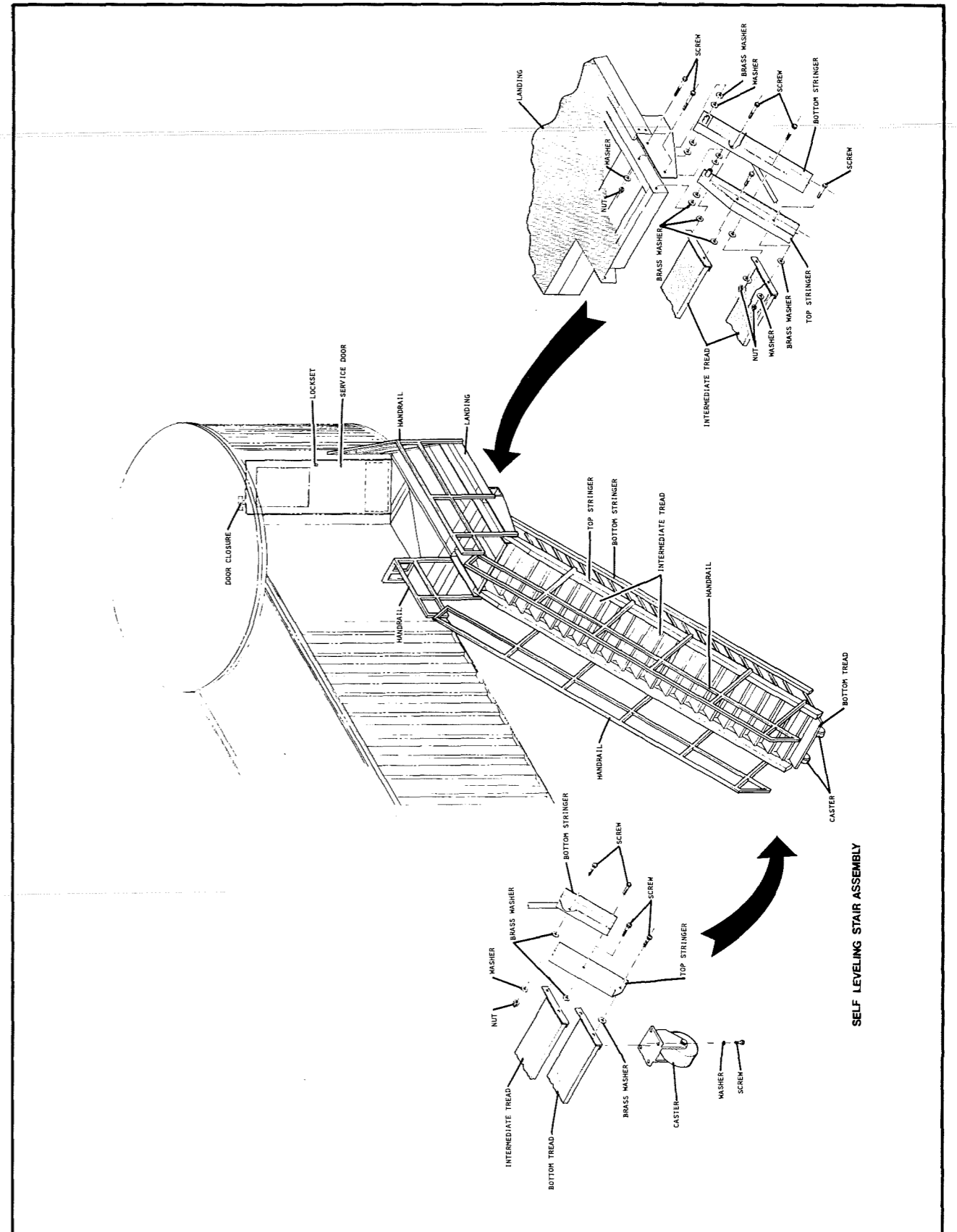
ROTUNDA

FIGURE 1

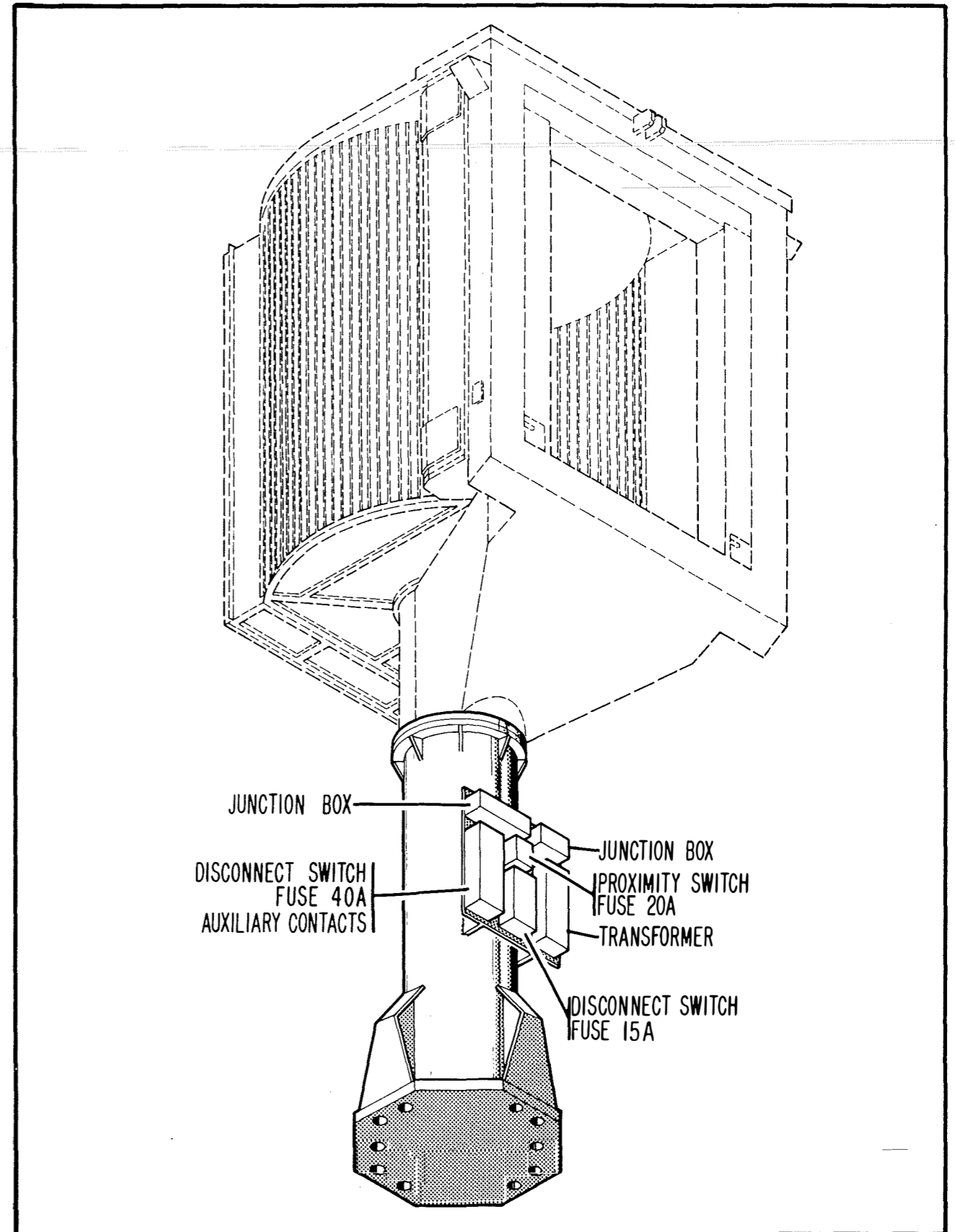


May 1981

CAB ASSEMBLY
FIGURE 5

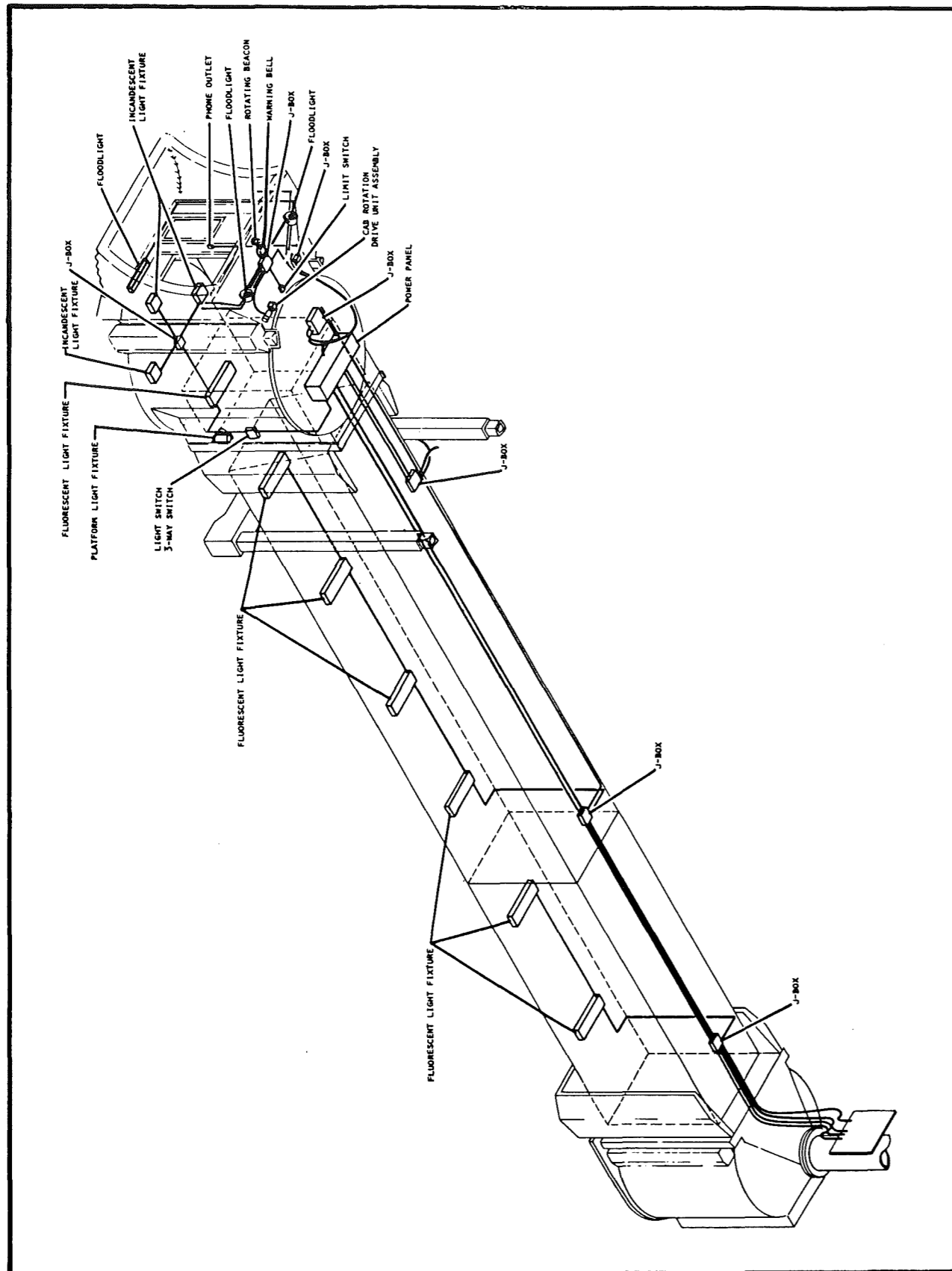


SERVICE ACCESS

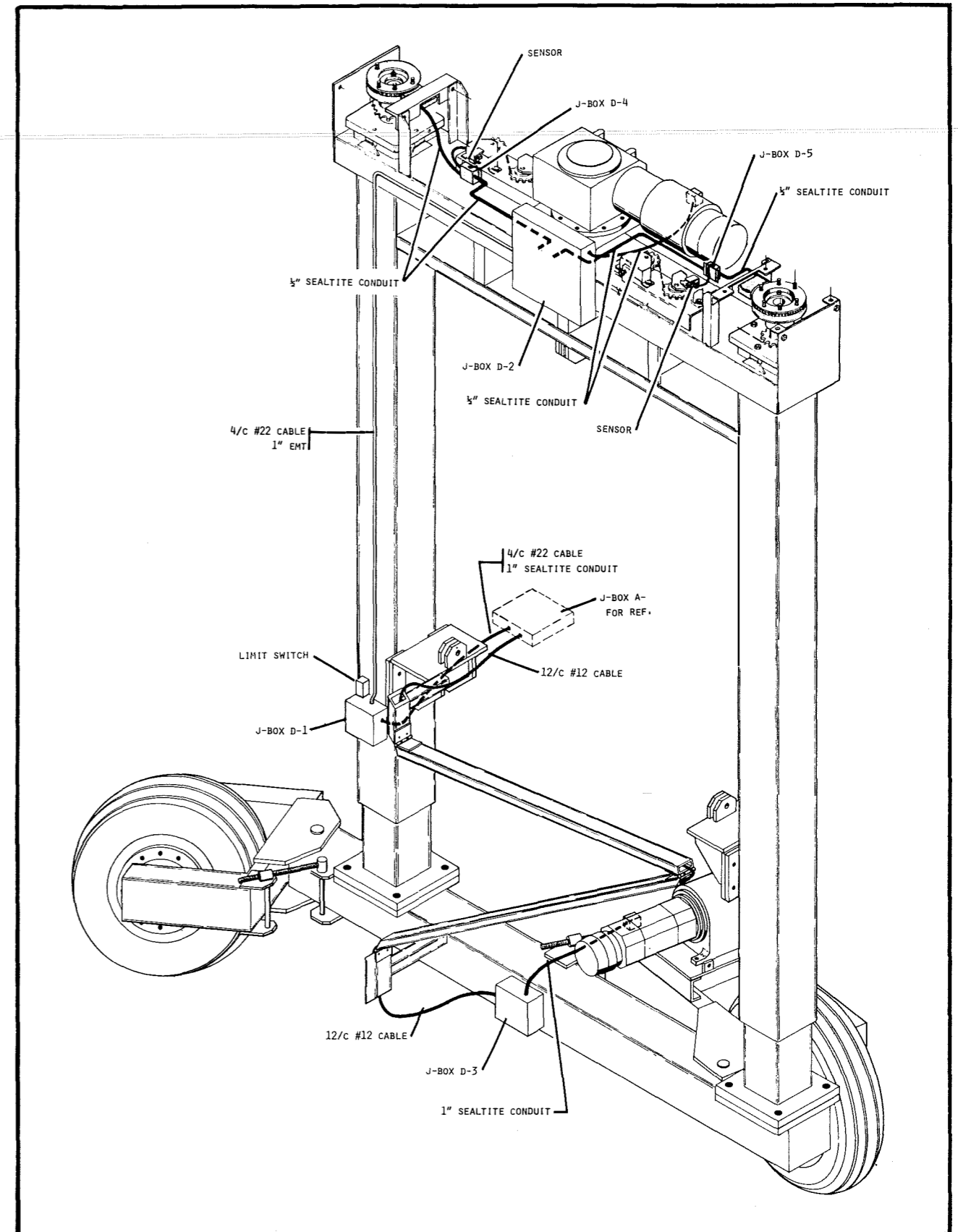


DISCONNECT PANELS

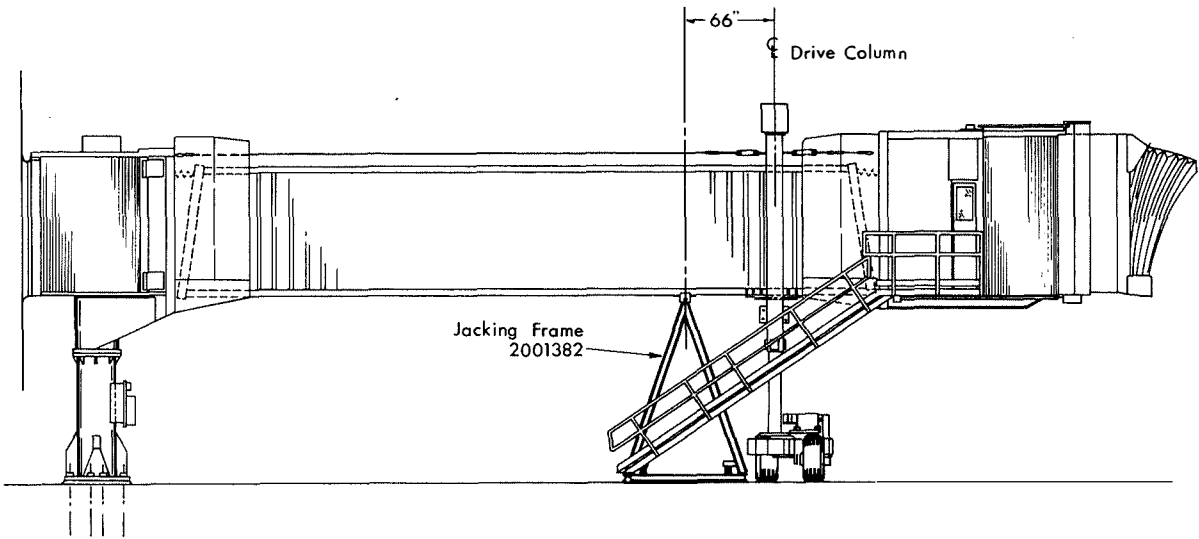
FIGURE 1



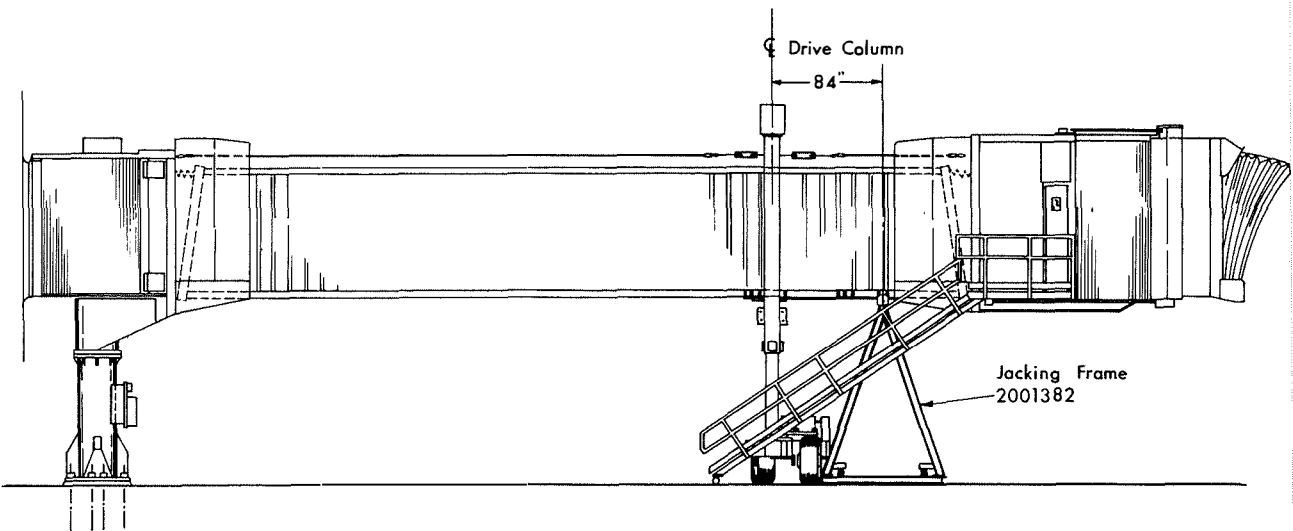
LOCATION OF CABLES, JUNCTION BOXES AND LIGHTS



DRIVE COLUMN ELECTRICAL



For FSR-29 thru FSR-63

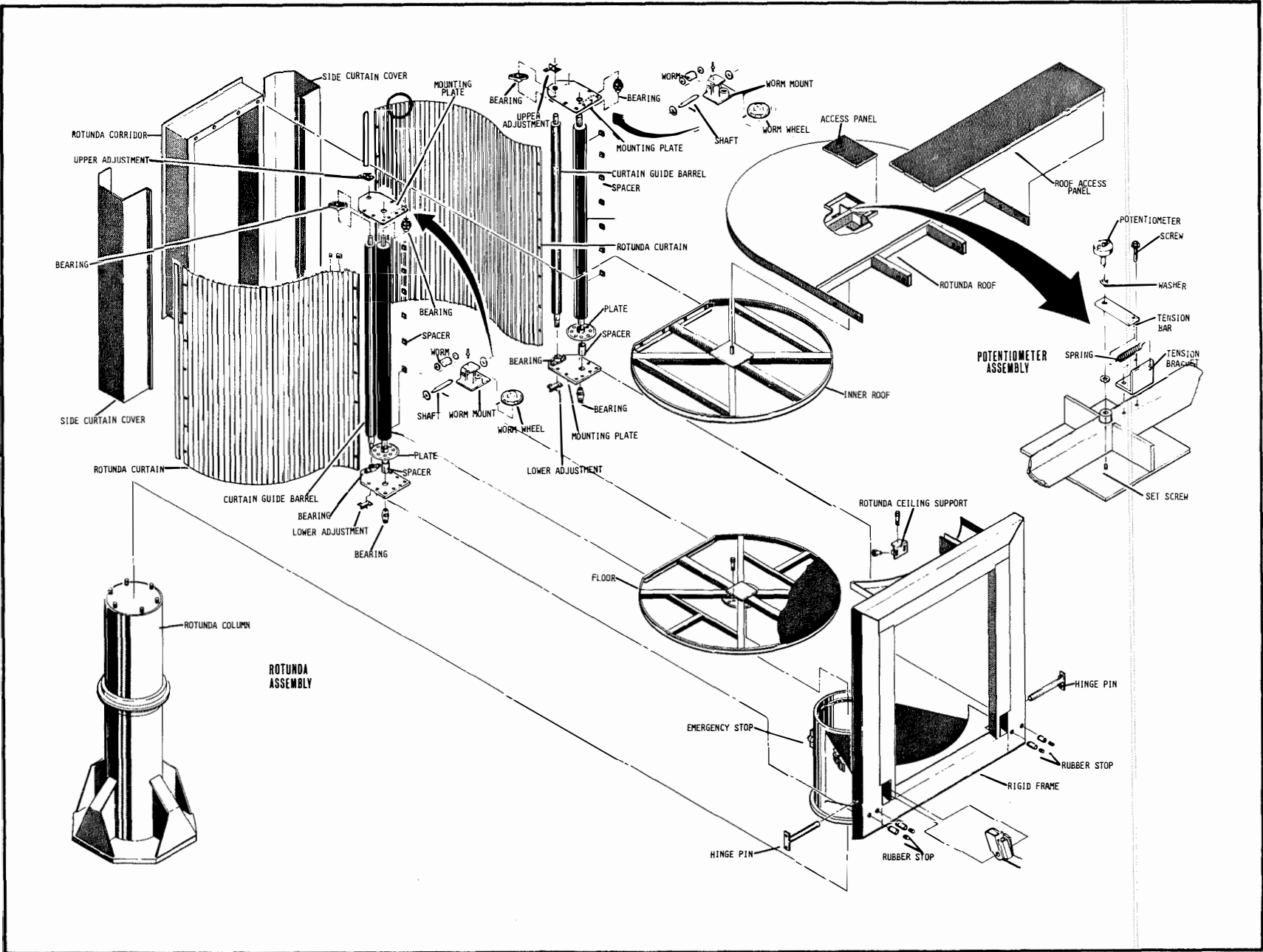


For FSR-65 thru FSR-131

LOCATION OF JACKING STAND

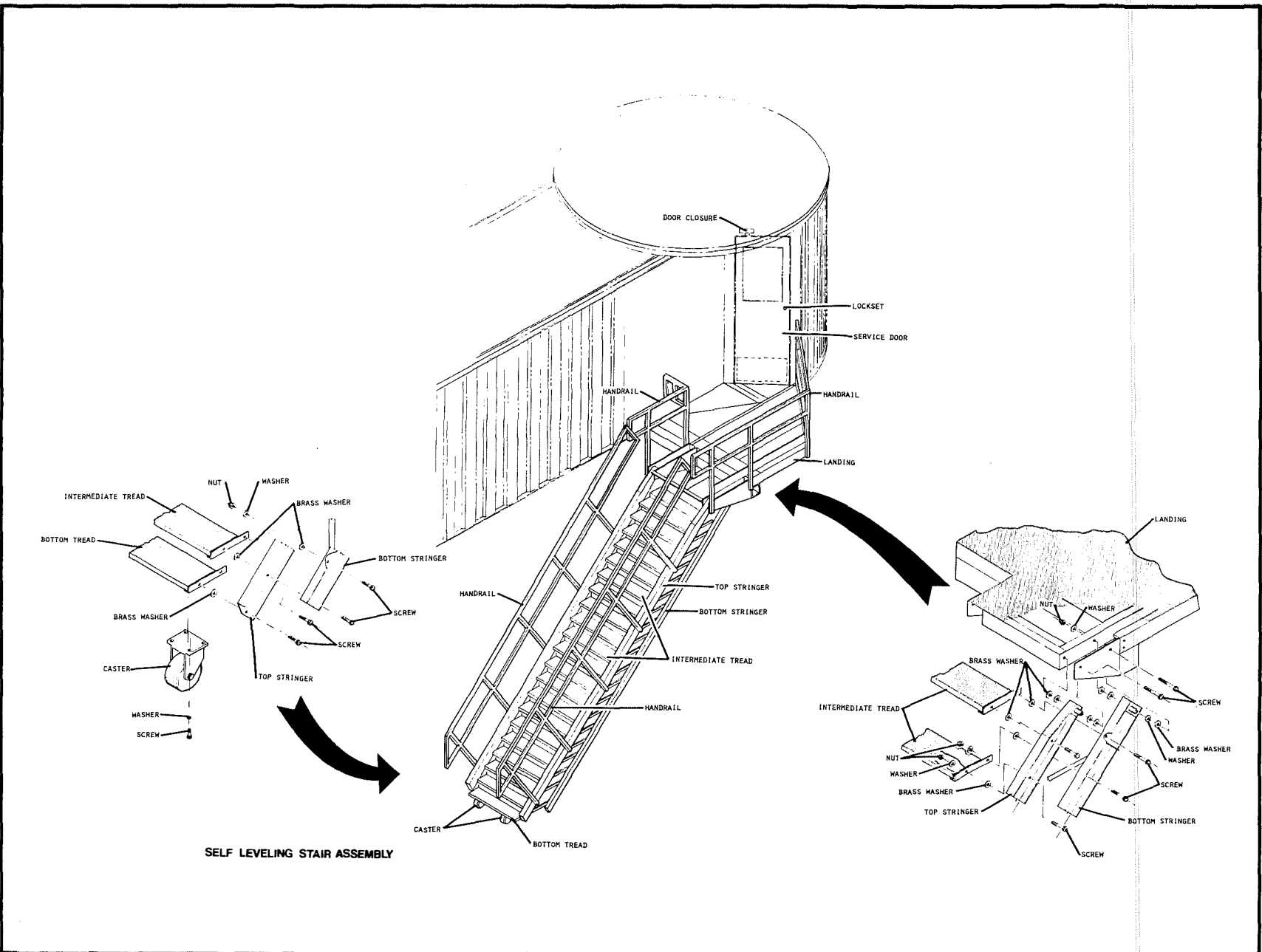
FIGURE 2

May 1981



ROTUNDA AND CURTAINS

FIGURE 1



SERVICE STAIR AND LANDING

FIGURE 5

May 1981



D12

2400

PS305

TY170

NO PARKING
From Manager
Toll Gate

KEEP CLEAR



Table of Contents
Operations and Maintenance Manual
Chapter 1 - Section 1
Bridge Description

1.	General _____	1
2.	Major Components _____	2
	A. Rotunda Assembly _____	2
	B. Tunnels _____	4
	C. Wheel Bogie Assembly _____	7
	D. Lift Column Assembly _____	9
	E. Cab Assembly _____	10
3.	Functional Description _____	14
	A. Bridge Lift System _____	14
	B. Horizontal Drive System _____	14
4.	Electrical System Description _____	15
	A. Functional Description _____	15



List of Figures
Operations and Maintenance Manual
Chapter 1 - Section 1
Bridge Description

Figure 1:1-1 — Passenger Boarding Bridge _____ 1



OPERATION AND MAINTENANCE MANUAL
CHAPTER 1 SECTION 1
BRIDGE DESCRIPTION

1. General

The Thyssen Stearns Ramp Drive Passenger Boarding Bridge (Figure 1:1-1), referred to as the bridge, provides a convenient, weather-protected walkway between the airport terminal building and commercial aircraft for enplaning and deplaning airline passengers. The bridge protects passengers from weather; aircraft engine blast; noise; and flying debris. It also separates the ground crew and external aircraft equipment from the passengers. The bridge may have two or three tunnels with a three tunnel bridge shown.

The bridge can be maneuvered on the ramp within its area of operation. The bridge can be extended or retracted due to the telescopic design of the tunnels. The bridge can be raised or lowered simultaneously with the extension, retraction, and movement on the ramp.

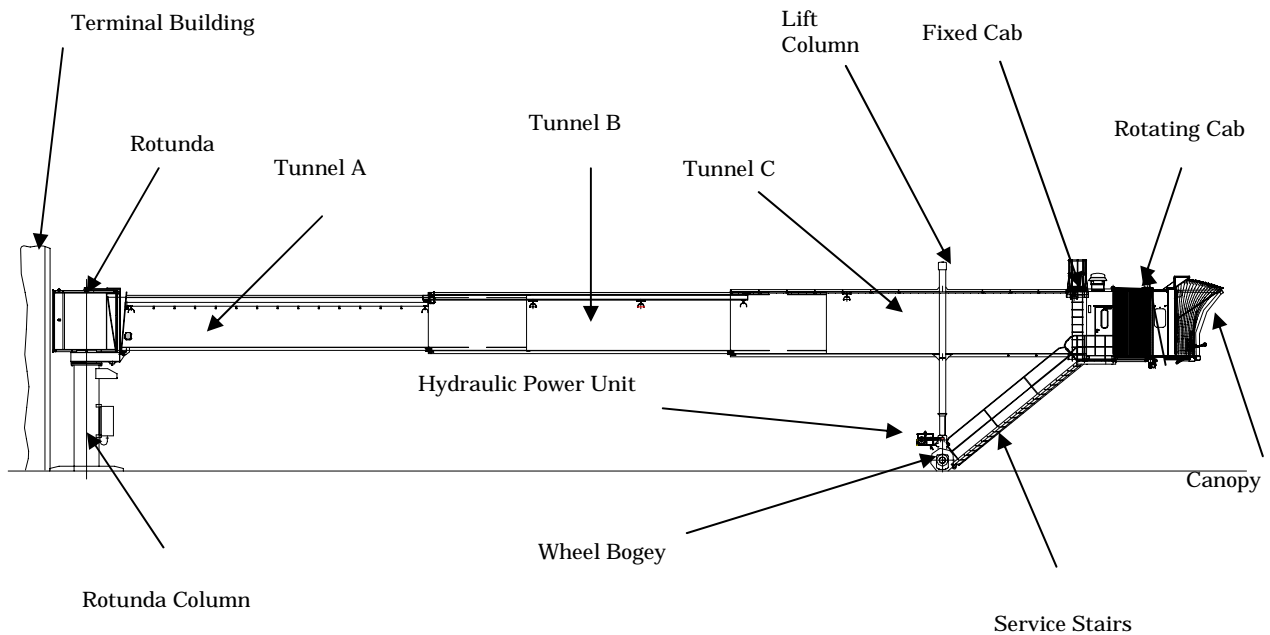


Figure 1:1-1 — Passenger Boarding Bridge



2. Major Components

A. Rotunda Assembly

The rotunda assembly consists of an entry corridor, a rotunda, and a support column. It serves as the terminal end pivot for all vertical and horizontal motion. It connects the bridge tunnels to the terminal building or to a fixed walkway. The rotunda is supported by and pivots on the rotunda column that is secured to the ramp. In operation, the rotunda floor, ceiling, entry corridor, and wall panel next to the terminal remain stationary. A rigid frame connected to the tunnel rotates about the rotunda column on a turntable bearing. Flexible roller curtain walls provide a weather seal between the stationary frame and tunnel section as the bridge swings into the desired position.

(1) Entry Corridor

The entry corridor is the transitional interface between the rotunda and the terminal building. The entry corridor design permits the installation of flexible weather seals and a threshold at the face of the terminal building.

(2) Rotunda Interior

The rotunda floor, ceiling, and side walls form the fixed part of the rotunda. The support frame, tunnel support, and rotunda support frame form the movable part of the rotunda. The floor of the rotunda remains stationary and level at all times, providing a smooth transition between the terminal and telescoping tunnels. Flexible seals provide weather protection between the rotunda and the hinged telescoping tunnels.

The rotunda interior is finished with coil coated ceiling panels, overhead fluorescent light fixture, auto level alarm buzzer, three way wall light switch and a 20 amp, GFCI, 120 electrical duplex wall receptacle. The three way light switch controls lights in the rotunda (and walkway, if present), tunnels and fixed cab.

As the bridge rotates to the desired swing angle, roller slat curtain walls are provided to completely enclose the circular rotunda. The roller walls are mounted on their own spring roller drum on the turntable rotunda support frame. The drum is mounted on the support frame using a lifetime lubricated deep groove ball flange bearing. These guide rollers, which extend along the total length of the roller curtains, maintain a constant gap width to the interior-cladding panel.

During rotation movements, one roller curtain is wound up on its spring-loaded drum, while the other winds out. Inside the drum,



spring tension ensures that the roller curtain remains tensioned, independently of the curtains rolled in or out status. Both springs are connected with a restretchable chain that supports the winding in and out of the roller walls.

(3) Rotunda Column

The rotunda column supports the rotunda and provides the point around which the rotunda pivots during operation. The rotunda column is secured to the ramp by anchor bolts embedded in a concrete foundation. All loads of the bridge are transferred to the foundation by means of the column. Power to the bridge is obtained from an external power supply. The external power is routed to a main power distribution switch mounted in a lockable enclosure on the rotunda column. Refer to Appendix D for specific information on this switch.

(4) Swing Limit Switches

The horizontal radial movements of the bridge around the rotunda are controlled using left and right limit switches. When the first magnetic limit switch is activated, the bridge goes into a slow down travel mode. This magnetic limit switch is set when the bridge is installed based upon specific airport configuration. When this limit switch is activated, movement of the bridge is slowed to about 1/4 speed.

At the end of the slow down range, a second magnetic limit switch is activated, stopping the drive system in the relevant direction of travel.

A mechanical safety limit switch operates if the second magnetic switch should fail. This mechanical switch turns off the power supply independent of the Programmable Logic Controller. If the mechanical switch is activated, then maintenance must be called to reset the safety limit and move the bridge off the swing limit.



B. Tunnels

The Thyssen Stearns Bridge is composed of two, telescoping welded steel tunnels. The combination of two tunnels of various lengths permits the bridge to serve a wide variety of aircraft and airport terminal layouts. The tunnels extend or retract on a system of rollers. A three-tunnel bridge is also available.

The first tunnel (Tunnel A) is flexibly linked to the rotunda support frame by means of a maintenance-free spherical plain ball bearing. This link and its supports are easily assessed from outside the bridge.

(1) Designation and Construction

Starting from the rotunda, tunnel sections are designated Tunnel A and Tunnel B. Tunnel A has the smallest width and height while Tunnel B has the larger width and height. Each tunnel is composed of roof, floor, and wall panels. Materials used are galvanealed steel sheets, steel angle and rectangular steel tubing.

 **NOTE:** *Three-tunnel bridges have an additional tunnel designated as Tunnel C.*

The tunnels are rectangular in cross-section formed to provide the required structural strength while presenting a flat wall exterior appearance. Interior gutters are provided on each side of the floor in Tunnel B (and for three-tunnel bridges, Tunnel C). The gutters collect and divert water run off from Tunnel A and Tunnel B, respectively.

(2) Interior Lighting

Ceiling mounted fixtures containing fluorescent lights illuminate the tunnels. A three-way wall switch in the rotunda (or walkway, if present) and fixed cab control the tunnel lights.

(3) Tunnel Rollers and Stops

The corners of each tunnel are constructed with steel angles. The tunnels are horizontally and vertically guided by roller units on the tunnel corner angles. The bearings on these roller units are readily accessible from inside or outside. The telescoping feature of the tunnel is accomplished by using a system of upper and lower roller assemblies that bear against those angles. Positive mechanical stops are provided to prohibit over extension and over retraction.

(4) Ramps

Floor ramps are built in to the cab end of Tunnel A to span the height differential to the next tunnel. The slopes of these ramps are less than three degrees relative to the floor of the tunnels.



 **NOTE:** *Three-tunnel bridges have a ramp between Tunnel B and Tunnel C.*

(5) Tunnel Equalizer Cables

Two steel cables are used to regulate the tunnel movements on Three Tunnel bridges. These cables bring about a controlled, simultaneous tunnel movement when the bridge is extended or retracted. Two tunnel bridges do not have Tunnel Equalizer Cables.

(6) Electrical Cable Routing

A telescopic cable trolley system is arranged on the right side along the telescopic tunnels. The electric lines for the power supply, as well as for the signal, control, and telephone lines, are directed by this cable trolley system to the last tunnel.

(7) Interiors

The interior of each tunnel is finished with a flat steel floor suitable for applying a floor covering per customer preferences. Rubber matting is laid over the steel floor in the cab areas to provide an attractive and slip resistant surface. The ceiling and tunnel walls are finished with panels with a baked on enamel finish. Interior lighting is provided using recessed dual lamp fluorescent fixtures.

(8) Extend/Retract Limit Switches

Before the mechanical limits are reached, the drive control system is switched to slowdown speed with the first magnetic limit switch. When the second magnetic switch is activated, the drive, for the relevant direction of travel, is turned off. A mechanical safety limit switch operates in the case of failure of the second magnetic limit switch.



(9) Slope Limits

A limit switch prevents excessive slope up or slope down conditions. The limit switch operating range is set when the bridge is installed. The maximum limit is set at the end of either the upper or lower limit range. When either position is reached, the limit switch is activated and switches off the main drive and blocks the elevation drive in the relevant direction. The slope limit switch has a secondary stage for the relevant direction, that if activated, removes power from the bridge. Further operation of the bridge is possible only by authorized personnel.



C. Wheel Bogie Assembly

A structural steel tubular frame weldment is used to mount the wheel and tire units, and the horizontal drive components. The drive unit is connected to the elevation unit by way of a bearing assembly. The bearing assembly takes over the static loads and allows a problem-free rotation of the drive unit. It has lifetime lubrication and is equipped for regreasing.

(1) Horizontal Drive and Steering

Each wheel is equipped with its own complete drive assembly consisting of an electromotor and wheel hub gearing that is attached to the drive unit frame. The drive wheel is directly flanged onto the wheel hub gear. A two-pole asynchronous current induction motor with a spring pressure brake is directly flanged to the planetary gear. The motor is surface-cooled and is not equipped with its own fan. It is designed for short-time service. A temperature switch is integrated into the motor winding for overload protection.

When driving straight ahead, the speed of both AC motors is synchronous. Each motor has its own variable frequency speed controller. When turning, the PLC monitors any revolution differences and adjusts the speed of the wheels to either turn left or right. The variable speed controllers also provide for dynamic braking. For turning on the spot, the wheels are counter rotated. The motors have a built in electrically operated disk brake that securely brakes the drive unit after it has been switched off. This disk brake prevents any movement of the bridge while in the service or park position. In case of a loss of power, the disk brake can be loosened by hand to permit towing of the bridge.

A magnetic limit switch for each direction limits the rotation of the wheels. When the wheels reach about 90 degrees to the left or right, the magnetic limit switch turns off the drive in the ordered direction and switches on the opposite direction until the magnetic limit switch is not operated any more. In the event of a failure of the magnetic switch, a security end switch turns off power to the drive motor in the ordered direction and turns on the drive in the opposite direction.



(2) Wheel Position Encoder Assembly

Transducers are provided on the wheel bogie and under the cab to actuate the wheel position indicator located on the bridge control panel in the cab. The wheel position indicator indicates the position of the wheels with respect to the operator, regardless of the cab position.



D. Lift Column Assembly

(1) Columns

Telescoping tubular steel columns house the lift cylinders that raise and lower the bridge to the desired position. The lift column and crossmember/trunnion are connected through a turntable bearing. The lift columns are mounted to the crossmember by bolts.

(2) Height Indicator Assembly

An ultrasonic measuring instrument is mounted under the rotating cab. Information from this device is transmitted to the control panel where they show the approximate height of the bridge in relation to the ground.

(3) Hydraulic Power Unit

The hydraulic power unit mounts to the crossmember. It is a self-contained module with flexible hose connections to the hydraulic lift cylinders. It consists of a 45-gallon reservoir, 7.5-horsepower, 3-phase electric motor adapter, and a gear pump that supplies pressurized hydraulic fluid through directional control valves.

(4) Power Distribution Panel

A power distribution panel is located on the crossmember to provide a termination point for all electrical connections between the wheel bogie area and the bridge. A 20-amp, GFCI duplex receptacle is also provided for maintenance purposes.

(5) External Floodlight

An external floodlight located under the fixed cab provides illumination for the wheel bogie area. The control for this floodlight is mounted on the control panel.



E. Cab Assembly

The cab assembly is manufactured as two components, a fixed portion and a rotating portion. The cab assembly has the following subcomponents:

(1) Fixed Cab Assembly

The fixed cab assembly is a round vestibule attached to the last tunnel section. It provides a rigid platform for the rotating cab to pivot about. The Tunnel ceiling flows into the fixed cab. A three-way wall light switch controls the lights in the rotunda, tunnels and rotating cab. The roller slat curtain walls provide an attractive interior wall as well as a weather seal between the fixed and rotating cab. A series of small window panels for visibility and light have been incorporated into the slats.

A power panel is mounted on the right side of the fixed cab with access from inside the fixed cab. Components housed in the cabinet sub-panel include 3-pole contactors for the hydraulic pump motor starter, cab rotate motor, variable frequency drive controllers, incoming and outgoing wire terminations and circuit breakers for the various motor, lighting and control circuits. Refer to Appendix E for specific information on this panel.

(2) Service Access

A service door, landing and stair leading to the apron area are located on the side of the fixed cab. They provide access between the bridge and apron for authorized personnel.

a. Service Door

A steel constructed, hollow core door is provided for access to the apron. The door has a heavy-duty closer, a wire glass window, a stainless steel kick plate, and is equipped with a lockset. The door opens outward onto a grip strut landing.



b. Service Landing

The service landing is level with the cab floor and is manufactured with open mesh galvanized steel grating. The platform is illuminated with an incandescent light located near the door. Protective handrails are attached to the platform.

c. Service Stair

The service stair is equipped with self-adjusting risers and open mesh galvanized steel treads. The stairs will maintain a level tread attitude as the bridge changes elevation. Casters, attached to the bottom tread, let the service stairs move vertically and horizontally with the bridge. Handrails are attached to both sides of the stairway.

(3) Rotating Cab Assembly

The rotating cab assembly contains the control console. The rotating cab rotates about the circular fixed cab to achieve the best alignment with aircraft. Windows are provided in front of and on both sides of the control console to give the bridge operator a view of the parked aircraft. View light panels, for visibility, are also incorporated into the curtain slats on both sides of the cab.

The cab is designed to rotate 135 degrees (92 degrees left and 40 degrees right). The cab rotation drive consists of an AC gear motor and a chain drive. The roller chain is located in a guide channel, looped about the floor of the rotating cabin, and is adjustable at each end. Over rotation is prevented by a mechanical switch that when activated switches over power in the ordered direction. Mechanical stops are present in the event of a failure of the magnetic switch. The gear motor is equipped with a magnetic disk spring pressure brake and is protected against overloading by a security switch.

The sides of the rotating cab are equipped with roller curtains. The roller curtain is mounted on a spring drum. The drum is mounted on the support frame by means of a lifetime lubricated, deep groove, ball flange bearing. During rotation one roller curtain is wound up on its spring-loaded drum while the other curtain winds out. Inside the drum, a tension spring guarantee that the roller curtains remain tensioned, independently of the curtains rolled in or out status. Both springs are connected with a restretchable chain that supports the winding in and out of the roller walls. The chain can be retensioned with the help of a chain tension pinion. The ball



flange bearing extends along the total length of the roller curtains and maintains a constant gap width to the interior panel.

(4) Control Console

The control console is located at the aircraft end of the bridge on the left side of the rotating cab. It provides the operator with all necessary controls required to operate the bridge. Controls and indicators are arranged to provide convenient access for bridge operators. The controls are organized into functional groups. The console is oriented to provide the operator with a full view of the aircraft during maneuvering and docking operations. Its location protects it from the outside environment and discourages passenger interference.

A 24 volt power supply and the programmable controller, both housed in the PP1 cabinet, along with the control switches, push-buttons, pilot lights, key operated switches and height and wheel indicators, control the main drive systems. The control console also contains a switch that operates the external floodlights.

(5) Weather Door

An electric roll-up door is provided as standard equipment and is located in the rotating cab assembly. It is operated from a pushbutton on the control console. The door should normally be closed to protect the interior of the bridge when not in use. An overhead weatherproof light above the weather door illuminates the rotating cab floor outside the weather door.

If your bridge does not have the standard electrically operated weather door, refer to the Appendix I. There you will find a description of the optional weather door installed on your bridge and any special operating or maintenance instructions.

(6) Canopy Closure

The bridge has a folded bellows canopy to provide a weatherseal against the aircraft. The canopy provides cover to passengers entering or leaving the aircraft. This type of closure positions the canopy against the aircraft using its own weight and a small force exerted by two independent struts. Operating controls are located on the control console.



(7) Auto Level

The bridge is equipped with an auto leveler device. The device allows the bridge to adjust to small changes in aircraft elevation that occur during loading and unloading operations. The auto leveler is located on the right side of the cab, in full view of the operator. The device consists of a linear actuator, which deploys an arm and fuselage contact wheel when the bridge operator places the bridge in the “Auto” mode.

The operator places the key switch in the “Auto” position after the bridge has been docked to the aircraft. The auto level system is linked electronically to the hydraulic power unit that raises and lowers the bridge. The position of the bridge is mechanically referenced with the aircraft/bridge relative position when the auto level mode is selected. The auto level system monitors any change of aircraft height and automatically adjusts the elevation of the bridge to any aircraft movements. The auto level system has audible and visual malfunction warnings.

(8) Proximity Detector

An infrared detector is mounted on the forward face of the cab. This detector slows the bridge down as it nears the aircraft. Its purpose is to slow the bridge down as it approaches the aircraft thus avoiding any hard collision between the bridge and the aircraft. It does not stop the bridge. The detection limit is adjustable.

(9) Cab Bumper

Limit switches are mounted on both ends of the cab bumper. They are activated when the bumper touches the aircraft. Activation of this limit switch inhibits any further relevant movement of the bridge. These limit switches are in place as a safety feature and are not to be relied upon for normal operation of the bridge.



3. **Functional Description**

A. **Bridge Lift System**

Depressing either the Vertical “Raise” or Vertical “Lower” pushbuttons on the control panel causes the pump to start and also energizes the appropriate solenoid on the lift cylinder directional control valve. This causes the valve to shift, directing fluid to raise or lower the lift cylinder as required.

B. **Horizontal Drive System**

A joystick is used to steer the bridge to the left, right, forward, or reverse. Movement of the joystick activates the horizontal drive system. The speed of travel is directly proportional to the joystick throw. Movement of the joystick sends a signal to the variable frequency drive controllers, which sends a signal to each wheel motor to drive the bridge. Note that the bridge will move in the direction indicated on the wheel bogie meter. This meter is compensated for both wheel bogie rotation and cab rotation. The wheel bogie can rotate a maximum of 180°, 90° to the left and 90° to the right.



4. Electrical System Description

Power to the bridge is provided by an external power source routed through a main disconnect switch located in a lockable enclosure mounted on the rotunda column. Lighting and control power is supplied from a control power transformer. Appendix D contains the electrical schematics.

WARNING WHEN PERFORMING ELECTRICAL MAINTENANCE OR REPAIR, POWER MUST BE REMOVED AT THE MAIN POWER DISCONNECT SWITCH LOCATED ON THE ROTUNDA COLUMN IN A LOCKABLE ENCLOSURE. FAILURE TO REMOVE ELECTRICAL POWER AT THE MAIN POWER DISCONNECT SWITCH COULD RESULT IN SERIOUS PERSONAL INJURY.



A. Functional Description

See the electrical schematics located in Appendix D.



This page left blank.



PASSENGER BOARDING BRIDGE (PBB) PAINTING

RFP AVIA 24-17

Pre-Proposal Meeting
February 13, 2024 at 10:00 AM EDT

AGENDA

- Housekeeping Items
- Introductions and Attendance
- Submission Requirements
- Bid Format (Required Forms)
- Selection Criteria
- Addenda and Proposer Questions
- eBuilder Bid Portal
- CBI Program Requirements
- Scope of work
- Site Visit
- Security Requirements
- Closing

HOUSEKEEPING ITEMS

- The purpose of this conference is to present information found in the Request for Proposal (RFP).
- RFP clarification questions will only be accepted and answered by submission through the e-Builder e-bidding portal's Q&A board. Answers to be provided via addendum.
- You may email andrew.buckner@cltairport.com with questions regarding the operation of e-Builder.
- Today's presentation will be included with addendum.
- Vendor registration and related information:
<https://www.charlottenc.gov/Growth-and-Development/Doing-Business/Vendor-Registration>

INTRODUCTIONS AND ATTENDANCE

- Presenters:
 - Drew Buckner– RFP Manager
 - Andy Williams– Project Manager
 - Marcus Choi– Business Diversity & Development Specialist
 - Aireyanna Kennedy- Security Construction Projects Manager
- Meeting Attendance:
 - Please be sure to capture your attendance in sign-in sheet .

SUBMISSION REQUIREMENTS

Submission Requirements:

- Companies must submit ONE (1) original and complete proposal in searchable Adobe Acrobat .pdf format, signed in ink, or digitally signed.
- Proposals must have standard text no smaller than twelve (12) points.
- Please combine all documents into one submission packet.
- Please name your file using twenty (20) characters or less.
- Please share username and password among co-workers.
- Proposals must be submitted through the eBuilder Bid Portal, using the link provided within the RFP document. CLT will not accept submissions through any other means (i.e. – mailed, faxed, emailed, hand delivered, etc.)

Proposal Submission Deadline:

- February 26, 2024, at 10:00 AM EDT (per CLT's clock)
- The bid portal will close promptly at 10:00 AM EDT. **Late submissions will not be accepted.**
- Please notify Drew Buckner via email andrew.buckner@cltairport.com if you experience issues using the bid portal. All other questions must be submitted through the Q&A link in the bid portal.
- DO NOT wait until the last minute!

Target Dates:

- Council Approval – April 22, 2024
- Start Date – June 10, 2024



PROPOSAL FORMAT (REQUIRED FORMS)

Proposals shall consist of the following forms:

- Form 1, Proposal Form
- Form 2, Qualifications and Proposer Requirements
- Form 3, Nondiscrimination Certification
- Form 4, CBI Program Requirements
- Form 5, Confidential Information
- Form 6, Pricing Worksheet

All required forms must be completed, signed and uploaded

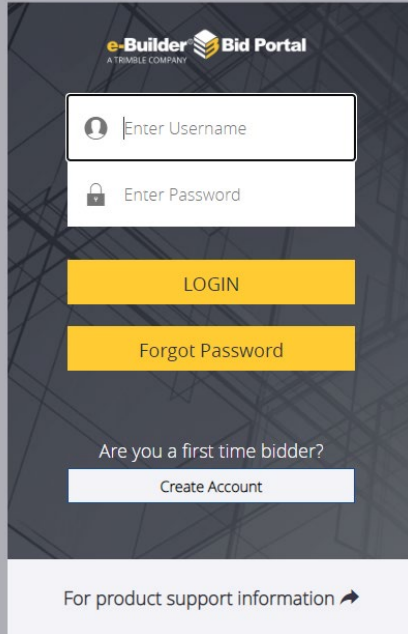
SELECTION CRITERIA

Experience	CLT will evaluate the Proposer based on its ability to meet the Experience requirements as set forth in the Specifications.
Operations Plan	CLT will evaluate the Proposers ability to meet the requirements set forth in the Specifications as detailed in the Proposer's Operation Plan.
Staffing Plan	CLT will consider the plan to provide necessary staffing and the experience of the individual team members proposed to provide the Work.
Compensation	CLT will evaluate the Proposer on the overall compensation proposed related to the provision of the Work. compensation proposed related to the provision of the Work.

ADDENDA AND PROPOSER QUESTIONS

- All addenda will be posted to the e-Builder bid portal, the City of Charlotte website and broadcast through Public Input.
- Questions and Answers will be included in addenda for the benefit of all proposers.
- Questions must be submitted in written form through the eBuilder Bid Portal Q&A board.
- Deadline for submitting written questions will be on February 15, 2024, at 5:30 PM EDT.
- Answers via addendum will be posted no later than February 20, 2024, at 5:30 PM EDT

EBUILDER BID PORTAL



The screenshot shows the login interface for the eBuilder Bid Portal. At the top, the logo reads "e-Builder Bid Portal" with "A TRIMBLE COMPANY" underneath. Below the logo are two input fields: "Enter Username" with a person icon and "Enter Password" with a lock icon. There are two yellow buttons: "LOGIN" and "Forgot Password". Below these is a link for "Are you a first time bidder?" with a "Create Account" button. At the bottom, there is a link for "For product support information" with a right-pointing arrow.

- Please use the link provided in the RFP to access the eBuilder Bid Portal.
- **PLEASE NOTE:** The eBuilder link is the “Invitation Key”.
- If this will be your first-time logging into the eBuilder bid portal, you will need to create login credentials.
- Use Chrome or Firefox as your browser when accessing the bid portal (do not use Internet Explorer).

EBUILDER BID PORTAL

Charlotte Douglas International Airport (CLT) / Solicitations 020 Facilities

↳ RFP AVIA 24-17: Passenger Boarding Bridge Painting

Status

Bid Package Open
Bidding Pending
Response Submitted No

20 Days 21 Hours 57 Minutes Left

Due on 02.26.2024 at 10:00 AM
(GMT-05:00) Eastern Time (US & Canada)

Summary

0.00

Base Bid Total 0.00
Complete Exterior Painting Priced Per Bridge Total 0.00

Package Invitation

Response Form

Q&A Board

Accept

Decline


Bid Info




Invitation Documents (1)

Addenda

Hide All | Show All

Locate proposal documents here

Click this icon  to download files. Clicking the icon next to a folder will download all files and subfolders within it.

File / Folder Name	Uploaded on	File Size
  Solicitation Documents (1)	01.16.2024 1:38 PM	
 RFP AVIA 24-17 PBB Painting Solicitation.pdf Version 1	01.26.2024 10:19 AM	412.37 KB



EBuilder Bid Portal

Charlotte Douglas International Airport (CLT) / Solicitations 020 Facilities

↳ RFP AVIA 24-17: Passenger Boarding Bridge Painting

Status

Bid Package	Open
Bidding	Pending
Response Submitted	No

20 Days 21 Hours 57 Minutes Left

Due on 02.26.2024 at 10:00 AM
(GMT-05:00) Eastern Time (US & Canada)

Summary

0.00

Base Bid Total	0.00
Complete Exterior Painting Priced Per Bridge Total	0.00

...

Package Invitation

Response Form

Q&A Board

Submit Question

Export

View List

View All

Submit questions here

Note: The date and time are shown in the bid time zone.

View	Subject	Questionee	Date & Time
------	---------	------------	-------------

EBuilder Bid Portal

Charlotte Douglas International Airport (CLT) / Solicitations 020 Facilities

↳ RFP AVIA 24-17: Passenger Boarding Bridge Painting

Status

Bid Package Open
Bidding Pending
Response Submitted No

20 Days 21 Hours 57 Minutes Left

Due on 02.26.2024 at 10:00 AM
(GMT-05:00) Eastern Time (US & Canada)

Summary

0.00

Base Bid Total 0.00
Complete Exterior Painting Priced Per Bridge Total 0.00

Package Invitation

Response Form

Q&A Board

Submit

STEP 1: Bid Form

STEP 2: Response Documents

STEP 3: Additional Info

Complete Exterior Painting Priced Per Bridge

#	Description	Spec Reference	Part Number	Quantity	UoM	Unit Cost	Total Cost
1	Complete Exterior prep and painting of Thyssen 2 tunnel Bridge per specs (Max PBB Length: 178 feet long)			1.0000	L5	<input type="text"/>	
2	Complete Exterior prep and painting of Thyssen 3 tunnel Bridge per specs (Max PBB Length: 165 feet long)			1.0000	L5	<input type="text"/>	
3	Complete Exterior prep and painting of JBT 2 Tunnel Bridge per specs (Max PBB Length: 111 feet long)			1.0000	L5	<input type="text"/>	
4	Complete Exterior prep and painting of JBT / FMC 3 Tunnel Bridge per specs (Max PBB Length: 141 feet long)			1.0000	L5	<input type="text"/>	
5	Complete Exterior prep and painting of Dew 2 Tunnel Bridge per specs (Max PBB Length: 100 feet long)			1.0000	L5	<input type="text"/>	

Complete Exterior Painting Priced Per Bridge Subtotal 0.00

Enter pricing here



EBUILDER BID PORTAL

Charlotte Douglas International Airport (CLT) / Solicitations 020 Facilities

↳ RFP AVIA 24-17: Passenger Boarding Bridge Painting

Status

Bid Package	Open
Bidding	Pending
Response Submitted	No

20 Days 21 Hours 57 Minutes Left

Due on 02.26.2024 at 10:00 AM
(GMT-05:00) Eastern Time (US & Canada)

Summary

0.00

Base Bid Total	0.00
Complete Exterior Painting Priced Per Bridge Total	0.00

Package Invitation

Response Form

Q&A Board

Submit



STEP 1: Bid Form

STEP 2: Response Documents

STEP 3: Additional Info

Upload submission packet here

⚠ There are no supporting documents attached to this bid.

Please provide response documents

Upload Additional Files

Drag and drop files here to upload, or browse.



Reminder:

- Upload as one (1) file
- File name 20 characters or less
- Don't wait until the last minute!



Charlotte Business Inclusion (CBI)

The City has set a CBI goal for this Contract of zero percent (0%).

Minority, Women and Small Business Enterprises (MWSBEs).

Required Proposal Form

- Form 3 Non-Discrimination Certification
- Form 4 Charlotte Business Inclusion Program Requirements Form

This Contract may be subject to the terms and conditions of the City's Charlotte Business INclusion (CBI) Program regarding subcontracting opportunities that may arise during the term of the Contract.

The CBI Program can be found at: www.charlottebusinessinclusion.com

Search for MWSBE firms: <http://charlotte.diversitycompliance.com>



SCOPE SUMMARY

Charlotte Douglas International Airport (“Airport”) is seeking a Company to perform painting of passenger boarding bridges. The Company is responsible for furnishing all labor, equipment, tools and use of equipment necessary for the surface preparation and painting of the entire interior and exterior surface of the passenger boarding bridges. The Airport reserves the right to request the company to provide partial painting or complete surface painting for the passenger boarding bridge during the contract term.

SCOPE OF WORK – HIGH LEVEL

- Follow safe work practices.
- Proper Prep – hot work permit required.
- Paint provided by CLT – unless special circumstance applies (paint spec in RFP)
- Work hours – multiple shifts as needed.
- Scheduling – advance notice, weather delays and contingency dates.
- SOW details found in RFP.

SITE VISIT

- Round-trip shuttle service provided from/to CLT Center.
- Do not bring bags.
- A valid (unexpired), government-issued photo ID required **ON YOUR PERSON** for the **ENTIRE** duration.
- All attendees will get visitor's pass.
- We will go through TSA screening.
- Always stay with staff escorts.
- Photos only in authorized areas.
- All questions submitted in writing via e-Builder bid portal Q&A board.
- If traveling after the site visit, you will need to exit and re-enter through checkpoint.

AIRPORT SECURITY REQUIREMENTS

Security
Program

Airport
Badging
Requirements

Please see requirements in solicitation
packet and go to
www.cltairport.com/business/credentialing
for all information regarding CLT's Security
Program, Policies and Procedures, FAQs,
etc.



THANK YOU!



CLT 