

# **SECTION VII**

## **INTERIOR EQUIPMENT**

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# SECTION VII

## INTERIOR EQUIPMENT

### COCKPIT DESCRIPTION

The cockpit (Figure 7-1) is configured in a standard side-by-side seating arrangement with a center pedestal mounted between the seats. The instrument panel is installed with an 18° forward cant which provides an ergonomic view of the panel by either crew member. The throttle quadrant is located between the center pedestal and the instrument panel. The instrument panel, center pedestal and throttle quadrant are easily accessible by both pilots.

The dual primary flight controls consist of a textured surface control wheel mounted to a control column and an adjustable set of rudder pedals. The control wheel and column operate with the normal push-pull (pitch) and left/right rotation (roll) input commands. The control wheels have a trim switch, microphone switch and a Control Wheel Master Switch (MSW) installed on the outboard side of the wheel. A checklist line advance switch, a transponder switch and a Touch Control Steering (TCS) switch are installed on the inboard side of the control wheels. The pilot's control wheel is equipped with an aileron (roll) disconnect lever. Each control column is equipped with an approach plate holder that will secure an entire approach plate booklet. An illuminated approach plate holder is available as an option. The left and right rudder pedals provide yaw control during flight and are electrically adjustable fore/aft for different sized pilots. The rudder pedals also control nose wheel steering and braking while the wheels are on the ground.

Secondary flight controls and thrust levers are mounted on the throttle quadrant at the forward side of the pedestal. The elevator disconnect handle, emergency gear freefall lever, flap control lever, emergency/parking brake handle and spoiler control handle are all located in the throttle quadrant. The system test control switch, pitch trim bias switch, radio control hot bus switch, rudder boost switch and clearance delivery radio are located at the forward end of the quadrant. Switches for the optional ground proximity warning system may be installed aft of the clearance delivery radio. The Multi-Function Display (MFD) joystick is located in the quadrant, aft of the thrust levers.

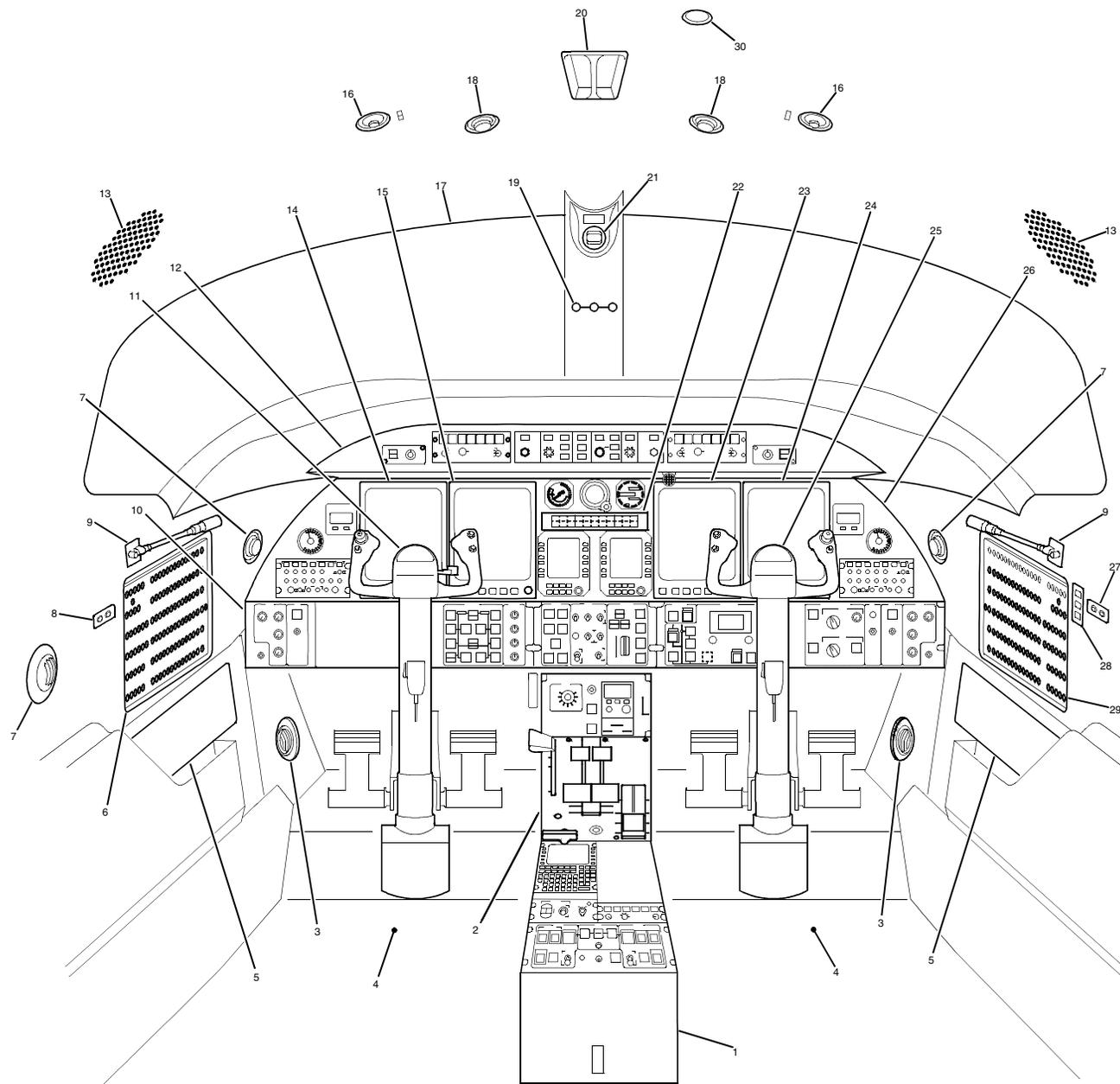
The instrument panel consists of three major horizontal tiers of instruments and controls. Within each tier, the controls for each system are grouped together on a separate panel and/or display. The glareshield panels (upper tier) provide controls for operating the flight director/autopilot and for managing information displayed on the Primary Flight Displays (PFDs), Multi-Function Display (MFD) and Multi-Function Display (MFD) and Engine Indicating and Crew Alerting System (EICAS) (EICAS) display. The main instrument panel (middle tier) provides visual displays and controls for communication/navigation, engine management and electronic flight instrument systems management. The subpanel (lower tier) provides control for several aircraft systems and for control of the lights and landing gear.

The upper tier (glareshield panel) is located immediately below the glareshield. It consists of the integrated flight guidance controller and the pilot's and copilot's Electronic Flight Instrument System (EFIS) control panels. The glareshield panels also contain the pilot's and copilot's display unit reversion panels and master warning/caution annunciator/reset switch.

The main instrument panel, in the middle tier area, is identified by four 8 x 7 inch high resolution color Cathode Ray Tube (CRT) displays. Display Units (DUs) on the pilot's side include both a Primary Flight Display (PFD) and an Engine Indicating/Crew Alerting System (EICAS). DUs on the copilot's side include a multi-function display (MFD) and a second PFD. The standby instruments (Airspeed, Attitude Indicator and Altimeter) are located between the EICAS and copilot's MFD. The Crew Warning Panel (CWP) and Radio Management Unit (RMU) displays are located below the standby instruments and between the EICAS and copilot's MFD. The angle-of-attack indicators (if installed), digital chronometers and audio control panels for both the pilot's and copilot's side are located near the outboard ends of the main instrument panel.

The pilot's subpanel contains the reversion control panel, electrical control panel and the Attitude Heading Reference System (AHRS) control for AHRS 1. It also contains the pilot's side crew lighting panel and rudder pedal adjustment switch. The copilot's subpanel contains the cabin pressurization and oxygen control panel, the environmental control panel and cockpit voice recorder control panel. It also contains the AHRS control for AHRS 2, the crew lighting panel and the rudder pedal adjustment switch. The anti-ice panel, aircraft light control panel and landing gear/hydraulic panel are all installed near the center of the subpanel (center switch subpanel), directly above the forward side of the throttle quadrant.

1. Pedestal
2. Throttle Quadrant
3. Air Outlet (ankle)
4. Fire Extinguisher (mounted on crew chair)
5. Smoke Goggle Storage
6. Pilot's Circuit Breaker Panel
7. Air Outlet (armrest level)
8. Pilot's Mic/Phone Jack Panel
9. Map Light
10. Pilot's and Copilot's Subpanels
11. Pilot's Control Column & Wheel
12. Glareshield Panels
13. Cockpit Speakers
14. Pilot's Primary Flight Display (PFD) (DU-1)
15. Engine Indicating and Crew Alerting System (EICAS) (DU-2)
16. Dome Light
17. Sunvisor
18. Overhead Air Outlet
19. Eye Reference Locator
20. Assist Handle
21. Magnetic Compass
22. Crew Warning Panel
23. Multi-Function Display (MFD) (DU-3)
24. Copilot's Primary Flight Display (PFD) (DU-4)
25. Copilot's Control Column & Wheel
26. Instrument Panel
27. Copilot's Mic/Phone Jack Panel
28. Cabin Lighting Control
29. Copilot's Circuit Breaking Panel
30. Access for hanging plumb bob



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**GENERAL ARRANGEMENT — COCKPIT  
Figure 7-1**



The pedestal is typically equipped with a single flight management system (FMS), a trim control panel, a weather radar control panel and an engine/fuel control panel. Optional equipment in the pedestal may include a second (dual) FMS, a high frequency comm control head, a SELCAL control panel, an Auxiliary Power Unit (APU) control panel, an Emergency Locator Transmitter (ELT) switch, and a 12-vdc cigarette lighter.

An inflatable harness type oxygen mask with an integral microphone is stored on the outboard side of each crew seat. Smoke goggles are stored in the left and right lower sidewall storage compartments. Hand-held fire extinguishers are installed on the crew seats directly behind the pilot's and copilot's legs. Life vests are stowed inside plastic holders which are mounted to cabinets located directly behind each crew seat.

A magnetic compass is installed on the windshield center post near the top of the windshield. The headliner houses a dome light, air outlets, an assist handle and an access for a plumb bob location for leveling the aircraft. An optional sunvisor may also be attached to the headliner. No switches, instruments or placards are located overhead. Circuit breaker panels are located on the pilot and copilot upper sidewall panels. A flexible map light is attached to the upper sidewall above the circuit breaker panel on each side. Cabin and spot light control switches are located adjacent to the copilot's circuit breaker panel. Flashlights are installed on the cabinet behind each crew seat. Air outlets are installed in the cockpit sidewall panels and lower forward cockpit side panels. Storage compartments are built into the lower sidewall panels for charts and Jeppesen manuals. Drink holders are attached to the forward side of the storage compartments. Additional manual storage is provided in the left storage cabinet located behind the pilot's seat.

## **CREW SEATS**

The crew seats (Figure 7-2) are comprised of three basic structures: the seat base, the seat bottom and the seat back. The seat base is attached to and travels on the seat tracks. The seat bottom is located above the seat base and provides controls for forward/aft movement, seat height adjustment and seat back reclining adjustment. The seat back contains the lumbar adjustment control, adjustable armrests and an adjustable headrest.

The crew seats are constructed of lightweight alloys covered with foam padding and sheepskin and are equipped with a five point restraint system. The lap belts and negative-G strap are mounted to the seat bottom. The rotary buckle is attached to the outboard lap belt. The manual lock/unlock handle for the shoulder harness belts is located on the inboard side of the seat back frame.

Seat height adjustment is accomplished by pulling up on the vertical adjustment control lever located under the forward edge of the seat bottom near the outboard side of the seat. When the lever is pulled, the mechanism is unlocked and the seat will move downward under the occupant's weight. To raise the seat, remove occupant weight from the seat while pulling up on the lever. Gas cylinders will cause the seat to automatically raise up. Release the lever at the desired height to lock the seat into place.

Forward and aft adjustment of the seat is accomplished by pulling up on the fore/aft adjustment control lever located under the forward edge of the seat bottom near the inboard side of the seat. The seat can be moved by holding the control lever up, and at the same time, sliding the seat forward or aft on the seat tracks. When the desired position is obtained, the control lever can be released to lock the seat to the seat track.

The headrest may be adjusted for both angle and height. The headrest can be tilted forward to an angle of up to 60° by tilting it by hand. The headrest can also be raised up to 2 inches by lifting the headrest. The headrest can be lowered by pushing it down to the desired height.

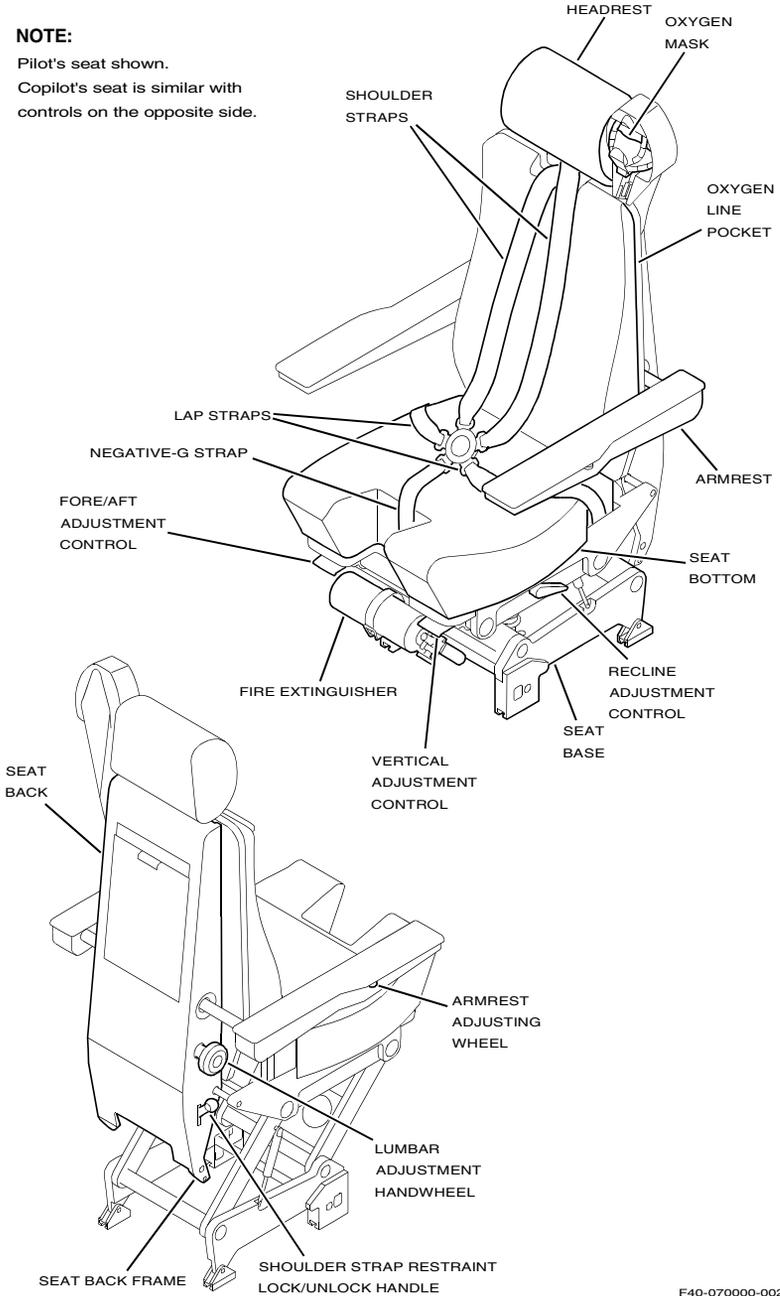
The back cushion/lumbar support is controlled by turning the fore/aft lumbar adjustment control handwheel located on the inboard side of the seat back frame. Turning the handwheel counterclockwise (as viewed looking outboard) extends the lumbar support forward. Turning the handwheel clockwise will retract the lumbar support.

The armrests are individually stowable and adjustable. Each armrest has an adjusting wheel on the underside of the armrest. To deploy the armrest, slide the armrest out from the seat back and rotate it down into position. To raise and lower the armrest position, turn the adjusting wheel on the underside of the armrest. The armrests will adjust 15 to 26°. To stow the armrests for entry and exit, lift the armrest until it is parallel with the seat back and push it in toward the seat spine.

The seat back recline angle is adjustable. The recline adjustment control lever is located on the outboard side of the crew seat bottom. Pull up on the recline control lever to release the seat back lock and lean the seat to the desired angle. The seat back can be reclined 25°. The seat back will lock in the selected position when the control lever is released.

**NOTE:**

Pilot's seat shown.  
Copilot's seat is similar with  
controls on the opposite side.



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**COCKPIT SEAT  
Figure 7-2**

A flexible oxygen hose is routed between the oxygen outlets on the left and right cabin sidewalls and the lower outboard side of each crew seat bottom. This hose provides oxygen for the oxygen mask installation adjacent to each headrest. The crew mask microphone wiring is routed with the oxygen hose through the crew seat.

## **CABIN DESCRIPTION**

The aircraft cabin is divided into three areas: the entryway galley, the passenger seating area and the lavatory/aft cabin stowage compartment. The entryway galley is located at the forward end of the cabin. The passenger seating area is located in the center of the cabin. The lavatory /aft cabin stowage compartment is located at the aft end of the cabin.

The entryway galley area begins at the cabin entry door area and extends forward to the cockpit. The entryway galley area is comprised of the left forward storage cabinet, the right forward storage closet and the right galley cabinet. The typical galley is equipped with a coffee warmer, a trash container, an ice chest and food / beverage storage and preparation equipment.

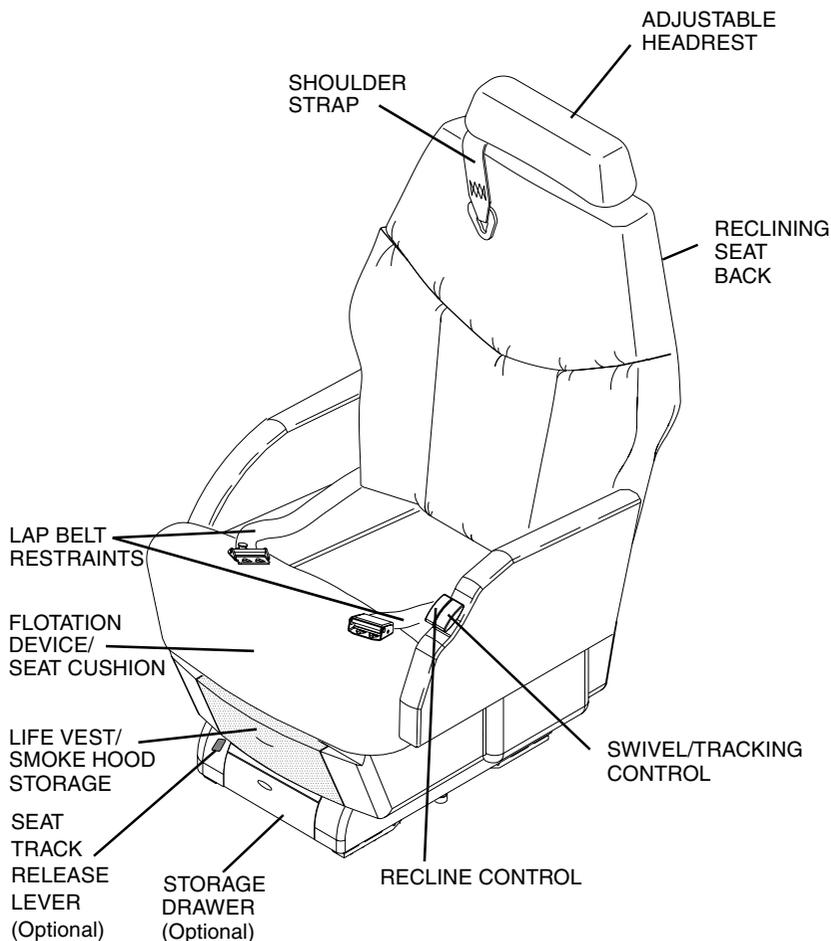
The passenger seating compartment is located aft of the cabin door entryway and extends aft to the lavatory. The typical passenger compartment has eight individual passenger seats in a two abreast configuration, with one seat on each side of a main center aisle. Individual reading lights, air outlets, and passenger oxygen masks are located in the overhead convenience panels and center headliner panels above the seats. Drinkholders, pull-out tables and lighting and entertainment control panels are built into the cabin sidewall adjacent to the seats. Optional 110-vac/60-Hz (230-vac/50-Hz) outlets may be available throughout the cabin (Refer to AC ELECTRICAL OUTLETS this section).

The lavatory is located on the aft side of a partition at the aft end of the passenger compartment, adjacent to the aft cabin stowage compartment. The partition features sliding doors between the lavatory and passenger compartment. The lavatory consists of a toilet and vanity cabinet. The toilet is located on the forward RH side of the lavatory. The vanity is located aft of the toilet. An optional lavatory has a vanity which includes a warm water wash basin.

Access to the aft cabin stowage compartment is accomplished through the lavatory at the center aisle. The aft stowage compartment is equipped with a decorative coat rod and a baggage restraining net.

**PASSENGER SEATS**

The passenger seats have a standard lap and shoulder restraint built into each seat (Figure 7-3). Dual armrests which include an articulating inboard armrest and leather covering are standard equipment.



**PASSENGER SEAT**  
**Figure 7-3**

The individual passenger seats are designed to be swiveled 360°. The seats are equipped with lateral tracking on the seat base which allows them to be located as far outboard as possible for takeoff and landing, thus maintaining maximum aisle clearance. After takeoff, the seats can be positioned inboard for increased comfort. The passenger seats can also be adjusted forward and aft on the seat base while the seat base remains stationary. These adjustments are accomplished by pulling up on the swivel control lever located at the end of the armrest. The swivel control lever is the larger of the two levers on the armrest.

Pulling up partially on the swivel/tracking control lever will release the seat to swivel, pulling the lever all the way up will allow the seat to be moved (in three directions) from side-to-side, forward/aft and in a swiveling motion. Releasing the swivel control lever will cause the seat locking mechanism to automatically lock the seat in the selected position.

The recline control lever is located at the end of the armrest, adjacent to the swivel control lever. The recline control lever is the smaller of the two levers on the end of the armrest. The seat will recline up to an 85° angle when the recline control lever is pulled up and the occupant applies weight against the seat back. The seat recline mechanism will lock in place when the recline control lever is released. To place the seat in an upright position, remove occupant weight from the seat back while pulling up on the recline lever. The mechanism will automatically raise the seat back into an upright position.

The passenger seat has an adjustable headrest installed in the seat back. The passenger headrest can be adjusted up and down by pulling it up or pushing it down with both hands. Life vests are stored in a pocket located on the forward side of each seat bottom. The seat base has proximity lights installed on the inboard side of the base.

Optional equipment may be installed on the passenger seats. An articulating outboard armrest is available that can be articulated for height. This armrest is standard equipment on the aft right passenger seat, which is situated adjacent to the right aft emergency exit. An underseat storage drawer may be incorporated into the forward end of the passenger seat. A seat track release mechanism is available which allows the entire passenger seat and seat base to be moved forward or aft along the seat tracks.

## **EMERGENCY EQUIPMENT**

### **SMOKE GOGGLES**

Smoke goggles are provided for each crew member and are stowed in the lower sidewall storage compartment. The goggles are donned if smoke or fumes are present in the aircraft.

### **HAND-HELD FIRE EXTINGUISHERS**

Two hand-held fire extinguishers are mounted on the front of each crew seat. Each cockpit fire extinguisher contains 1.25 pounds of Halon 1211.

An additional hand-held fire extinguisher may be mounted in the aft cabin, near the lavatory. The cabin fire extinguisher contains 2.5 pounds of Halon 1211.

The extinguishers incorporate a pressure gauge which indicates the state of propellant charge. If properly charged, the indicator needle will be within the green segment. When an extinguisher has been manually discharged, the indicator will be in the red area. This provides the crew with visual indication that the bottle has been partially or totally discharged. The extinguishers are rechargeable.

### **FIRST AID KIT AND CRASH AXE (IF INSTALLED)**

The first aid kit and crash axe are located in the forward right storage closet.

### **PROTECTIVE BREATHING EQUIPMENT (IF INSTALLED)**

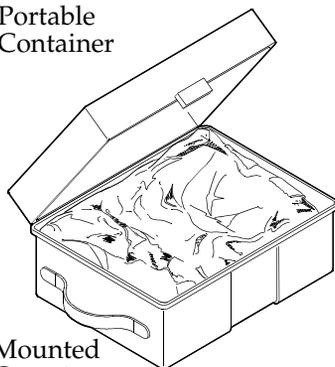
Protective Breathing Equipment (PBE) is available for a crew member to use in fighting cabin fires. The PBE is designed to protect the user's eyes and respiratory system from the harmful atmosphere which may be generated by a cabin fire. The PBE is a hood with a visor which is placed over the head and seals around the neck. An oxygen generating canister provides breathing oxygen for the user. The PBE is vacuum sealed in a bag and stored in a box accessible to the crew. The PBE is a throw-away unit that must be replaced whenever the vacuum seal is broken. It is imperative that the vacuum seal be maintained since the oxygen-generating chemicals react with moisture.

Duration of oxygen production is nominally 15 minutes depending upon the work rate and size of the user. Useful life of a sealed PBE is 10 years from the date of manufacture.

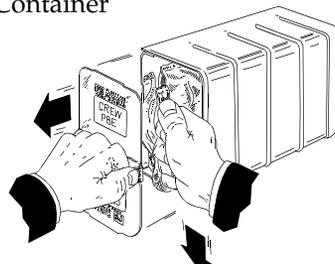
**NORMAL OPERATION****Donning the PBE:**

There are two available carriers for the PBE. A portable container stored in a cabinet behind the cockpit or a mounted container (normally mounted to the aft side of the pedestal).

1. Remove mask from container.
  - a. To open the portable container, lift the single latch on the cover and lift. Remove sealed bag from the container.

**Portable  
Container**

- b. On the mounted container, grasp the red access handle on the protective container firmly and pull forcibly to disengage the cover. When the cover is removed from the container, immediately drop it. (The vacuum sealed bag does not need to be removed from the container to open.) The packaged unit may be removed from the stowage container prior to opening and carried to a remote location for use.

**Mounted  
Container****STEP 1**

2. To remove the PBE from the vacuum sealed bag, locate the red I.D. tag and pull sharply to tear open the vacuum sealed bag. Reach into the opened vacuum-sealed bag and firmly grasp the PBE. Pull the PBE straight out of the bag. If necessary hold the bag with the opposite hand.

**STEP 2**

- Place both hands inside the neckseal opening with palms facing each other and PBE visor facing downward with the oxygen generating canister resting on the tip of the hands.



- With the top of the head bent forward, guide the PBE neckseal over the top of the head and down over the face using the hands to shield the face and glasses from the oronasal mask cone.



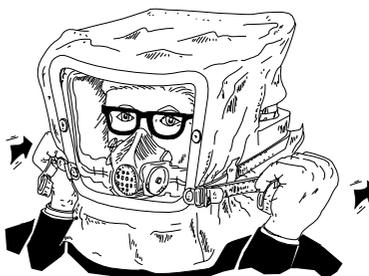
- With both hands, grasp the adjustment straps at the lower corners of the visor and pull outward sharply to actuate the starter candle. Within 1 to 5 seconds, a rushing noise of oxygen entering the hood will be heard and inflation will be evident.



**WARNING**

Human hair is highly flammable. Hair that protrudes through the neckseal could ignite if brought into direct contact with flame.

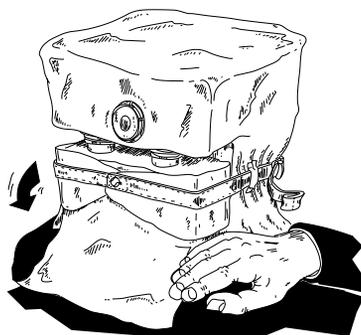
- With the straps still in hand and head bent forward, pull backward to secure the oronasal mask cone high on the nose for a tight seal.



7. If wearing glasses, adjust their position to rest on the tip of the oronasal mask cone by moving the sides of the frame through the hood fabric. Do not attempt to adjust through the neckseal as this will result in infiltration of the surrounding atmosphere into the interior of the hood.

**STEP 7**

8. When the neckseal is positioned at the neck and the oxygen generating canister is resting on the nape of the neck, remove the hands, checking to see that clothing is not trapped in the seal and hair does not protrude between the seal and the neck. Pull the protective neck shield down to cover the collar and upper shoulder area.

**STEP 8**

Following actuation, the hood will inflate over a 15- to 20-second period. After this period, the starter candle will cease flowing and the only sound will be a slight rustling of the fabric on each inhalation and exhalation. Dependent upon breathing rate, there will be a slight exhalation resistance as the exhaled breath is forced through the oxygen generating canister. Inhalation resistance will be almost unrecognizable since inhalation is directly from the interior of the hood through a diaphragm type check valve located at the base of the oronasal mask. The visor should remain clear of fogging or misting. Heat is produced by both the chemical air regeneration process and transfer of body heat during the rebreathing cycle. Heat build-up within the hood is normal and is dependent upon the amount of work performed. There should be no irritating or strong unusual odors within the hood. Operational duration is variable dependent upon the amount of work performed by the user.

If the PBE is worn to exhaustion of the chemical regeneration system, this will be evidenced by a gradual reduction in the expended volume of the hood until the point that the hood is collapsed tightly around the head at the end of a full inhalation. Additionally, there will be a rapid buildup of heat and moisture in the hood as the canister loses its effectiveness. At this point, the wearer should immediately retire to a safe breathing area clear of flame and toxic fumes and remove the device.

## Removing the PBE

1. Go to a safe area away from immediate contact with fire or open flame and/or toxic fumes.
2. With both hands, reach for the two lower corners of the visor area and push forward on the metal tabs of the adjustment strap buckles to release the strap tension.
3. Place both hands under the neckseal in the forward area and pull up, guiding the oronasal cone and neckseal over the face/glasses until the PBE is clear of the head.
4. Place the expended PBE in a safe place to cool away from fire or exposure to water.

## Disposal

The expended PBE still contains unreacted oxidizing material and strong alkali materials. At the completion of flight, it must be turned over to maintenance for authorized disposal.

## ABNORMAL CONDITION OF OPERATION



This device produces oxygen which will vigorously accelerate combustion. Do not intentionally expose the device to direct flame contact, or remove in the immediate presence of fire or flame. Due to oxygen saturation of the hair, do not smoke or become exposed to fire or flame immediately after removing.

Users should be trained to recognize abnormal conditions which could signify malfunction or failure of the equipment to properly operate as follows:

### Failure of the Starter Candle

If the starter candle fails to actuate when the adjustment strap is pulled, an additional sharp pull on the strap may be sufficient to dislodge the lanyard pin and actuate the device. If the device still fails to actuate, the hood will continue to function, although the initial purge capability is lost. Sticking the fingers into the neckseal to allow a large lung inhalation may be required to enable sufficient breathing volume until the chemical regeneration system begins producing a surplus of oxygen.

### Inadequate Oronasal Mask Seal

Absence of a tight seal of the oronasal cone to the face may result in excess leakage of the exhaled breath into the hood, short circuiting the oxygen-generating canister. This condition may result in a build-up of CO<sub>2</sub> within the rebreathing volume in the hood. Excessive CO<sub>2</sub> is normally indicated by breathing distress such as rapid and labored breathing accompanied by a general feeling of insufficient ability to get one's breath, although there is no restriction to breathing. Presence of moisture or fogging on the visor and the sensation of air escaping from the mask, particularly around the nose and eyes, are indications of a lack of proper fit. Adjustment of the mask straps and mask position to minimize leakage should rapidly alleviate the problem. If the perception of breathing distress persists, the user should quickly go to a safe area and remove the PBE and don alternate breathing equipment if required.

### Loss of Infiltration Seal

The smoke and toxic fumes generated by the combustion of most aircraft cabin interior materials has many strong irritants. The continued presence of strong irritation odors inside the hood resulting in eye and respiratory tract discomfort is a good indicator of the lack of an effective infiltration seal. Verify that the seal is in contact with the skin or the neck and does not have clothing or jewelry trapped in the seal, or hair protruding between the seal and the neck. If the condition persists, or there is evidence of a tear in the neckseal, the user should go quickly to a safe area and don alternate breathing equipment if required.

## **FLOTATION EQUIPMENT**

Life vests are stowed in plastic compartments located behind the pilot's and copilot's seats, and in the lavatory adjacent to the toilet seat (on toilet seats with seat belts). They also may be stowed in a compartment at the front of each passenger seat. The life vests are inflated by pulling the red CO<sub>2</sub> release tabs. *On aircraft 45-232, 45-236 thru 45-2000*, each passenger seat cushion has been designed to also be used as a personal flotation device.

## MISCELLANEOUS EQUIPMENT

### CREW COMPARTMENT

#### FLASHLIGHTS

Two flashlights are installed in the crew compartment. The flashlights are located behind each crew member's seat. The pilot's flashlight is secured to a bracket mounted to the forward side of the forward left storage cabinet. The copilot's flashlight is secured to a bracket mounted to the forward side of the forward right-hand storage cabinet.

Rechargeable flashlights are available as optional equipment. The rechargeable flashlights are mounted in a location similar to the standard flashlights. The rechargeable flashlights are waterproof, floatable and flame retardant.

#### APPROACH PLATE HOLDER

A spring loaded chart holder is installed on each control wheel. The holders are large enough to hold an entire approach plate.

#### LIGHTED APPROACH PLATE HOLDERS

Optional illuminated chart holders are available for each control wheel. The chart holders provide illumination of the approach plates.

#### SUNVISORS

Sunvisors may be installed as optional equipment. Two sunvisors are located at the upper edge of the windshield, one on each side. Each sunvisor is hinged so it can be folded down and will slide along its track as desired.

#### FORWARD POCKET DOORS

Optional solid sliding doors may be installed which separate the cockpit from the entryway galley and passenger compartment.

**PASSENGER COMPARTMENT**

## CABINETS, DRAWERS &amp; TABLES

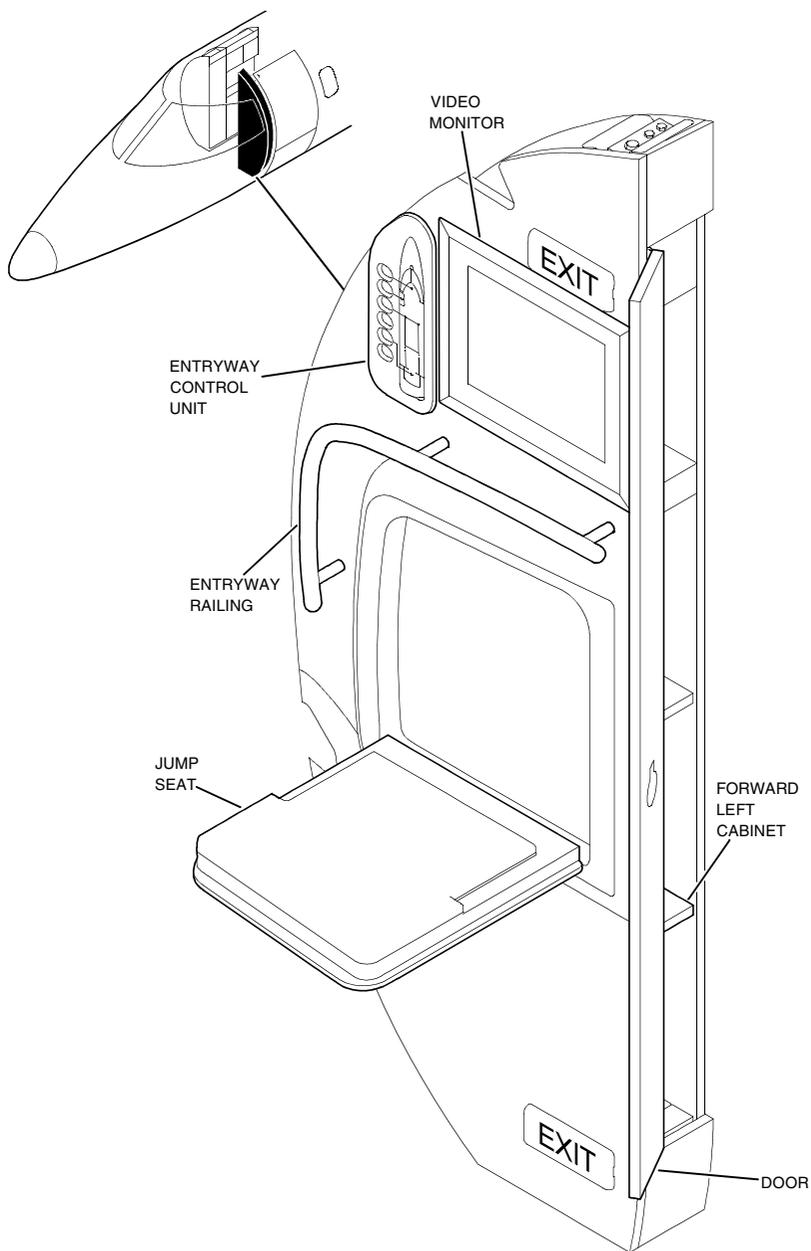
Standard and optional cabinets, drawers and tables may be built into the passenger compartment. The following descriptions and figures show the most common accessories:

## Forward Left Cabinet

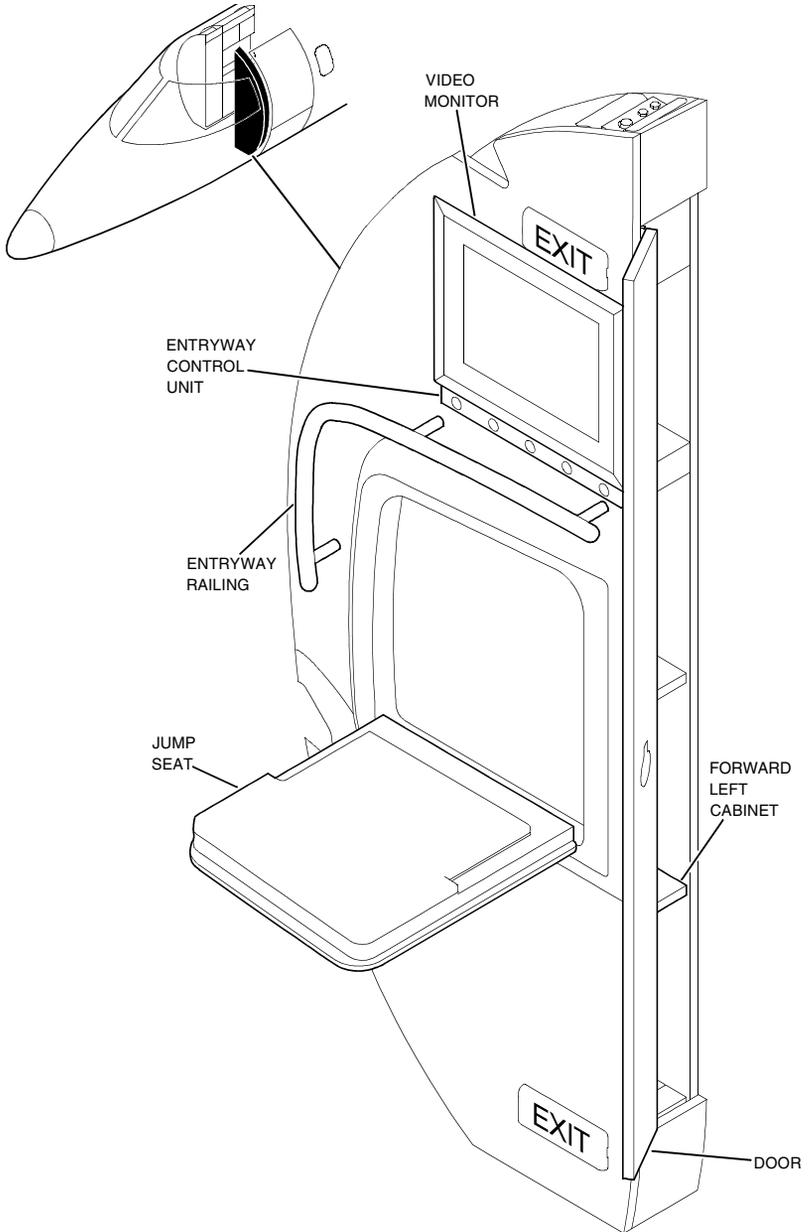
The forward left cabinet (Figure 7-4 or 7-5) is located immediately aft of the pilot's seat, on the forward side of the cabin entry door. The left cabinet has a hinged door and storage space built into the aisle side. An entryway railing is installed on the aft side of the cabinet adjacent to the entrance steps. A cabin entryway lighting control panel (Entryway Control Unit) is installed on the aft side of the cabinet above the railing. The entryway control unit contains switches for the pilot's overhead dome light, entry spotlight, cabin overhead lights, spotlights and lavatory overhead lights. An optional video monitor may be installed on the right side of the lighting control panel.

## Jump Seat

An optional jump seat may be installed on the aft side of the forward left cabinet. The jump seat unfolds down from the cabinet with the occupant situated in a side-facing position for access to the right forward galley. The jump seat cannot be occupied during takeoff or landing. It must be folded up against the aft side of the forward left cabinet for both takeoff and landing.



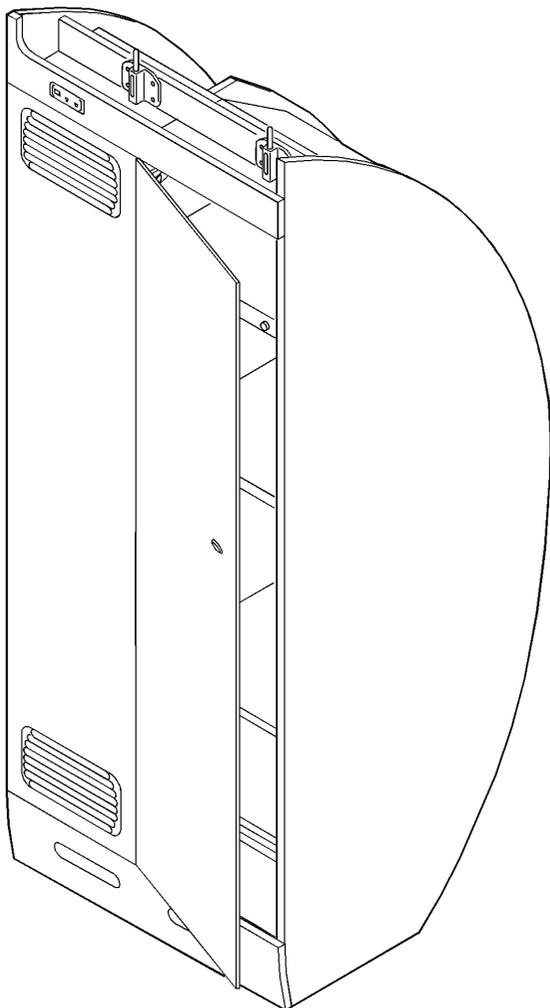
**FORWARD LEFT CABINET**  
**(Aircraft 45-002 thru 45-231, 45-233 thru 45-235)**  
**Figure 7-4**



**FORWARD LEFT CABINET**  
**(Aircraft 45-232, 45-236 thru 45-2000)**  
**Figure 7-5**

## Forward Right Storage Closet/Avionics Cabinet

The forward right storage closet/avionics cabinet is located in the forward right side of the cabin, aft of the copilot's seat. The closet is equipped with a door which is hinged at the forward side and shelves located in the main compartment. The avionics cabinet racks are located behind a panel and are not accessible by door.

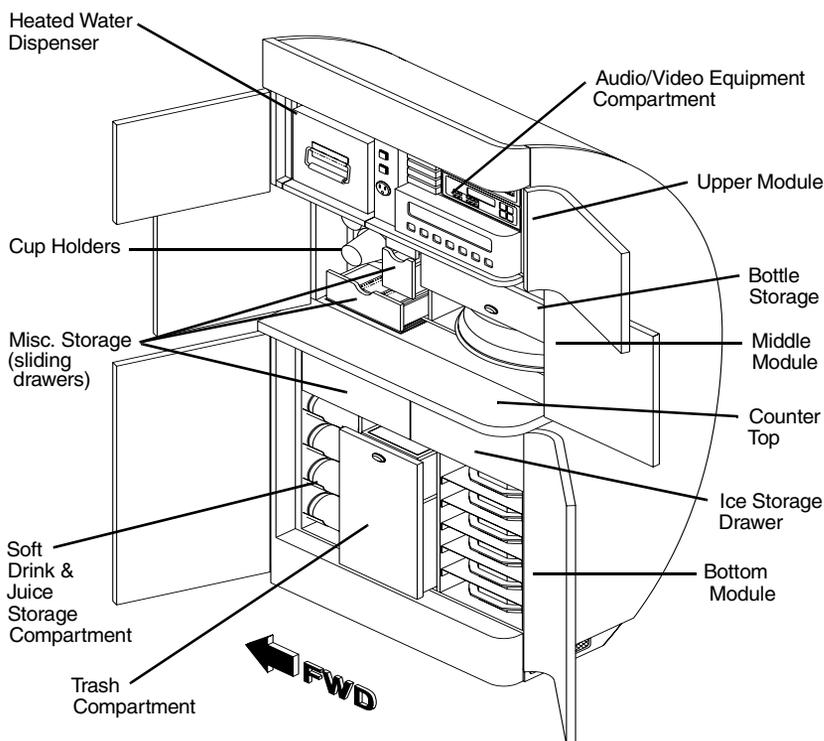
**FORWARD RIGHT STORAGE CLOSET/AVIONICS CABINET****Figure 7-6**

**Galley Cabinet**

(Aircraft 45-002 thru 45-231; 45-233 thru 45-235)

The galley cabinet (Figure 7-7) is located on the forward right side of the cabin next to and aft of the forward right storage closet. The galley cabinet consists of three customized insert modules inside the cabinet; the upper module, the middle module and the bottom module. Each module is configured according to the customer's requests, so galley cabinet assemblies will vary.

Three pairs of self-facing doors are used to enclose the galley cabinet and ensconce the contents inside the three modules. A fluorescent light is installed inside the middle module. The cabinet doors can be opened by depressing the oval shaped press-to-open latches which are installed in each door, near the center of the cabinet.



**NOTE:** Galley Cabinets will vary in both equipment installation and arrangement.

**GALLEY CABINET**  
**(Aircraft 45-002 thru 45-231, 45-233 thru 45-235)**  
**Figure 7-7**

The upper module is equipped with a heated water dispenser, the audio amplifier and optional cassette player, CD player and video cassette player. Additional storage space for video tapes and compact discs is available inside the module.

The middle module may be equipped with a cup holder/dispenser, small misc. storage drawers, bottle storage and food storage.

The bottom module may be equipped with a soft drink & juice can storage compartment, a large misc. storage drawer, and a slide-out drawer with a built-in ice storage liner. The ice drawers are equipped with drains to the lower fuselage, where melted ice is drained overboard through a heated drain mast. The bottom module may also include a slide-out trash compartment and a set of food tray shelves.

The following equipment and features are standard and will be installed in the galley cabinet:

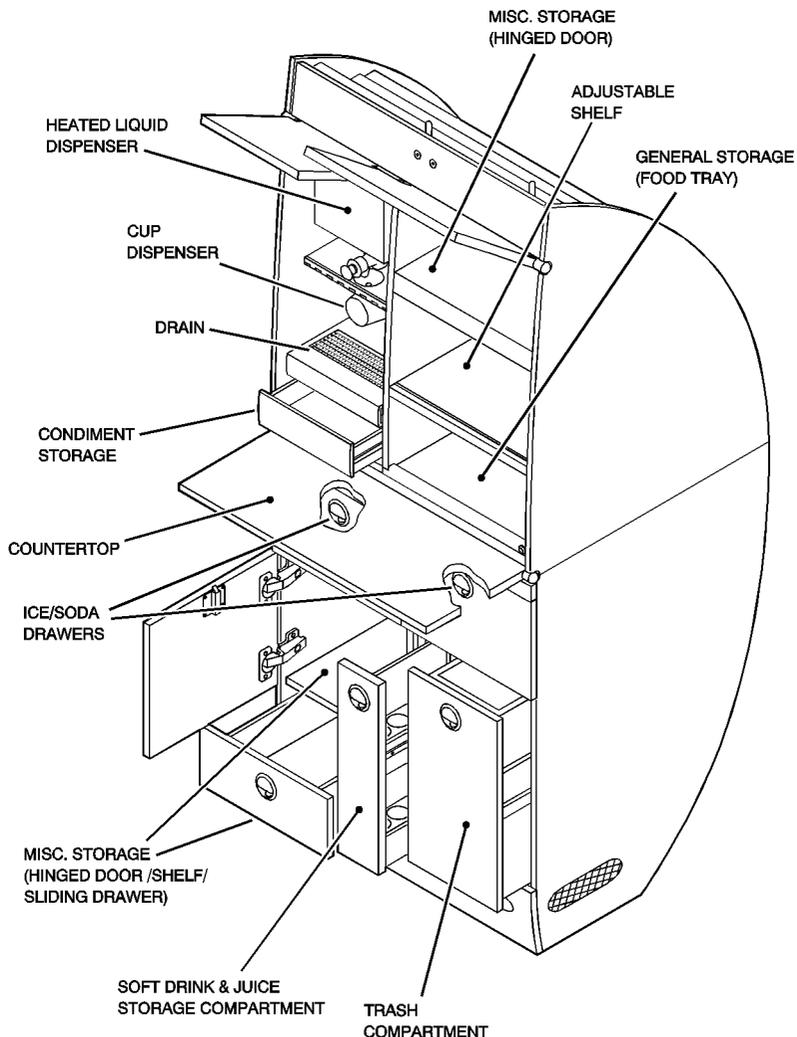
|  |                      |                              |
|--|----------------------|------------------------------|
| <b>Water Dispenser</b>                               | <b>Coffee Warmer</b> | <b>Bottle Storage</b>        |
| <b>Soft Drink &amp;<br/>Juice Can Storage</b>        | <b>Ice Storage</b>   | <b>Trash<br/>Compartment</b> |
| <b>Liquor Decanter<br/>and Miniature<br/>Storage</b> |                      |                              |

The following equipment is optional and may be installed in the galley cabinet:

|                               |                                  |                     |
|-------------------------------|----------------------------------|---------------------|
| <b>Cassette/CD<br/>Player</b> | <b>Video Cassette<br/>Player</b> | <b>Wine Storage</b> |
| <b>Microwave Oven</b>         | <b>Convection Oven</b>           | <b>China</b>        |
| <b>Catering Tray</b>          | <b>Crystal</b>                   |                     |

Galley Cabinet  
(Aircraft 45-232, 45-236 thru 45-2000)

The galley cabinet (Figure 7-8) is located on the forward right side of the cabin next to and aft of the forward right storage closet/avionics cabinet. The galley cabinet consists of three customized insert modules inside the cabinet; the upper module, the middle module and the bottom module. Each module is configured according to the customer's requests, so galley cabinet assemblies will vary.



**NOTE:** Galley cabinets will vary in both equipment installation and arrangement.

**GALLEY CABINET**  
**(Aircraft 45-232, 45-236 thru 45-2000)**  
**Figure 7-8**

The following equipment and features are standard and will be installed in the galley cabinet:

|                                |   |                              |
|--------------------------------|---|------------------------------|
| <b>Water/Coffee<br/>Warmer</b> | <b>Soft Drink/Juice<br/>Can &amp; Ice Storage</b> | <b>Trash<br/>Compartment</b> |
|--------------------------------|---|------------------------------|

The following equipment is optional and may be installed in the galley or closet:

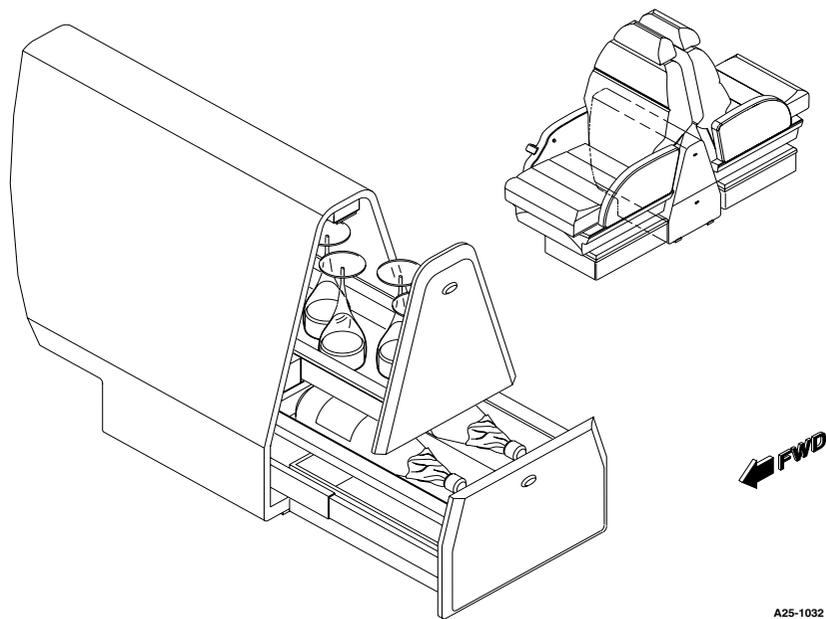
|                               |                                |                                      |
|-------------------------------|--------------------------------|--------------------------------------|
| <b>Warming Oven</b>           | <b>Microwave Oven</b>          | <b>Wine Storage</b>                  |
| <b>Catering Tray</b>          | <b>Crystal</b>                 | <b>China</b>                         |
| <b>CD Player<br/>(closet)</b> | <b>DVD Player<br/>(closet)</b> | <b>Multi-DVD Player<br/>(closet)</b> |

#### Sidewall Storage Boxes

Headphones, as well as other small items, may be stored in the outboard sidewall storage boxes located along the cabin armrests.

## Mid-Ship Cabinets (Optional)

Optional mid-ship cabinets (Figure 7-9) may be located between the forward and aft-facing seats on both sides of the aisle. The mid-ship cabinet drawers may be configured for general storage, to securely store wine glasses and stemware, or to incorporate an optional ice liner to hold wine bottles. The drawers may be opened by pressing a button located near the top center of each front drawer panel.

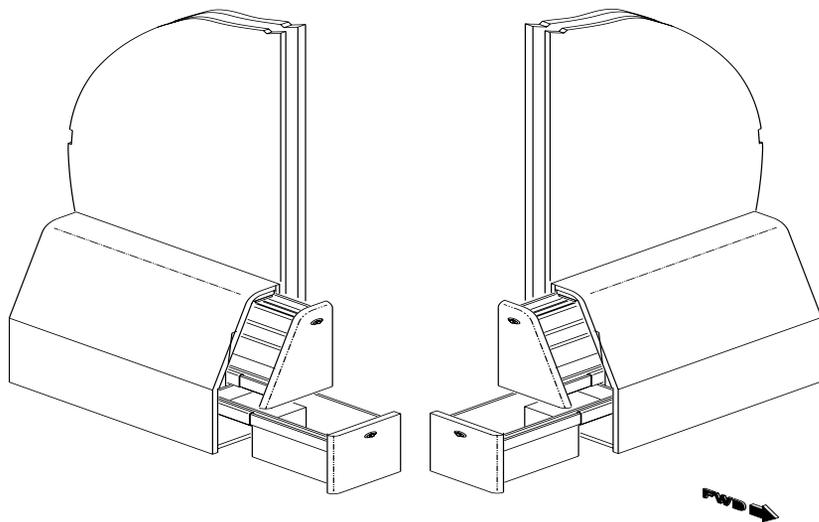


A25-1032

**MID-SHIP CABINETS**  
**(Right Side with Wine & Stemware Shown)**  
**Figure 7-9**

### Aft Pyramid Cabinets (Optional)

Optional aft pyramid cabinets (Figure 7-10) may be located behind the aft seats on both the right and left sides of the cabin. The pyramid cabinets can be opened by lifting and pulling latches near the top of each drawer panel. The pyramid cabinets may be configured for can storage, magazine and/or miscellaneous storage.



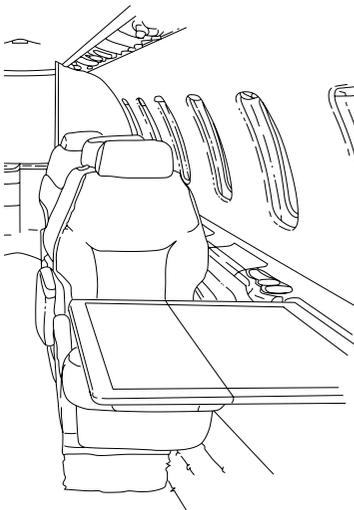
### AFT PYRAMID CABINETS

Figure 7-10

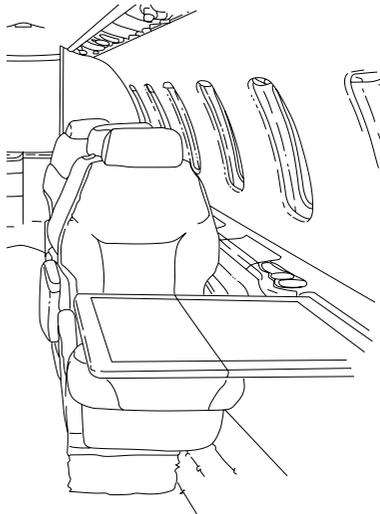
### Tables

Two pull-out bi-fold executive tables are located (one) on each side of the cabin and are stored inside the sidewall between the facing seats. The executive tables are 20 inches (50.8 centimeters) wide with folding leaves and a solid work surface. The table is extended for use by pulling it up from the cabin sidewall and then unfolding the leaves until they lock in place. The tables (Figure 7-11) can be stowed by folding the leaves together, raising them up until parallel with the cabin sidewall, and then sliding them down into the compartment inside the cabin sidewall.

An optional left side slimline table may be installed in the cabin sidewall adjacent to the aft forward-facing seat. The left side table unfolds and stows in the same manner as the larger tables. An optional right side table is stowed aft of the left side divider and plugs into the receptacles in the escape hatch armrest. Both tables are approximately 10 inches (25.4 centimeters) wide.



**Executive Table**



**Slimline Table**



**TABLE INSTALLATIONS (TYPICAL)**

**Figure 7-11**

**CABIN MANAGEMENT SYSTEM**

*(Aircraft 45-002 thru 45-231, 45-233 thru 45-235)*

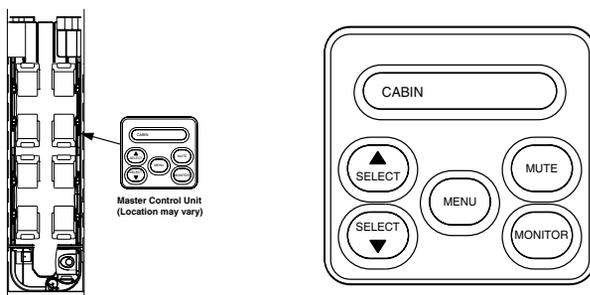
**AUDIO/VIDEO SYSTEMS**

The optional audio system consists of a 10 disc CD player, a cassette player, an audio amplifier, four cabin speakers, sub woofer speaker and a master control unit for cabin speaker control. The audio system also includes a passenger distribution system located in the outboard armrests with headphone jacks, output controls and an audio headphone set at each passenger seat location.

Power for the audio system is 28-vdc through the 20-amp AUDIO circuit breaker on the copilot's circuit breaker panel and through the 20-amp SPKRS circuit breaker on the pilot's circuit breaker panel. Electrical power for the optional video monitors is provided by the 5-amp VIDEO circuit breaker on the copilot's circuit breaker panel.

**Cabin Speaker Audio Source**

To select a listening source for the cabin speakers, first locate the master control unit. The master control unit (Figure 7-12) may be located on the outboard armrest panel at any of the cabin seat positions, but it is generally located on the right side at the second or third row from the front. Upon power-up the master control unit will display **CABIN** on the master control display.



**MASTER CONTROL UNIT**

**Figure 7-12**

Next, depress the **MENU** button on the master control unit until the display shows **A| CD**. When the **A| CD** symbol is displayed, the CD player will be selected as the active source for the cabin speakers. To select a different audio source for the cabin speakers, depress the

SELECT (down arrow) button on the master control unit, the next audio source **A** CASS will be displayed. When **A** CASS is displayed, the cassette player is selected as the active source for the cabin speakers.

For additional cabin speaker audio source choices, continue to depress the SELECT (down arrow) button or SELECT (up arrow) button until the desired source is displayed. The master control unit display will show the cabin speaker source selections as follows:

|                 |                           |
|-----------------|---------------------------|
| CABIN           | (DISPLAYED UPON POWER-UP) |
| <b>A</b> CD     | (AUDIO SOURCE SELECTION)  |
| - <b>A</b> CD   | (COMPACT DISC)            |
| - <b>A</b> VCP  | (VIDEO CASSETTE PLAYER)   |
| - <b>A</b> CASS | (CASSETTE PLAYER)         |

### Cabin Speaker Volume, Bass and Treble Adjustment

Cabin speaker volume is adjusted by first selecting the volume control by depressing the MENU button on the master control unit until VOL XX% is displayed (the XX represents a 2 digit number from 01 through 99, a percentage of maximum speaker volume). After VOL XX% is displayed, increase or decrease cabin speaker volume by depressing the SELECT up arrow or SELECT down arrow on the master control unit until the desired volume level is achieved. As the speaker volume level changes, the master control unit will display a corresponding VOL % value.

Cabin speaker treble and cabin speaker bass are adjusted in the same manner that cabin speaker volume is with the exception that BASS % or TREBLE % is selected with the MENU button, instead of VOL %.

### Mute and Monitor Switches - Master Control Unit

To turn the cabin speaker sound OFF, depress the MUTE button on the master control unit. Depress the MUTE button again to turn the cabin speaker sound ON. To turn the optional video monitor ON, depress the MONITOR button on the master control unit. To turn the video OFF, depress the MONITOR button on the master control unit again.

### Video Source Selection

Video signal for the video monitor is selected by depressing the MENU button on the master control unit until **V** VCP is displayed. When **V** VCP is displayed, the video cassette player will be selected as the active source for the video monitor. To select additional optional video sources, depress the SELECT down arrow or SELECT up arrow until the desired source (**V** AIRSHOW 400, for example) is displayed.

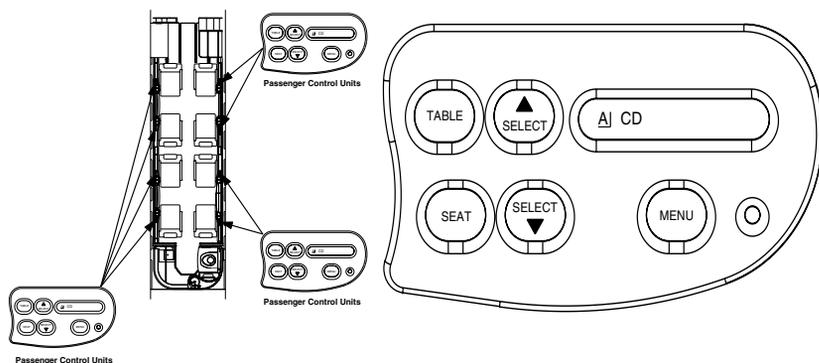
## Headphone Audio Controls

Headphone audio is controlled by the passenger control units (Figure 7-14) which are located in the cabin sidewall adjacent to each passenger seat. To select a listening source for the passenger headphones, depress the MENU button on the passenger control unit until the **CD** symbol is displayed. When the **CD** symbol is displayed, the CD player will be selected as the active source for the headphones. After the **CD** is displayed, depress the **SELECT** up arrow or **SELECT** down arrow button on the passenger control unit until the desired source is displayed. The passenger control unit display will show the passenger headphone source selections as follows:

|                        |                          |
|------------------------|--------------------------|
| <b>CD</b>              | (AUDIO SOURCE SELECTION) |
| - <b>A</b> <b>CD</b>   | (COMPACT DISC)           |
| - <b>A</b> <b>VCP</b>  | (VIDEO CASSETTE PLAYER)  |
| - <b>A</b> <b>CASS</b> | (CASSETTE PLAYER)        |

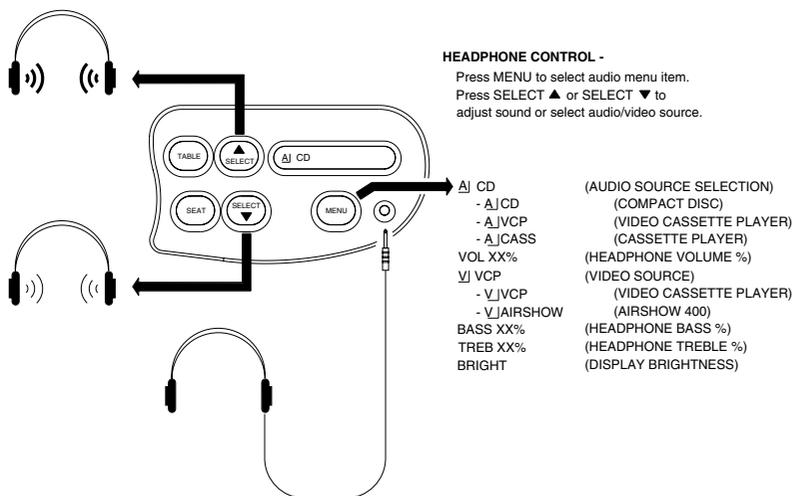
Headphone volume is adjusted by first depressing the MENU button on the passenger control unit until **VOL XX%** is displayed (the XX represents a 2 digit number from 01 through 99, a percentage of maximum headphone volume). After **VOL XX%** is displayed, increase or decrease headphone volume by depressing the **SELECT** up arrow or **SELECT** down arrow on the passenger control unit until the desired volume level is achieved. As the headphone volume level changes, the passenger control unit will display a corresponding **VOL %** value.

Headphone treble and headphone bass are adjusted in the same manner that headphone volume is with the exception that **BASS %** or **TREBLE %** is selected with the MENU button, instead of **VOL %**.



**PASSENGER CONTROL UNIT**

**Figure 7-13**

**HEADPHONE CONTROL**  
**PASSENGER CONTROL UNIT**


**PASSENGER HEADPHONE CONTROLS**  
**Figure 7-14**

### Armrest Monitor Video Source Selection

Video signal for the 5.6 inch articulating armrest monitor is selected by depressing the **MENU** button on the appropriate passenger control unit until **VJ VCP** is displayed. When **VJ VCP** is displayed, the video cassette player will be selected as the active source for the articulating monitor. Additional video sources for the armrest monitor can be selected by depressing the **SELECT** up arrow or **SELECT** down arrow on the passenger control unit until the desired source (**VJ AIRSHOW 400**, for example) is displayed.

### Brightness Control - Master Control Unit and Passenger Control Unit Displays

To select the brightness on either the master control unit display or passenger control unit display, depress the **MENU** button on the respective display until the display brightness symbol (**BRIGHT**) is displayed. After **BRIGHT** is displayed, increase or decrease the master control unit or passenger control unit intensity by depressing the **SELECT** up arrow or **SELECT** down arrow on the master control unit until the desired brightness level is achieved.

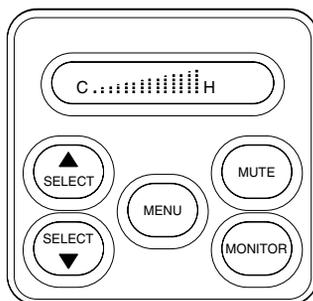
**REMOTE CABIN TEMPERATURE CONTROLS**

A remote cabin temperature control is incorporated into the master control unit located in the cabin armrest.

Cabin temperature adjustments can be made by pressing the MENU button on the master control unit until C ∴ H symbols are displayed (Figure 7-15) in the display window. After the C ∴ H symbols are displayed, the cabin temperature is adjusted by pressing the SELECT up arrow or SELECT down arrow buttons.

Each time the SELECT up arrow or SELECT down arrow button is pressed, the display will show a larger or smaller flashing segment which represents a corresponding higher or lower temperature.

The master control unit can only adjust the temperature within a 9° F range. The center of this range is determined by the setting on cabin temperature control located on the copilot's subpanel. The master control unit can adjust the cabin temperature in small increments up to a maximum of 4.5° F above, or down to 4.5° F below the current setting on the copilot's cabin temperature control. The copilot's cabin temperature control can be adjusted in a much wider range, between 60°F and 90° F.

**MASTER CONTROL UNIT****REMOTE CABIN TEMPERATURE CONTROL PANEL****Figure 7-15**

## CABIN MANAGEMENT SYSTEM

(Aircraft 45-232, 45-236 thru 45-2000)

### DESCRIPTION

An Audio International cabin management system has been installed in the aircraft to manage various cabin systems and components. These systems and components include cabin lights, lavatory lights, cabin audio and video entertainment systems (if installed), cabin temperature, galley equipment, and water system (if installed). The cabin management system uses discrete signal lines or a two-wire, bidirectional data bus for communication between components.

This Audio International cabin management system consists of a switch control unit, a cockpit switch panel, an entry switch panel, a galley switch panel, a lavatory switch panel, eight Lighting Control Unit (LCU) switch panels, a Passenger Interface Unit (PIU) and a Master Control Unit (MCU) switch panel. The following table lists the cabin management system components and locations.

| Component                       | Location                         |
|---------------------------------|----------------------------------|
| Cockpit switch panel            | Copilot's sidewall panel         |
| Entry switch panel              | Forward left cabinet aft face    |
| Galley switch panel             | Forward right cabinet header     |
| Lavatory switch panel           | Lavatory cabinet backsplash      |
| Lighting Control Unit (LCU) (8) | Cabin side ledge (7) and PSU (1) |
| Master Control Unit (MCU)       | VIP seat side ledge              |
| Passenger Interface Unit (PIU)  | Behind side ledge                |
| Switch control unit             | Forward left cabinet             |
| PAX CTRLS circuit breaker       | Copilot's circuit breaker panel  |

### CABIN MANAGEMENT SYSTEM COMPONENTS/LOCATIONS

Figure 7-16

#### Galley Switch Panel

The galley switch panel controls the hot liquid container, second hot liquid container (if installed), and galley drain system (if installed).

#### Cockpit Switch Panel

The cockpit switch panel controls the cabin lights, entry light, and reading/table lights. This unit can also disable all cabin switch panels.

#### Entry Switch Panel

The entry switch panel controls the cabin wash lights, lavatory wash lights, cockpit lights, entry light, reading/table lights, and the optional exterior lighting system (if installed).

**Lavatory Switch Panel**

The lavatory switch panel controls the toilet flush, lavatory wash and spot lights. This unit includes an ordinance sign. This switch panel also controls the optional water pump and sink drain system (if installed).

**Lighting Control Unit (LCU)**

The LCU allows the passengers to control the reading and table lights.

**Passenger Interface Unit (PIU)**

The PIU provides the communication interface for the aft right PSU mounted LCU.

**Master Control Unit (MCU)**

The MCU communicates with the other units and allows the occupant of the VIP seat to control the cabin wash lights, cabin temperature, and other cabin functions.

**OPERATION**

The Audio International cabin management system utilizes a bidirectional data bus and discrete outputs to control switching functions. Actuation of a discrete push button control switch sends a signal directly to the device being controlled. Actuation of a push button control switch on the data bus sends a data word to the bidirectional data bus. Each data word is addressed to a particular device. The addressed device decodes the data word, activates the appropriate control or function, and sends a feedback response to the control switch to change the LED display (if applicable).

Consult the manufacturer's documentation for complete programming and operating instructions.

| Equipment                                 | Location                               | Control Circuit Breaker/s                                     |
|---|--|---|
| Cabin Audio Amplifier                     | Aft Lavatory                           | SPKRS (Pilot's CB Panel)<br>CABIN PA (Pilot's CB Panel)       |
| Master Control Unit (MCU)                 | LH or RH Side Ledge                    | PAX CTRLS (Copilot's CB Panel)                                |
| Power Switching Module                    | Forward LH Cabinet                     | PAX CTRLS (Copilot's CB Panel)                                |
| Passenger Control Units (PCU)             | LH/RH Side Ledge                       | PAX CTRLS (Copilot's CB Panel)                                |
| A/V Distribution Unit                     | Forward RH Cabin Side-wall             | AUDIO (Copilot's CB Panel)                                    |
| IR Receiver                               | Forward LH Cabinet                     | PAX CTRLS (Copilot's CB Panel)                                |
| CD Changer, Control Head                  | Forward RH Cabinet                     | AUDIO (Copilot's CB Panel)                                    |
| CD Changer, Remote Unit                   | Forward RH Cabinet                     | AUDIO (Copilot's CB Panel)                                    |
| Single CD Player (SCD)                    | Forward RH Cabinet                     | AUDIO (Copilot's CB Panel)                                    |
| Cassette Tape Player (CTP)                | Forward RH Cabinet                     | AUDIO (Copilot's CB Panel)                                    |
| Digital Video Disc Player (DVD)           | Forward RH Cabinet                     | AUDIO (Copilot's CB Panel)                                    |
| Dual Digital Video Disc Player (Dual DVD) | Forward RH Cabinet                     | AUDIO (Copilot's CB Panel)                                    |
| Video Cassette Player (VCP)               | Forward RH Cabinet                     | AUDIO (Copilot's CB Panel)                                    |
| 10.4" Monitor                             | Forward LH Cabinet and/or Aft Bulkhead | VIDEO (Copilot's CB Panel)                                    |
| Lavatory Switch Panel                     | Lavatory Backsplash                    | PAX CTRLS (Copilot's CB Panel)                                |
| Cockpit Switch Panel                      | Cockpit Sidewall                       | N/A   |
| Galley Switch Panel                       | Forward RH Cabinet                     | N/A   |
| Entry Switch Panel                        | Forward LH Cabinet                     | PAX CTRLS (Copilot's CB Panel)<br>CABIN (Pilot's CB Panel)    |
| Lighting Control Units (LCU)              | LH Side Ledge                          | PAX CTRLS (Copilot's CB Panel)<br>L SPOT (Pilot's CB Panel)   |
| Lighting Control Units (LCU)              | RH Side Ledge                          | PAX CTRLS (Copilot's CB Panel)<br>R SPOT (Copilot's CB Panel) |
| Speaker (Mid-range/tweeter)               | Convenience Panels                     | N/A   |
| Speaker (Subwoofer)                       | Cabin Floor                            | N/A   |

**CABIN MANAGEMENT SYSTEM  
EQUIPMENT AND CIRCUIT BREAKER LOCATION (TYPICAL)**

**Figure 7-17**

**FLIGHT PHONE**

Digital Airborne Telephone (Optional)

The optional Magnastar C2000 is a two voice/data system that has direct dialing, multiple calls, fax/data modem, uplink calls, interfone, speed dialing and call charging features. Handsets are installed in both the cockpit and the passenger compartment.

The passenger compartment handset can be located in any of the cabin armrest storage boxes. The handset in the cockpit is located on the aft end of the center pedestal.

Power for the flight phone is 28-vdc through the 10-amp FLT PHONE circuit breaker on the pilot's circuit breaker panel.

**AC ELECTRICAL OUTLETS (Optional)**

Four optional 110-vac/60-Hz electrical outlets may be installed in the cabin. One of the outlets is located in the galley cabinet. Two of the outlets are located in the passenger compartment lower sidewall (one on the right side and one on the left side) between the facing passenger seats. The 110-vac outlets have a 1200-wa capacity. The fourth outlet is equipped with a Ground Fault Interrupt (GFI) circuit which, if tripped, may be reset. This outlet is installed across from the lavatory in the cabin stowage area at the floor. The GFI outlet can be reset by depressing the TEST/RESET button. The inverters powering these outlets will automatically shut down if the cabin altitude goes above 9500 feet. Power will be restored when the cabin altitude descends below 8300 feet.

A 230-vac/50-Hz circuit is available, as an option, for aircraft which will be used primarily overseas.

**WINDOW SHADES**

Each cabin window is equipped with a window shade. The shades are adjustable and can be raised and lowered to any desired level. The shades are made of pleated translucent material and may allow some light in.

**GASPER OUTLETS**

Individual gasper outlets (air outlets) are located in the cabin overhead convenience panels. The outlets are adjacent to the lights and can be turned to approximately 40° around its center to direct airflow as desired. Rotate the conical port counterclockwise to open the outlet and clockwise to close.

## **AFT CABIN STOWAGE COMPARTMENT**

The aft cabin stowage compartment is located on the left side of the aircraft immediately aft of the passenger compartment. The stowage compartment is equipped with a coat rod for hanging garments and a restraining web. Some interiors are equipped with a fire extinguisher which is mounted to the left partition.

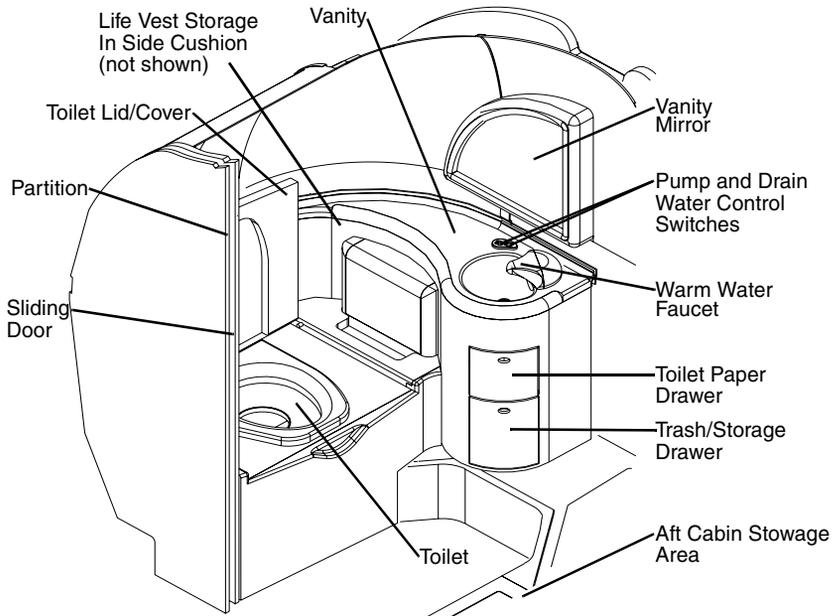
## **LAVATORY/VANITY**

*(Aircraft 45-002 thru 45-231, 45-233 thru 45-235)*

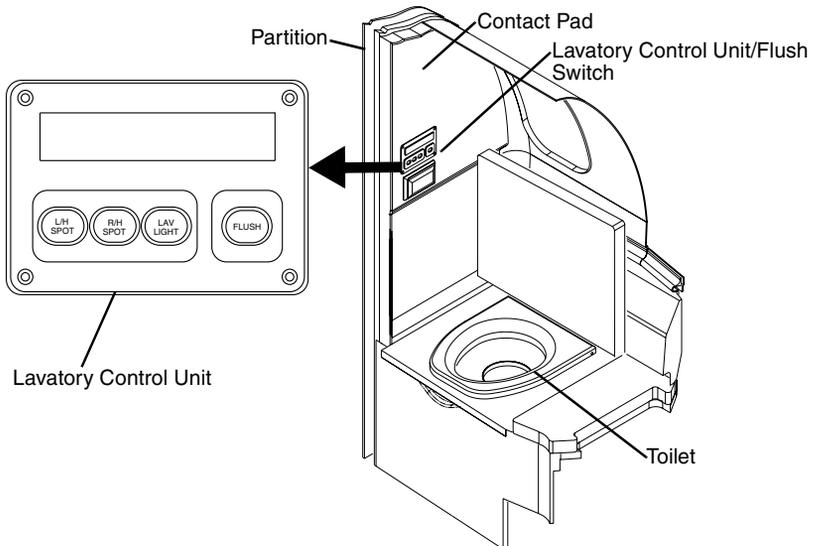
The standard lavatory/vanity (Figure 7-18) is equipped with a toilet, a vanity counter, a toilet tissue drawer and a trash/storage drawer. Optional equipment for the standard vanity includes a belted toilet with a life vest, a lighted vanity mirror and a wash basin with warm running water plumbed to an overboard heated drain.

The lavatory is separated from the passenger cabin by sliding doors which stow inside the left and right sides of the partition. The doors do not lock and are equipped with a magnetic strip which holds them together while closed. The toilet is located on the right side of the lavatory compartment. The toilet is flushed by depressing the toilet FLUSH switch, located in the contact pad on the forward side of the toilet. The optional sink is located at the aft end of the lavatory. The water faucet is operated by depressing the PUMP button located on the vanity adjacent to the basin to dispense running water. Water in the basin is drained by depressing the DRAIN button which is located next to the PUMP button.

If equipped with the optional sink, the lavatory/vanity will have a potable water tank and pump located under the vanity counter. The potable water tank (with an internal heater) holds approximately 1.5 gallons of 100° F heated water. The pump and tank (with heater) draw electrical power from the 15-amp LAV SINK circuit breaker located on the pilot's circuit breaker panel. The lavatory sink is drained through a heated drain mast on the bottom of the aircraft. The heater prevents ice from forming in the drain mast.



**VIEW LOOKING AFT**



**VIEW LOOKING FORWARD**

**LAVATORY/VANITY (TYPICAL)**  
*(Aircraft 45-002 thru 45-231, 45-233 thru 45-235)*

**Figure 7-18**

## Toilet

A flushing toilet is installed on the right side of the lavatory compartment. The unit features a two compartment design which isolates the flushing fluid from the waste. The toilet is flushed by depressing the FLUSH button located on the lavatory control unit in the contact pad immediately forward of the toilet (see Figure 7-18). The length of the flush cycle is controlled automatically. There are two electric pumps installed inside the unit. The flushing pump circulates the flushing fluid during the flush cycle. The macerator/pump is used to pump the waste from the toilet during servicing only.

This toilet is equipped with a macerator pump which has the capability to process regular toilet paper. It is not necessary to use the special biodegradable toilet paper in this toilet.

Servicing of the toilet is accomplished using servicing ports located on the aircraft exterior. The macerator/pump is used to pump the waste from the toilet while fresh flushing fluid is pumped into the toilet from the servicing equipment. Refer to Chapter 12 in the maintenance manual for servicing instructions.

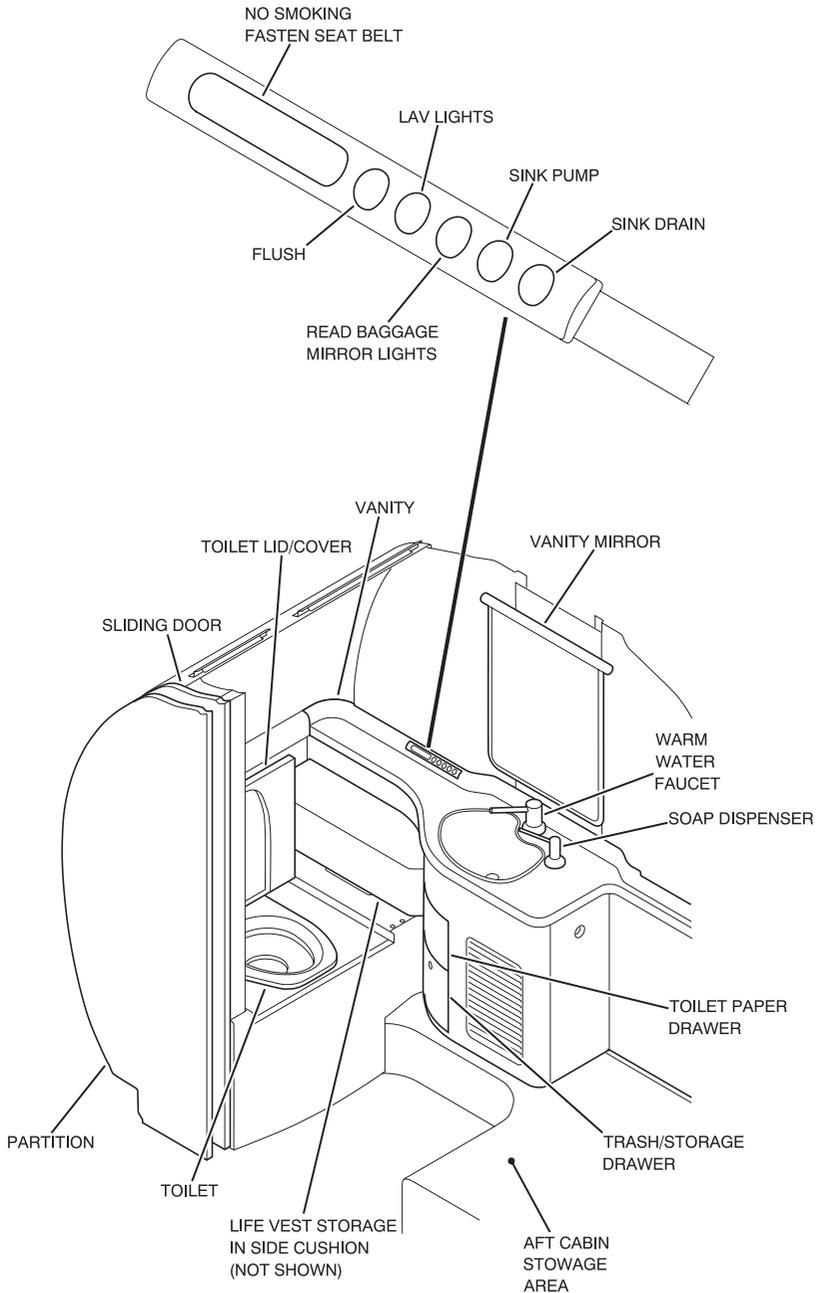
Electrical power to operate the flushing circuit is 28-vdc supplied through the 3-amp TOILET circuit breaker on the copilot's circuit breaker panel.

**LAVATORY/VANITY****(Aircraft 45-232, 45-236 thru 45-2000)**

The standard lavatory/vanity (Figure 7-19) is equipped with a toilet, a vanity counter, a toilet tissue drawer and a trash/storage drawer. Optional equipment for the standard vanity includes a belted toilet with a life vest, a lighted vanity mirror and a wash basin with warm running water plumbed to an overboard heated drain.

The lavatory is separated from the passenger cabin by sliding doors which stow inside the left and right sides of the partition. The doors do not lock and are equipped with a magnetic strip which holds them together while closed. The toilet is located on the right side of the lavatory compartment. The toilet is flushed by depressing the toilet FLUSH switch, located in the lavatory switch panel on the forward side of the toilet. The sink is located at the aft end of the lavatory. The water faucet is operated by depressing the PUMP switch located on the lavatory switch panel adjacent to the basin to dispense running water. Water in the basin is drained by depressing the DRAIN button which is also on the lavatory switch panel.

If equipped with the optional sink, the lavatory/vanity will have a potable water tank and pump located under the vanity counter. The potable water tank (with an internal heater) holds approximately 1.5 gallons of 100° F heated water. The pump and tank (with heater) draw electrical power from the 15-amp LAV SINK circuit breaker located on the pilot's circuit breaker panel. The lavatory sink is drained through a heated drain mast on the bottom of the aircraft. The heater prevents ice from forming in the drain mast.



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**LAVATORY/VANITY (TYPICAL)**  
**(Aircraft 45-232, 45-236 thru 45-2000)**  
**Figure 7-19**

## Toilet

A flushing toilet is installed on the right side of the lavatory compartment. The unit features a two compartment design which isolates the flushing fluid from the waste. The toilet is located on the right side of the lavatory compartment. The toilet is flushed by depressing the toilet FLUSH switch, located in the lavatory switch panel on the forward side of the toilet (see Figure 7-19). The length of the flush cycle is controlled automatically. There are two electric pumps installed inside the unit. The flushing pump circulates the flushing fluid during the flush cycle. The macerator/pump is used to pump the waste from the toilet during servicing only.

This toilet is equipped with a macerator pump which has the capability to process regular toilet paper. It is not necessary to use the special biodegradable toilet paper in this toilet.

Servicing of the toilet is accomplished using servicing ports located on the aircraft exterior. The macerator/pump is used to pump the waste from the toilet while fresh flushing fluid is pumped into the toilet from the servicing equipment. Refer to Chapter 12 in the maintenance manual for servicing instructions.

Electrical power to operate the flushing circuit is 28-vdc supplied through the 3-amp TOILET circuit breaker on the copilot's circuit breaker panel.