

WELCOME TO TECHNICAL ORDER 00-105E-9, 1 JULY 2004, REVISION 9.

THIS IS SEGMENT 17 COVERING CHAPTER 18 FROM THE 707 TO THE 737.

TO NAVIGATE

CLICK ON THE BOOKMARKS AND CLICK ON THE (+) SYMBOLS, THEN CLICK ON SUBJECT LINKS TO GO TO SPECIFIC VIEWS IN THIS SEGMENT.



CONTINUE

NOTICE

CONTACT

**TO GO DIRECTLY TO THE TECHNICAL ORDER,
CLICK ON THE CONTINUE BUTTON.**

**TO SEE THE SEGMENT INFORMATION CHANGE NOTICE,
CLICK ON THE NOTICE BUTTON.**



**TO CONTACT THE TECHNICAL CONTENT MANAGER ,
CLICK ON THE CONTACT BUTTON.**

TECHNICAL ORDER 00-105E-9 TECHNICAL CONTENT MANAGER

WRITTEN CORRESPONDENCE:

HQ AFCESA/CEXF

ATTN: Fire and Emergency Services Egress Manager
139 Barnes Drive Suite 1
Tyndall AFB, Florida 32403-5319



E-MAIL: Tom.Stemphoski@tyndall.af.mil

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<http://www.afcesa.af.mil/CEX/fire/index.asp>

PHONE: (850) 283-6150
DSN 523-6150

FAX: (850) 283-6390
DSN 523-6390

For technical order improvements, correcting procedures, and other inquiries, please use the above media most convenient.

SEGMENT 17 INFORMATION CHANGE NOTICE

This page is provided to notify the user of any informational changes made to Technical Order 00-105E-9 in this Segment and the current Revision. Informational changes will be referenced in the Adobe Reader's Bookmark tool as a designator symbol illustrated as a <[C]> for quick reference to the right of the affected aircraft. The user shall insure the most current information contained in this TO is used for his operation. Retaining out of date rescue information can negatively affect the user's operability and outcome of emergencies. If the user prints out pages his unit requires, the user shall print the affected page(s), remove and destroy the existing page(s), and insert the newly printed page(s) in the binder provided for that purpose. A Master of this TO shall be retained in the unit's library for reference, future printing requirements and inspections.

<u>CHAPTER</u>	<u>AIRCRAFT</u>	<u>PAGE</u>	<u>EXPLANATION OF CHANGE</u>
18	707	ALL	Updated file.
18	717	ALL	Added new file.
18	720	ALL	Updated file.
18	727	ALL	Updated file.
18	737	ALL	Updated file and added US Marshals configuration.

NOTE: All Boeing aircraft files are updated based on the latest ARFF information and all of these aircraft, regardless of age, are still being used and making aviation contributions in various functions besides CRAF, such as cargo, and freight.

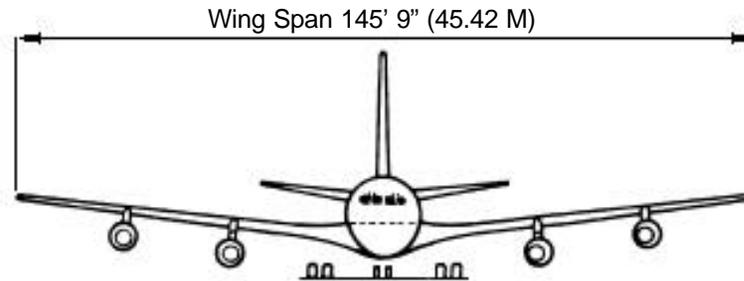
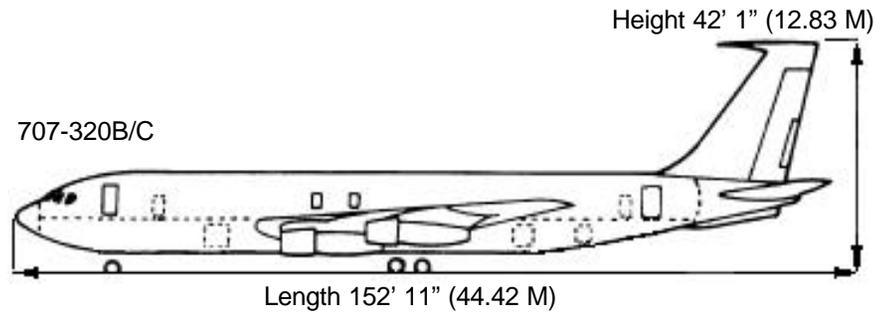
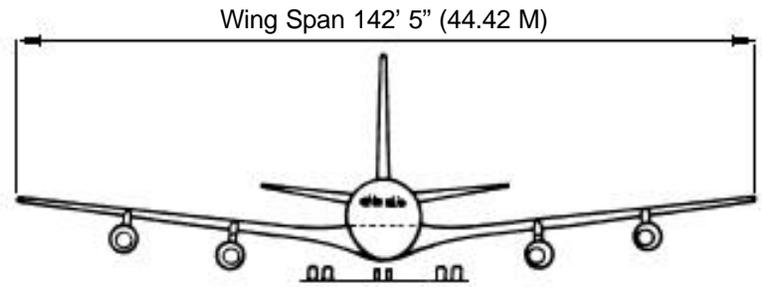
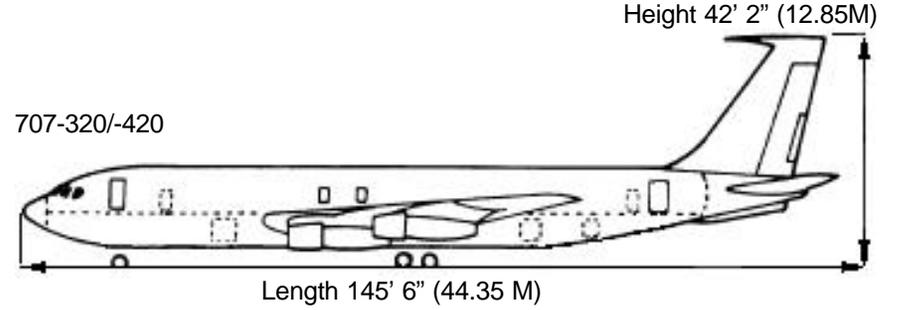
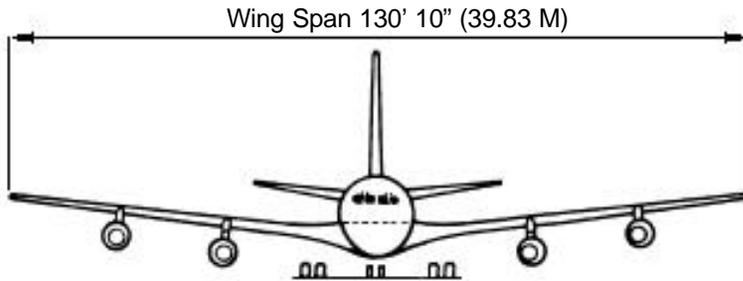
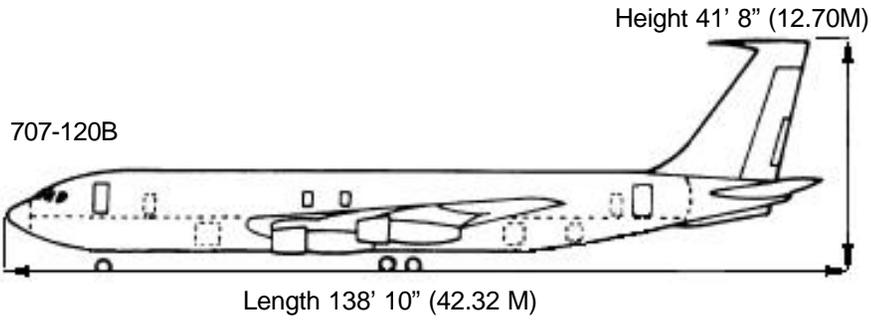
NOTE

Chapter 18 contains emergency rescue and mishap response information for the following aircraft:

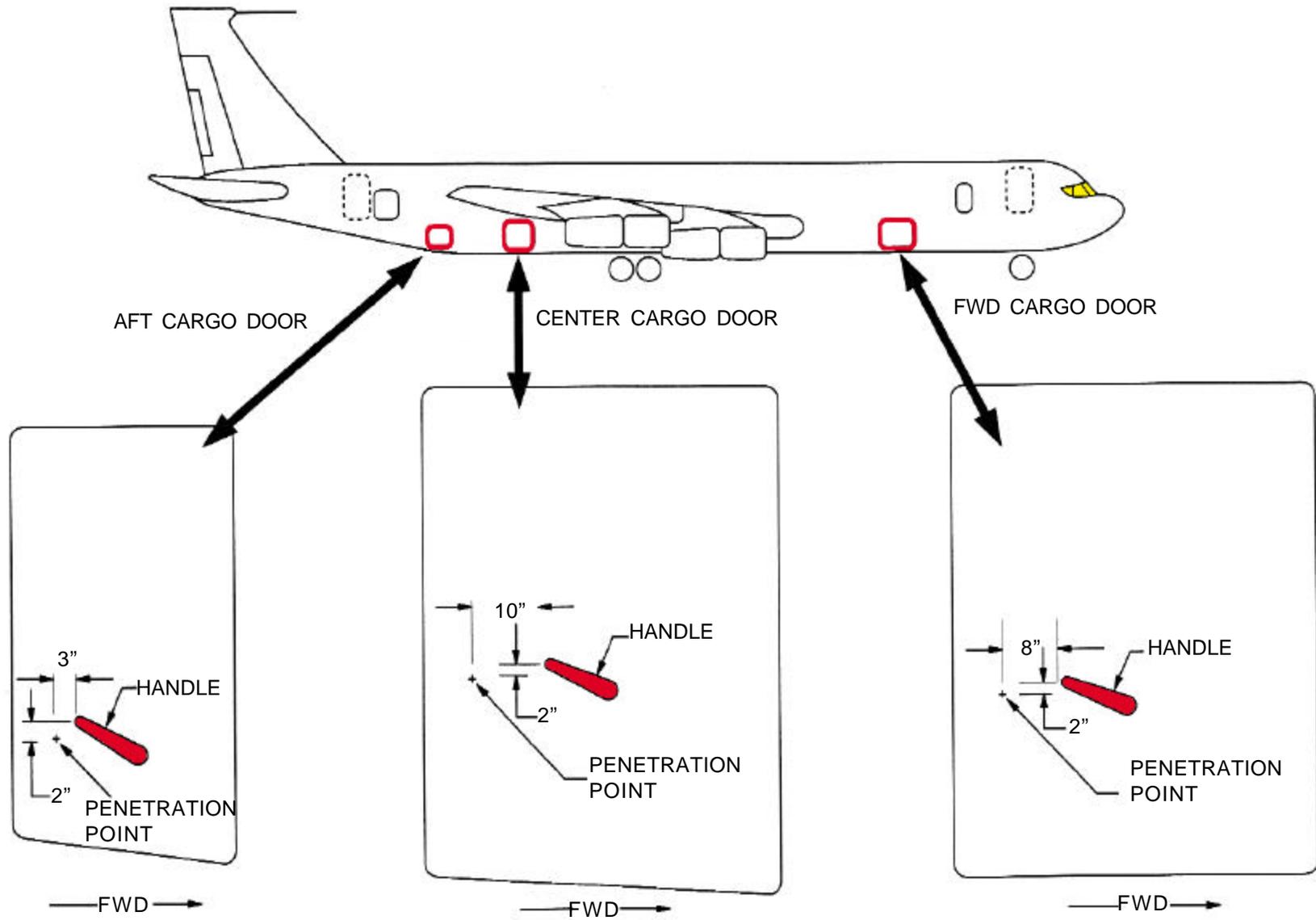
**DC-3
DC-6
DC-7
DC-8
DC-9
DC-10
MD-11
MD-80
MD-90
L-1011-1
L-1011-500
707
717
720
727
737
747
757
767
777**



AIRCRAFT DIMENSIONS



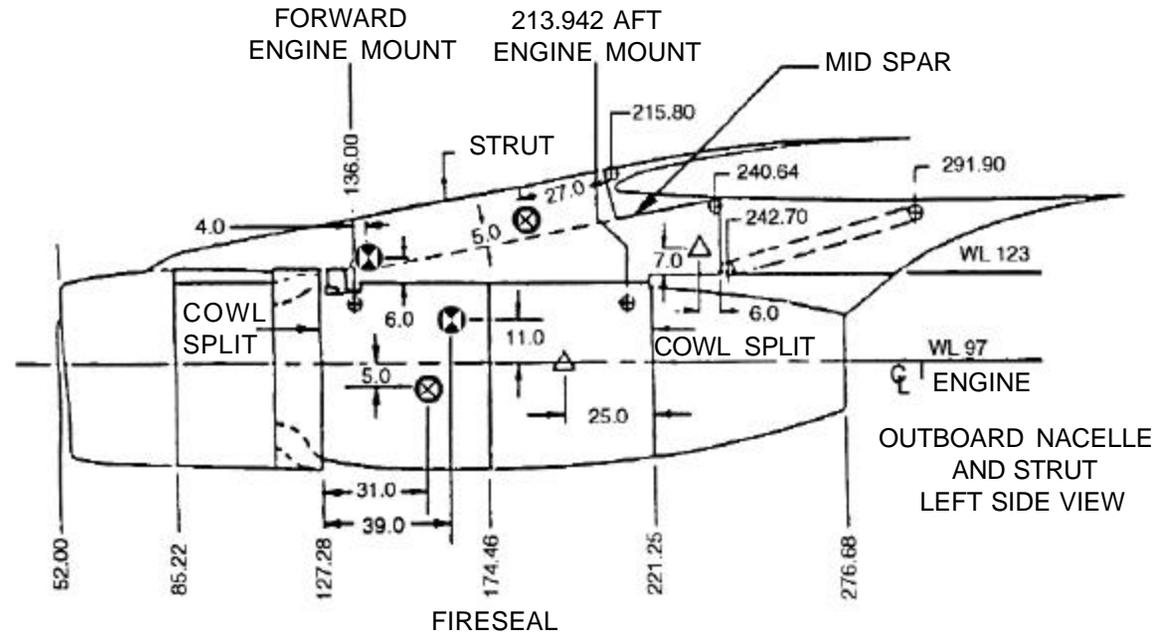
AIRCRAFT SKIN PENETRATION POINTS



AIRCRAFT SKIN PENETRATION POINTS-Continued

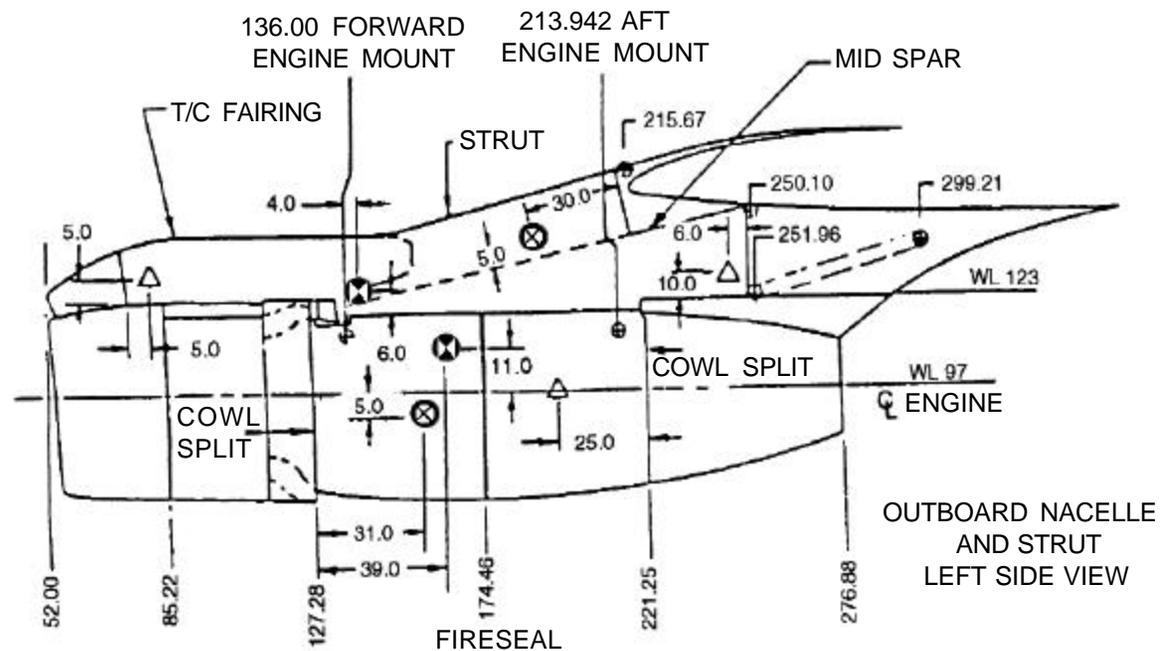
707-120B-320C TURBOFAN ENGINES

-  LEFT SIDE OF ENGINE
-  RIGHT SIDE OF ENGINE
-  COMMON POINT (LH & RH SIDE)



707-120B-320C TURBOFAN ENGINES

-  LEFT SIDE OF ENGINE
-  RIGHT SIDE OF ENGINE
-  COMMON POINT (LH & RH SIDE)



SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw
24 Foot Ladder
35 Foot Ladder
Fire Drill II

NOTE:

Refer to the C-135 for more extensive information. Both airframes are identical except cargo and tanker capabilities.

AIRCRAFT ENTRY-100/-200 SERIES

1. NORMAL/EMERGENCY ENTRY

- Overwing escape hatches both sides- Push red panel, located top center of hatches, in and push hatches inward.
- Pull handle, located left side forward and aft entry doors, outward and rotate clockwise.
- Pull handle, located forward and aft galley doors right side, outward and rotate counter-clockwise.
- Press red handle, located on escape hatch top right forward crew compartment, and pull out.

2. CUT-IN

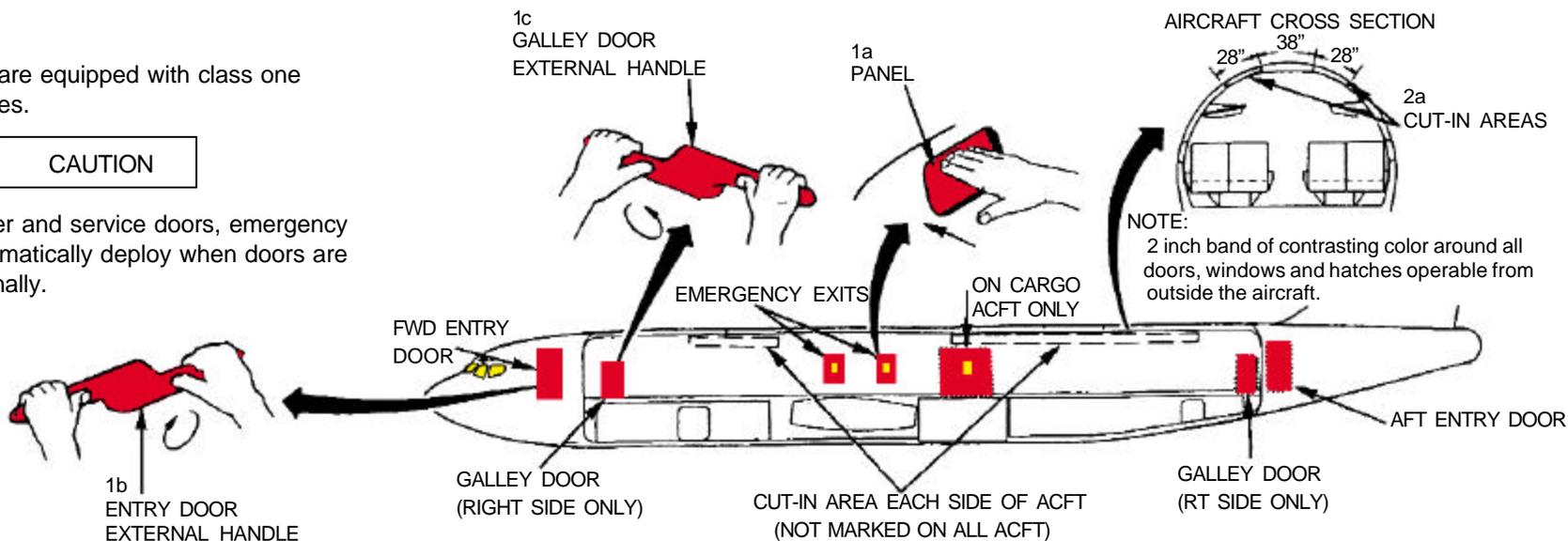
- Cut along window lines as last resort.

NOTE:

Some series are equipped with class one escape hatches.

CAUTION

For passenger and service doors, emergency slide will automatically deploy when doors are opened externally.



ENGINE SHUTDOWN AND AIRCREW EXTRACTION

APPLICABILITY:
707-100/-200
-300/-400

1. ENGINE SHUTDOWN

- Retard thrust levers, located on pilot's center console, to RETARD position.
- Place engine start levers, located on pilot's center console, to CUT OFF position
- Pull emergency fire T-handles, located top center above instrument panel.
- Place engine start switches, located on pilot's overhead panel, to OFF position.
- In case of APU fire, pull APU fire switch, located on the upper left flight engineer's panel, out to apply agent to APU.
- If no APU fire, place APU master switch, located on the upper left flight engineer's panel, to OFF position.

- Place battery switch, located on lower right flight engineer's panel, down to OFF position.

2. AIRCREW EXTRACTION

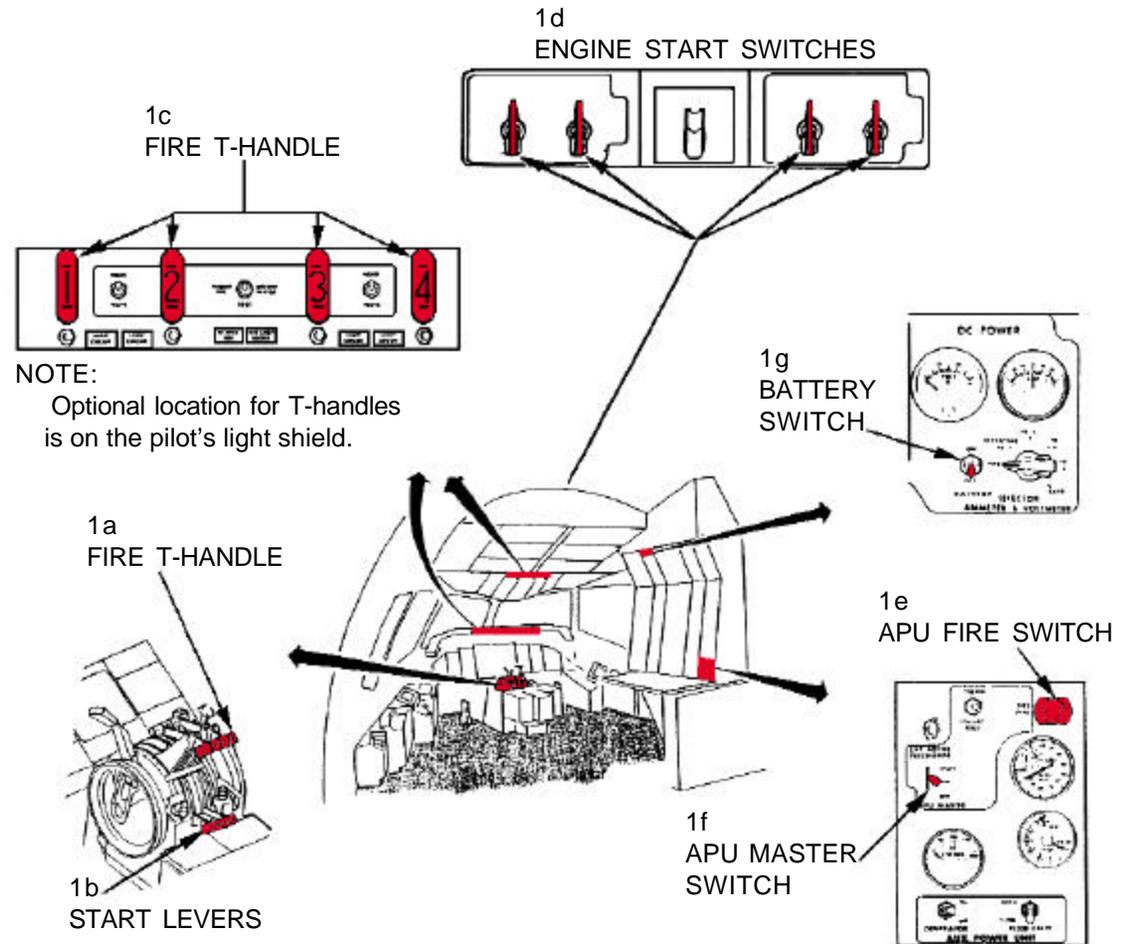
- Unlatch lap belts and remove shoulder harness from crewmembers.
- Depress seat control handles, located on flight engineer's seat, and rotate from left to right.

NOTE:

If seat tracks are not damaged during crash landing, use adjustable seat controls to retract seats to aft position.

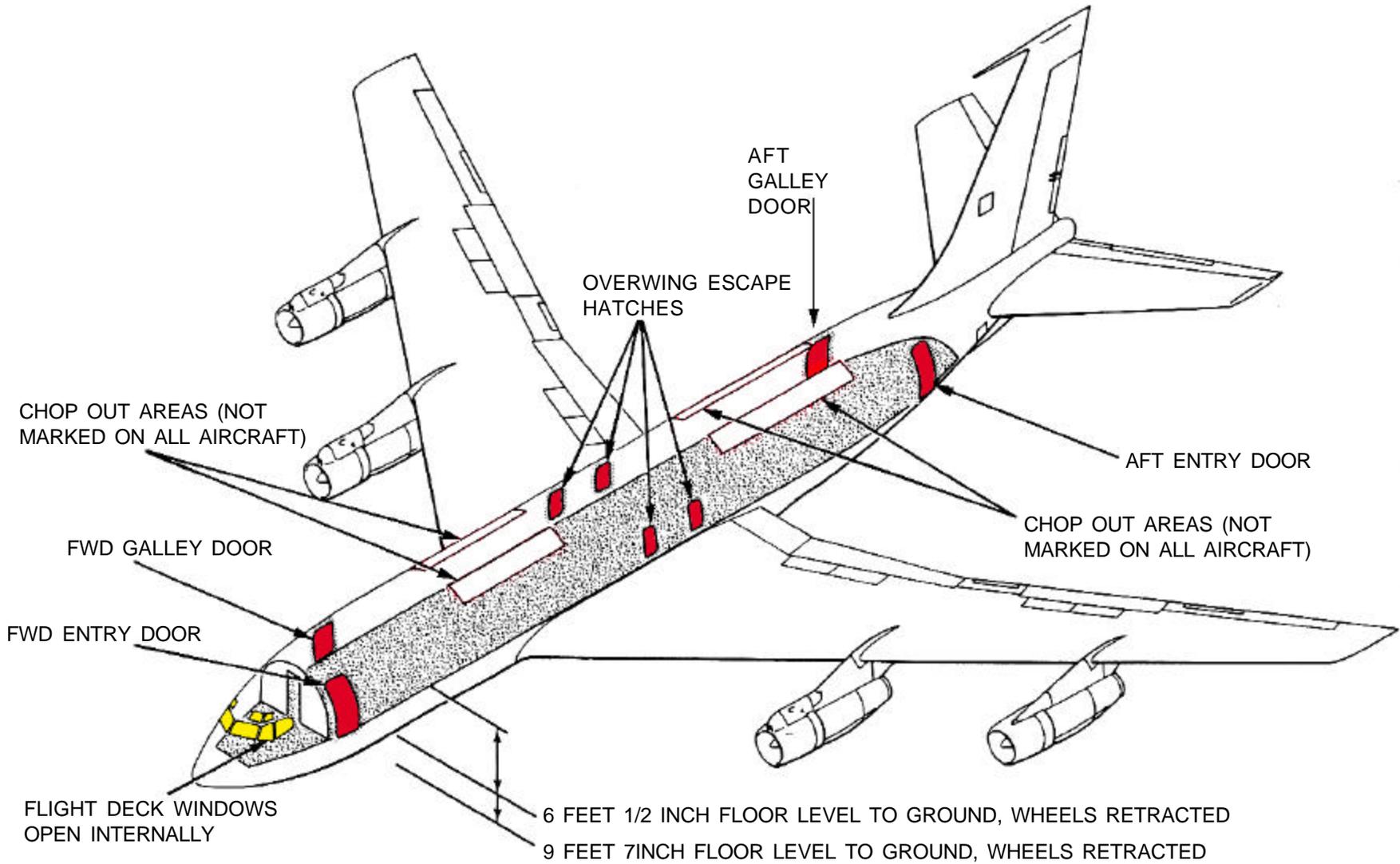
NOTE:

Passenger seats are equipped with lap belts only.



EMERGENCY RESCUE ACCESS

-100 AND -200 SERIES



SPECIAL TOOLS/EQUIPMENT

- Power Rescue Saw
- 24 Foot Ladder
- 35 Foot Ladder
- Fire Drill II

AIRCRAFT ENTRY-300/400 SERIES

1. NORMAL/EMERGENCY ENTRY

- a. Overwing escape hatches both sides- Push red panel, located top center of hatches, in and push hatches inward.
- b. Pull handle, located left side forward and aft entry doors, outward and rotate clockwise.
- c. Pull handle, located forward and aft galley doors right side, outward and rotate counter-clockwise.
- d. Press red handle, located on escape hatch top right forward crew compartment, and pull out.

2. CUT-IN

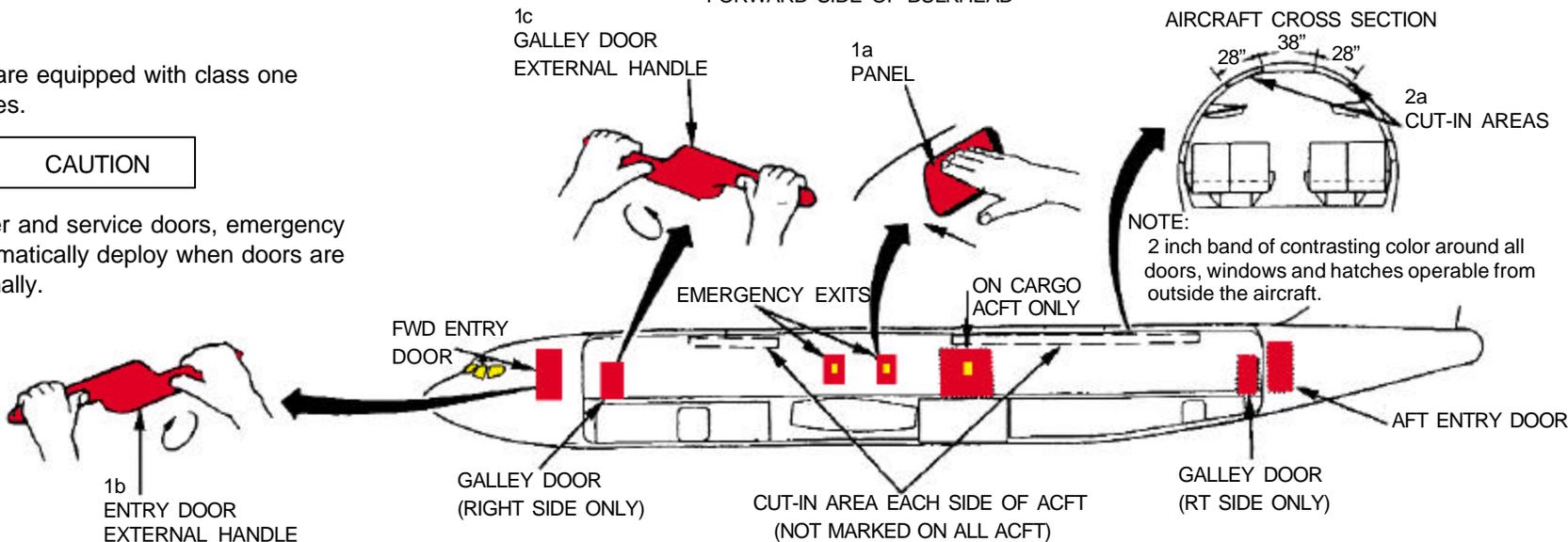
- a. Cut along window lines as last resort.

NOTE:

Some series are equipped with class one escape hatches.

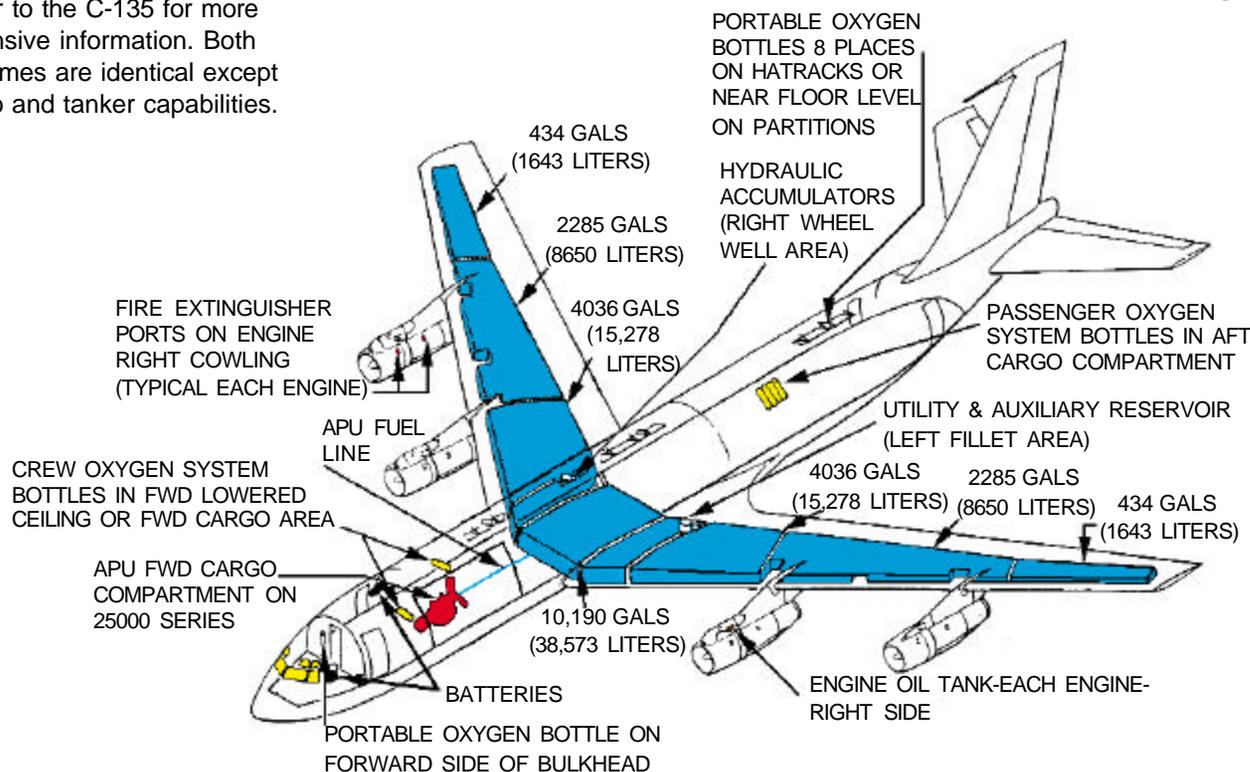
CAUTION

For passenger and service doors, emergency slide will automatically deploy when doors are opened externally.



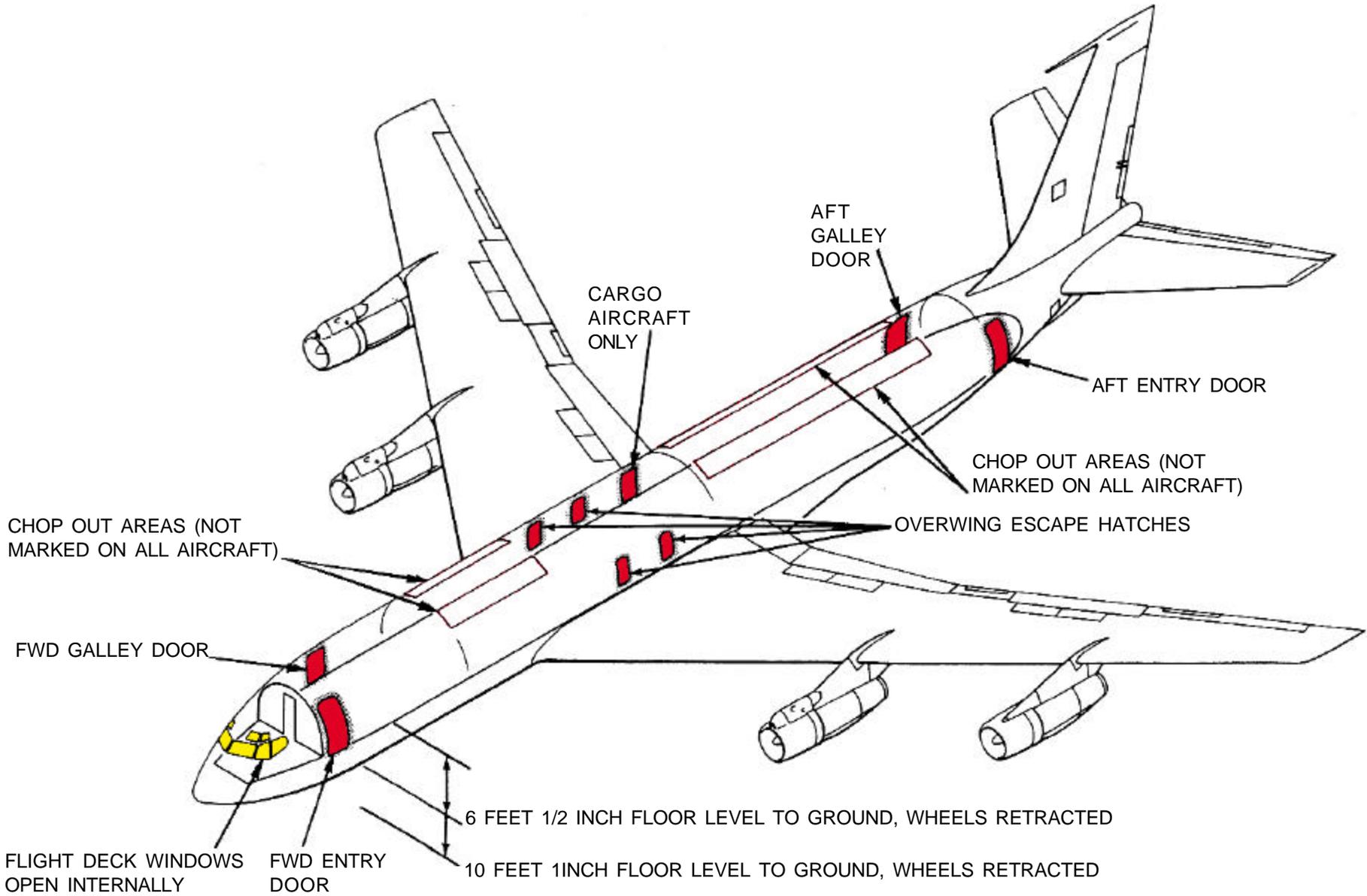
NOTE:

Refer to the C-135 for more extensive information. Both airframes are identical except cargo and tanker capabilities.



EMERGENCY RESCUE ACCESS

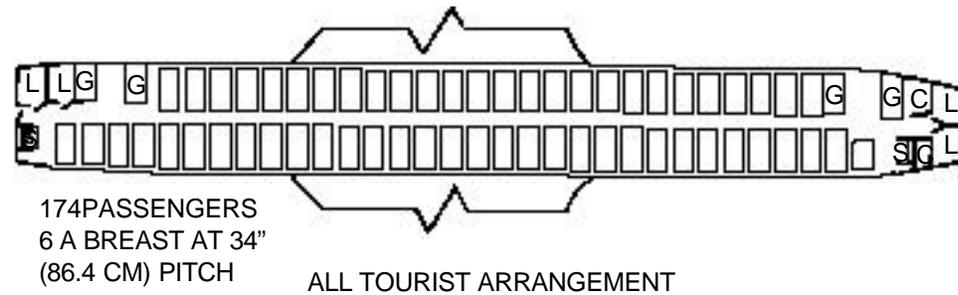
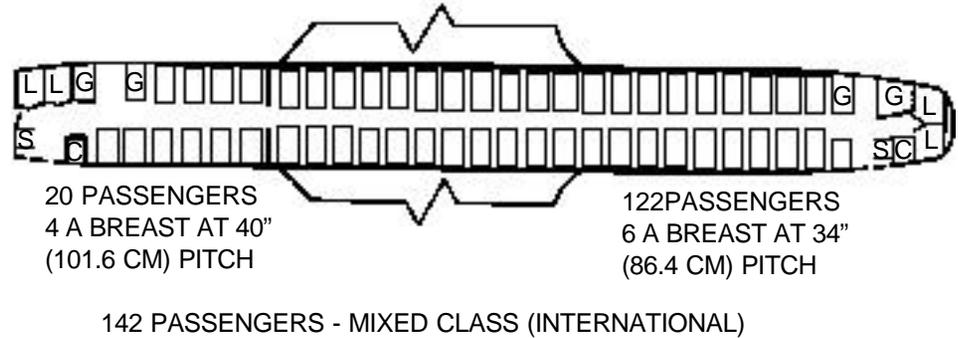
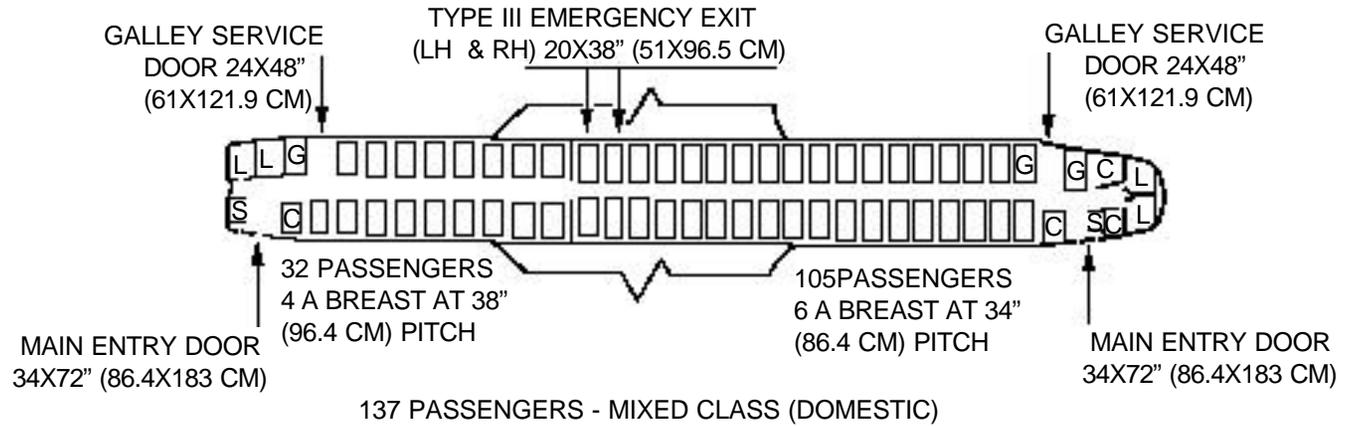
-300 AND -400 SERIES



CABIN CONFIGURATION

-707-120B (PASSENGER)

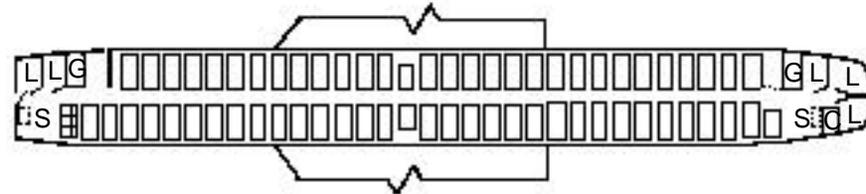
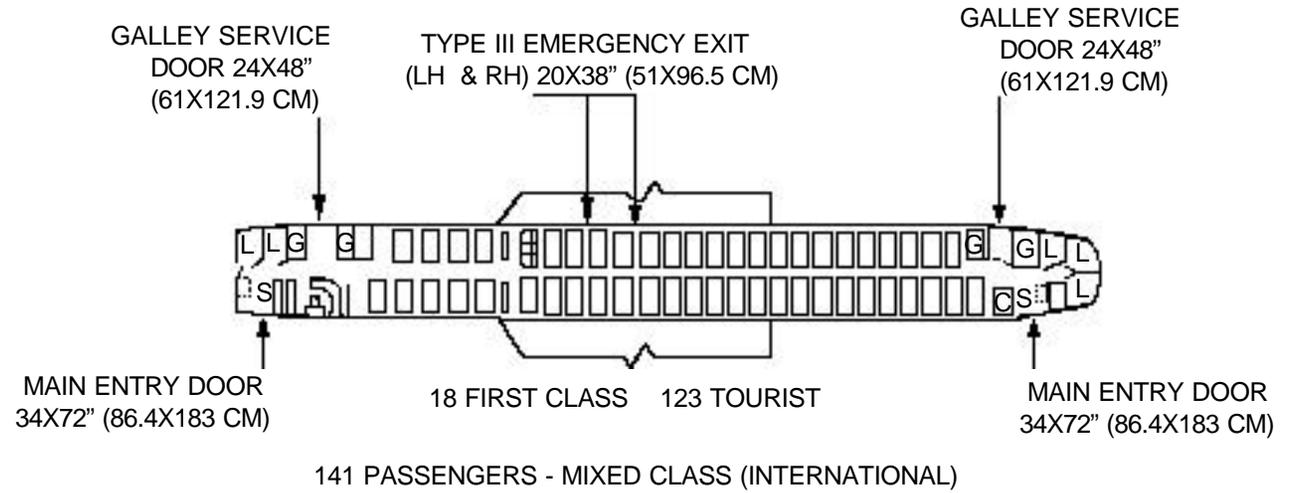
C	CLOSET
G	GALLEY
L	LAVATORY
S	DOUBLE ATTENDANT'S SEAT



CABIN CONFIGURATION-Continued

-707-320/-320B/-420 (PASSENGER)

- C CLOSET
- G GALLEY
- L LAVATORY
- S DOUBLE ATTENDANT'S SEAT



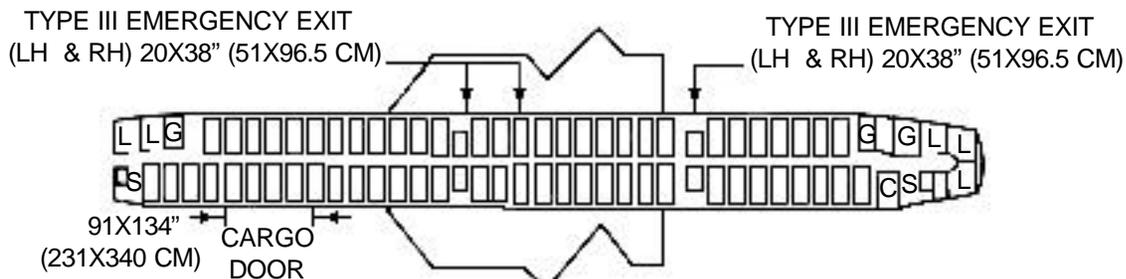
189 PASSENGERS - 34" SEAT PITCH (86.4 CM)
ALL TOURIST ARRANGEMENT

CABIN CONFIGURATION-Continued

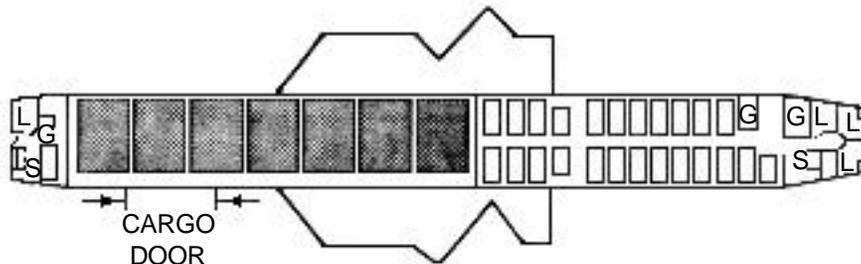
-707-320C (CARGO/PASSENGER)

THREE TO 10 PALLETS CAN BE ACCOMMODATED IN MIXED CARGO/PASSENGER CONFIGURATIONS.

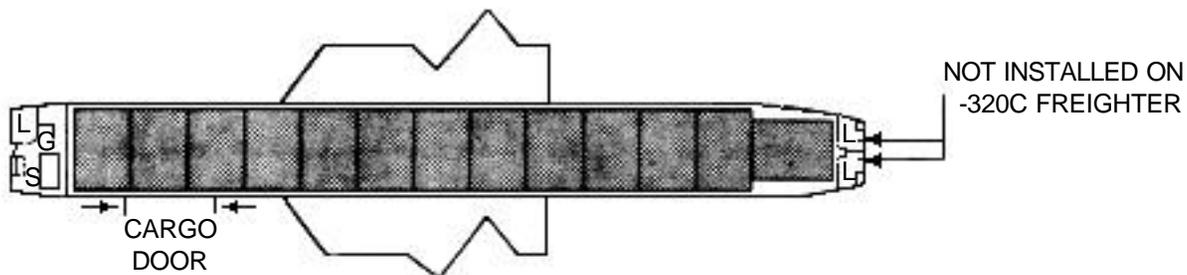
- C CLOSET
- G GALLEY
- L LAVATORY
- S DOUBLE ATTENDANT'S SEAT



ALL TOURIST - 194 PASSENGERS - 32.8" (82.5 CM) SEAT PITCH



7 PALLETS - 88X108" (274 CM) 69 PASSENGERS 34" (86.4 CM) SEAT PITCH



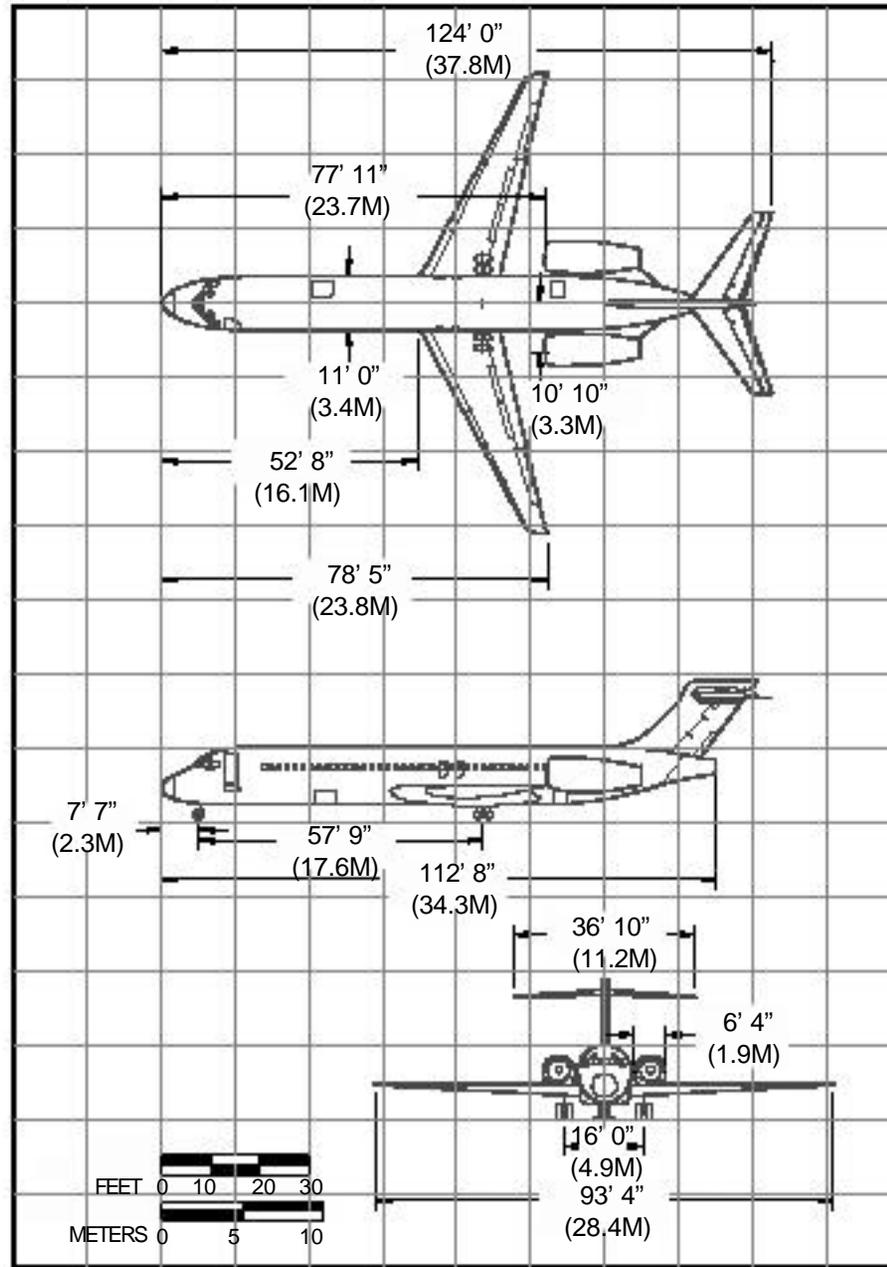
13 PALLETS - 88X125" (223X318 CM)

PASSENGERS	PALLETS
187	0
131	3
115	4
103	5
87	6
69	7
57	8
33	9
29	10
0	13



AIRCRAFT DIMENSIONS

717-200



SKIN PENETRATION POINTS AND GENERAL INFORMATION

NOTE:

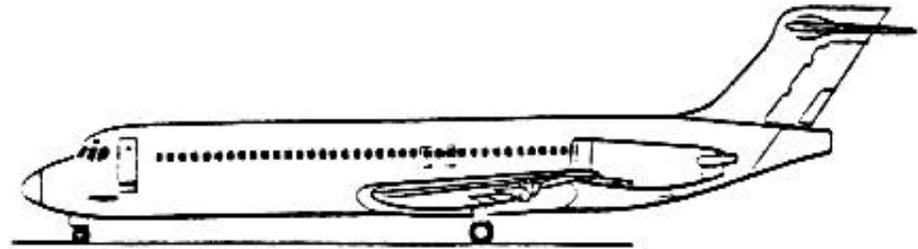
The Boeing 717 is the previously named MD-95 after the design was acquired in 1997. It is the reconfigured DC-9-30.

GENERAL INFORMATION FOR ALL 717 MODELS AND VARIANTS

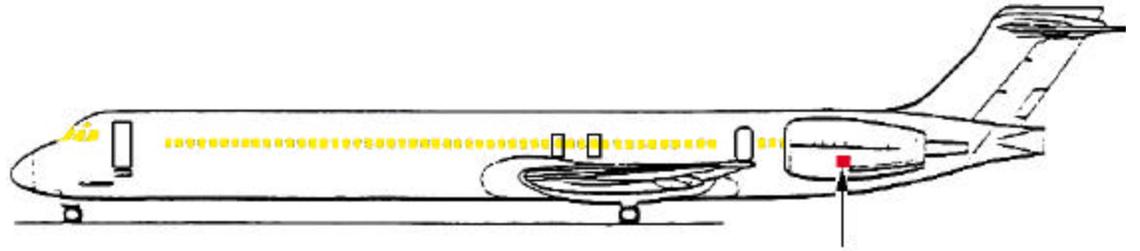
1. Current version is the 717-200. Available in basic and gross weight versions.
2. A proposed version is the 717-100 with 86 seats, formerly the MD-95-20.
3. Another proposed version will be the 717-100X Lite with 75 seats.
4. Another proposed version will be the 717-300 for 130 seats.

SKIN PENETRATION POINTS

Fuselage (both sides)
Penetrate approximately 4 inches below cabin windows. Avoid penetrating emergency exits.



BASIC WEIGHT FUSELAGE VARIANT



GROSS WEIGHT FUSELAGE VARIANT

ENGINE NACELLES (BOTH SIDES)
PENETRATE MID-SECTION OF ENGINE
BELOW ENGINE CENTERLINE

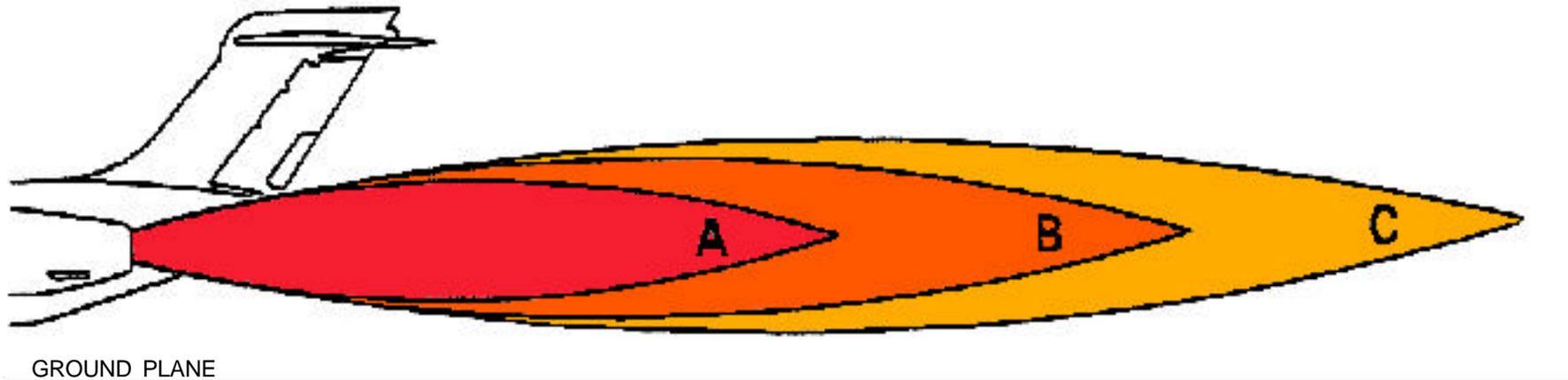
ENGINE DANGER AREAS

JET INTAKE AND BLAST DISTANCES

NOTE:

- These contours are to be used as guidelines only since the operational environment varies greatly - operational varies greatly-operated safety aspects are the responsibility of the user/planner.
- All velocity values are statute miles per hour.
- Cross winds will have considerable effect on contours.
- Sea level static-standard day-zero ramp gradient.

		AFT LIMIT OF ZONE		
		A	B	C
WIND VELOCITY (STATUTE MPH)		300	100	60
TAKEOFF POWER	FEET	31	178	375
	METERS	11	54	114
BREAKAWAY POWER	FEET	NA	35	78
	METERS	NA	11	24
IDLE POWER	FEET	NA	30	50
	METERS	NA	9	15



AIRCRAFT DANGER AREAS

1. EXTERIOR TAILCONE JETTISON

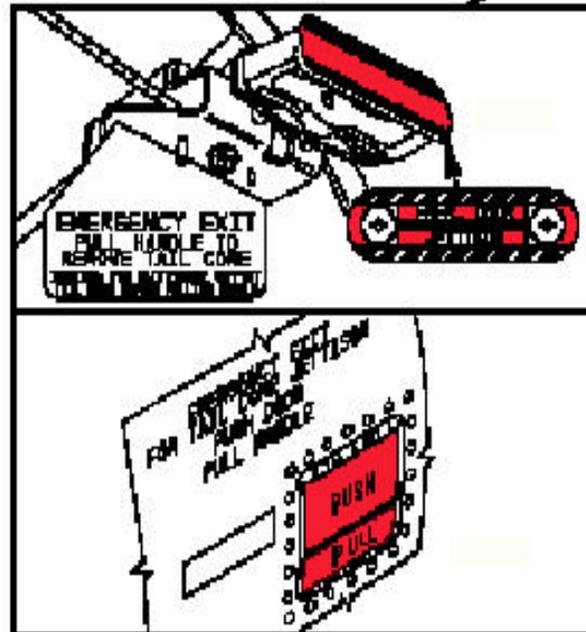
WARNING

Jettisoning tailcone allows emergency ingress or egress. Prior to selecting jettison of tailcone, insure all personnel and equipment are clear of jettison area. Failure to clear area can cause damage to equipment and death or injury to personnel.

- a. Using a ladder, proceed aft of left engine, locate jettison handle access door which is 10 feet (3 meters) above ground.
- b. Push door and pull control handle. Inside lock cable must be re-installed if handle is pulled.

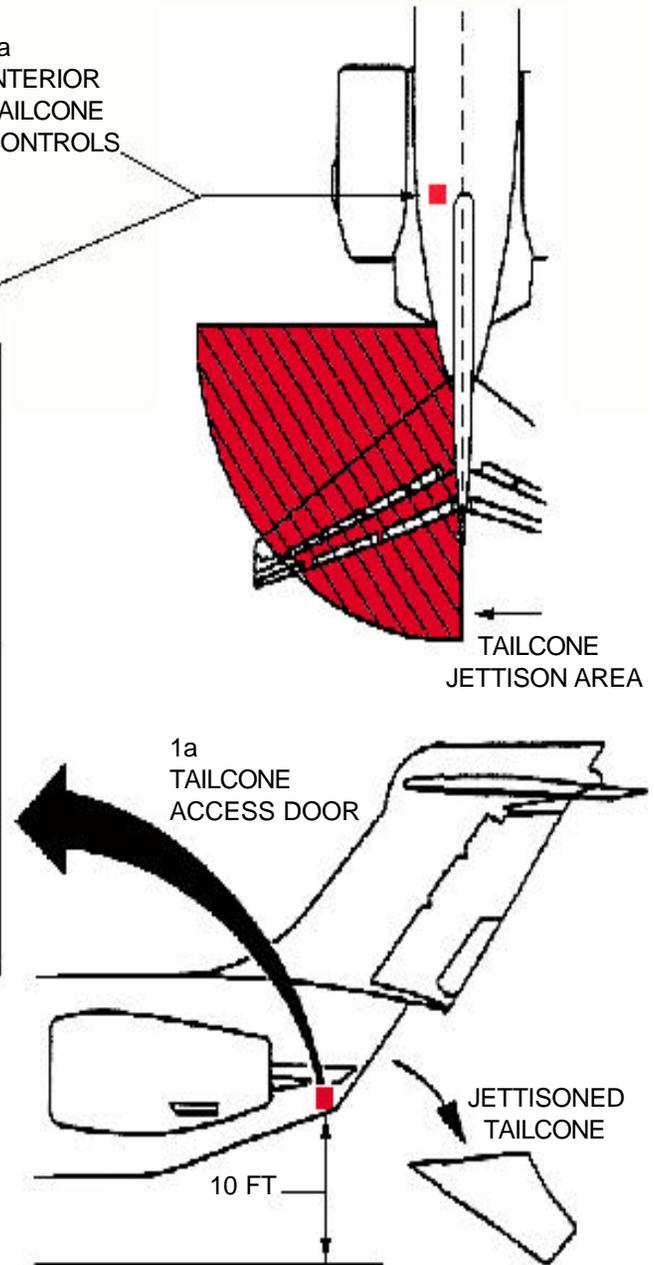
2. INTERIOR TAILCONE JETTISON

- a. Proceed aft to rear cabin bulkhead, locate jettison handle on aircraft left wall and pull control handle.



1a
EXTERIOR
TAILCONE
CONTROLS

2a
INTERIOR
TAILCONE
CONTROLS



TAILCONE
JETTISON AREA

1a
TAILCONE
ACCESS DOOR

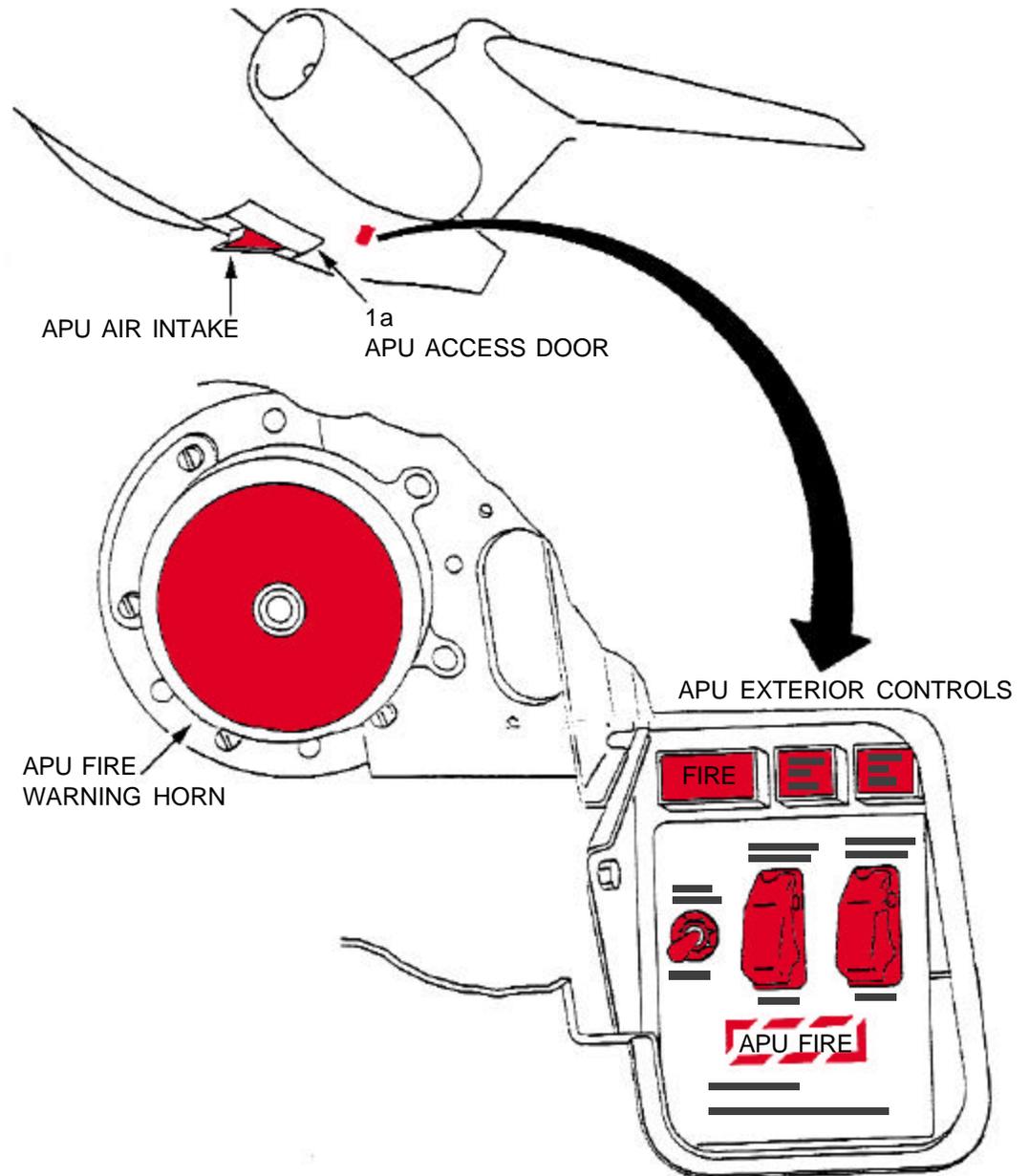
JETTISONED
TAILCONE

10 FT

AIRCRAFT DANGER AREAS-Continued**APU ACCESS DOORS AND APU EXTERIOR CONTROLS****WARNING**

Use extreme caution when opening access areas where fire is evident.

1. APU ACCESS DOORS
 - a. Insert screw driver or similar tool into slot of cam-lock fasteners.
 - b. Turn fasteners to the left to open.
 - c. Pull down access doors.
2. APU EXTERIOR CONTROLS
 - a. Shut off APU by pressing the APU SHUT OFF/NORMAL switch UP.
 - b. If FIRE warning light is illuminated indicating APU fire, flip toggle switch cover up, select FIRE AGENT 1 switch and press UP to discharge fire agent.
 - c. If FIRE light remains illuminated, repeat step a by selecting FIRE AGENT 2 switch. FIRE light will go out if fire is extinguished.
 - d. If fire is not extinguished, access APU through air intake, skin penetration, or other means available.

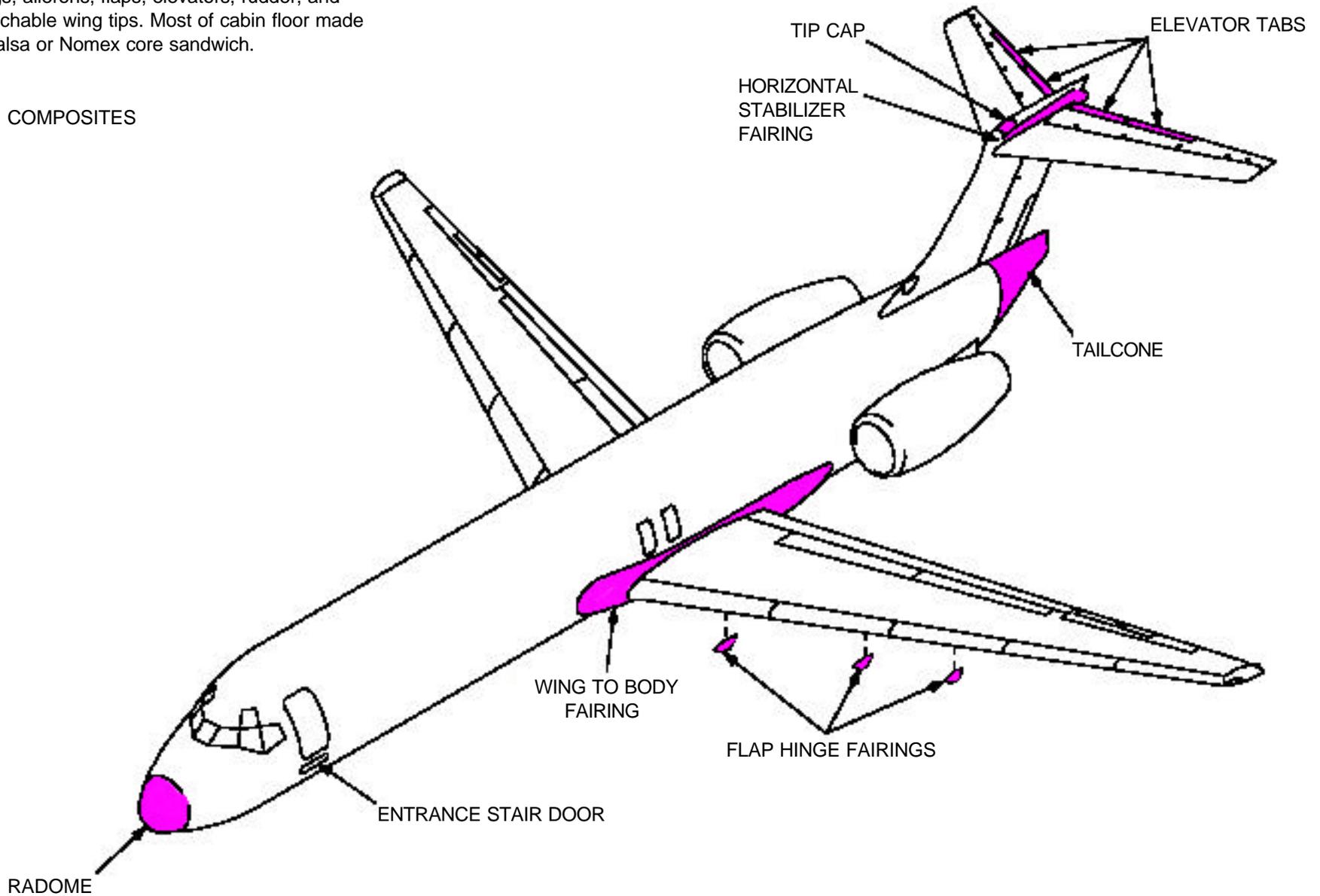


AIRFRAME MATERIALS

NOTE:

All metal wing spars, glassfibre trailing edges on wings, ailerons, flaps, elevators, rudder, and detachable wing tips. Most of cabin floor made of balsa or Nomex core sandwich.

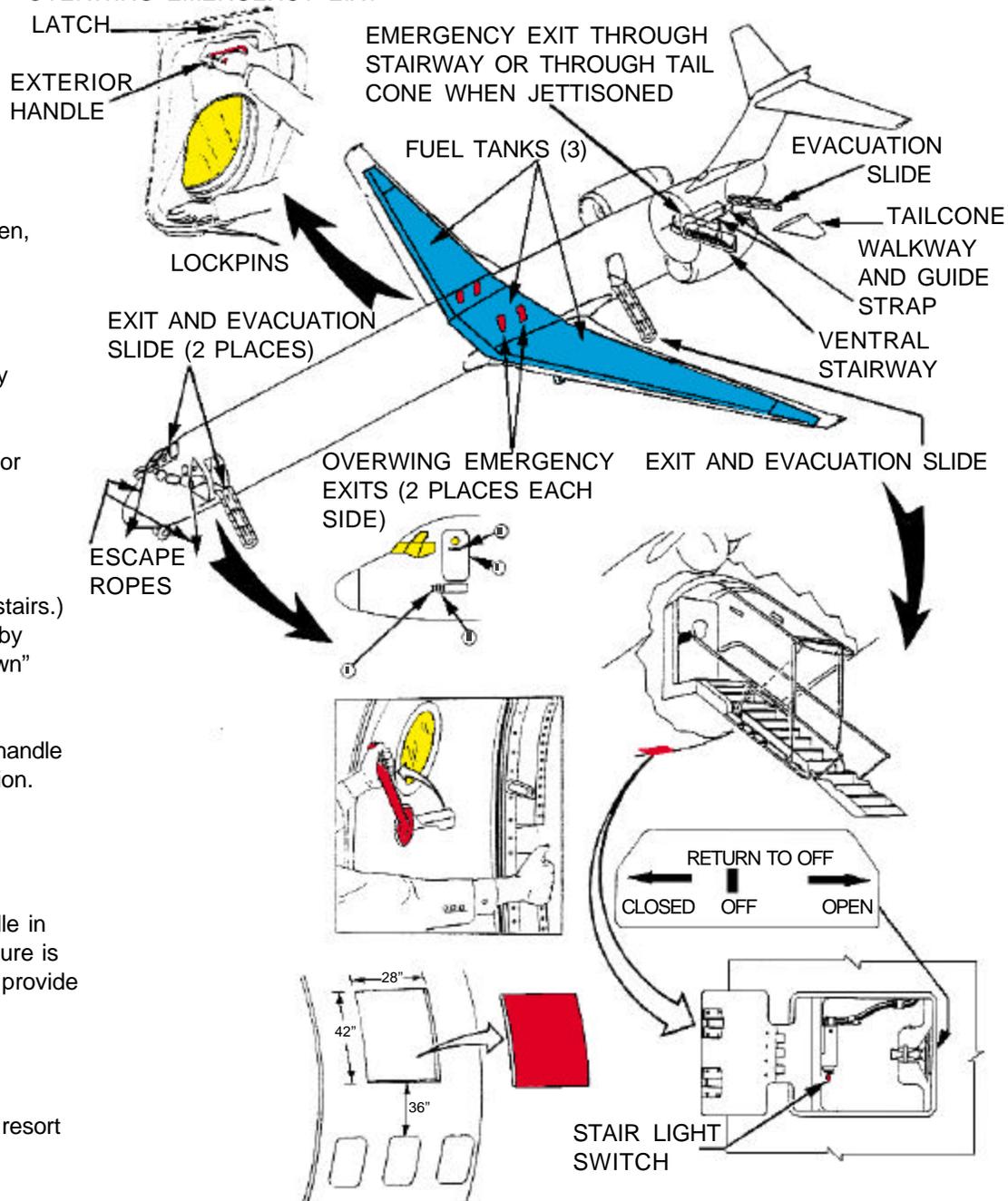
 COMPOSITES



SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw
35 Foot Ladder
Fire Drill II

TOTAL FUEL CAPACITY:
5,840 GALLONS
(FUEL IN WINGS ONLY)

1a
OVERWING EMERGENCY EXIT

AIRCRAFT ENTRY

1. NORMAL/EMERGENCY ENTRY

- a. OVERWING ESCAPE HATCHES, both sides, 4 places. To open, pull exterior handle, push inward at bottom and lift upward.

WARNING

When doors are opened from outside, slide chutes automatically deploy. An opening door could injure rescue personnel.

- b. LEFT FORWARD PASSENGER/SERVICE DOOR (Only left door has stair.) To open, using a ladder, (1) pull door handle out, (2) rotate counterclockwise, (3) push front door edge in, (4) pulling rear edge out and (5) swing door forward.
- c. LEFT FORWARD PASSENGER/SERVICE DOOR (Deploying stairs.) (1) Pull door handle out and open slightly, (2) unlatch stair door by turning and holding battery switch "ON", press and (3) hold "down" button until stair fully extends, and (4) open door fully.
- d. RIGHT FORWARD EMERGENCY EXIT DOOR To open, pull handle down, located top center of door, and door lowers to open position.

NOTE:

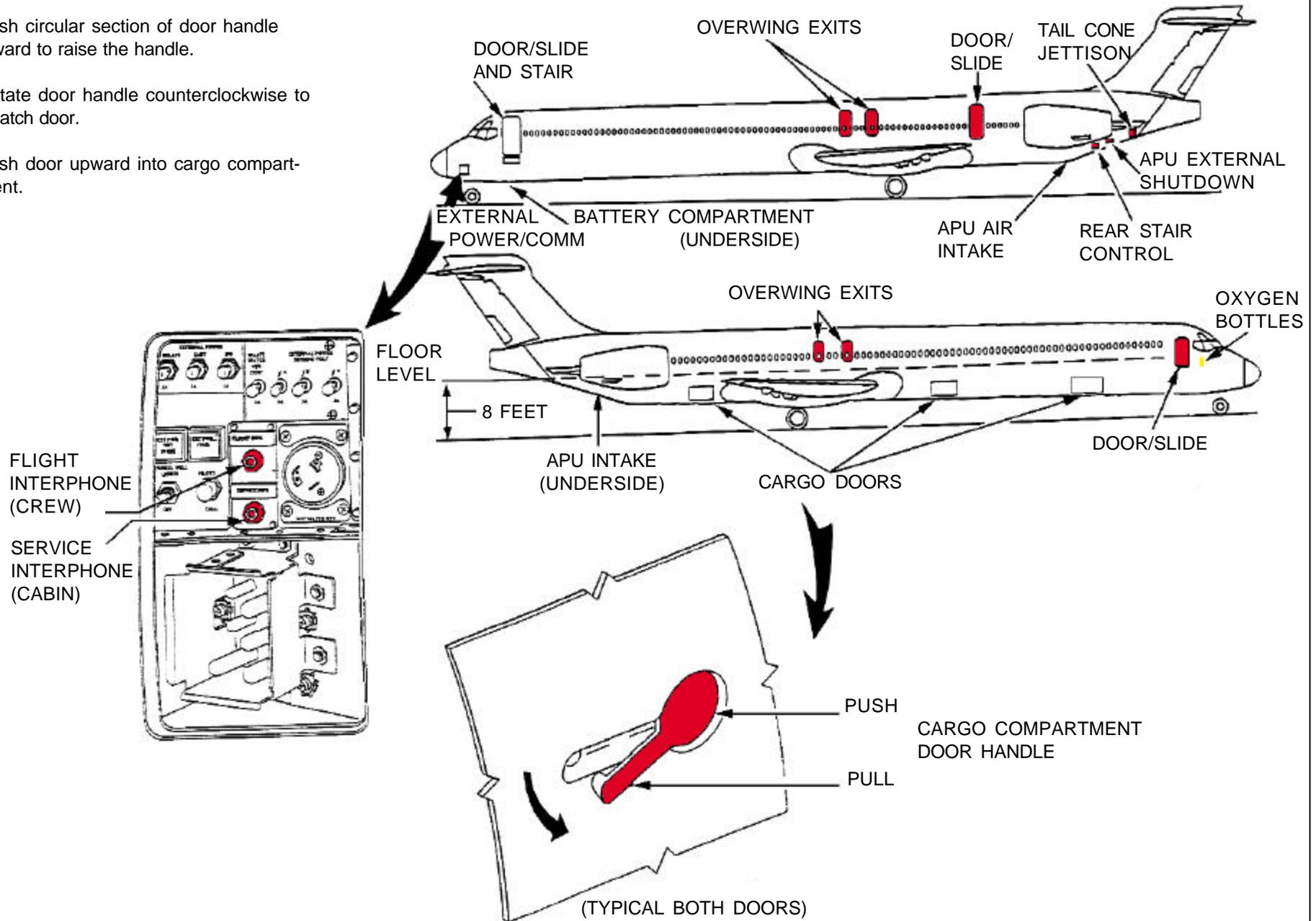
Doors are hinged at bottom edge.

- e. PASSENGER AFT ENTRANCE DOOR AND STAIR Hold handle in "OPEN" position until stair is lowered. If aircraft hydraulic pressure is "OFF", manually pull stair to maximum travel. Accumulator will provide initial movement. (Rear ventral stairway is optional.)
2. CUT-IN
- a. Cut 36" above any window with a cut out of 42" by 28" as a last resort to evacuate smoke and passengers.

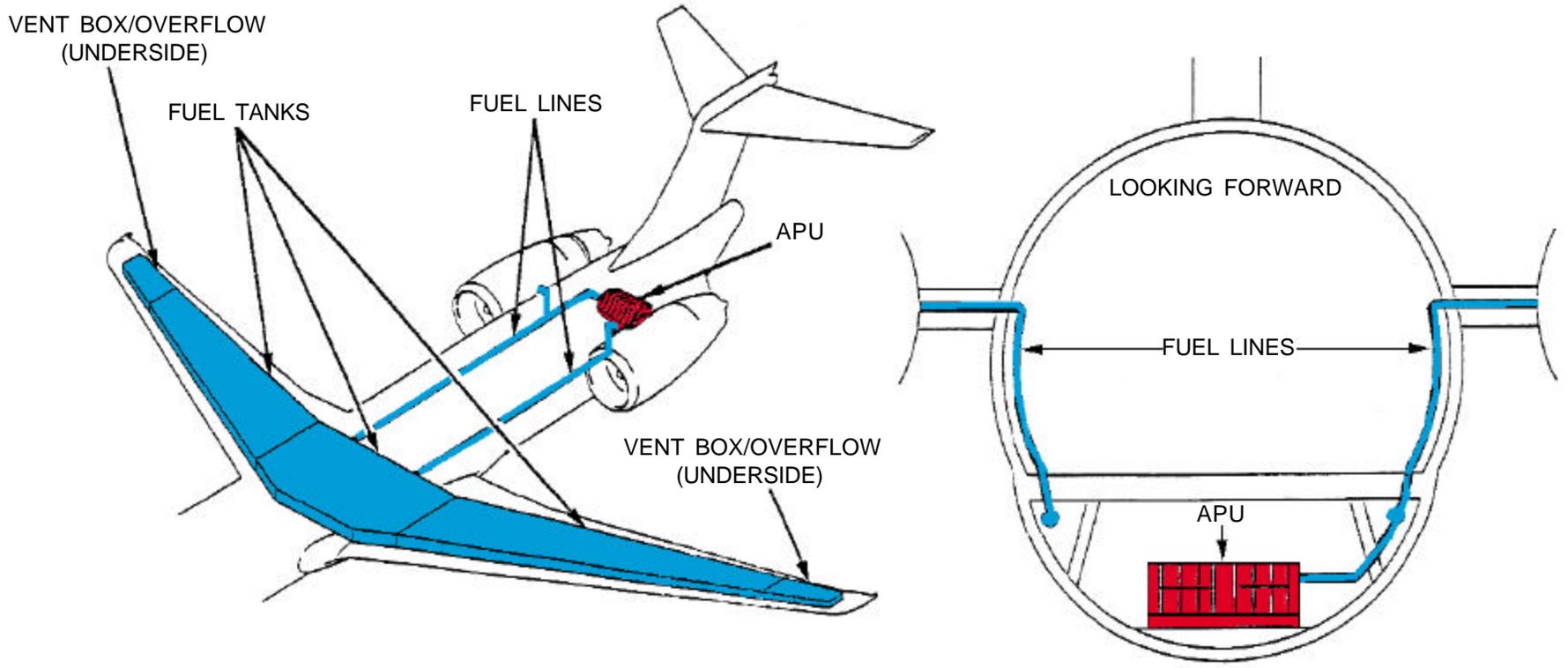
AIRCRAFT EMERGENCY EGRESS

1. CARGO COMPARTMENT DOOR

- a. Push circular section of door handle inward to raise the handle.
- b. Rotate door handle counterclockwise to unlatch door.
- c. Push door upward into cargo compartment.



AIRCRAFT FUEL AND APU SYSTEMS LOCATIONS



ENGINE/APU SHUTDOWN AND AIRCREW EXTRACTION

1. ENGINE/APU SHUTDOWN

- a. Place fuel control levers, located on pilot's center console, to aft and OFF position.
- b. Retard throttles, located on pilot's center console, to IDLE CUTOFF position.
- c. Place battery switch, located on center overhead panel, to OFF position.

NOTE:

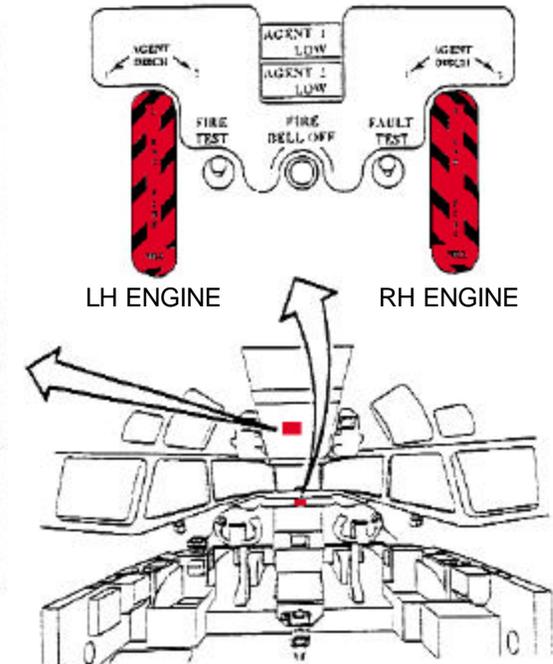
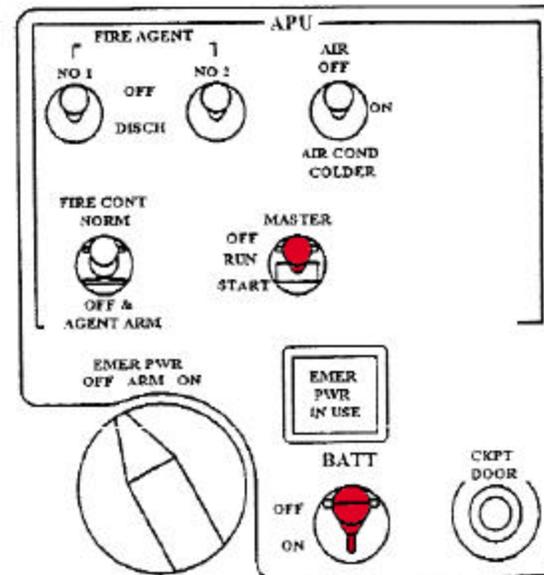
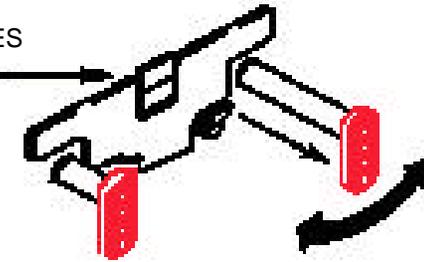
If engines fail to shutdown, pull emergency fire T-handles out, located on pilot's center forward panel. Rotate handles as appropriate.

- d. Place APU master switch, located on center overhead panel, to OFF position.
- e. On the APU ground control panel, located to left of APU access doors on the tail cone, place APU master switch to the APU shutoff position. Discharge fire agent 1 and/ or 2 as applicable.

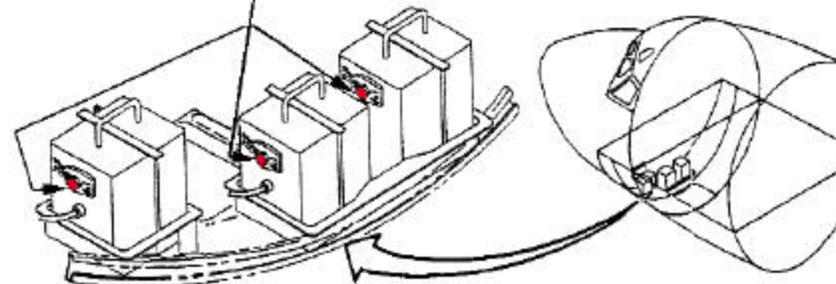
2. AIRCREW EXTRACTION

- a. Unlatch lap belt and remove shoulder harness from crewmember(s).
- b. If seat tracks are not damaged during crash landing, use adjustable seat controls to retract seat to aft position. Pilot's controls are on right side of seat while co-pilot's are on the left.
- c. Flight crew cabin seats are equipped with lap belts and shoulder harnesses.
- d. Passenger seats are only equipped with lap belts.

FIRE T - HANDLES
(PULLED OUT)

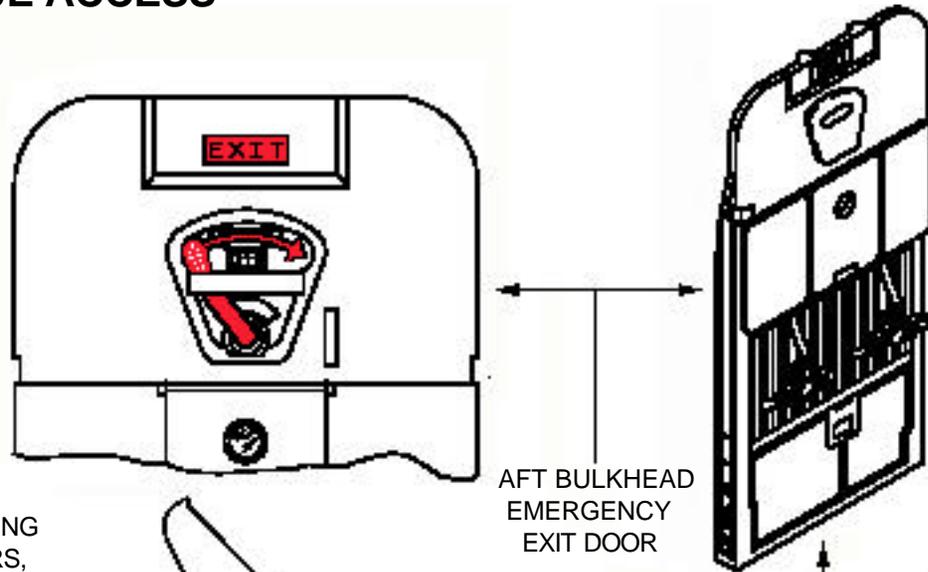


BATTERY QUICK
DISCONNECTS (3)



EMERGENCY RESCUE ACCESS

2" WIDE BAND OF CONTRASTING COLOR INDICATING ALL DOORS, HATCHES AND WINDOWS EXTERNALLY OPERABLE.



AFT BULKHEAD EMERGENCY EXIT DOOR

- JETTISONABLE TAILCONE
- TAILCONE ACCESS DOOR
- TAILCONE JETTISON LATCH

OVERWING EMERGENCY EXITS

FORWARD LOWER CARGO DOOR

FORWARD SERVICE ENTRANCE DOOR

CLEARVIEW WINDOW - CHILL PANE WITH CO2 AND BREAK WITH HEAVY FIRE AXE FOR ACCESS TO HANDLE; SLIDE WINDOW AFT

FORWARD PASSENGER ENTRANCE DOOR

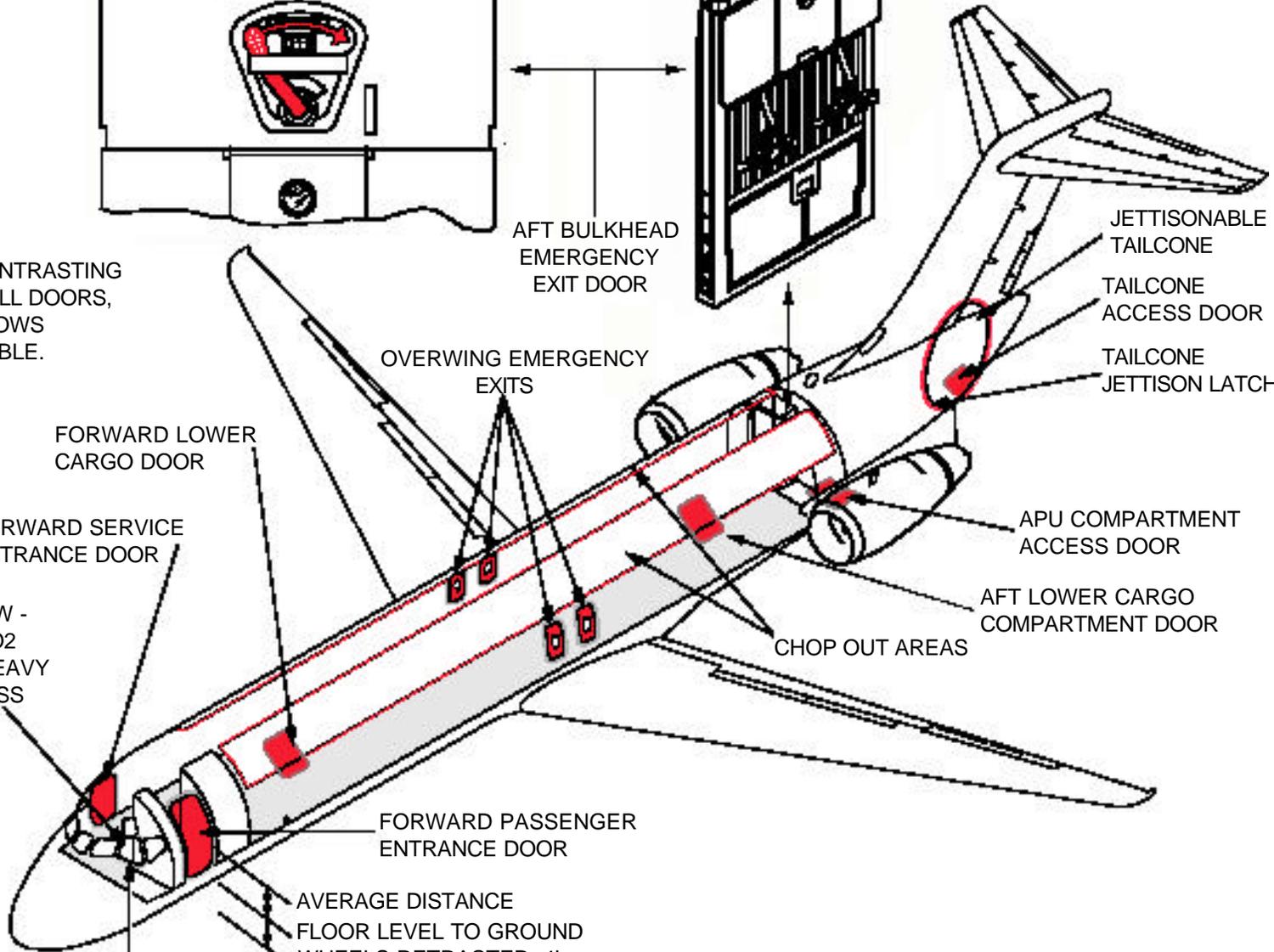
APU COMPARTMENT ACCESS DOOR

AFT LOWER CARGO COMPARTMENT DOOR

CHOP OUT AREAS

CLEARVIEW WINDOW

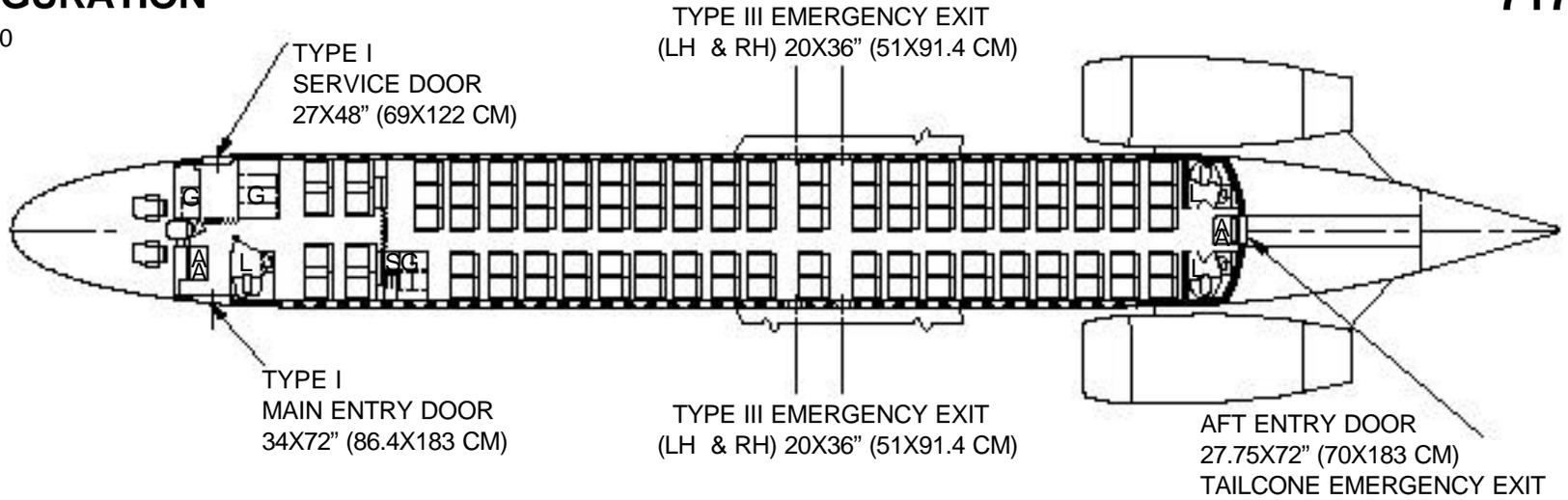
AVERAGE DISTANCE FLOOR LEVEL TO GROUND
WHEELS RETRACTED: 4'
WHEELS EXTENDED: 8'



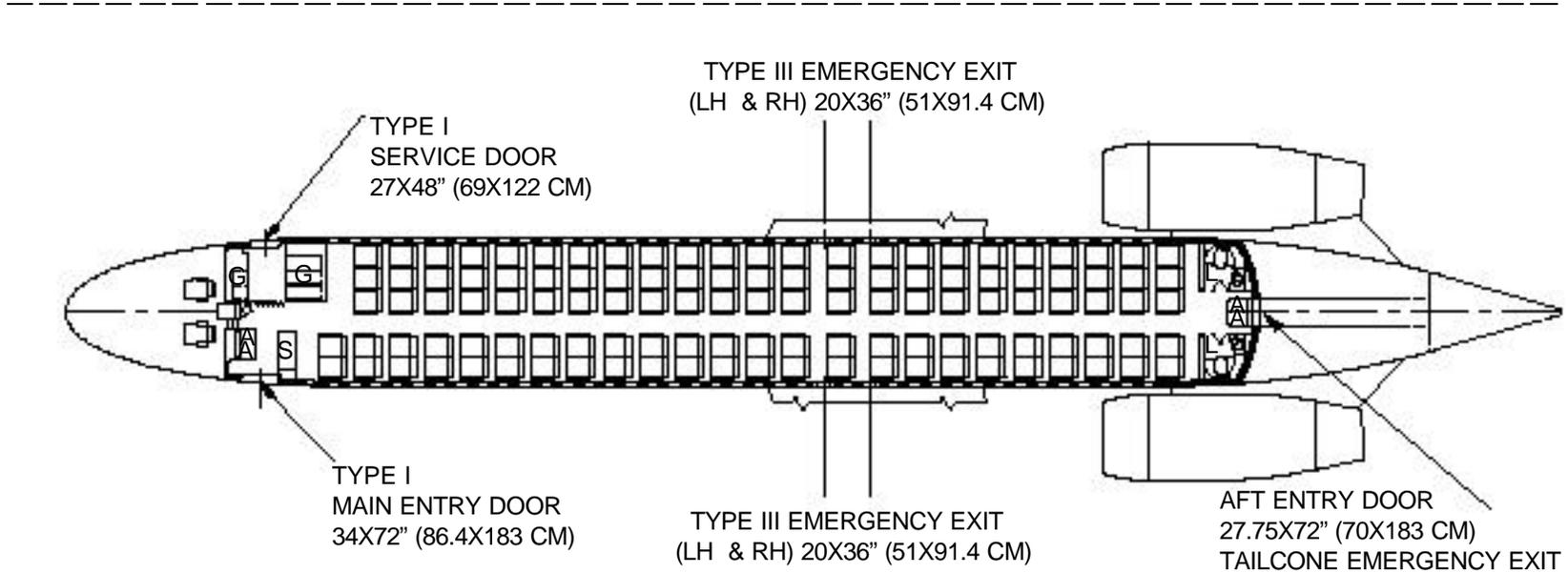
CABIN CONFIGURATION

EFFECTIVITY: 717-200

A	ATTENDANT
G	GALLEY
L	LAVATORY
S	STOWAGE



MIXED CLASS - 106 PASSENGERS
 FIRST CLASS - 8 SEATS ON 36" (91.4 CM) PITCH ECONOMY CLASS - 98 SEATS ON 32" (81.3 CM) PITCH

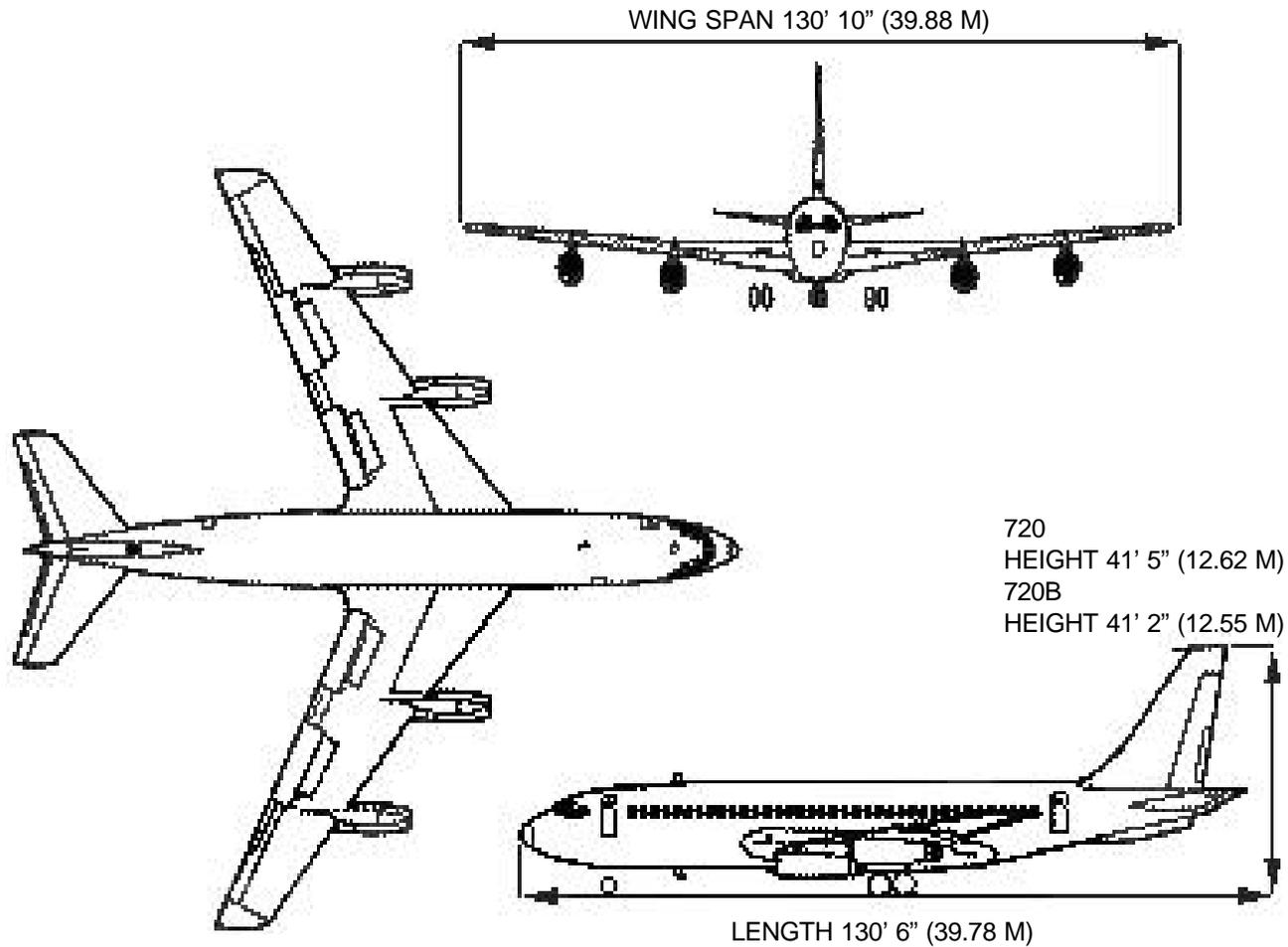


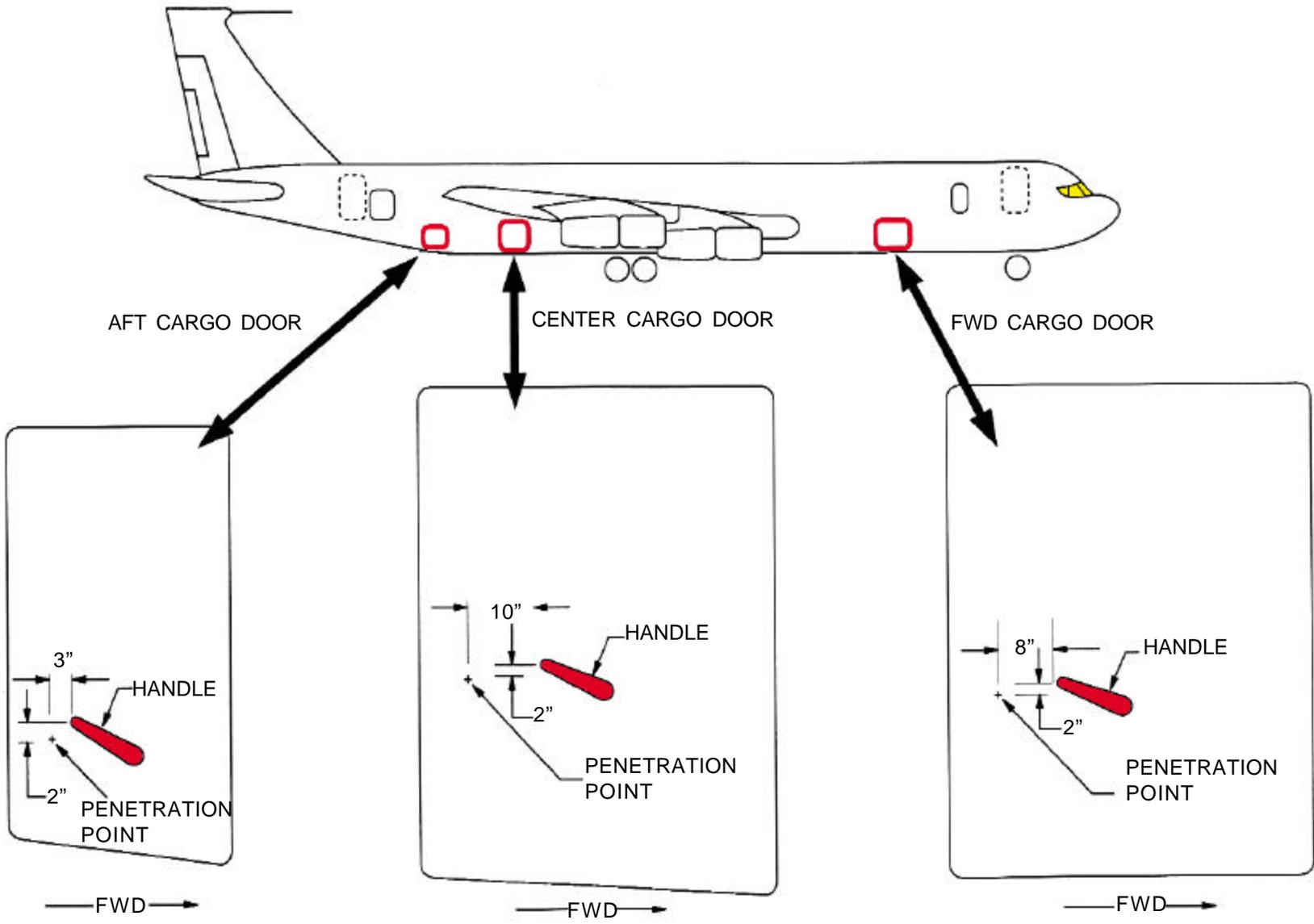
ALL ECONOMY CLASS - 117 PASSENGERS
 5 - ABREAST ON 32" (81.3 CM) PITCH



AIRCRAFT DIMENSIONS

The 720 was originally designated the 707-020 from a modified 707-120 design for medium-range operation from shorter runways. The aircraft is lighter and faster than the 707 and has a simplified wing design.

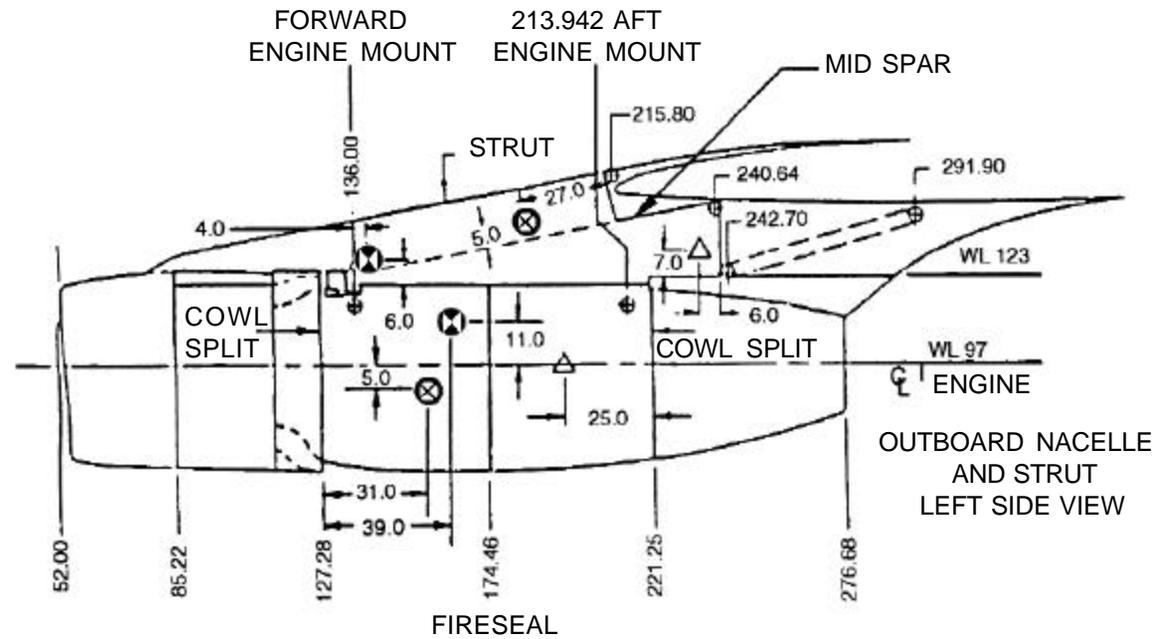




AIRCRAFT SKIN PENETRATION POINTS-Continued

720B TURBOFAN ENGINES

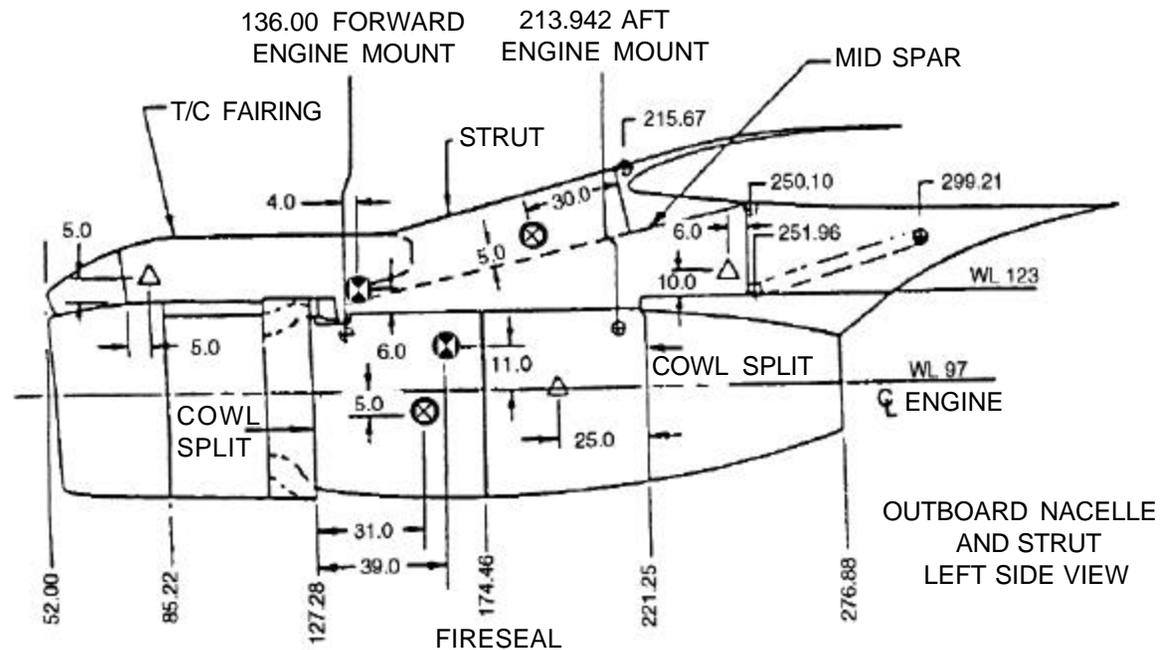
-  LEFT SIDE OF ENGINE
-  RIGHT SIDE OF ENGINE
-  COMMON POINT (LH & RH SIDE)



FIRESEAL

720B TURBOFAN ENGINES

-  LEFT SIDE OF ENGINE
-  RIGHT SIDE OF ENGINE
-  COMMON POINT (LH & RH SIDE)



FIRESEAL

SPECIAL TOOLS/EQUIPMENT

- Power Rescue Saw
- 24 Foot Ladder
- 35 Foot Ladder
- Fire Drill II

NOTE:

Refer to the C-135 for more extensive information. Both airframes are identical except cargo and tanker capabilities.

AIRCRAFT ENTRY

1. NORMAL/EMERGENCY ENTRY

- a. Overwing escape hatches both sides- Push red panel, located top center of hatches, in and push hatches inward.
- b. Pull handle, located left side forward and aft entry doors, outward and rotate clockwise.
- c. Pull handle, located forward and aft galley doors right side, outward and rotate counter-clockwise.
- d. Press red handle, located on escape hatch top right forward crew compartment, and pull out.

2. CUT-IN

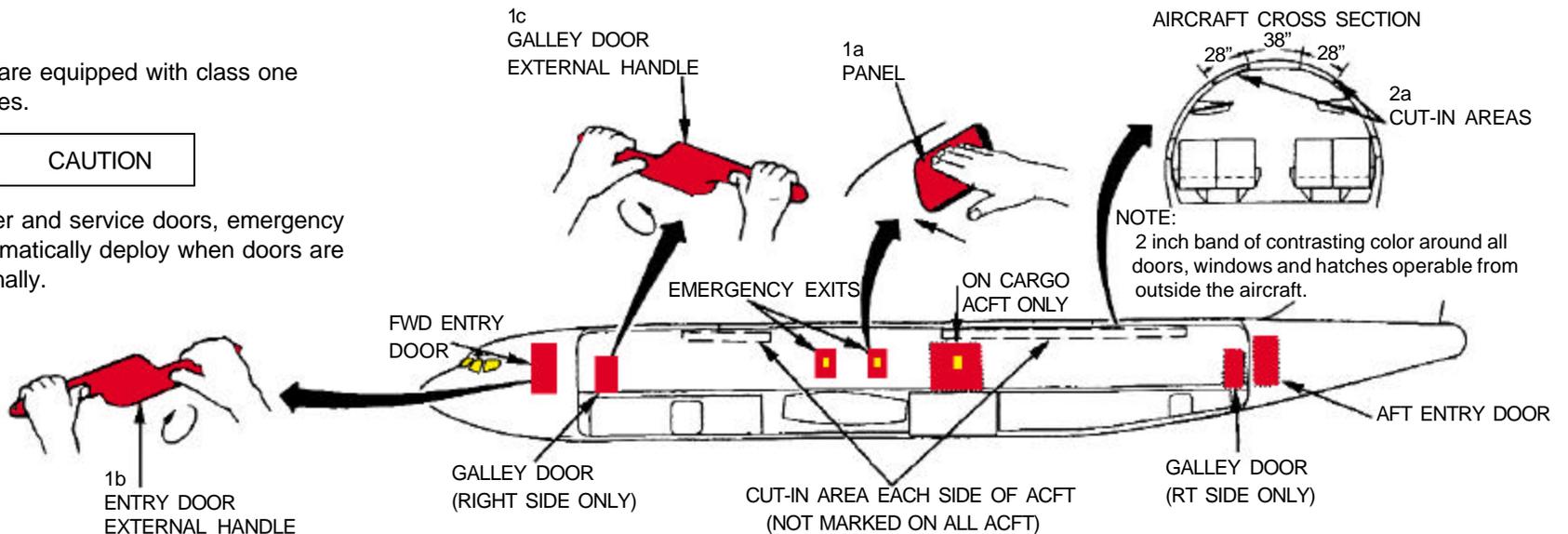
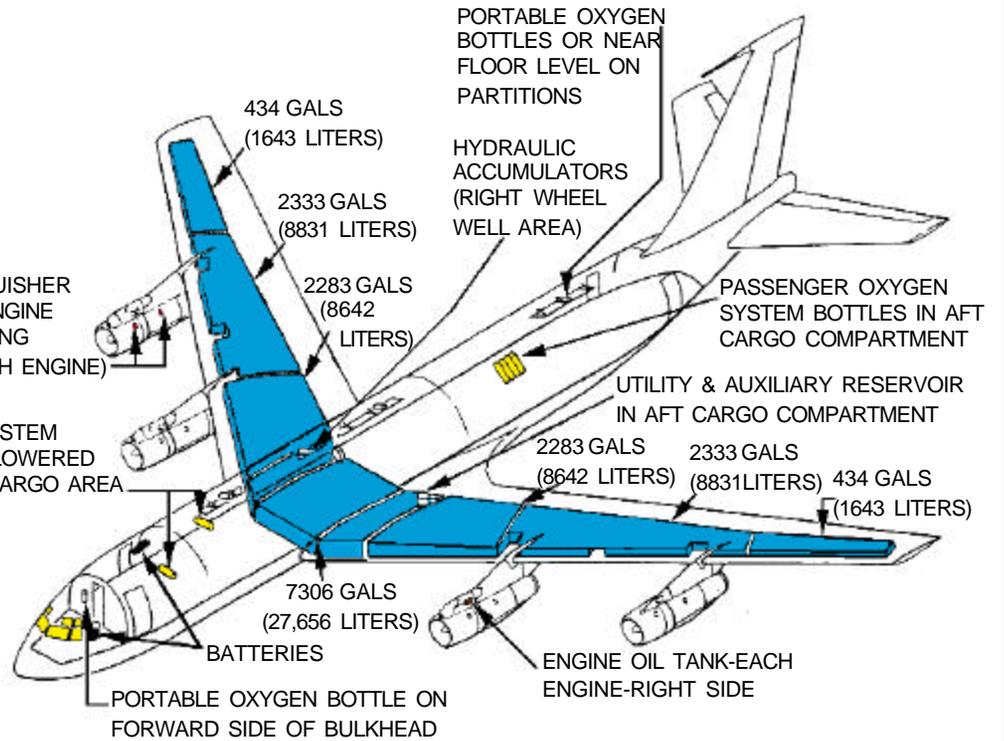
- a. Cut along window lines as last resort.

NOTE:

Some series are equipped with class one escape hatches.

CAUTION

For passenger and service doors, emergency slide will automatically deploy when doors are opened externally.



ENGINE SHUTDOWN AND AIRCREW EXTRACTION

APPLICABILITY:
707-100/-200
-300/-400
720 & 720B

1. ENGINE SHUTDOWN

- Retard thrust levers, located on pilot's center console, to RETARD position.
- Place engine start levers, located on pilot's center console, to CUT OFF position
- Pull emergency fire T-handles, located top center above instrument panel.
- Place engine start switches, located on pilot's overhead panel, to OFF position.
- In case of APU fire, pull APU fire switch, located on the upper left flight engineer's panel, out to apply agent to APU.
- If no APU fire, place APU master switch, located on the upper left flight engineer's panel, to OFF position.

- Place battery switch, located on lower right flight engineer's panel, down to OFF position.

2. AIRCREW EXTRACTION

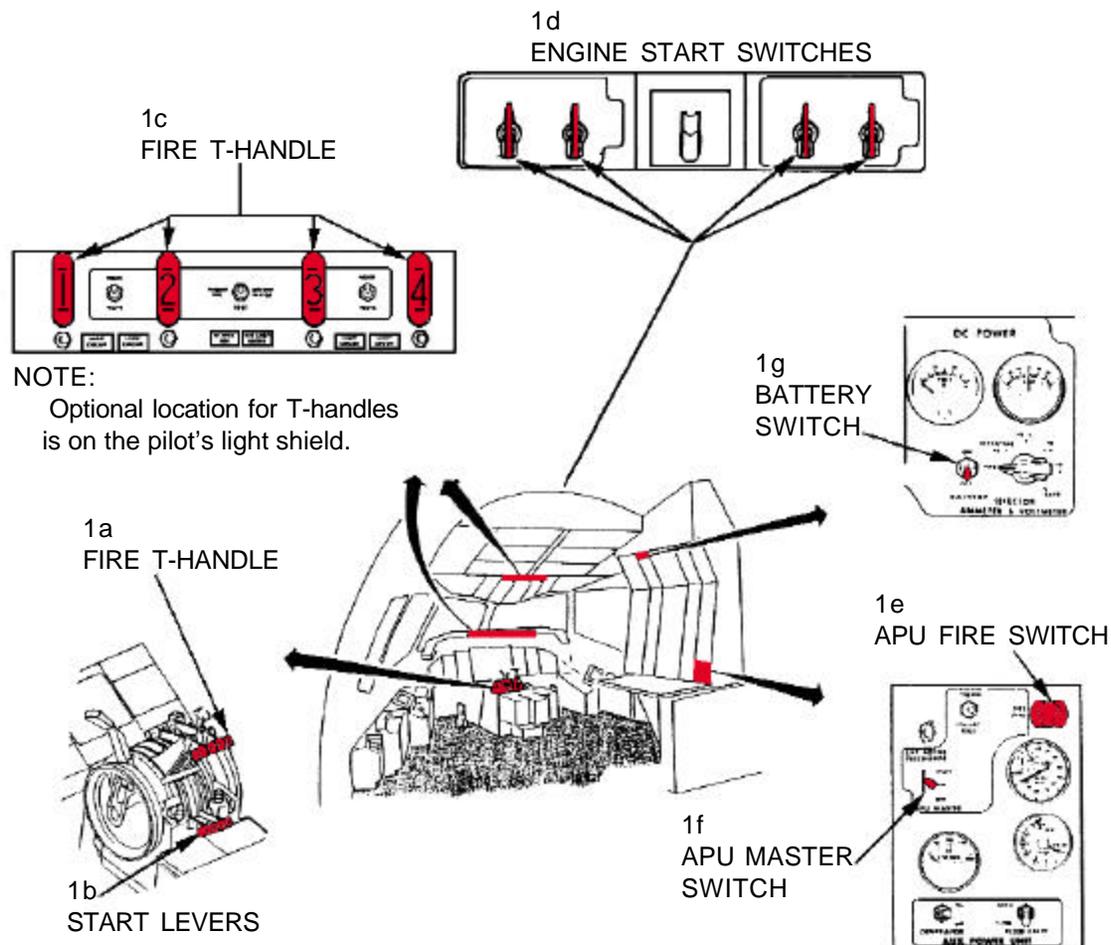
- Unlatch lap belts and remove shoulder harness from crewmembers.
- Depress seat control handles, located on flight engineer's seat, and rotate from left to right.

NOTE:

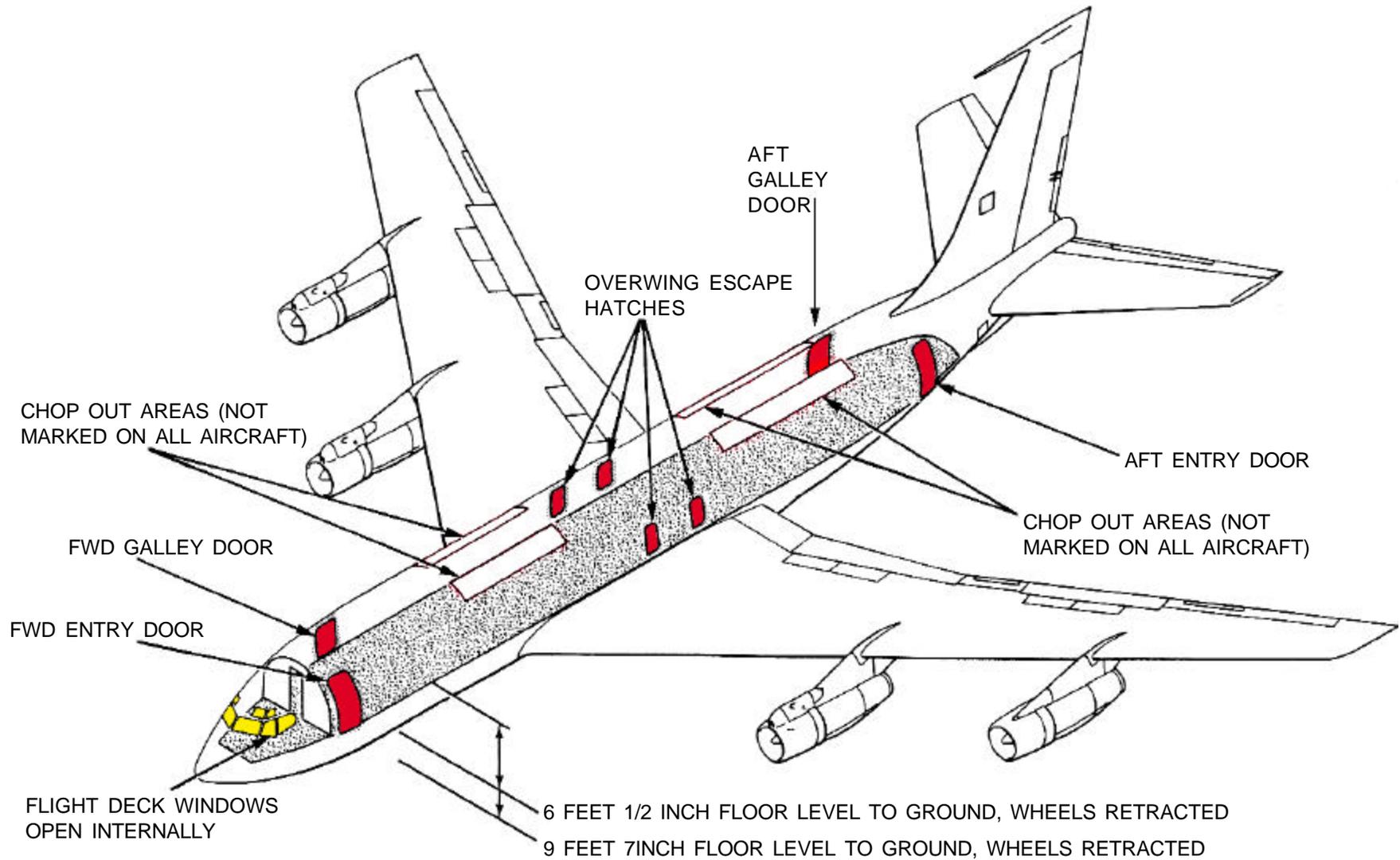
If seat tracks are not damaged during crash landing, use adjustable seat controls to retract seats to aft position.

NOTE:

Passenger seats are equipped with lap belts only.



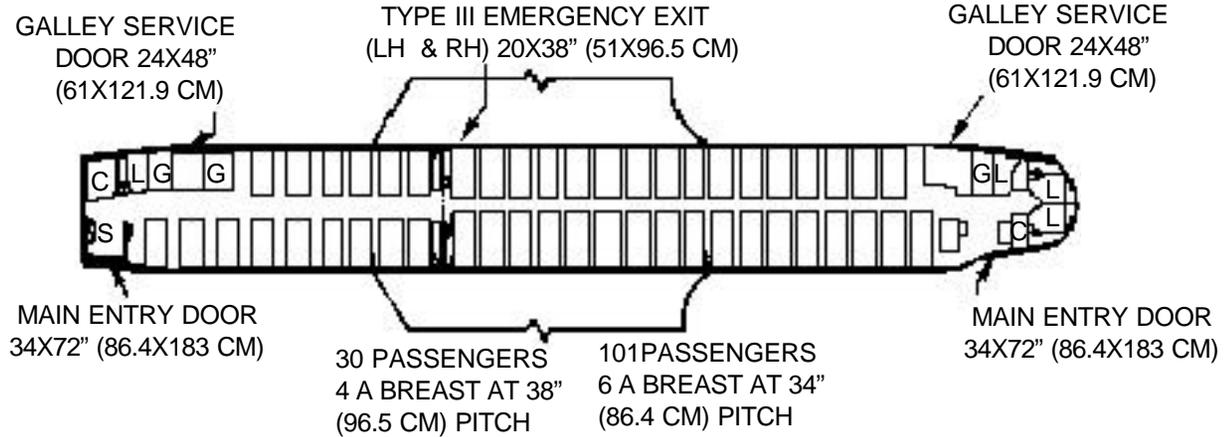
EMERGENCY RESCUE ACCESS



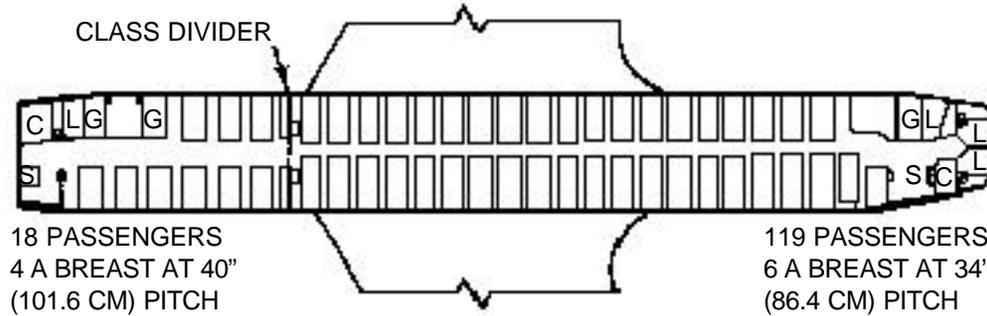
CABIN CONFIGURATION

EFFECTIVITY: 720, 720B (PASSENGER)

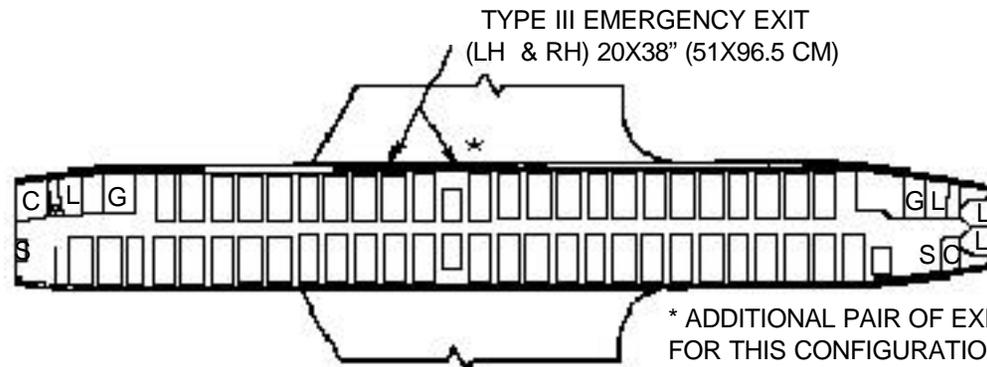
C	CLOSET
ES	ESCAPE SLIDE
G	GALLEY
L	LAVATORY
S	DOUBLE ATTENDANT'S SEAT



131 PASSENGERS - MIXED CLASS (DOMESTIC)



137 PASSENGERS - MIXED CLASS (INTERNATIONAL)

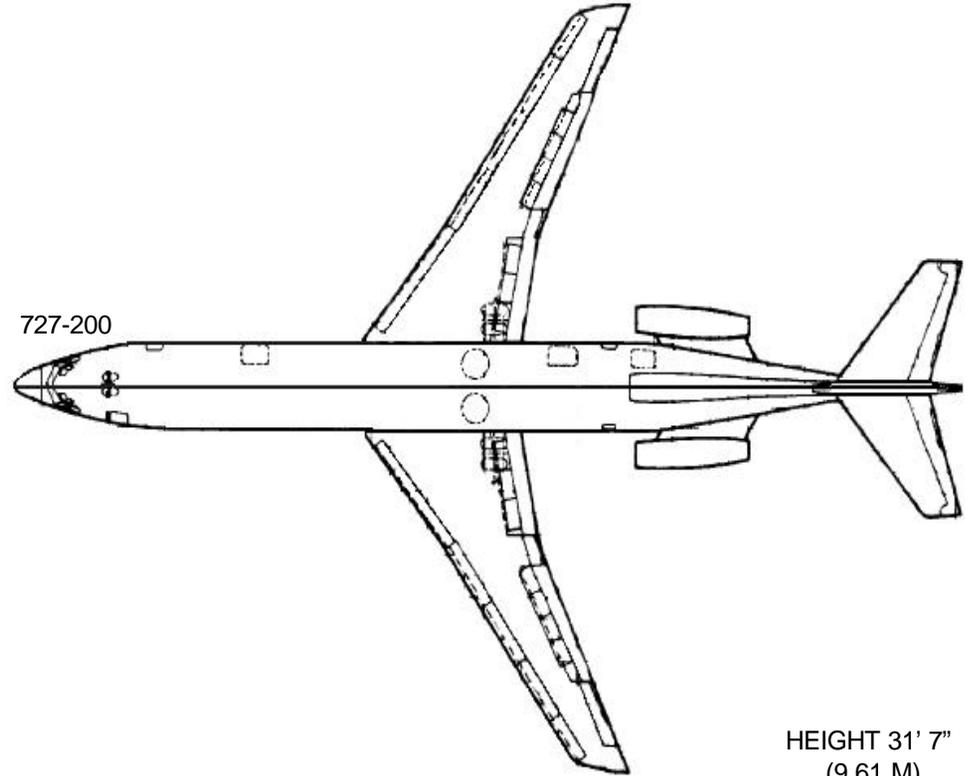
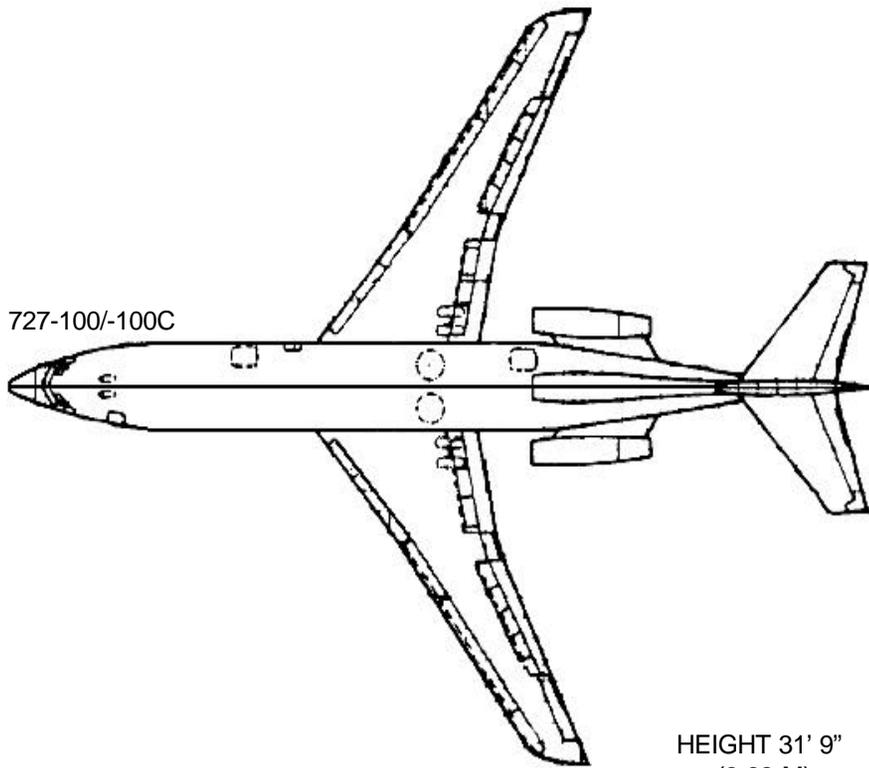


* ADDITIONAL PAIR OF EXITS REQUIRED FOR THIS CONFIGURATION: 149 PASSENGERS MAXIMUM ALLOWABLE WITH TWO TYPE III EMERGENCY EXITS.

156* PASSENGERS - 6 A BREAST AT 34" (86.4 CM)

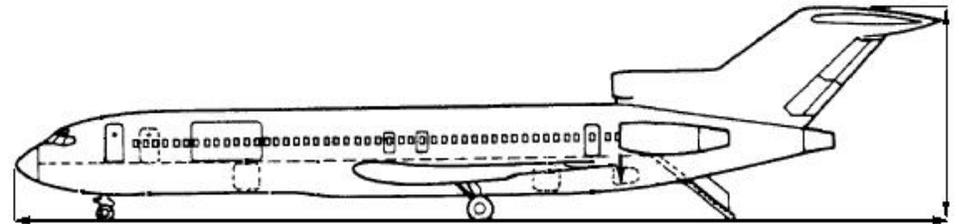
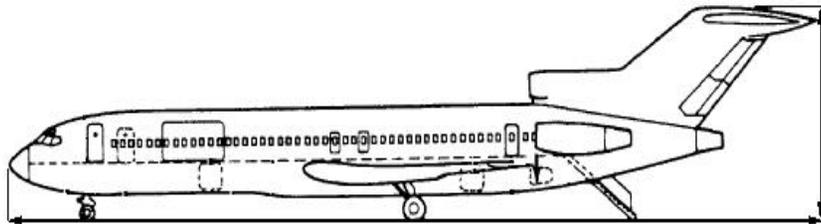


AIRCRAFT DIMENSIONS



HEIGHT 31' 9"
(9.68 M)

HEIGHT 31' 7"
(9.61 M)

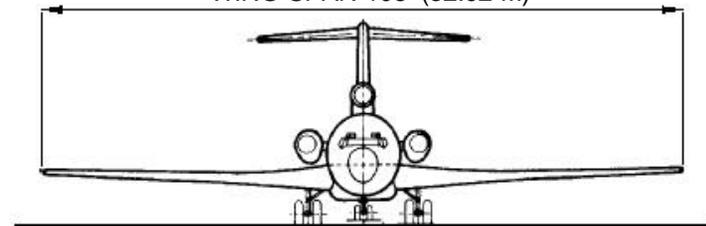
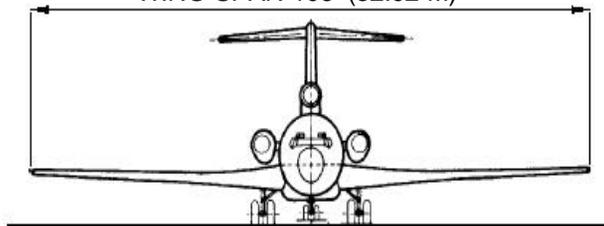


LENGTH 116' 2" (35.41 M)

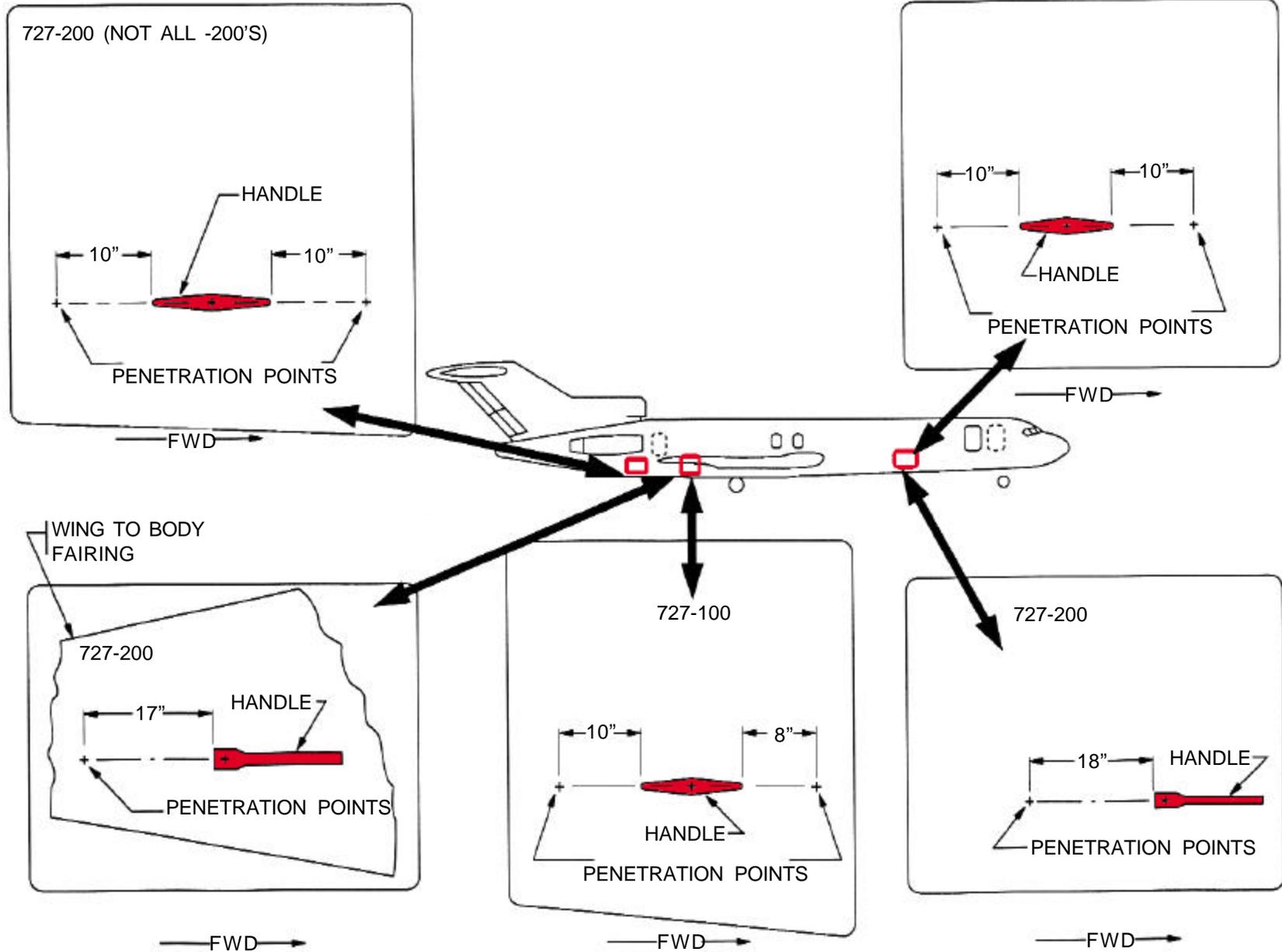
LENGTH 136' 2" (41.50 M)

WING SPAN 108' (32.92 M)

WING SPAN 108' (32.92 M)



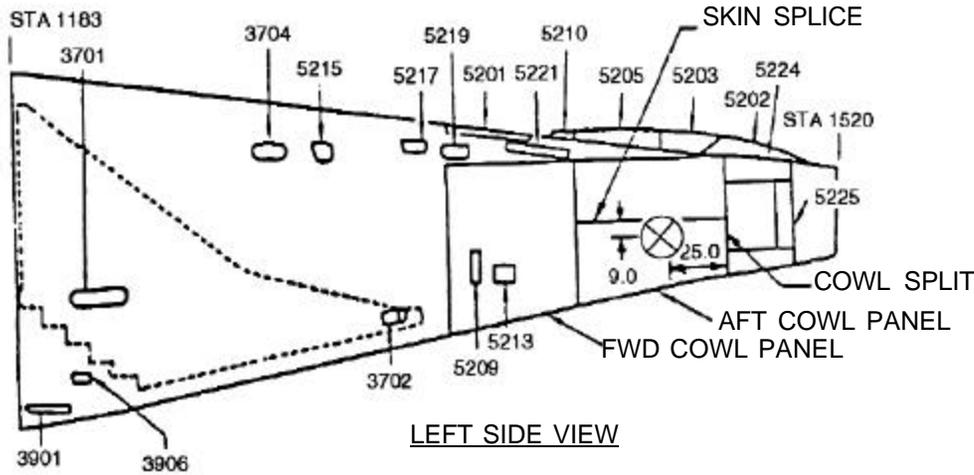
AIRCRAFT SKIN PENETRATION POINTS



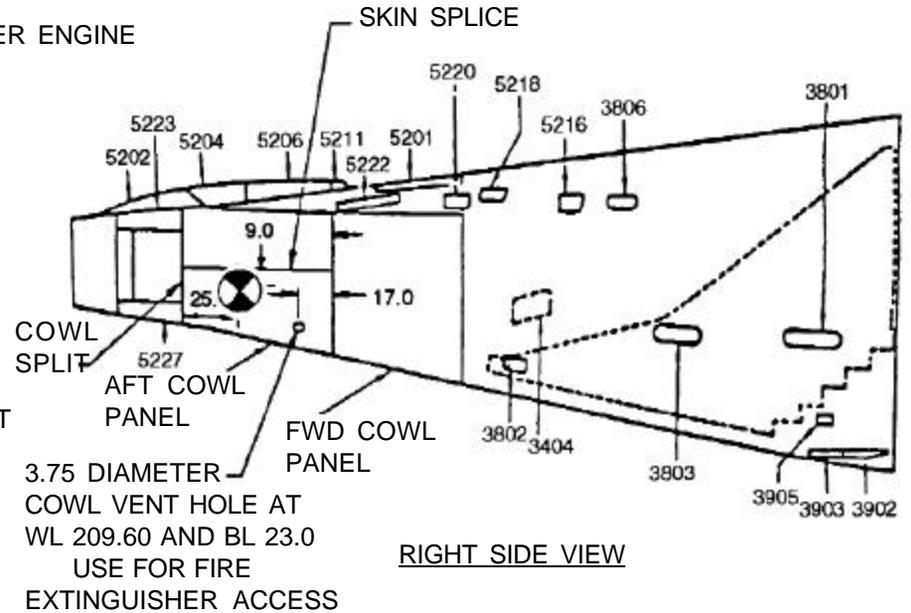
AIRCRAFT SKIN PENETRATION POINTS-Continued

-  LEFT SIDE OF ENGINE
-  RIGHT SIDE OF ENGINE

727-100/200 CENTER ENGINE



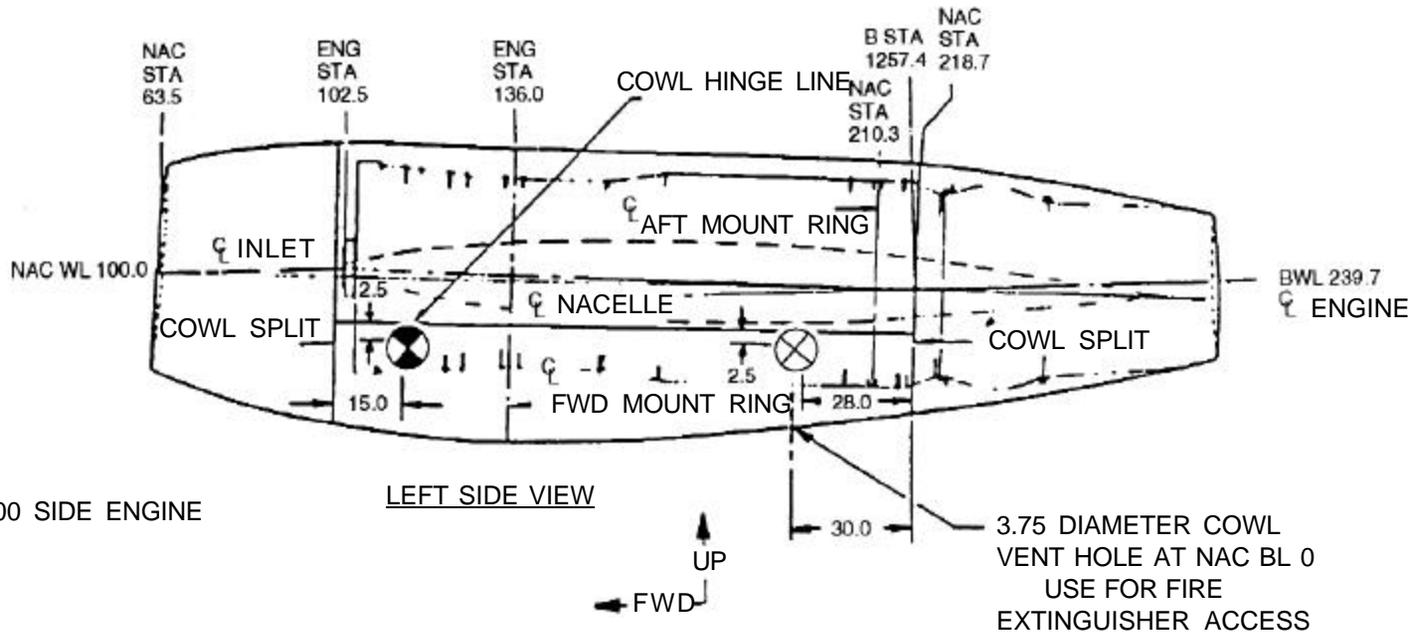
LEFT SIDE VIEW



RIGHT SIDE VIEW

3.75 DIAMETER
COWL VENT HOLE AT
WL 209.60 AND BL 23.0
USE FOR FIRE
EXTINGUISHER ACCESS

727-100/200 SIDE ENGINE



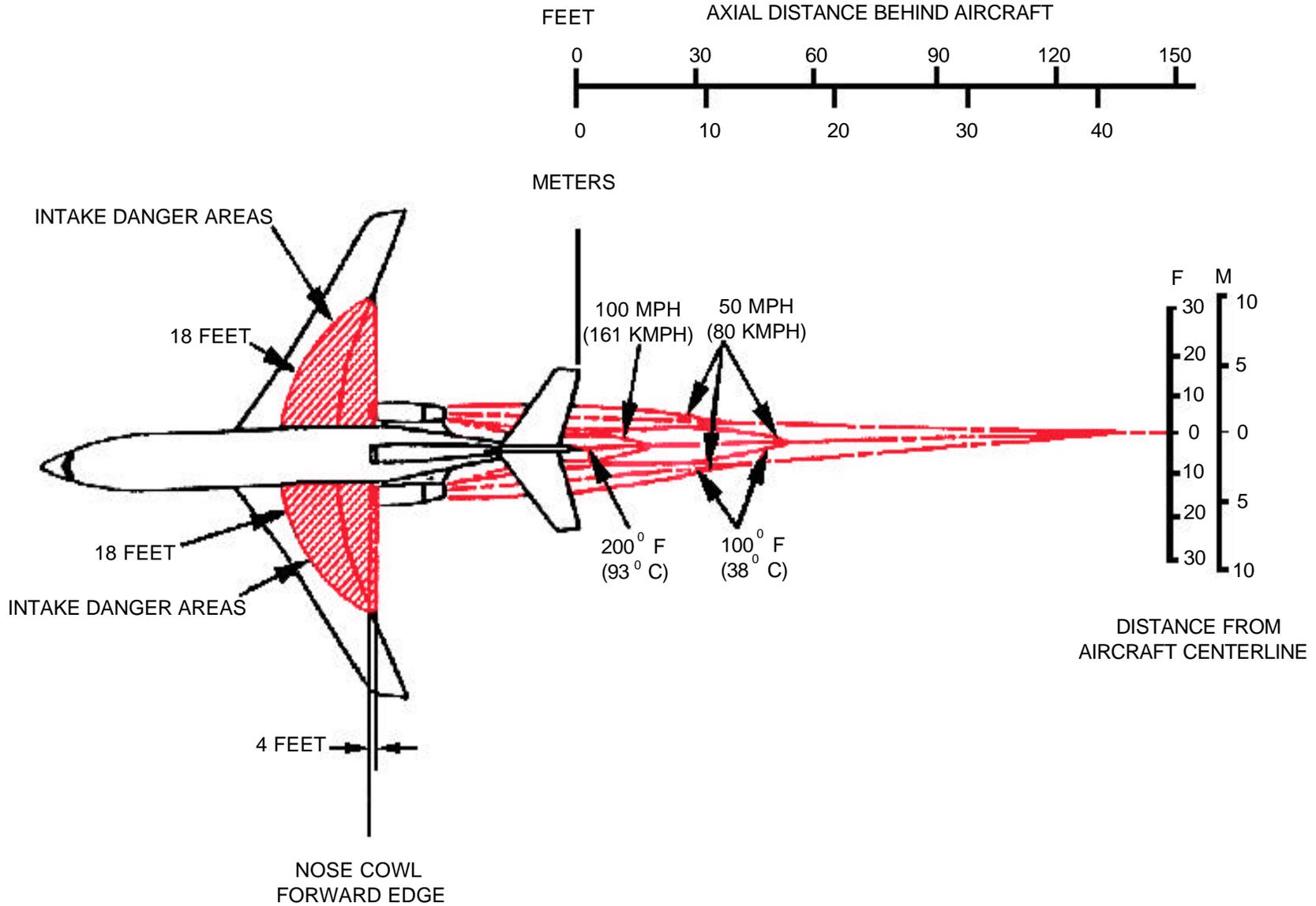
LEFT SIDE VIEW

3.75 DIAMETER COWL
VENT HOLE AT NAC BL 0
USE FOR FIRE
EXTINGUISHER ACCESS



AIRCRAFT DANGER AREAS

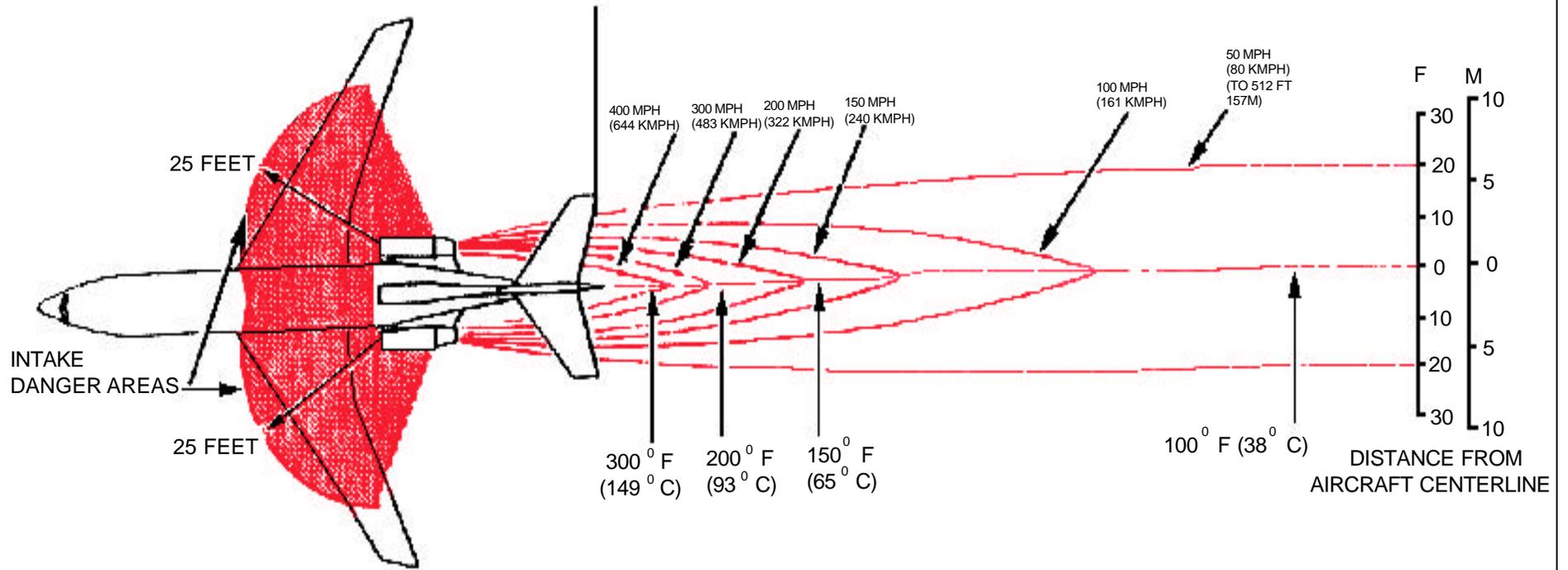
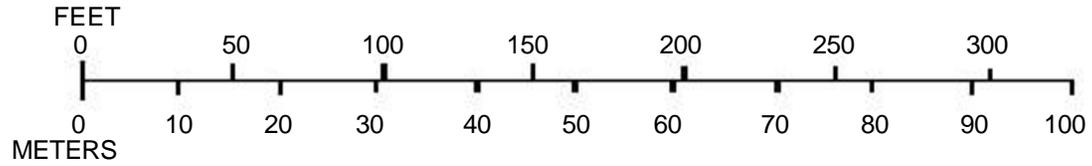
JT8D TURBOFAN ENGINE HAZARD AREAS
AT IDLE THRUST



AIRCRAFT DANGER AREAS-Continued

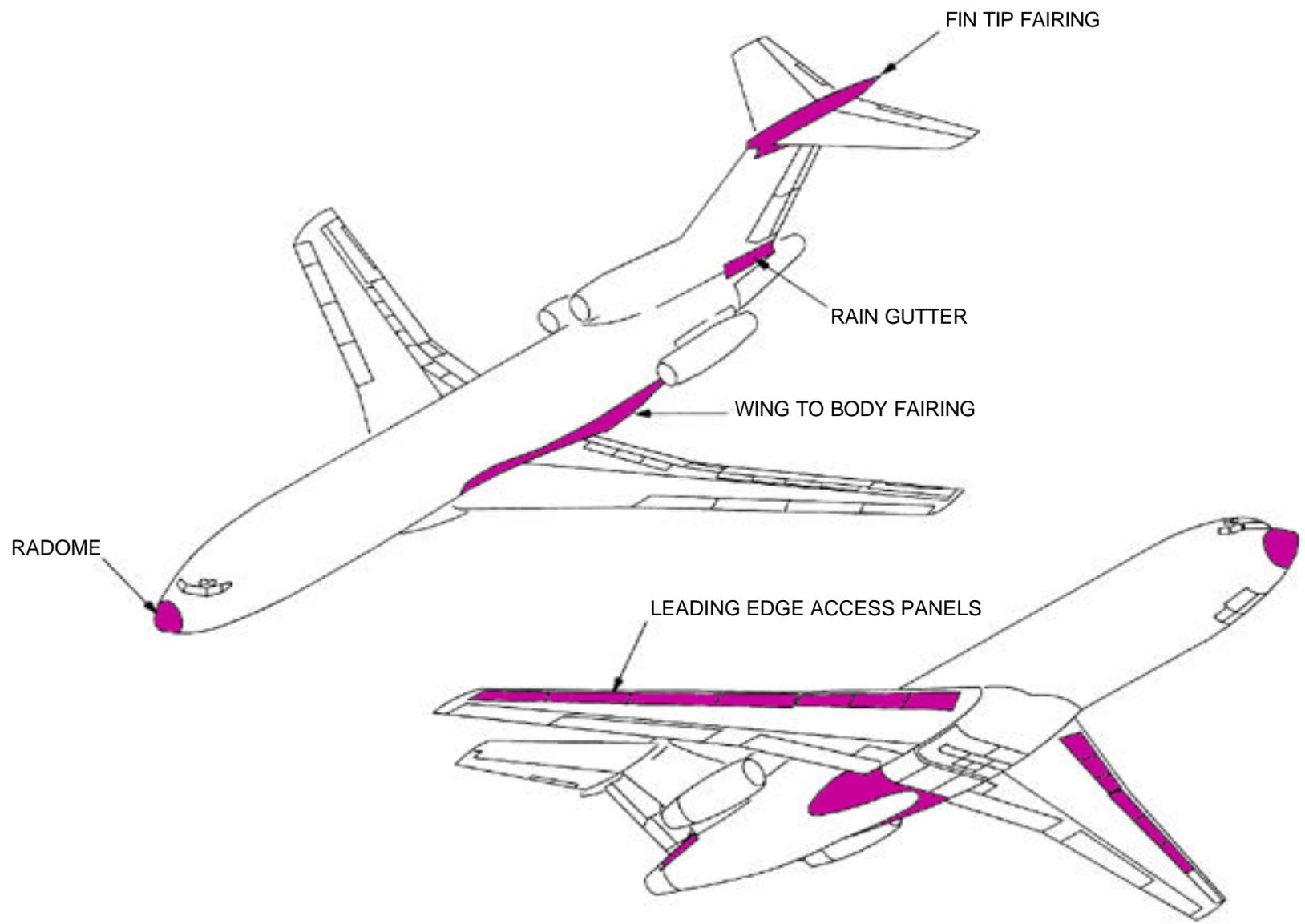
JT8D TURBOFAN ENGINE HAZARD AREAS
AT TAKEOFF THRUST

AXIAL DISTANCE BEHIND AIRCRAFT



AIRCRAFT COMPOSITE LOCATIONS

 COMPOSITE LOCATIONS



US MARSHALS SERVICE 727 VERSION



1. US MARSHALS SERVICE 727 VERSION

Type Aircraft: 727 Saberliner used to transport prisoners.

Models involved:

727-100 (93 passengers, 3 crew, and a deputy crew of 12 to 17)

727-100 (95 passengers, 3 crew, and a deputy crew of 12 to 17)

727-200 (configuration is similar)

Seat Positions: All seats face forward except the ones over the wing which face aft. A large center aisle between the seats goes from one side to the other side where the emergency exit is over the wings.

2. PRISONER TRANSPORTATION

In 1995, the air fleets of the Marshals Service and the Immigration and Naturalization Service (INS) merged to create the Justice Prisoner and Alien Transportation System (JPATS). The merger created a more efficient and effective system for transporting prisoners and criminal aliens. Operated by the Marshals Service, JPATS is one of the largest transporters of prisoners in the world, handling hundreds of requests every day to move prisoners between judicial districts, correctional institutions and foreign countries.

On average, more than 200,000 prisoner and alien movements a year are completed by the Marshals Service via coordinated air and ground systems. Most of these prisoners are transported aboard Service-owned aircraft and vehicles.

Since 1984, the Marshals Service has acquired a fleet of aircraft that includes three Boeing 727s, a DC-9, several smaller jets and turboprop airplanes. These planes move thousands of prisoners for the Marshals Service, Bureau of Prisons (BOP) and INS, as well as the U.S. military and state and local governments. Many of the airplanes were acquired at no cost through the Government Surplus Property Program and the Asset Seizure and Forfeiture Program.

The JPATS is the only government-operated, scheduled passenger airline in the nation. It serves 40 cities, and is used to move prisoners more economically and with higher security than commercial airlines.



The U.S. Marshals Service assumes custody of individuals arrested by all federal agencies and is responsible for the housing and transportation of prisoners from the time they are brought into federal custody until they are either acquitted or incarcerated.

Moving thousands of prisoners and criminal aliens each year requires extra security precautions and careful coordination. Deputy Marshals, Aviation Enforcement Officers and Aviation Safety Officers are stationed throughout the aircraft, and prisoners wear handcuffs and leg irons in the close confines of the aircraft cabin.

Ground security is provided by Deputy Marshals, BOP guards or INS officers at each airport transfer point. If prisoners cannot be moved in one day, they are housed overnight at various BOP facilities. Careful scheduling is required to ensure that each prisoner appears in court at the designated time.

In an effort to assist state and local law enforcement agencies, the Marshals Service transports non-federal prisoners between different jurisdictions when space is available on its aircraft.

For example, a fugitive wanted for trial in one locale may have been apprehended in another, distant jurisdiction. However, local authorities are often reluctant to seek extradition of felons because of high transportation and personnel costs. The Marshals Service offers state and local law enforcement agencies a safe and effective prisoner transportation system at about one-quarter of the normal cost.

SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw
24 Foot Ladder
Fire Drill II

AIRCRAFT ENTRY

1. NORMAL ENTRY

WARNING

If Forward Entry Door is used for rescue, passenger escape chute-slide will be actuated if not disconnected from inside.

- a. RIGHT FORWARD ENTRY DOOR - Pull handle outward, rotate clockwise and pull door outward to open position.
2. EMERGENCY ENTRY
 - a. PILOT'S SLIDING WINDOW - (RH & LH) Cargo and (RH only) passenger aircraft.
 - b. OVERWING ESCAPE HATCHES - Push panel in, located top center of hatches, and push hatches inward and up.
 - c. FORWARD ENTRY DOOR - Pull external handle, located on entry door, outward, rotate clockwise and pull door out to open position.
 - d. MID GALLEY DOOR - Pull external handle, located on galley door right forward side, outward, rotate counterclockwise and pull door out to open position.
 - e. AFT EXIT DOORS - Pull lower end of handle, located top center of door left side of fuselage, outward, rotate clockwise and pull door outward. (Turn handle counterclockwise on doors located on right side of fuselage.)
 - f. AIRSTAIR ENTRY DOOR - Depress latch on access door, located right side aft fuselage, and pull handle down to release stairway. (Stairway can jack aircraft up for passenger escape in a no-gear situation.)
 - g. AFT ENTRY DOOR - Rotate handle, located on aft entry door, clockwise and push door inward.

3. CUT-IN

- a. Cut tenth window aft from crew compartment and fifth window forward from tail section as last resort.

NOTE:

Oxygen, rafts, flashlights, and fire extinguishers are located in overhead compartments.

NOTE:

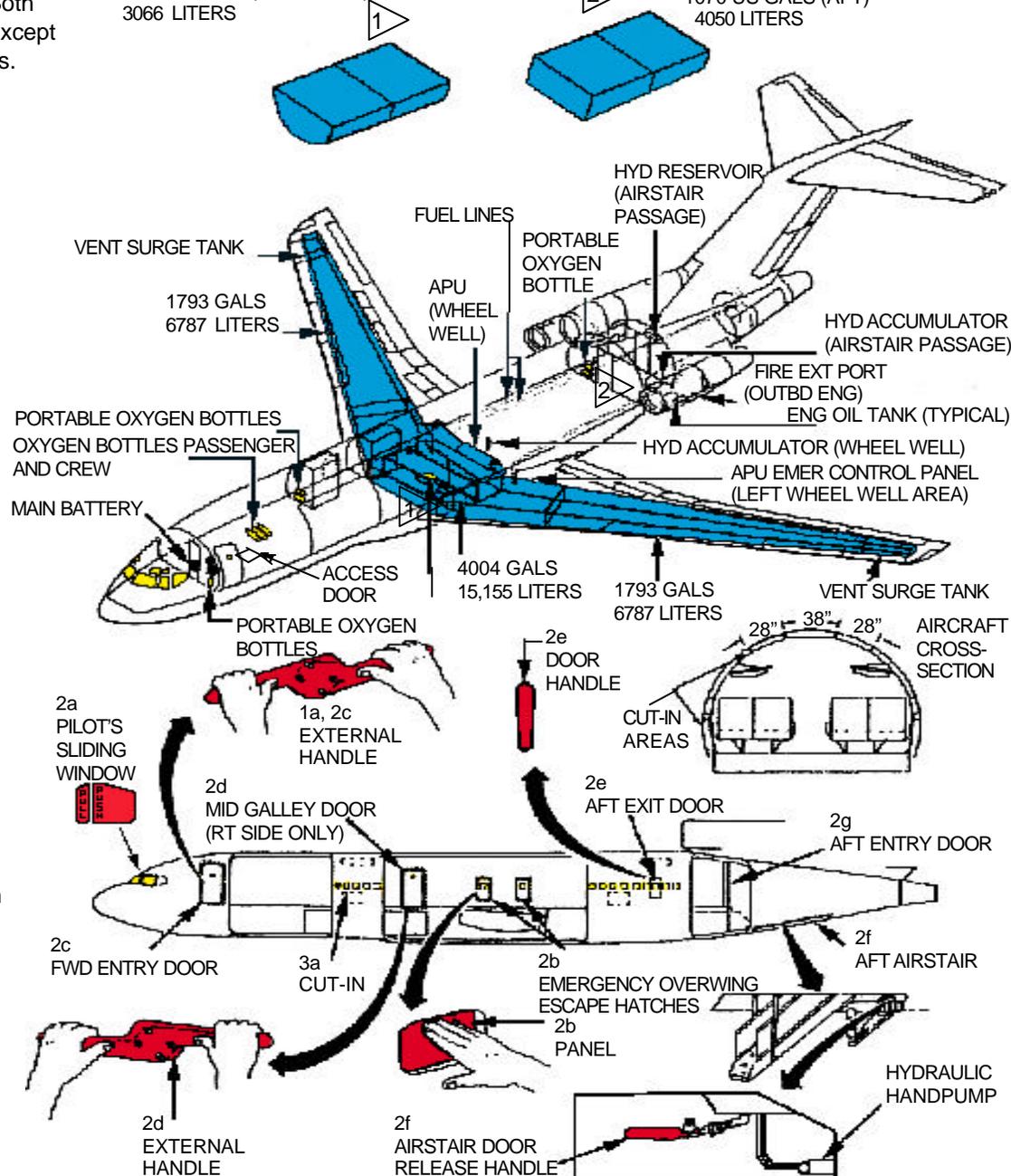
Refer to the C-22 for more extensive information. Both airframes are identical except for military configurations.

FWD CARGO FUEL TANKS (OPTIONAL)

810 US GALS (EACH CELL)
3066 LITERS

AFT CARGO FUEL TANKS (OPTIONAL)

860 US GALS (FWD) 3255 LITERS
1070 US GALS (AFT)
4050 LITERS



ENGINE SHUTDOWN AND AIRCREW EXTRACTION

1. ENGINE SHUTDOWN

- Retard thrust levers, located on pilot's center console, to RETARD position.
- Retard engine start levers, located on pilot's console, to CUT OFF position.
- In case of engine fire, pull appropriate engine fire T-handles, located on center overhead instrument panel glare shield.

NOTE:

Optional location for T-handles is on the pilot's light shield.

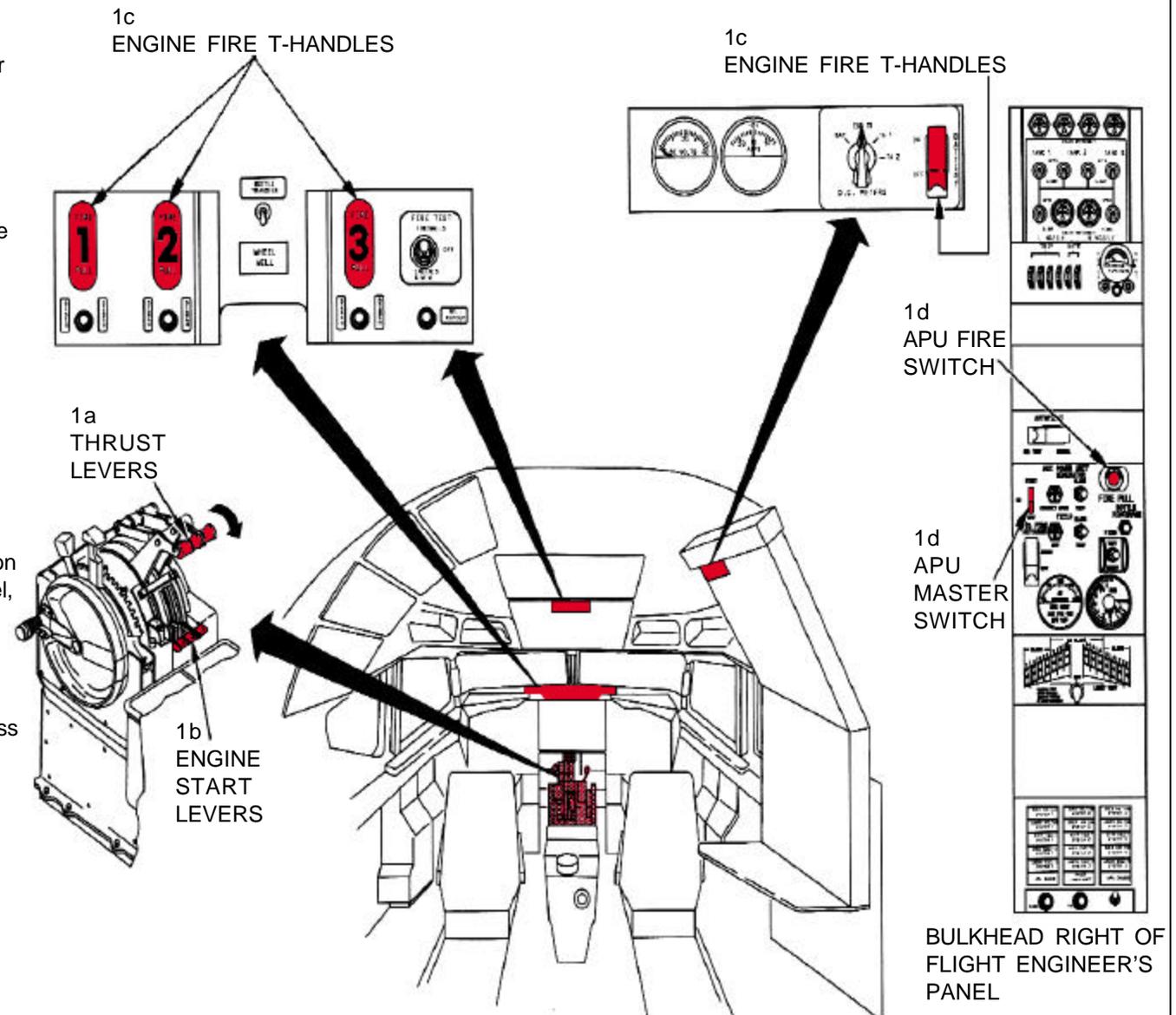
- In case of APU fire, pull APU fire switch to OFF and place APU master switch to OFF, located on rear cockpit wall.
- Lift guard and place battery switch, located on lower center flight engineer's upper left panel, to OFF position.

2. AIRCREW EXTRACTION

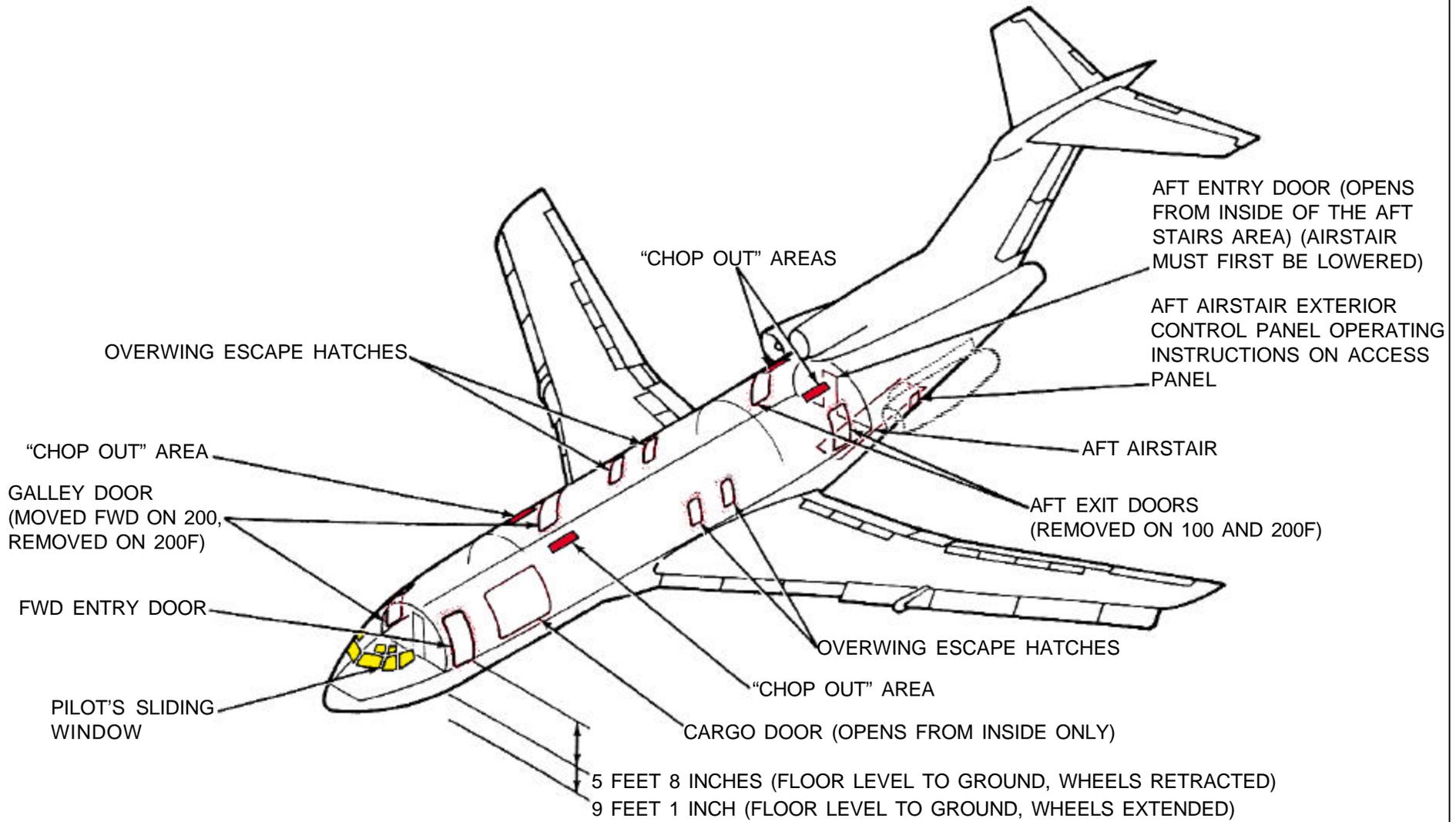
- Unlatch lap belt and remove shoulder harness from crewmembers
- FLIGHT ENGINEER'S SEAT** - Depress seat control handles and rotate seat clockwise.
- PASSENGER'S SEATS** - Passenger seats are equipped with lap belts only.

NOTE:

If seat tracks are not damaged during crash landing use adjustable seat control handles to retract seats to aft position.



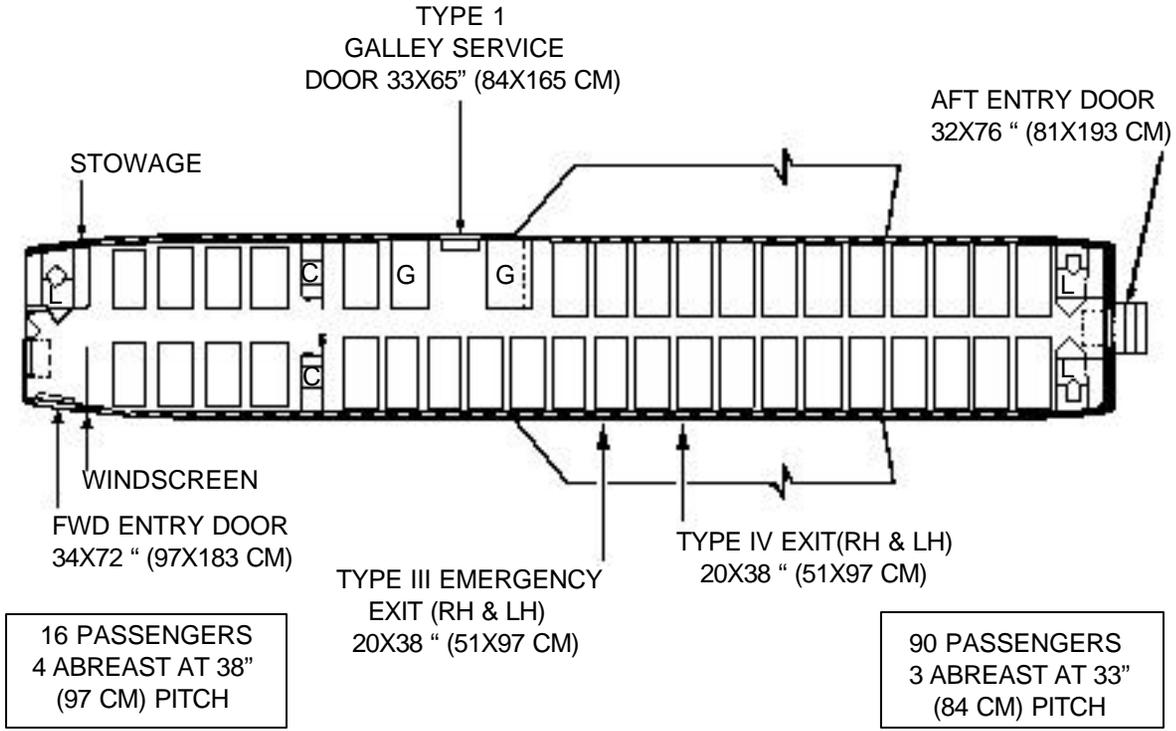
EMERGENCY RESCUE ACCESS



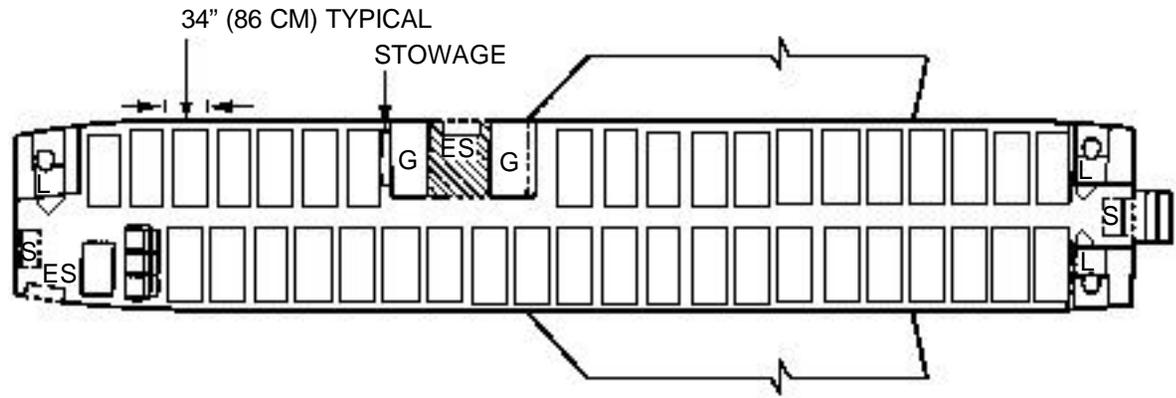
CABIN CONFIGURATION

EFFECTIVITY: 727-100/-100C (PASSENGER)

C	CLOSET
ES	ESCAPE SLIDE
G	GALLEY
L	LAVATORY
S	DOUBLE ATTENDANT'S SEAT



106 PASSENGERS - TYPICAL MIXED CLASS (16 FIRST CLASS, 90 TOURIST)

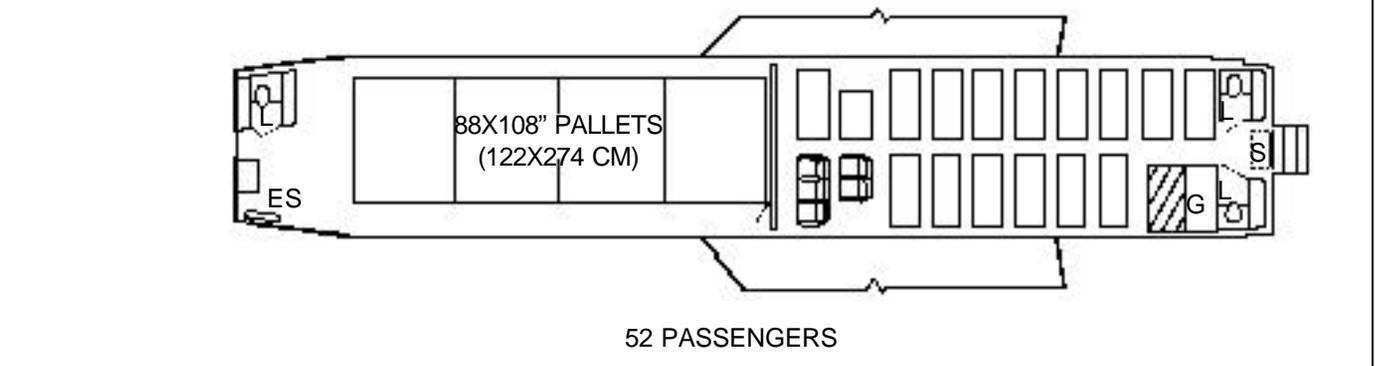
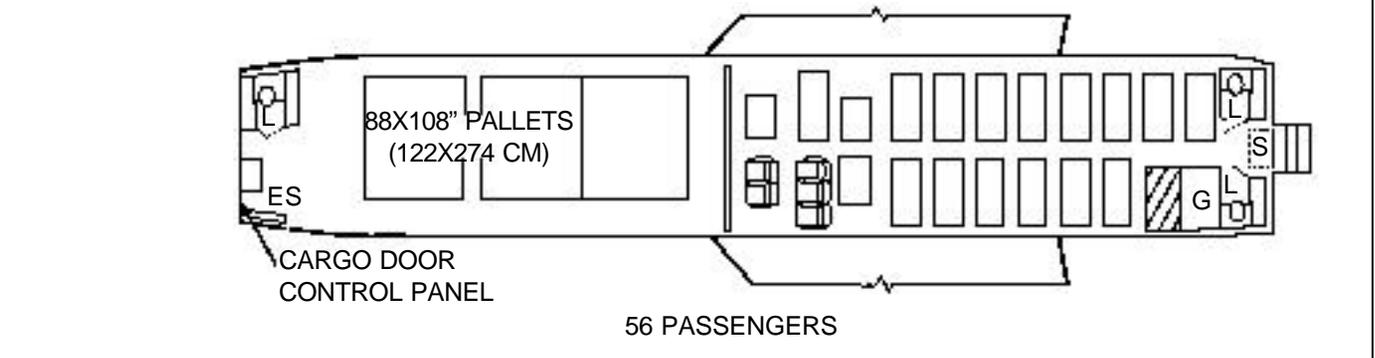
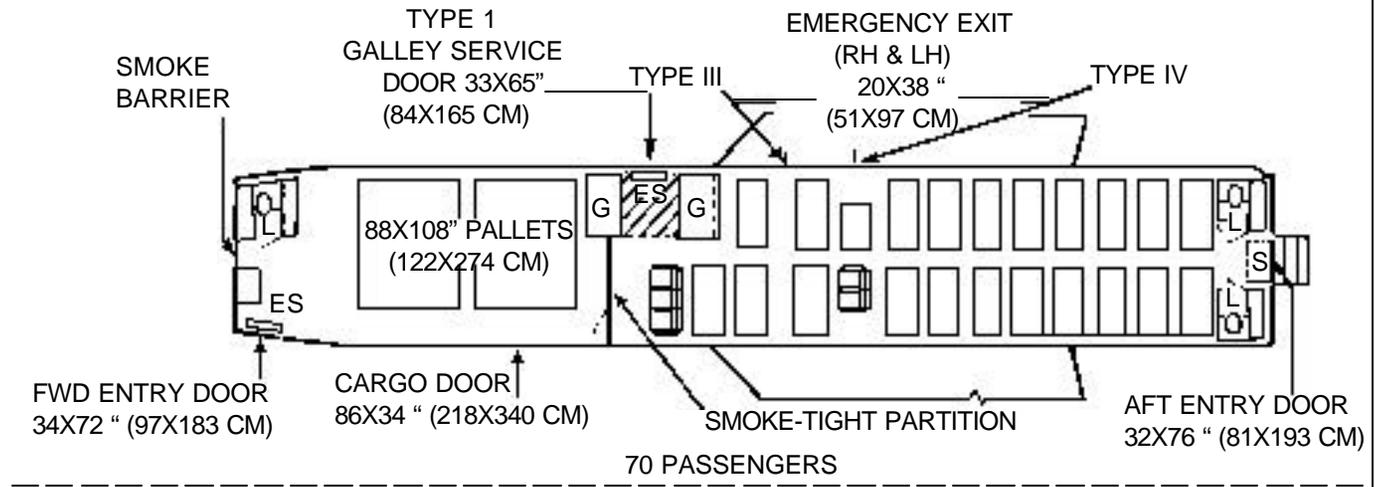


126 PASSENGERS - ALL TOURIST (MAXIMUM CERTIFICATED CAPACITY - 129 PASSENGERS)

CABIN CONFIGURATION-Continued

EFFECTIVITY: 727-100C (PASSENGER/CARGO)

- ES ESCAPE SLIDE
- G GALLEY
- L LAVATORY
- S DOUBLE ATTENDANT'S SEAT



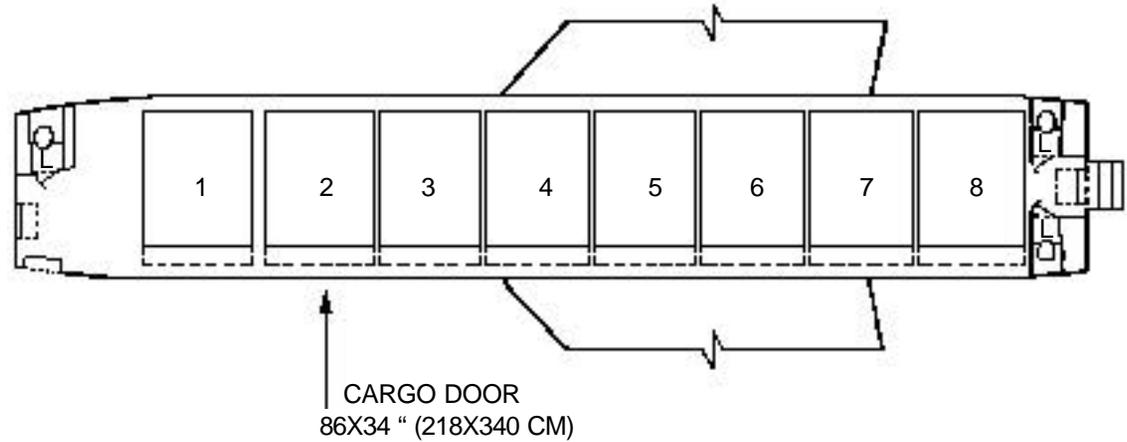
CABIN CONFIGURATION-Continued

EFFECTIVITY: 727-100C (ALL CARGO)

L LAVATORY

CONDITIONS

- HATRACKS UP
- 2" CLEARANCE
- 9_g COMMERCIAL PALLETS
- HIGH-PROFILE ROLLERS
- PALLET VOLUME NOT INCLUDED IN CARGO VOLUME



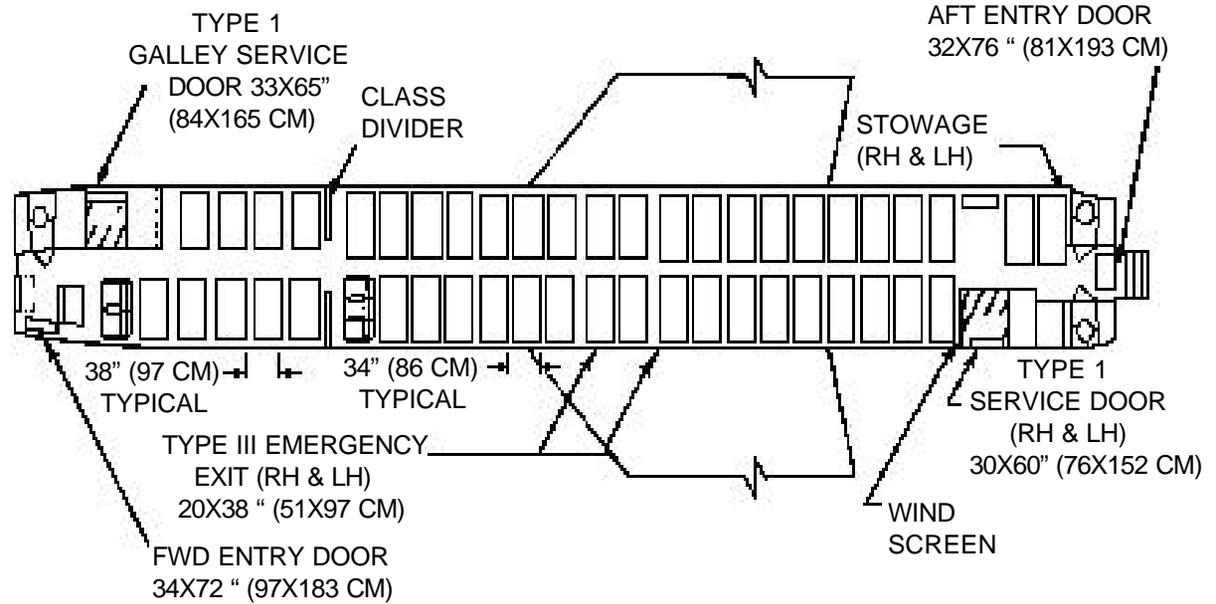
CARGO ENVELOPE VOLUMES IN CUBIC FEET (CUBIT METERS)

PALLET SIZE	88X108" (223X274 CM)	88X125" (223X318 CM)
MAIN DECK		
PALLET 1	359 (10.17)	401 (11.36)
PALLETS 2-8	366 (10.4) EACH 2,562 (72.56)	APPROX. 411 (11.6) EACH 2,877 (81.47)
LOWER DECK	890 (25.2)	890 (25.2)
TOTAL VOLUME	3,811 (107.9)	4,168 (11.8)

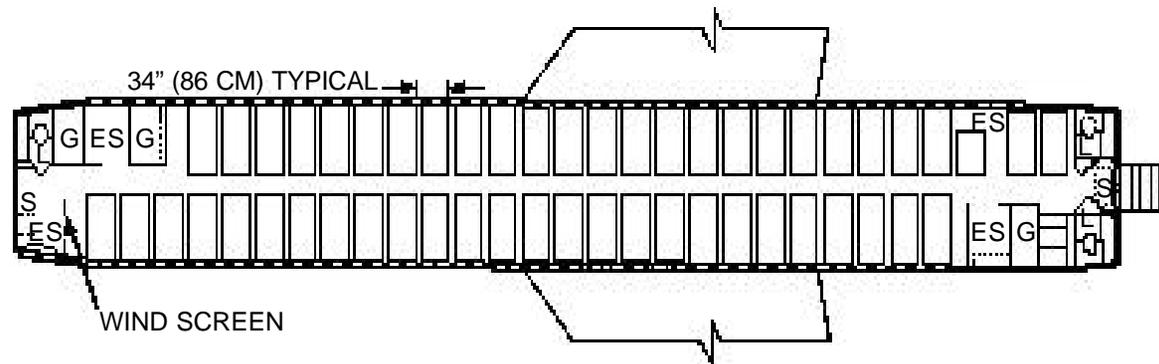
CABIN CONFIGURATION-Continued

EFFECTIVITY: 727-200 (PASSENGER)

C	CLOSET
ES	ESCAPE SLIDE
G	GALLEY
L	LAVATORY
S	DOUBLE ATTENDANT'S SEAT



134 PASSENGERS - TYPICAL MIXED CLASS
(20 FIRST CLASS, 114 TOURIST)



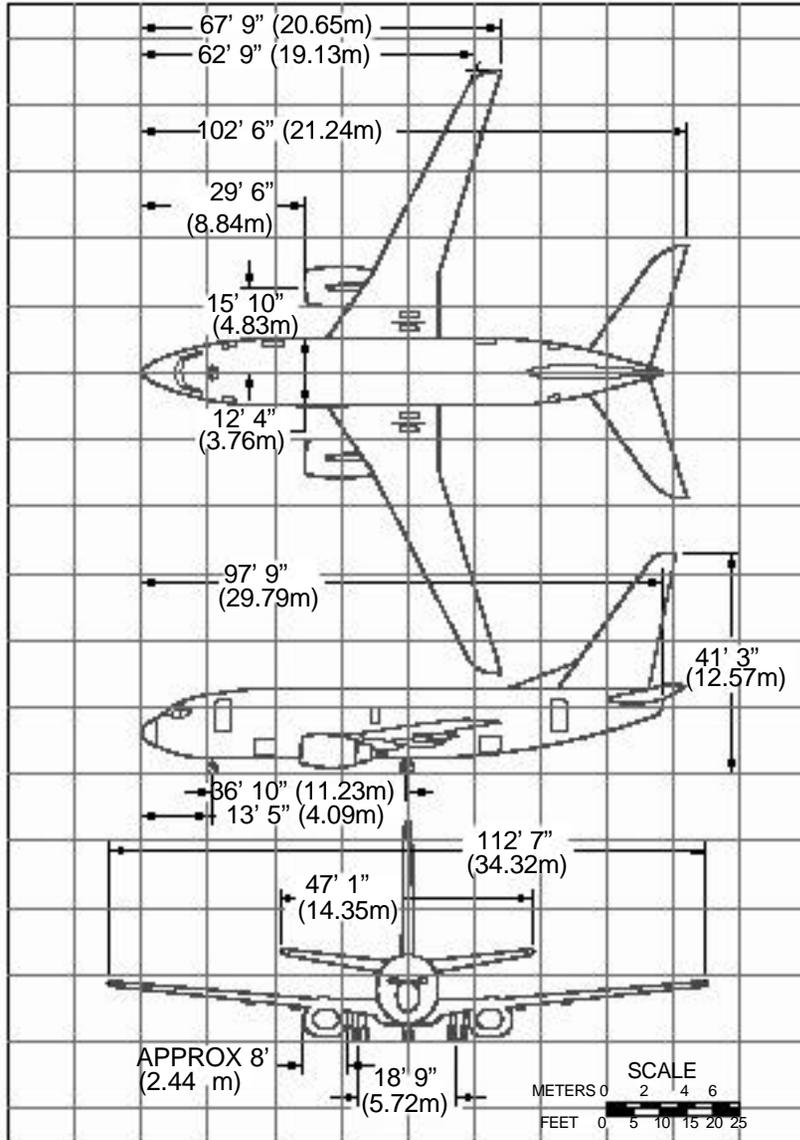
155 PASSENGERS - TYPICAL ALL-TOURIST
(MAXIMUM CERTIFICATED CAPACITY - 189 PASSENGERS)



AIRCRAFT DIMENSIONS

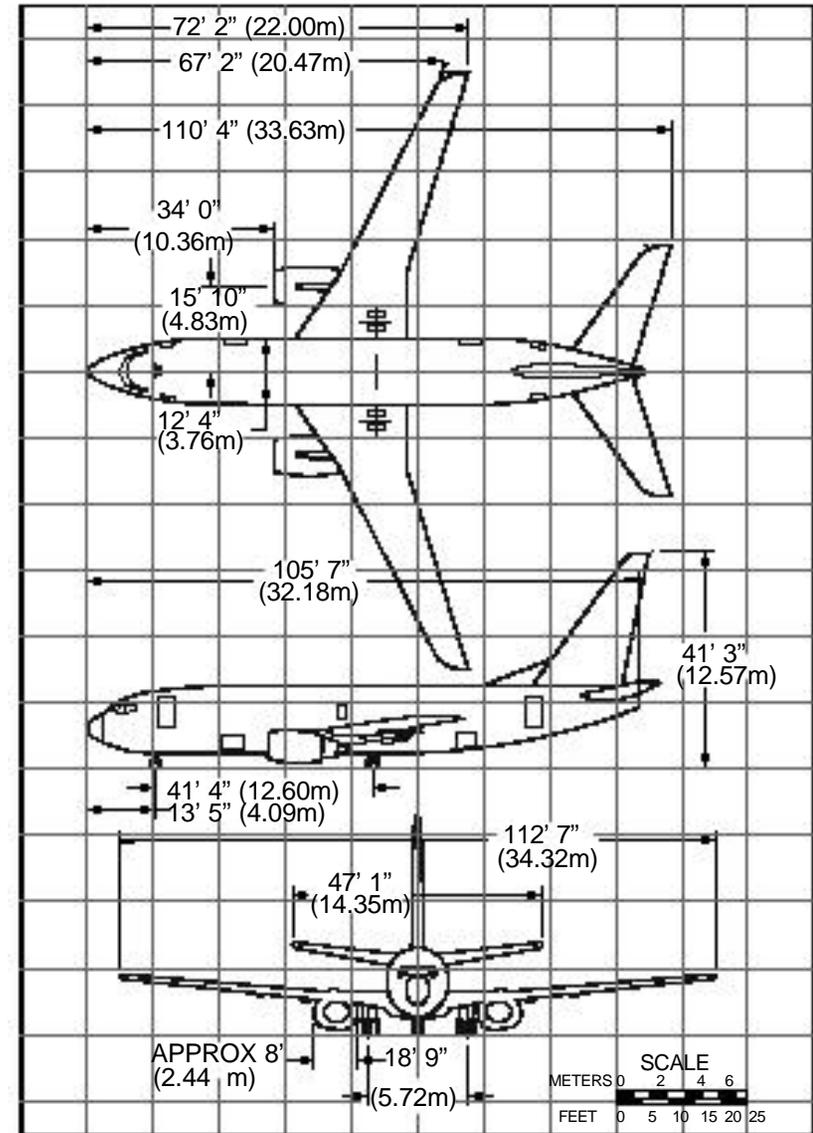
NOTE:

737-600s are the current smallest version of the fleet. Earlier versions i.e., -100/-200/-300/-400/-500 models are similar until the mid 1990's upgrades when longer versions were requested by Boeing's customers, hence the -600/-700/-800/-900 models were developed. The earlier versions will be referred to as some of these aircraft are still in service in many countries. Military versions of the T-43 and C-40A/B/C are addressed in separate files of this manual.

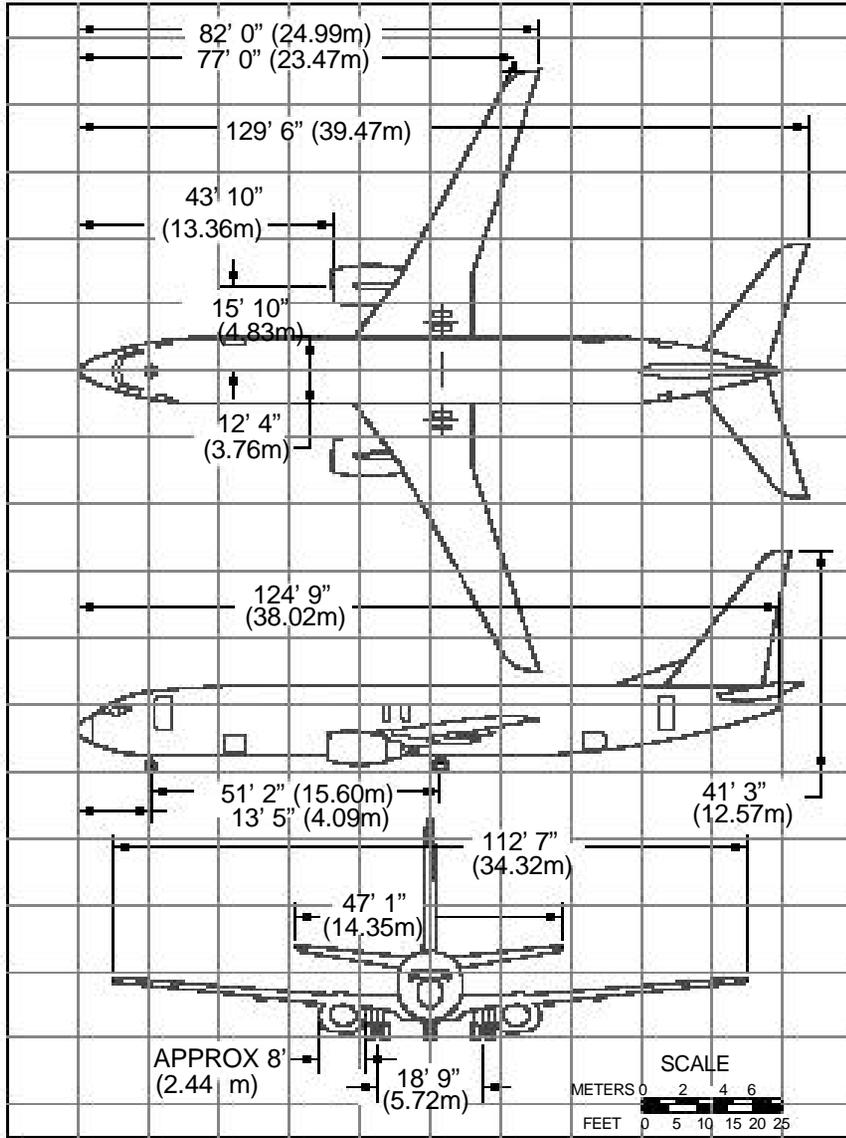


737-600

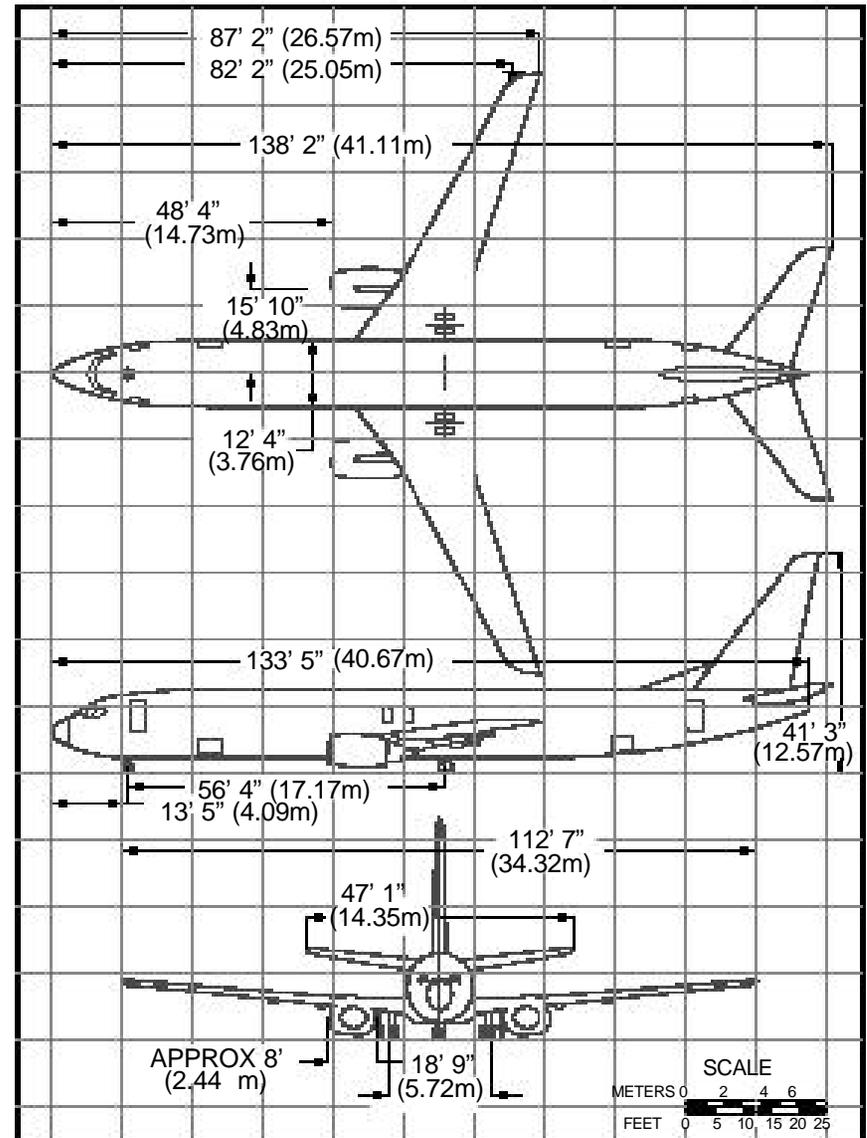
(737-100/-200/-300/-400/-500 prior to engine and aircraft upgrades.)



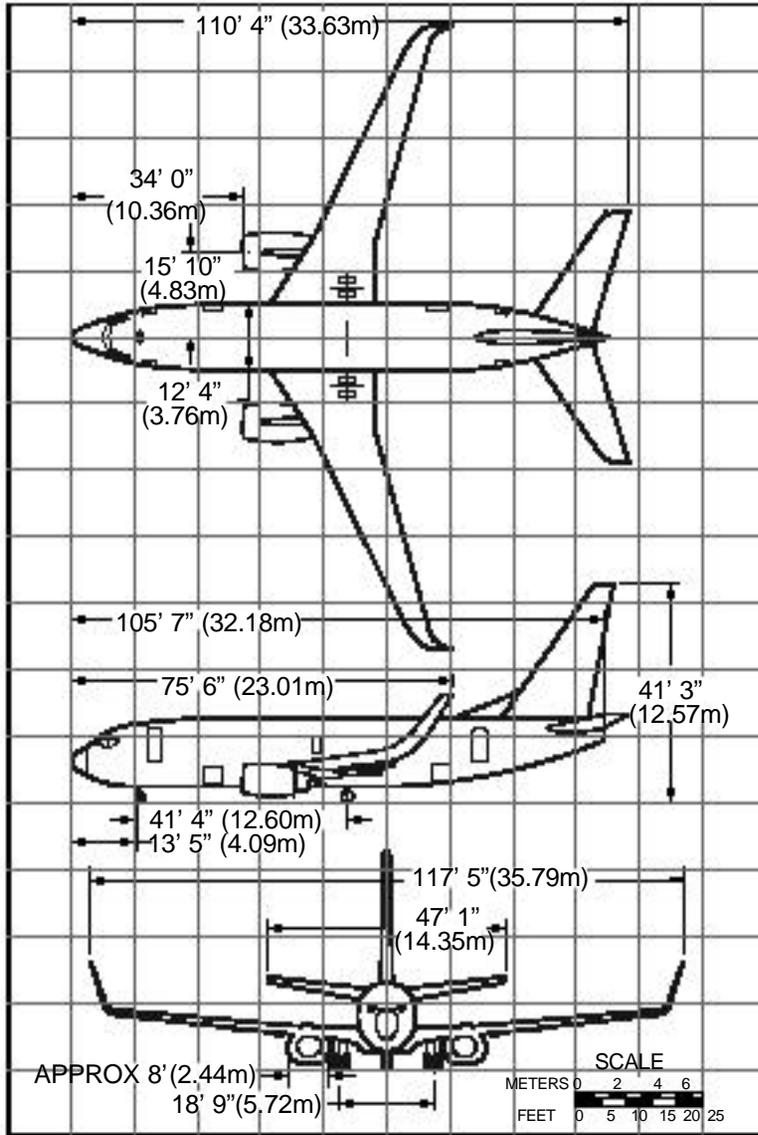
737-700



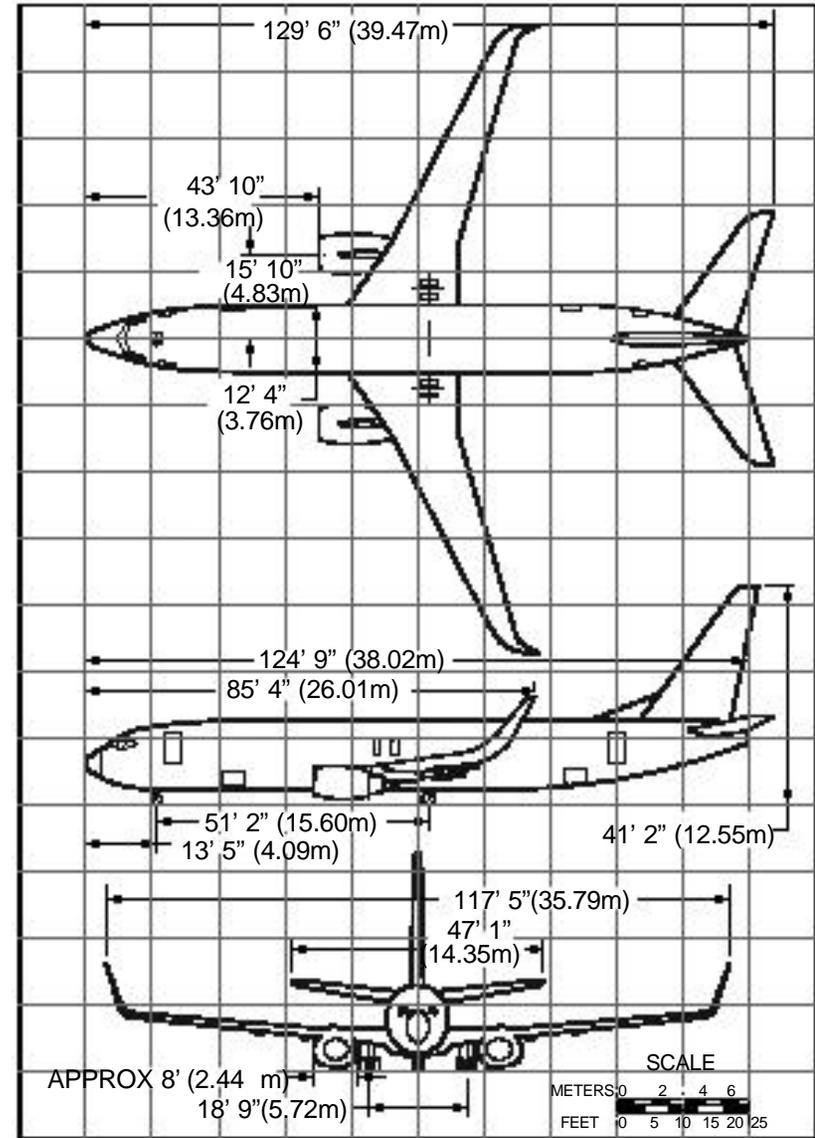
737-800



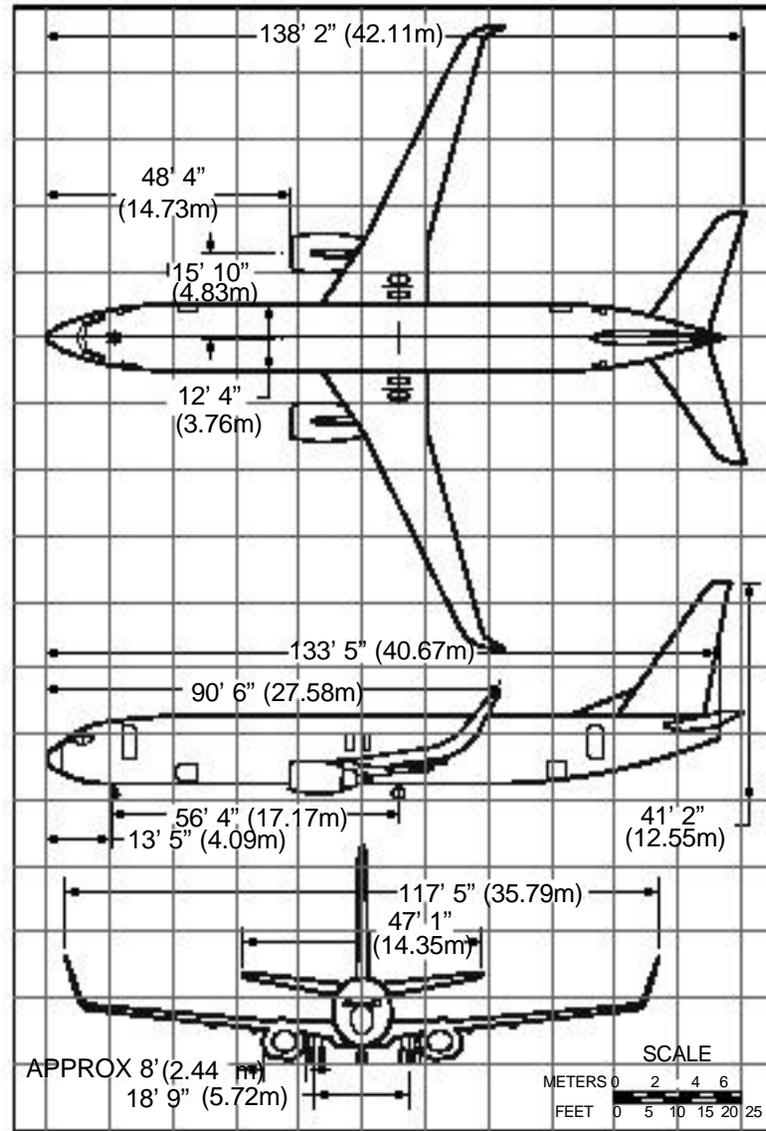
737-900



737-700 WITH WINGLETS



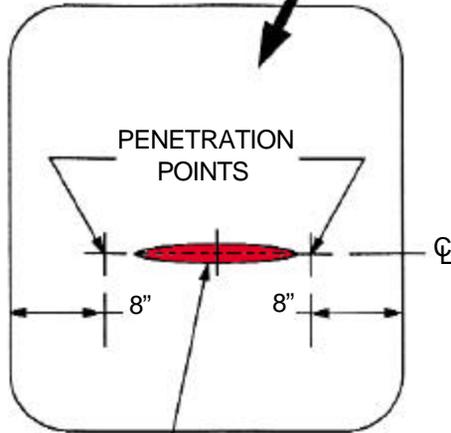
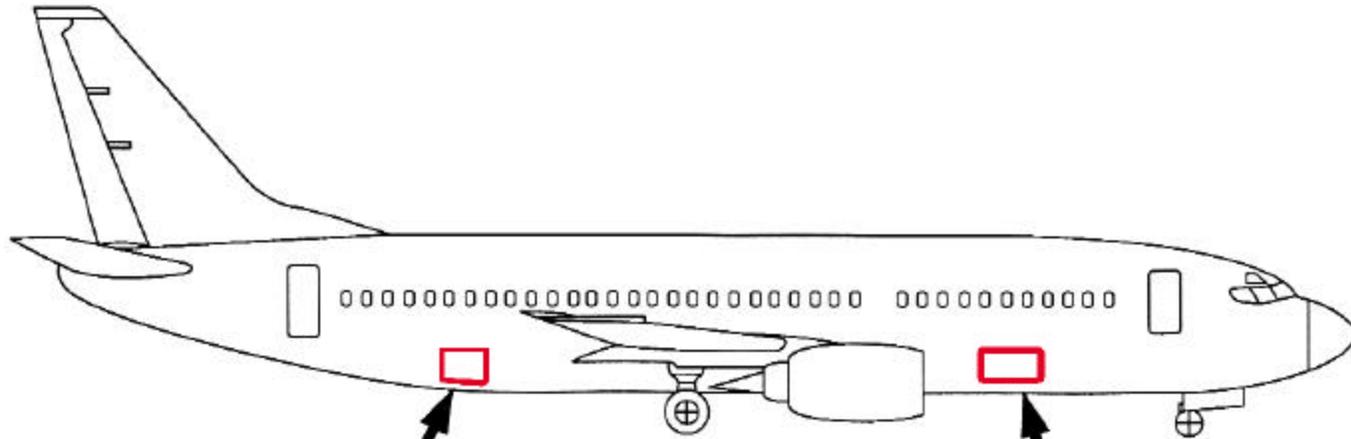
737-800 WITH WINGLETS



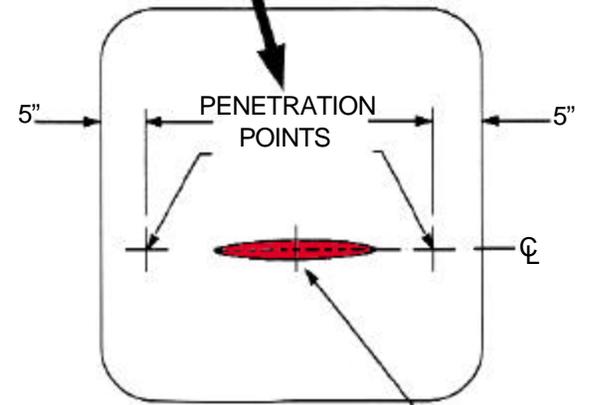
737-900 WITH WINGLETS

AIRCRAFT SKIN PENETRATION POINTS

NOTE:
Typical penetration areas for all models.



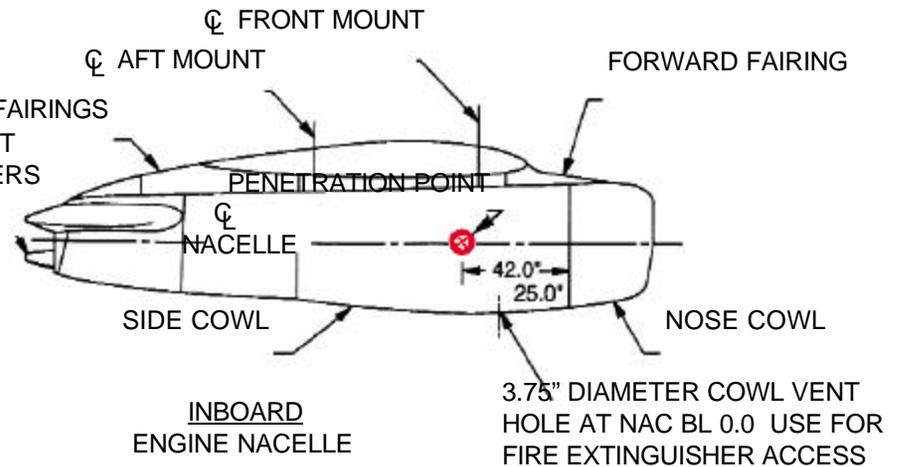
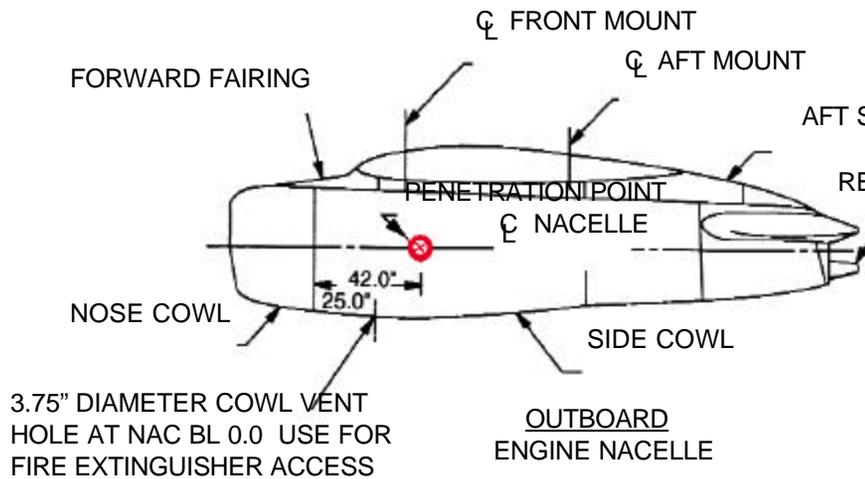
— FWD →



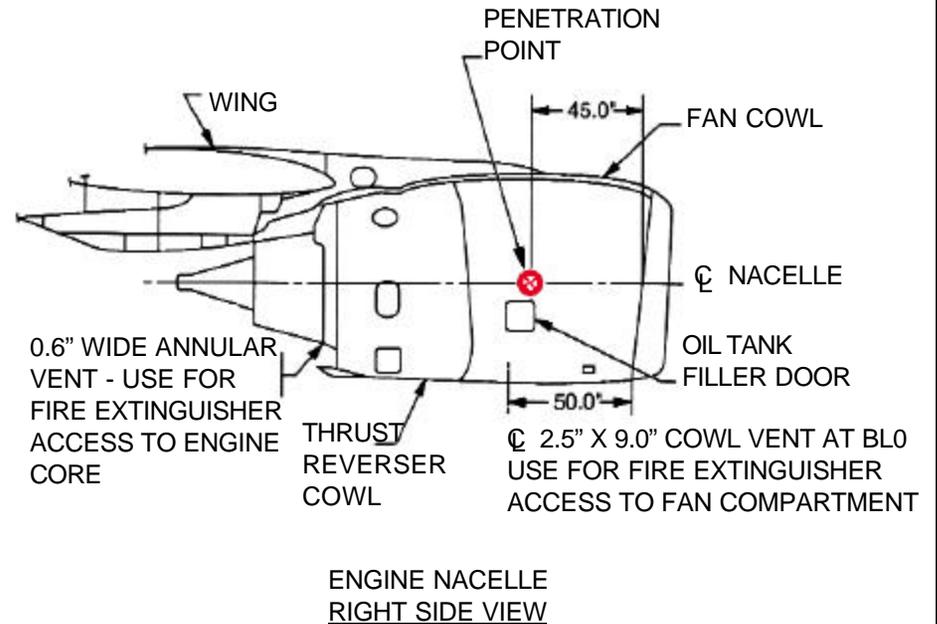
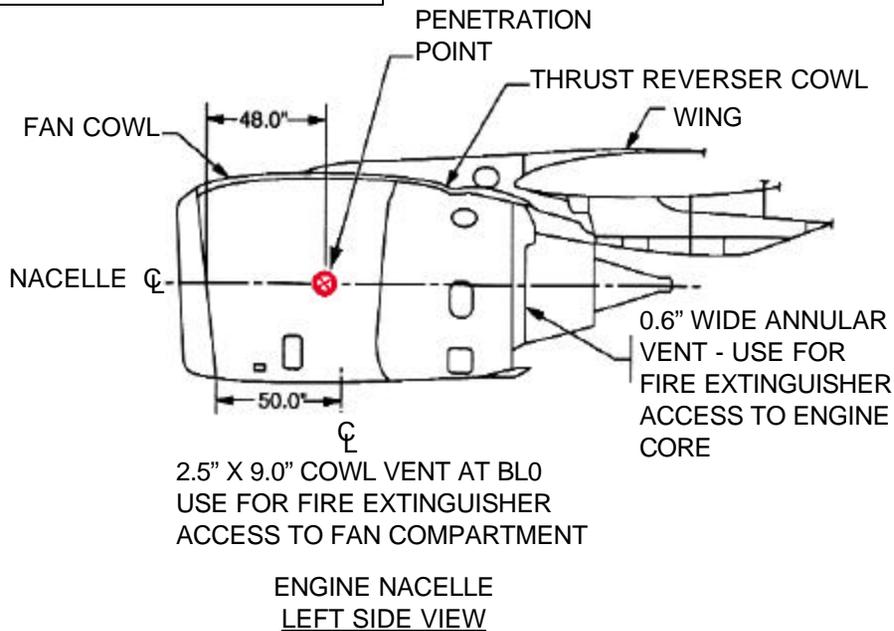
— FWD →

AIRCRAFT SKIN PENETRATION POINTS-Continued

737-100/-200



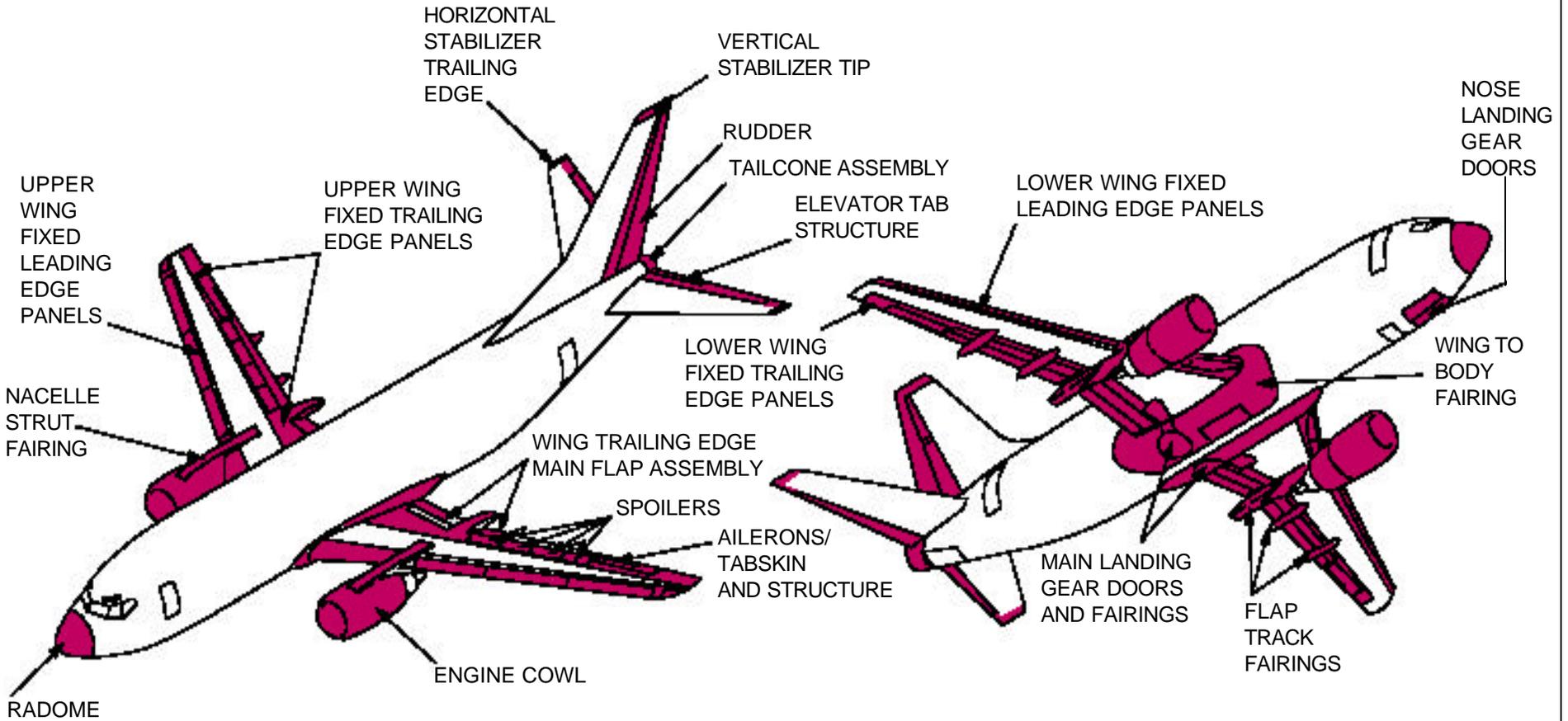
737-300/-400/-500/-600/-700/-800/-900



AIRFRAME MATERIALS



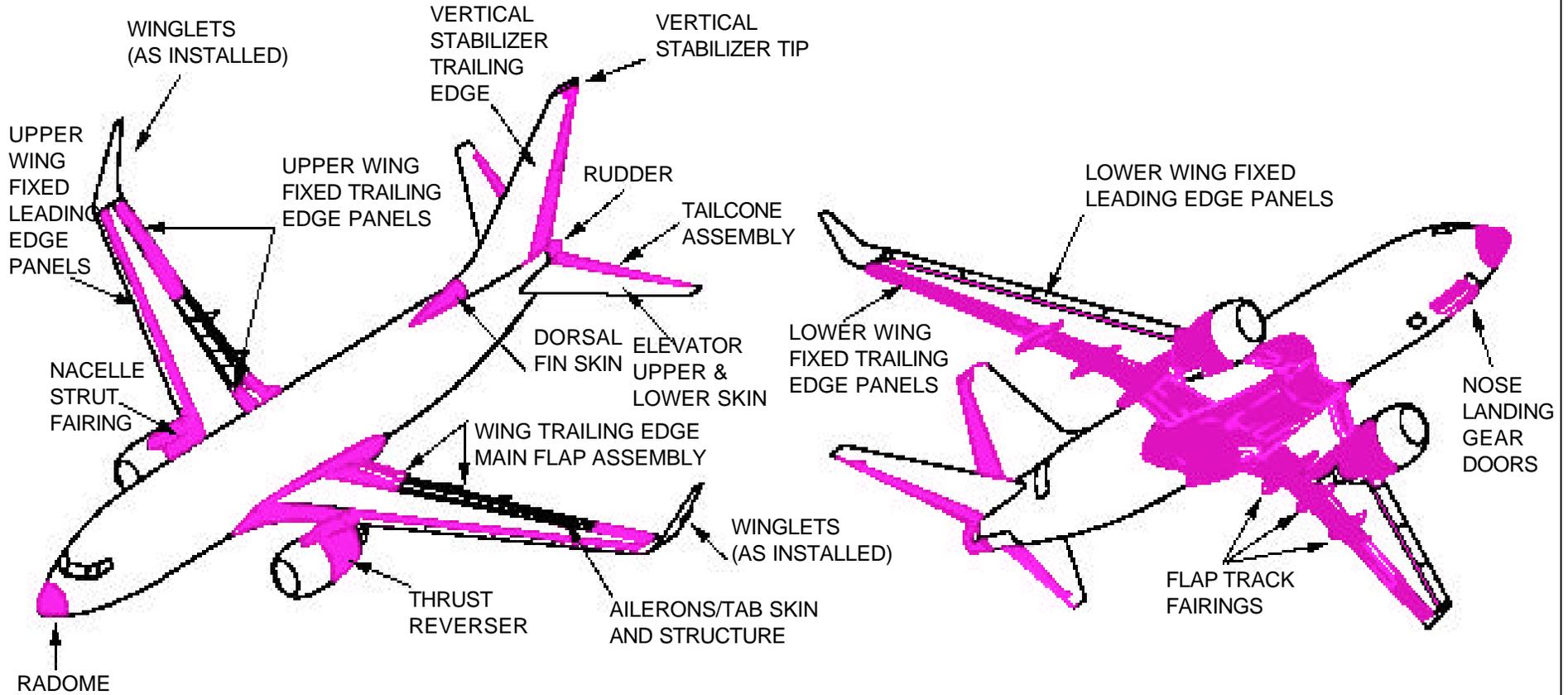
GRAPHITE COMPOSITES
EFFECTIVITY: -100/-200/-300/-400/-500



AIRFRAME MATERIALS-Continued



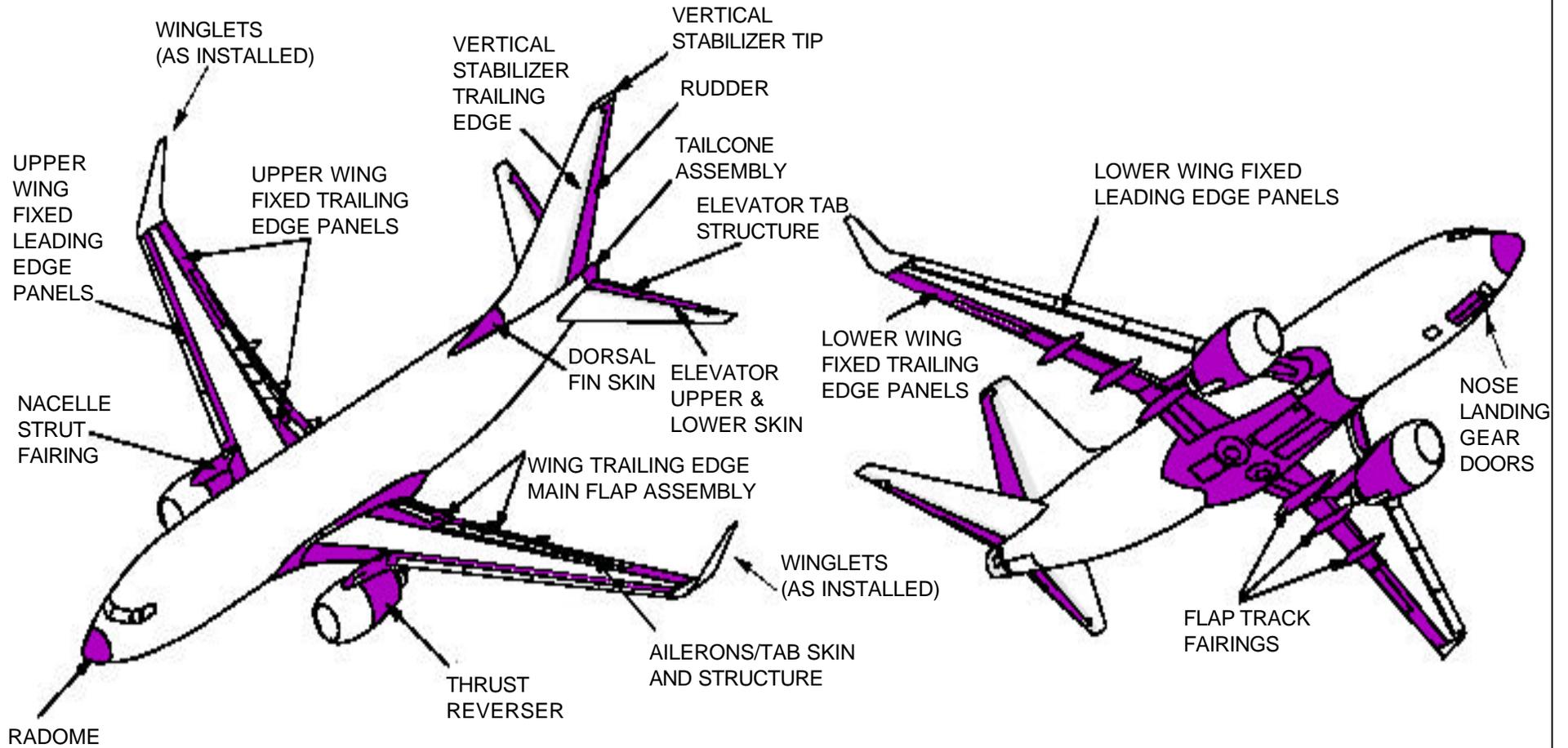
GRAPHITE OR FIBERGLASS GRAPHITE COMPOSITES
EFFECTIVITY: -600/-700/-800/-900



AIRFRAME MATERIALS-Continued



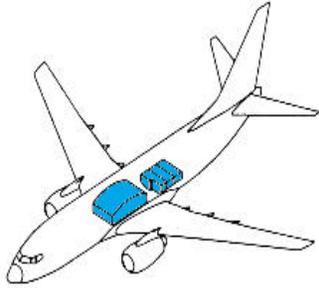
GRAPHITE OR FIBERGLASS GRAPHITE COMPOSITES
EFFECTIVITY: BOEING BUSINESS JET (BBJ)/BBJ-2



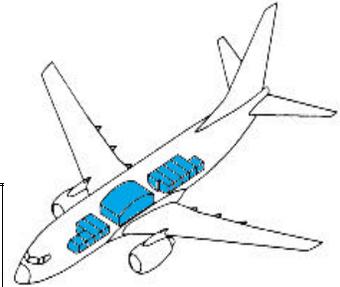
AUXILIARY FUEL TANK CAPACITIES

NOTE:

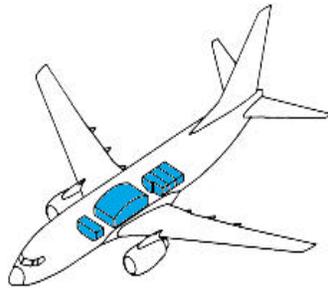
This information includes Boeing Business Jets.



3 AFT

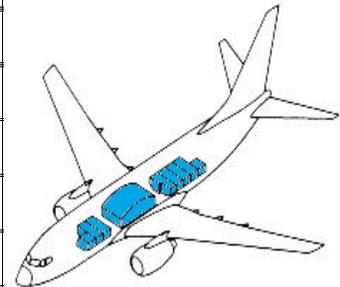


5 AFT/4 FWD

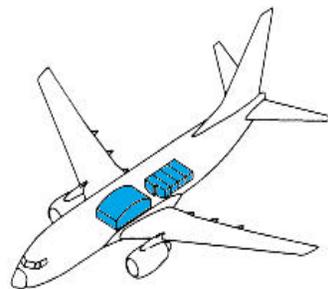


3 AFT/1 FWD

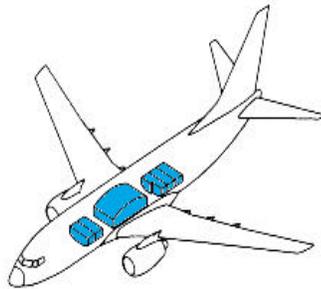
AUX FUEL	GALLONS	LITERS	TOTAL GALLONS (ALL TANKS)	TOTAL LITERS (ALL TANKS)
3 AFT	1,485	5,685	8,360	31,710
4 AFT	2,010	7,676	8,885	33,701
3 AFT - 1 FWD	2,000	7,639	8,875	33,664
3 AFT - 2 FWD	2,530	9,647	9,405	35,672
4 AFT - 2 FWD	3,055	11,639	9,930	37,664
5 AFT - 2 FWD	3,360	12,797	10,235	38,822
5 AFT - 3 FWD	3,605	13,727	10,480	39,752
5 AFT - 4 FWD	3,850	14,656	10,725	40,681



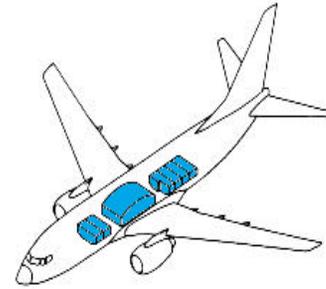
5 AFT/3 FWD



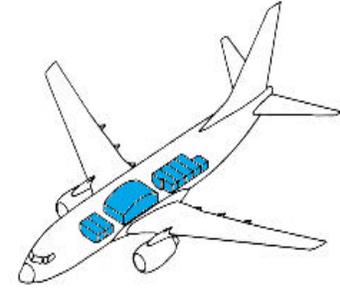
4 AFT



3 AFT/2 FWD



4 AFT/2 FWD



5 AFT/2 FWD

SPECIAL TOOLS/EQUIPMENT

- Power Rescue Saw
- 12 Foot Ladder
- Fire Drill II

AIRCRAFT ENTRY-100/-200/-300/-400/-500 SERIES

1. NORMAL/EMERGENCY ENTRY

- a. Push in top center panel on overwing escape hatches, located on both fuselage sides. Push hatch inward and upward.

NOTE:

Some models are equipped with stairs that can be deployed from forward and aft entry doors.

- b. Pull handle on forward and aft entry doors, located left side of fuselage, outward and rotate clockwise. Pull doors outward.

NOTE:

Depress button and pull handle out, rotate clockwise to extend stairway.

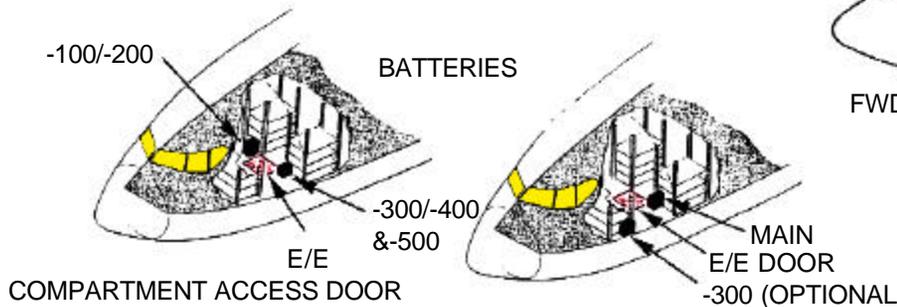
- c. Pull handle on right forward and aft service doors, outward and rotate counterclockwise. Pull doors outward.

CAUTION

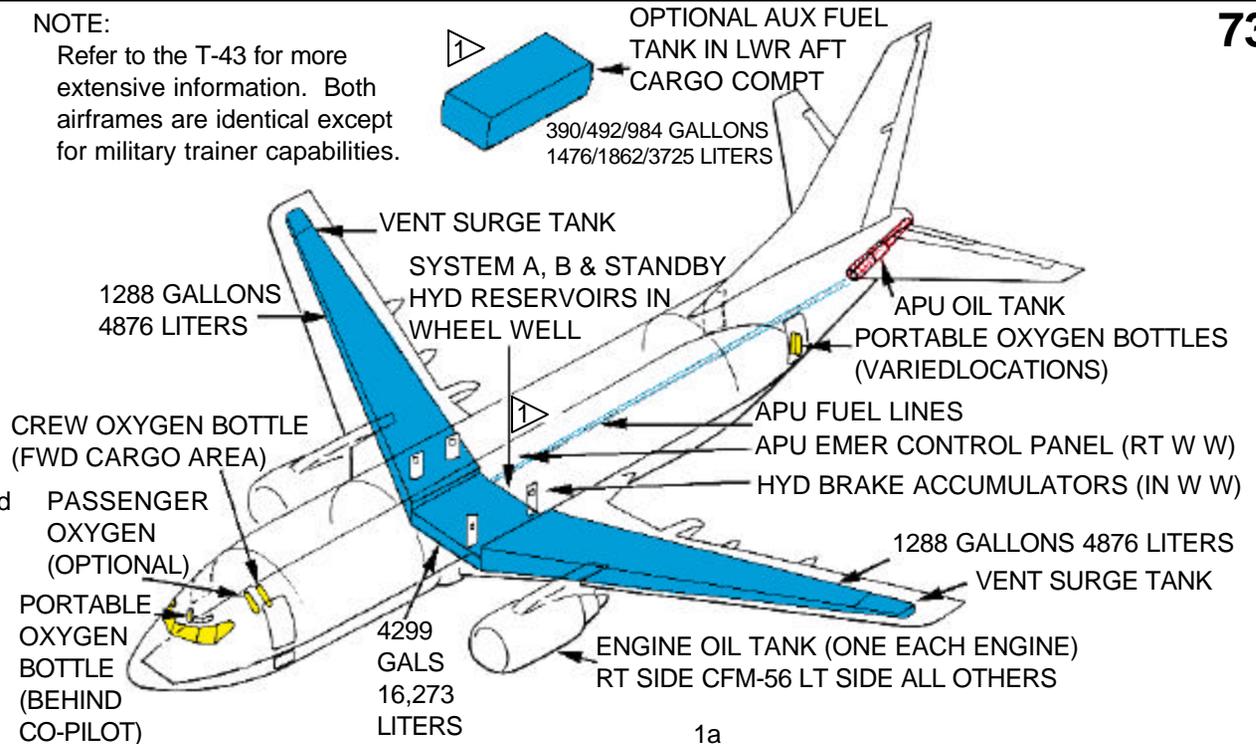
When doors are opened from outside, chutes automatically deploy.

2. CUT-IN OR CHOP OUT AREAS

- a. Cut along window line as the last resort.

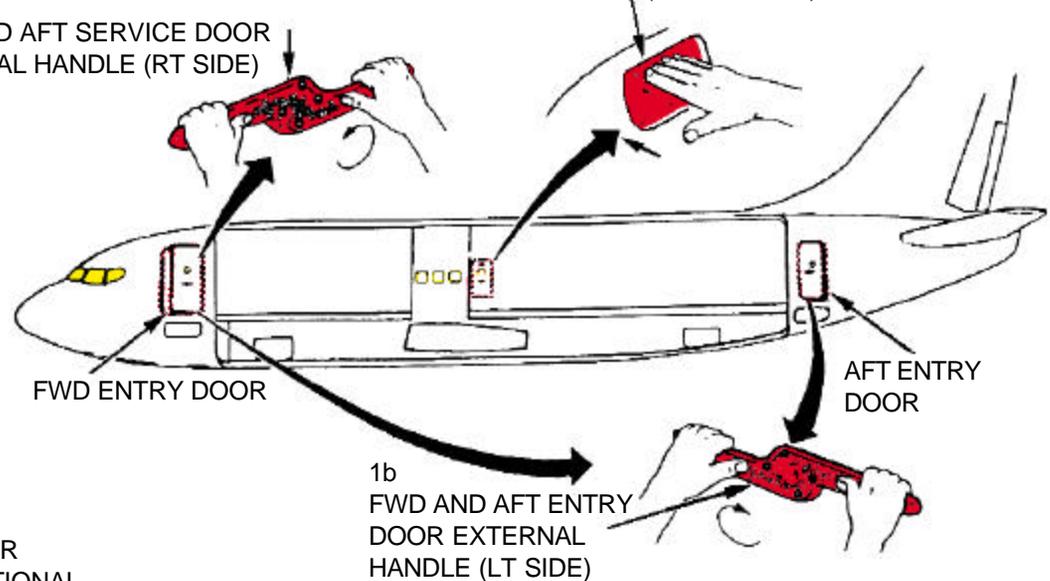


NOTE:
Refer to the T-43 for more extensive information. Both airframes are identical except for military trainer capabilities.



1c
FWD AND AFT SERVICE DOOR
EXTERNAL HANDLE (RT SIDE)

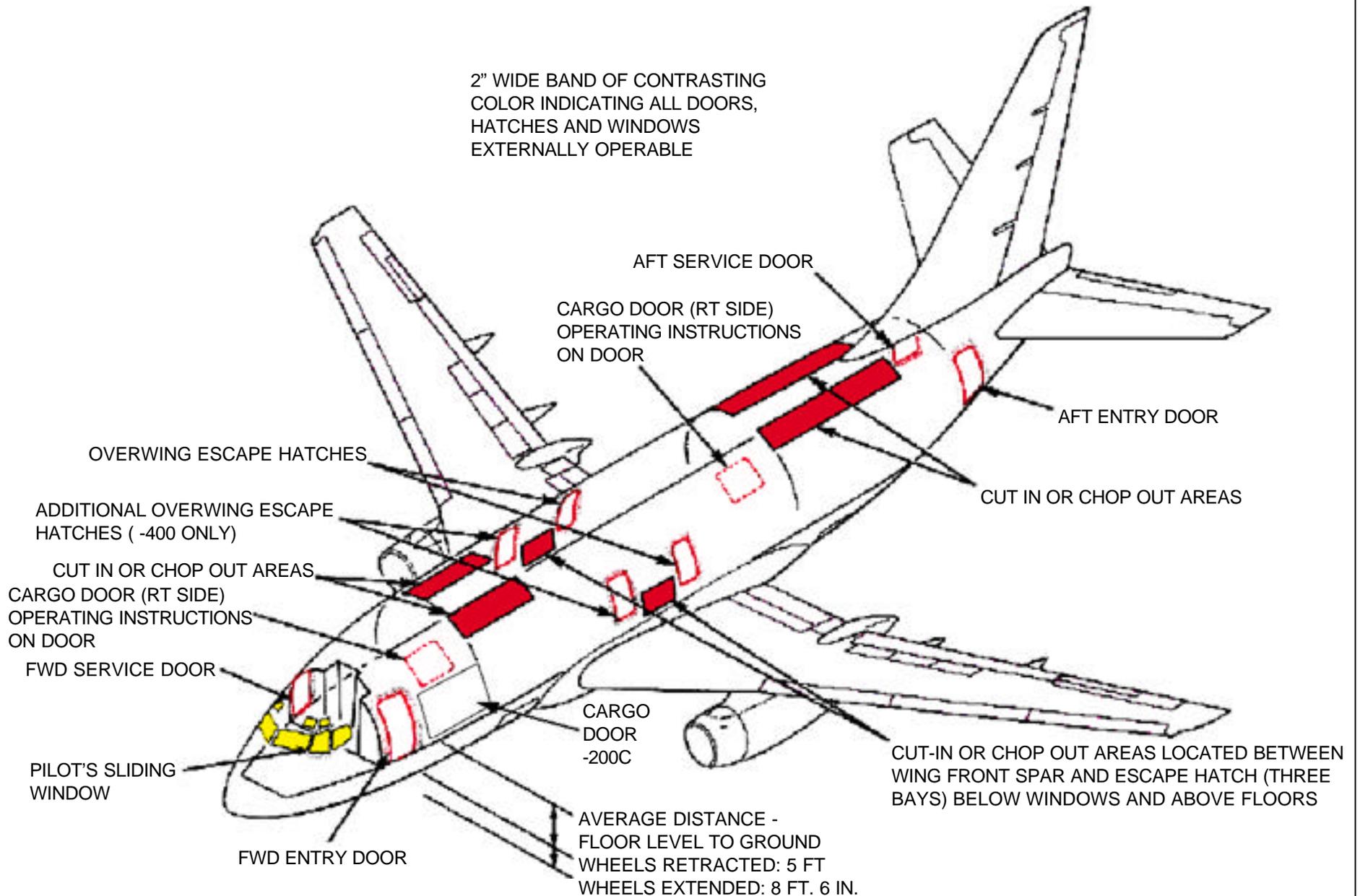
1a
EMERGENCY OVERWING EXIT HATCHES
PUSH PANEL (BOTH SIDES)



EMERGENCY RESCUE ACCESS

EFFECTIVITY:-100/-200/-300/-400/-500 SERIES

2" WIDE BAND OF CONTRASTING COLOR INDICATING ALL DOORS, HATCHES AND WINDOWS EXTERNALLY OPERABLE



AIRCRAFT ENTRY-Continued

AIRCRAFT ENTRY -600/-700/-800 SERIES

1. NORMAL ENTRY

NOTE:

Some models are equipped with stairs that can be deployed from forward and aft entry doors.

- a. Pull handle on forward and aft entry doors, located left side of fuselage, outward and rotate clockwise. Pull doors outward.

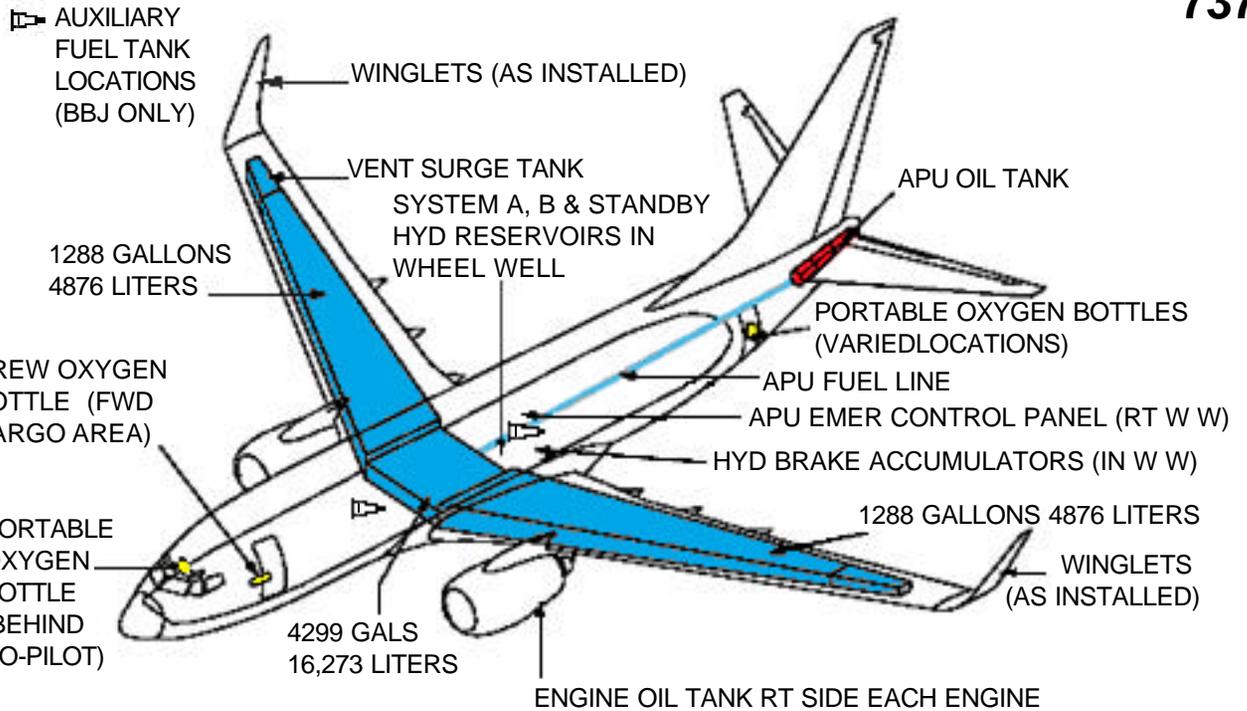
NOTE:

Depress button and pull handle out, rotate clockwise to extend stairway.

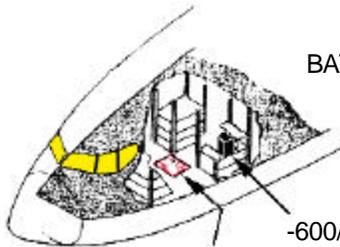
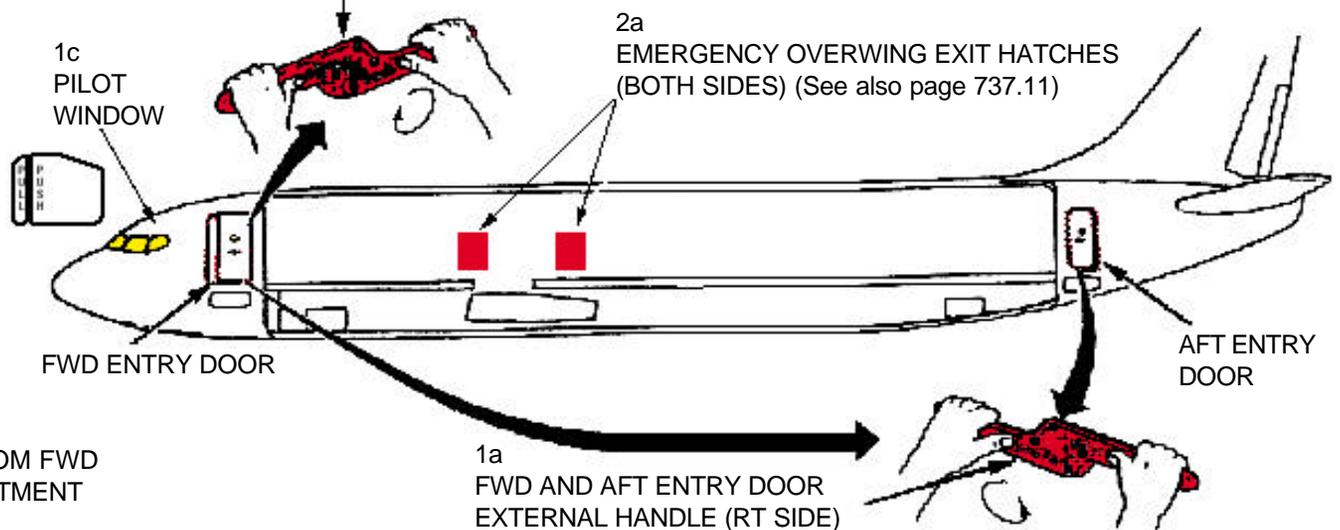
- b. Pull handle on right forward and aft service doors, outward and rotate counterclockwise. Pull doors outward.
- c. The pilot's sliding window can be accessed by pulling the external handle and sliding window open.

CAUTION

When doors are opened from outside, chutes automatically deploy.



1b FWD AND AFT SERVICE DOOR EXTERNAL HANDLE (LT SIDE)



BATTERY

E/E COMPARTMENT ACCESS DOOR

-600/-700/-800 ACCESSIBLE FROM FWD CARGO COMPARTMENT

AIRCRAFT ENTRY-Continued

2. EMERGENCY ENTRY

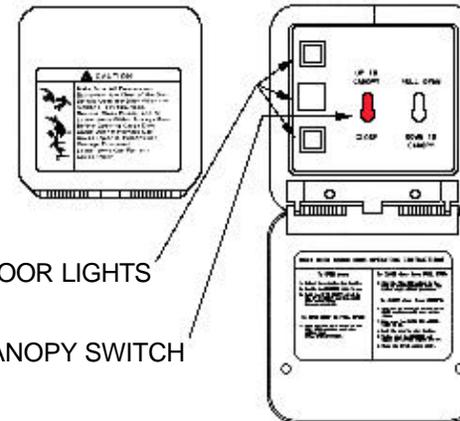
- a. Push in top center on overwing escape hatches, located on both fuselage sides (see page 737.16 for hatch locations.)



2a
EMERGENCY OVERWING
EXIT HATCHES (BOTH SIDES)

3. CARGO DOOR OPERATION

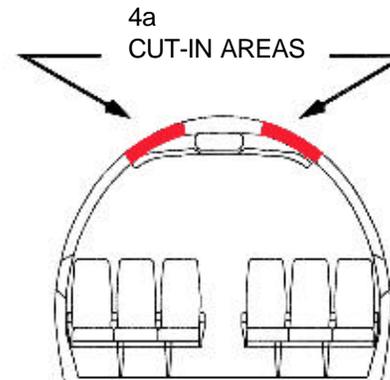
- a. To open cargo door 1, unlock the external door handle.
 - b. Verify unlocked light in ON.
 - c. Hold the UP TO CANOPY switch (illustrated in red) in UP position until door motion stops.
4. CUT-IN OR CHOP OUT AREAS
- a. Cut-in or chop out areas are located between wing front spar and escape hatch (three bays) below windows and above floors. (see page 737.11)



3a
EXTERNAL CARGO
DOOR CONTROLS

3b
CARGO DOOR LIGHTS

3c
UP TO CANOPY SWITCH



4a
CUT-IN AREAS

EMERGENCY RESCUE ACCESS

EFFECTIVITY:-600/-700/-800 SERIES

2" WIDE BAND OF CONTRASTING COLOR INDICATING ALL DOORS, HATCHES AND WINDOWS EXTERNALLY OPERABLE

AFT SERVICE DOOR

OVERWING ESCAPE HATCHES

CARGO DOOR (RT SIDE)
OPERATING INSTRUCTIONS
ON DOOR

ADDITIONAL OVERWING ESCAPE
HATCHES (-800/-900 ONLY)

AFT ENTRY DOOR

CUT IN OR CHOP OUT AREAS
CARGO DOOR (RT SIDE)
OPERATING INSTRUCTIONS
ON DOOR

CUT IN OR CHOP OUT AREAS

FWD SERVICE DOOR

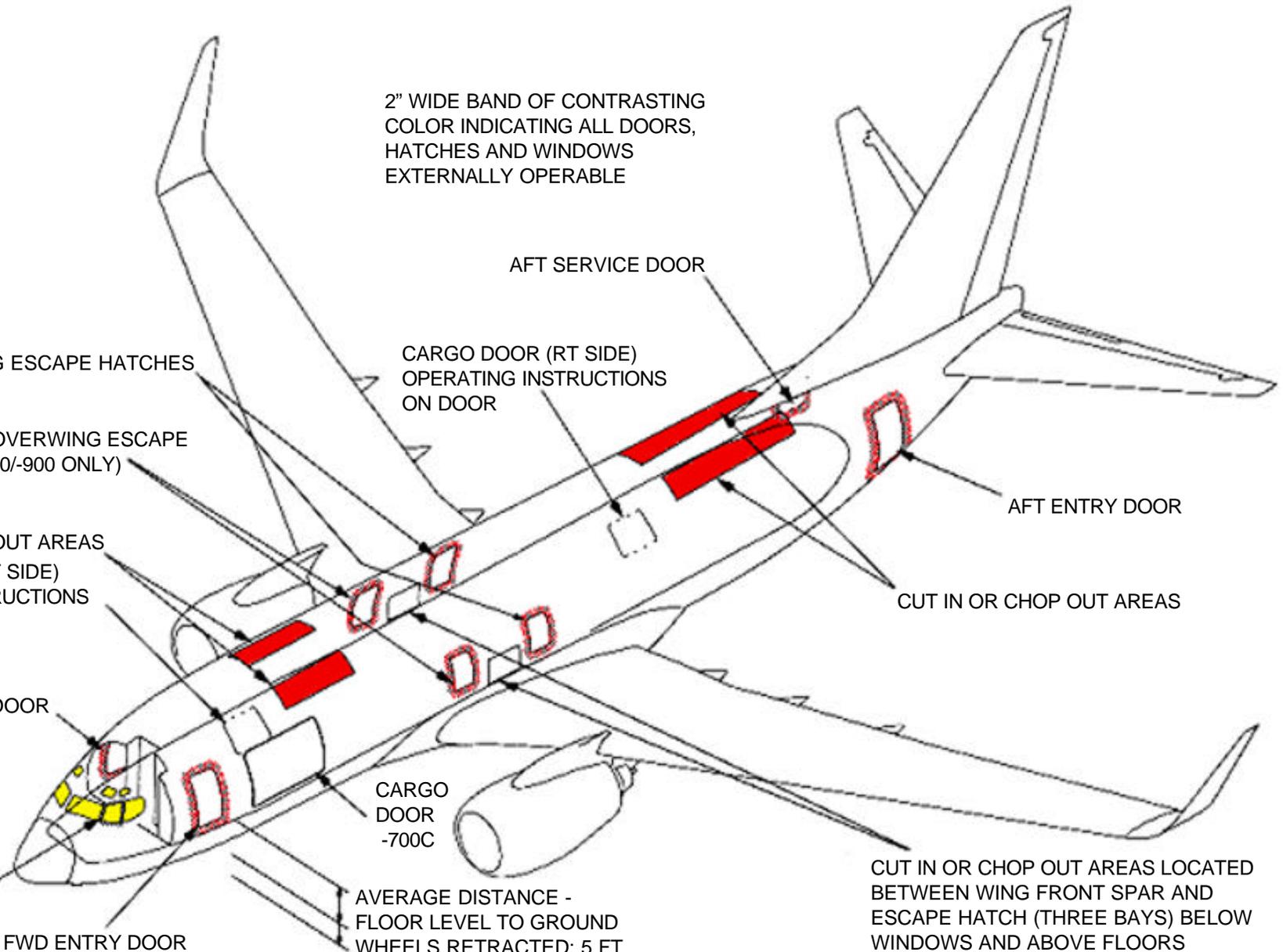
PILOT'S
SLIDING
WINDOW

FWD ENTRY DOOR

CARGO
DOOR
-700C

AVERAGE DISTANCE -
FLOOR LEVEL TO GROUND
WHEELS RETRACTED: 5 FT
WHEELS EXTENDED: 8 FT. 6 IN.

CUT IN OR CHOP OUT AREAS LOCATED
BETWEEN WING FRONT SPAR AND
ESCAPE HATCH (THREE BAYS) BELOW
WINDOWS AND ABOVE FLOORS



ENGINE SHUTDOWN AND AIRCREW EXTRACTION

1. ENGINE SHUTDOWN (-100 thru -800 & BBJ)

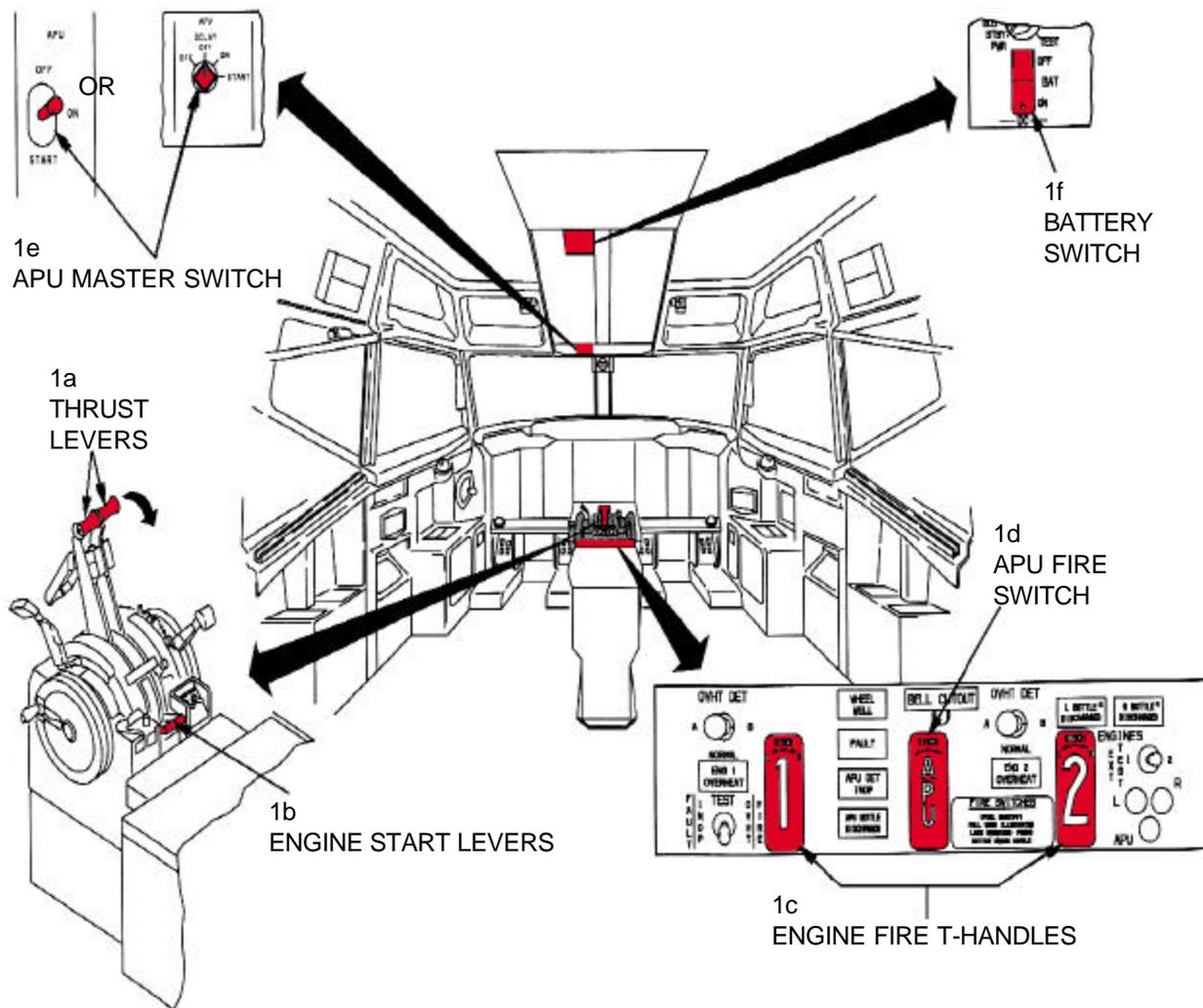
- Retard thrust levers, located on pilot's center console, to RETARD position.
- Retard engine start levers, located on pilot's console, to CUT OFF position.
- In case of engine fire, pull appropriate engine fire T-handles, located on center console forward of thrust levers. Turn right or left to discharge agent. If not illuminated, push and hold the button under the switch to release.
- In case of APU fire, pull the APU fire T-handle, located on center console forward of thrust levers. Turn right or left to discharge agent.
- Place APU master switch up to OFF position OR OFF position. (Switch type can vary.)
- Lift guard and place battery switch, located on pilot's center overhead panel, to OFF position.

2. AIRCREW EXTRACTION

- Unlatch lap belt and remove shoulder harness from crewmembers. See page T-43.5 for view of seats and associated controls.
- FLIGHT ENGINEER'S SEAT** - Depress seat control handles and rotate seat clockwise.
- PASSENGER'S SEATS** - Passengers seats are equipped with lap belts only.

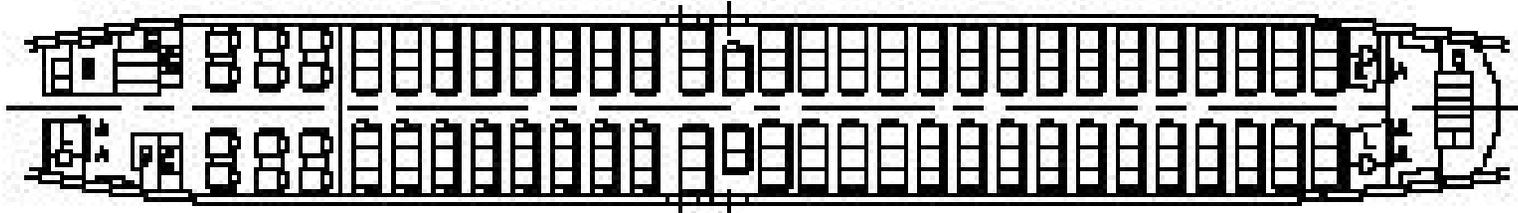
NOTE:

If seat tracks are not damaged during crash landing use adjustable seat control handles to retract seats to aft position.

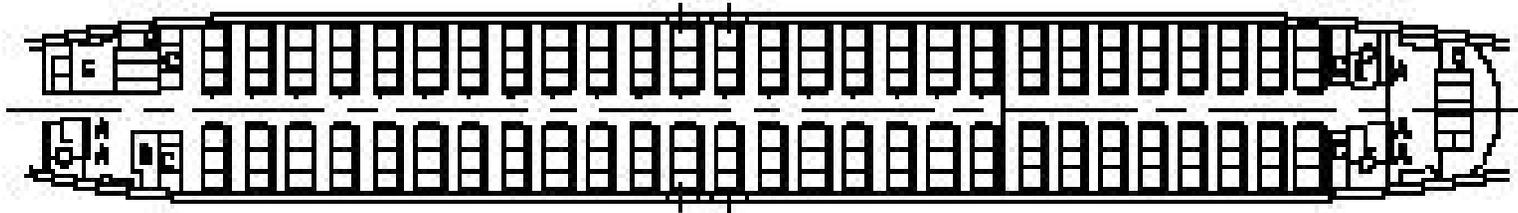


CABIN CONFIGURATIONS

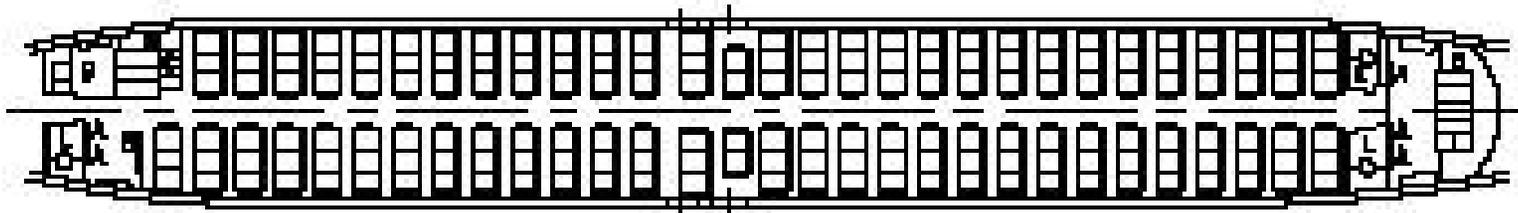
EFFECTIVITY: -100/-200/-300/-400/-500/-600 (NO WINGLETS) (SEE SEPARATE FILES FOR T-43 AND C-40A/B/C)



MIXED CLASS
 8 FIRST CLASS SEATS AT 36 - IN PITCH
 120 ECONOMY CLASS SEATS AT 32 - PITCH



MIXED CLASS
 90 BUSINESS CLASS SEATS AT 34 - IN PITCH
 36 ECONOMY CLASS SEATS AT 32 - PITCH

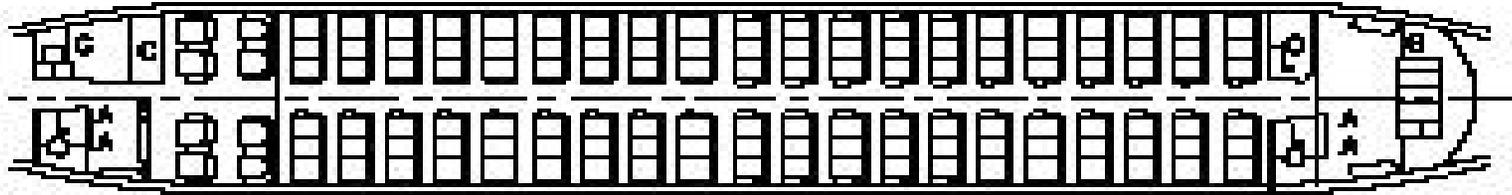


SINGLE CLASS
 140 ECONOMY CLASS SEATS AT 32 - IN PITCH (SHOWN)
 OR 148 ECONOMY CLASS SEATS AT 30 - PITCH

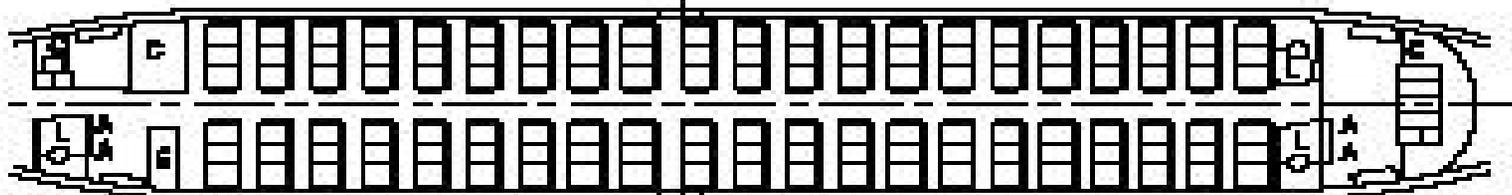
[A] ATTENDANT [C] CLOSET [G] GALLEY [L] LAVATORY [S] STORAGE

CABIN CONFIGURATIONS-Continued

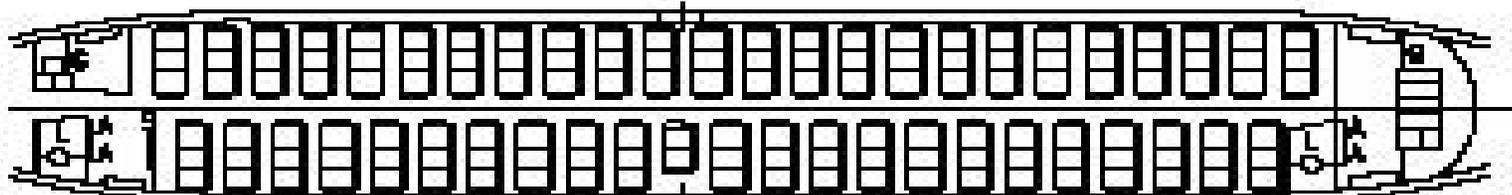
EFFECTIVITY: -700 (WITH OR WITHOUT WINGLETS)



MIXED CLASS
 8 FIRST CLASS SEATS AT 36 - IN PITCH
 120 ECONOMY CLASS SEATS AT 32 - PITCH



MIXED CLASS
 90 BUSINESS CLASS SEATS AT 34 - IN PITCH
 36 ECONOMY CLASS SEATS AT 32 - PITCH

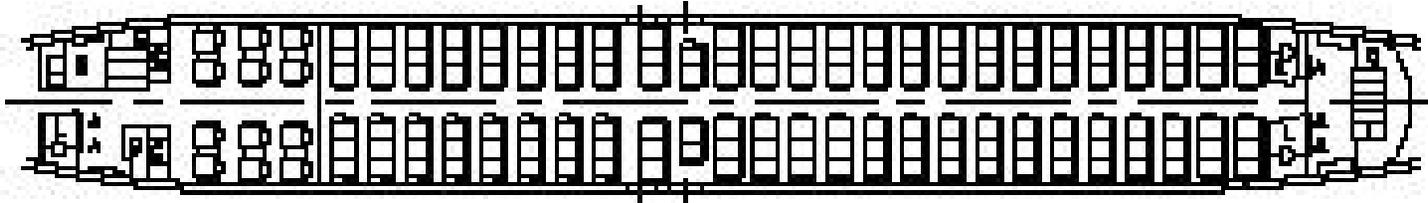


SINGLE CLASS
 140 ECONOMY CLASS SEATS AT 32 - IN PITCH (SHOWN)
 OR 148 ECONOMY CLASS SEATS AT 30 - PITCH

[A] ATTENDANT [C] CLOSET [G] GALLEY [L] LAVATORY [S] STORAGE

CABIN CONFIGURATIONS-Continued

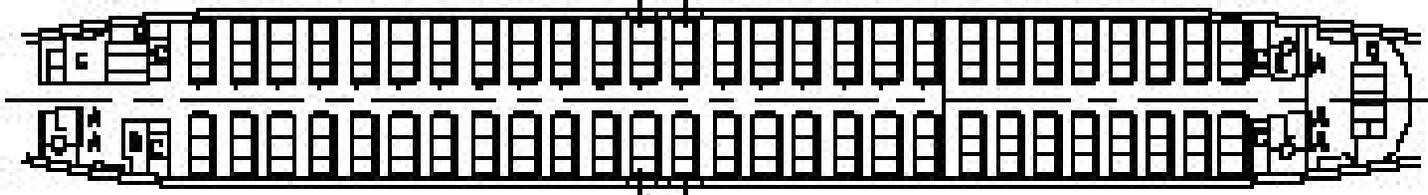
EFFECTIVITY: -800 (WITH OR WITHOUT WINGLETS)



MIXED CLASS

8 FIRST CLASS SEATS AT 36 - IN PITCH

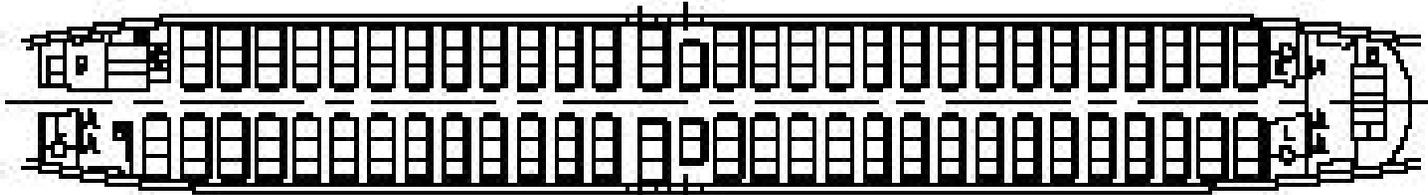
120 ECONOMY CLASS SEATS AT 32 - PITCH



MIXED CLASS

90 BUSINESS CLASS SEATS AT 34 - IN PITCH

36 ECONOMY CLASS SEATS AT 32 - PITCH



SINGLE CLASS

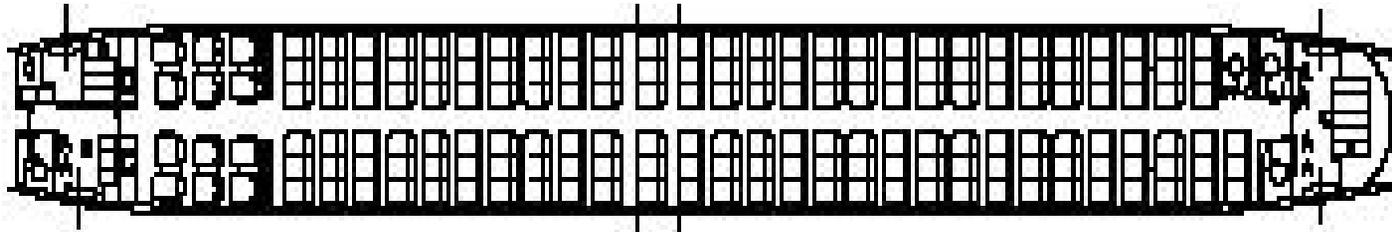
140 ECONOMY CLASS SEATS AT 32 - IN PITCH (SHOWN)

OR 148 ECONOMY CLASS SEATS AT 30 - PITCH

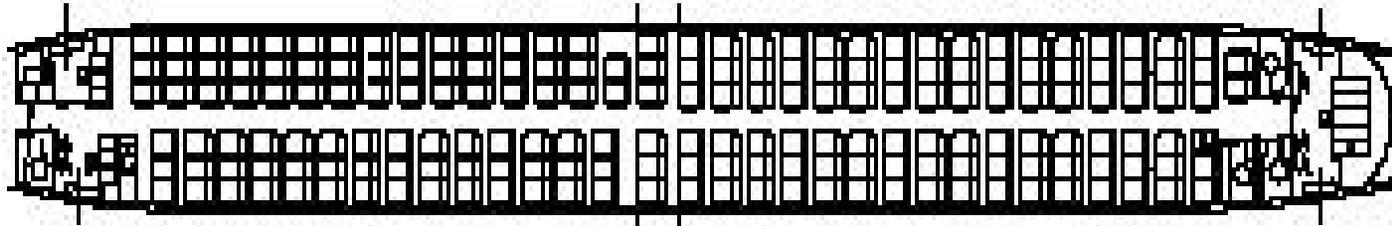
[A] ATTENDANT	[C] CLOSET	[G] GALLEY	[L] LAVATORY	[S] STORAGE
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CABIN CONFIGURATIONS-Continued

EFFECTIVITY: -900 (WITH OR WITHOUT WINGLETS)



MIXED CLASS
 12 FIRST CLASS SEATS AT 36 - IN PITCH
 165 ECONOMY CLASS SEATS AT 32 - PITCH



SINGLE CLASS
 177 ECONOMY CLASS SEATS AT 32 - IN PITCH
 OR 189 ECONOMY CLASS SEATS AT 31 - PITCH

[A] ATTENDANT [C] CLOSET [G] GALLEY [L] LAVATORY