

# SAFETY SUPPLEMENT

## TECHNICAL MANUAL

# AEROSPACE EMERGENCY RESCUE AND MISHAP RESPONSE INFORMATION (EMERGENCY SERVICES)

THIS PUBLICATION SUPPLEMENTS TO 00-105E-9 REVISION 9, DATED 1 JULY 2004, LOCATED AT WEB SITE:  
<http://www.robins.af.mil/logistics/LGEDA/Documents/to00-105e-9.htm>.

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TO THE ATTENTION OF ALL AFFECTED AIR FORCE PERSONNEL.**

PUBLISHED UNDER AUTHORITY OF THE SECRETARY OF THE AIR FORCE

**7 October 2004**

1. PURPOSE.

This supplement provides instructions for update of TO 00-105E-9 Revision 9, dated 1 July 2004, affecting Chapter 6 USAF Cargo Aircraft. This supplement is a updated file for the latest information regarding the C-32A aircraft procedures.

2. INSTRUCTIONS.

- a. This information, formatted in PDF, can be downloaded and printed from this web site by the end user. Use the most current Adobe Reader for this function, available free from [Adobe.com](http://Adobe.com).
- b. This supplement to Chapter 6 adds information based on newly researched source data information regarding this Cargo aircraft. The new file update should be added to Chapter 6 in TO 00-105E-9 Revision 9. The end user should save this file and print the affected pages, if applicable to the user's operation. File a copy of this Safety Supplement with the main Technical Order according to current regulations.

**NOTE**

This information should also be included in mobility boxes where applicable. If your unit or a part of your unit is serving elsewhere, they should be informed of this Safety Supplement and how to obtain it. See TO 00-5-2 paragraphs 1-1.4, 1-1.4.1, and 1-1.6 for Local Reproduction of TOs and Digital Media guidance.

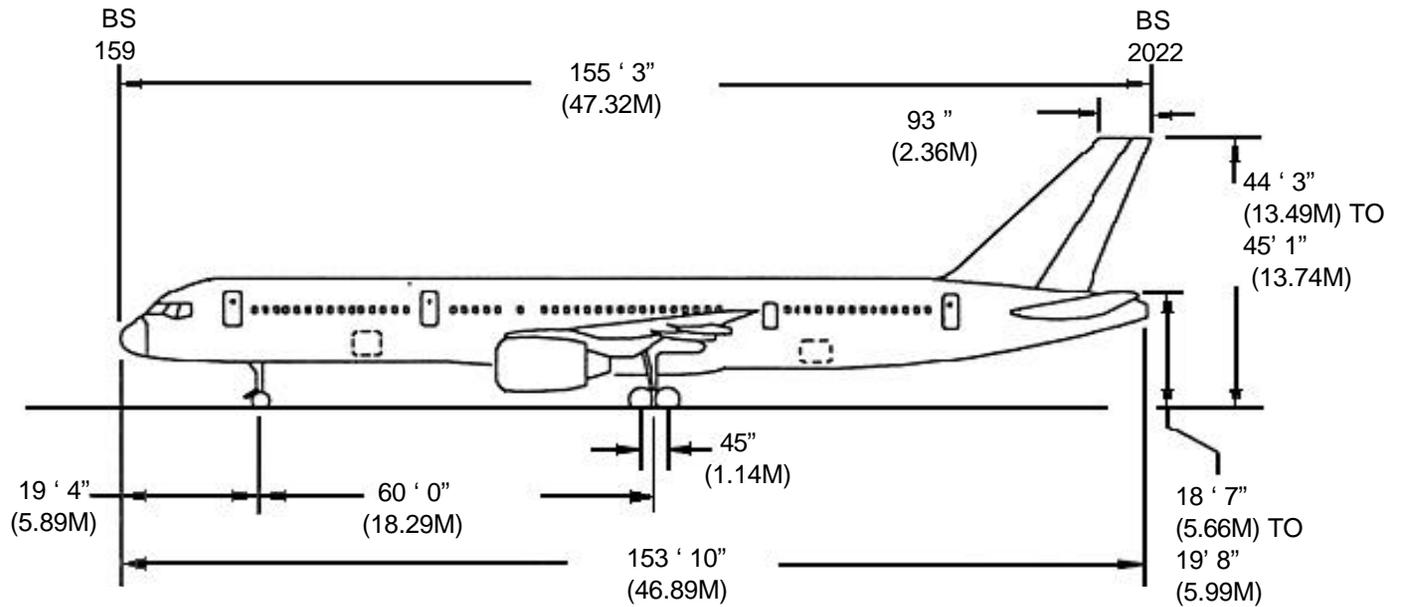
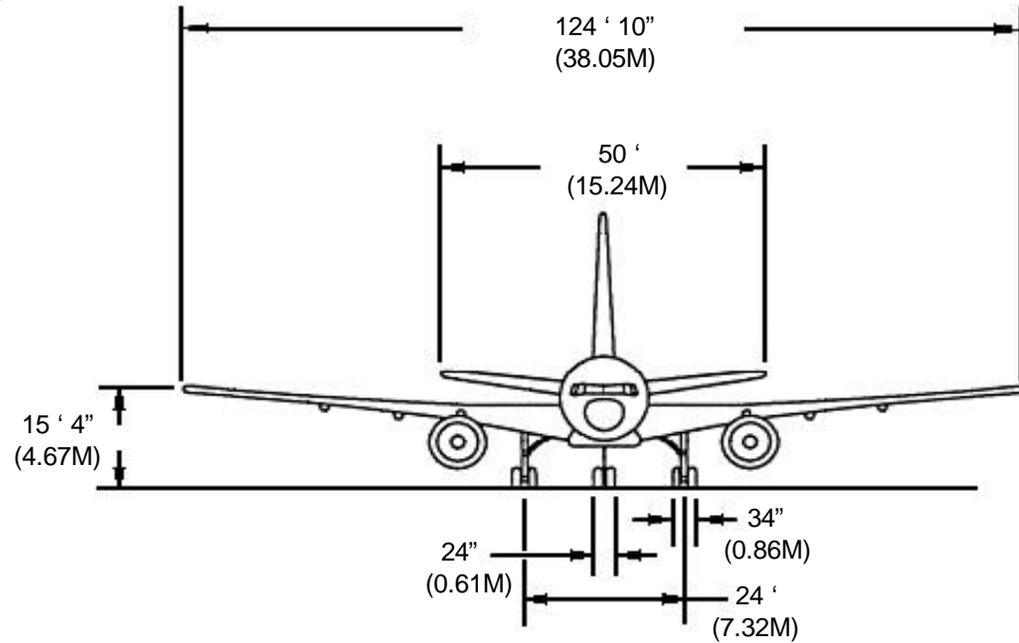
THE END

# AIRCRAFT PAINT SCHEME

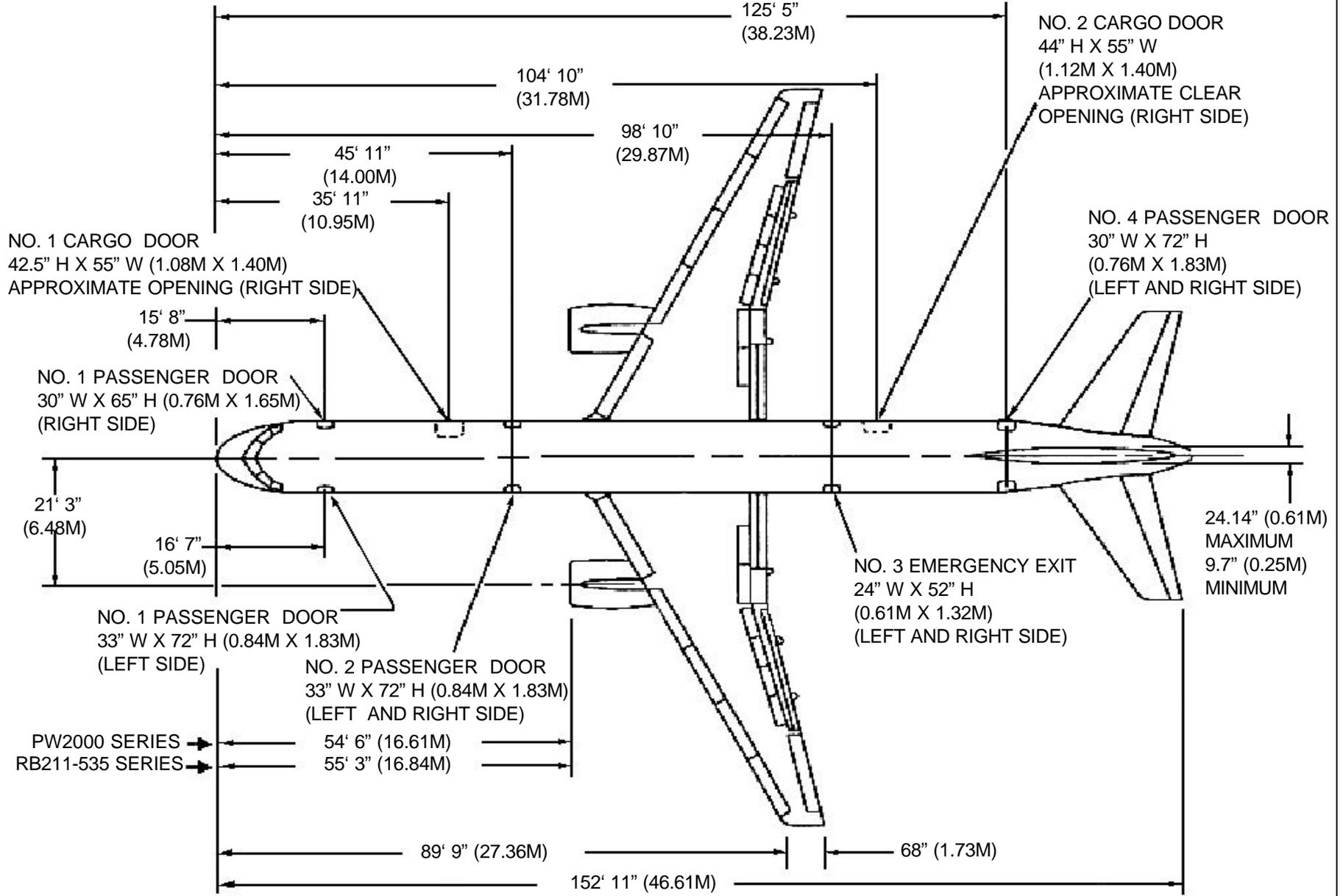


# AIRCRAFT DIMENSIONS

C-32A



# AIRCRAFT DIMENSIONS-Continued

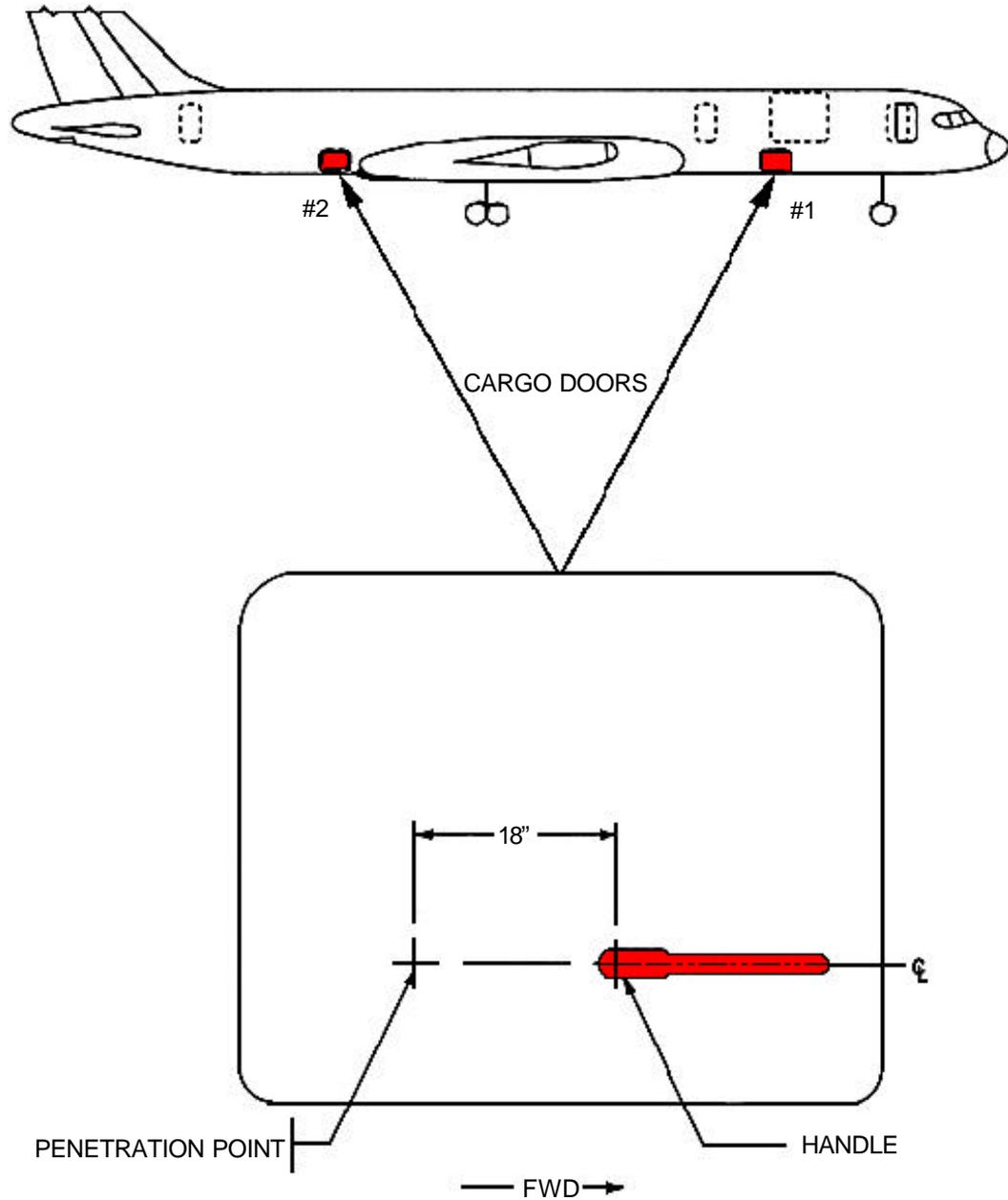


# SKIN PENETRATION POINTS

C-32A

**NOTE:**

This aircraft is the same as a Boeing 757-200. The C-32A is the official USAF designation for Vice Presidential transport. It has been modified and configured to accommodate his staff, a distinguished visitor stateroom, a conference area, a business class and general seating. See the INTERIOR ARRANGEMENT page for specifics.



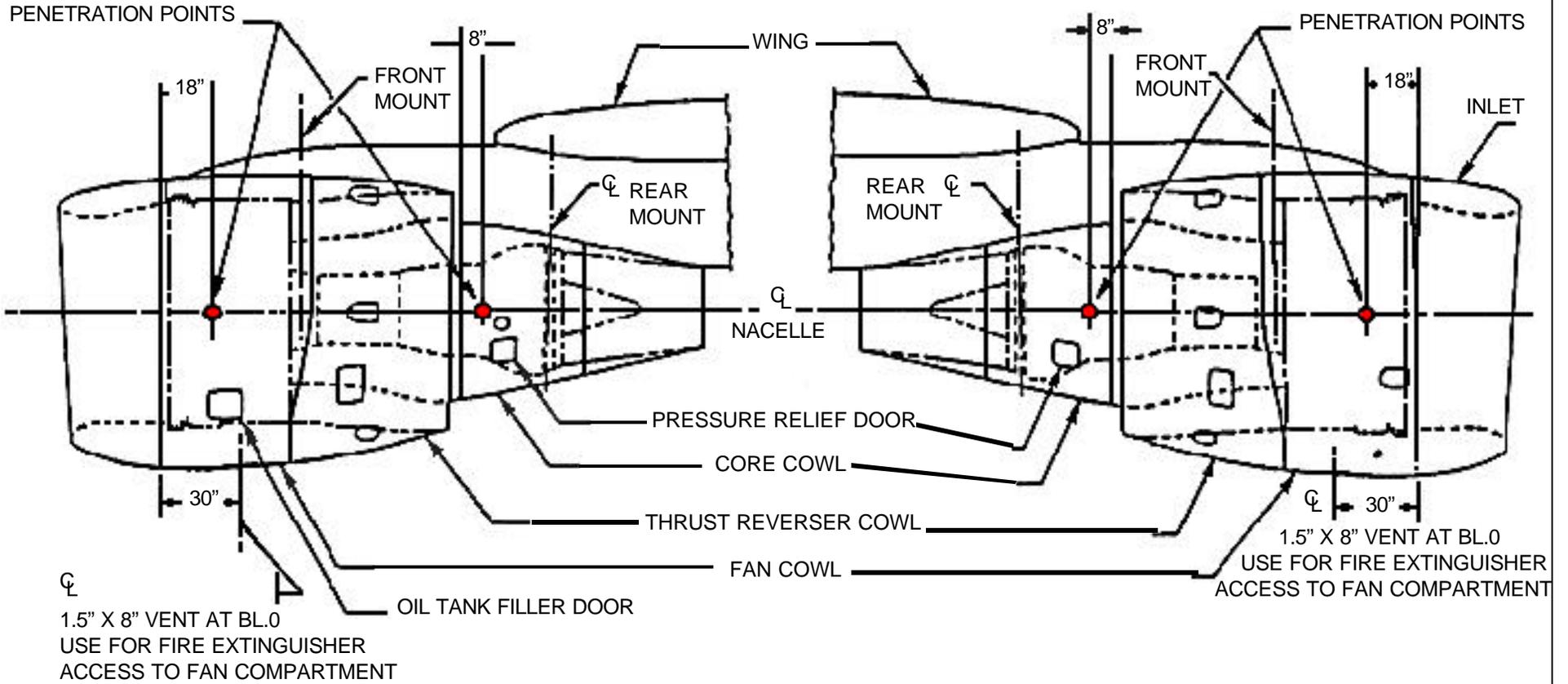
# SKIN PENETRATION POINTS-Continued

757-200 (PW 2037)

757-200 (PW 2037)

PENETRATION POINTS

PENETRATION POINTS



ENGINE NACELLE

ENGINE NACELLE

LEFT SIDE VIEW

RIGHT SIDE VIEW

# AIRCRAFT HAZARDS

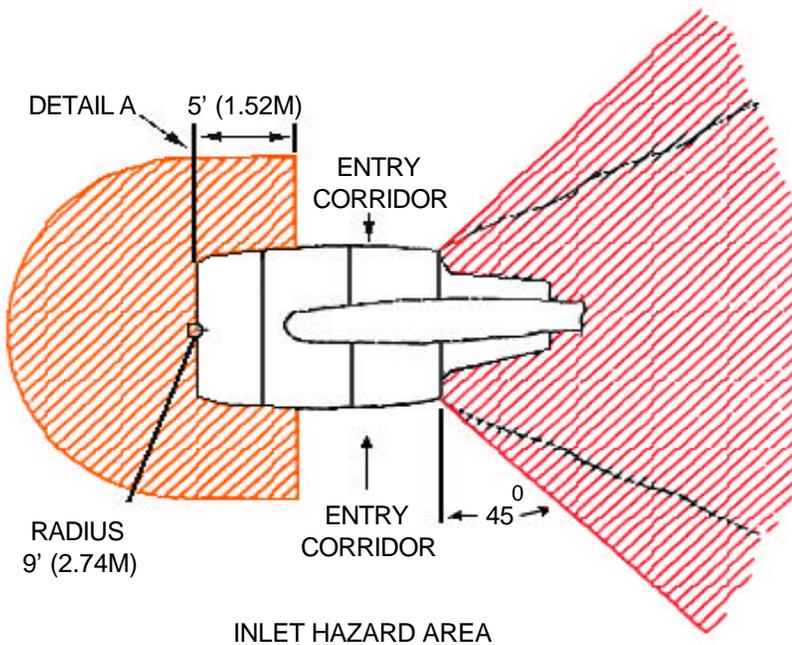
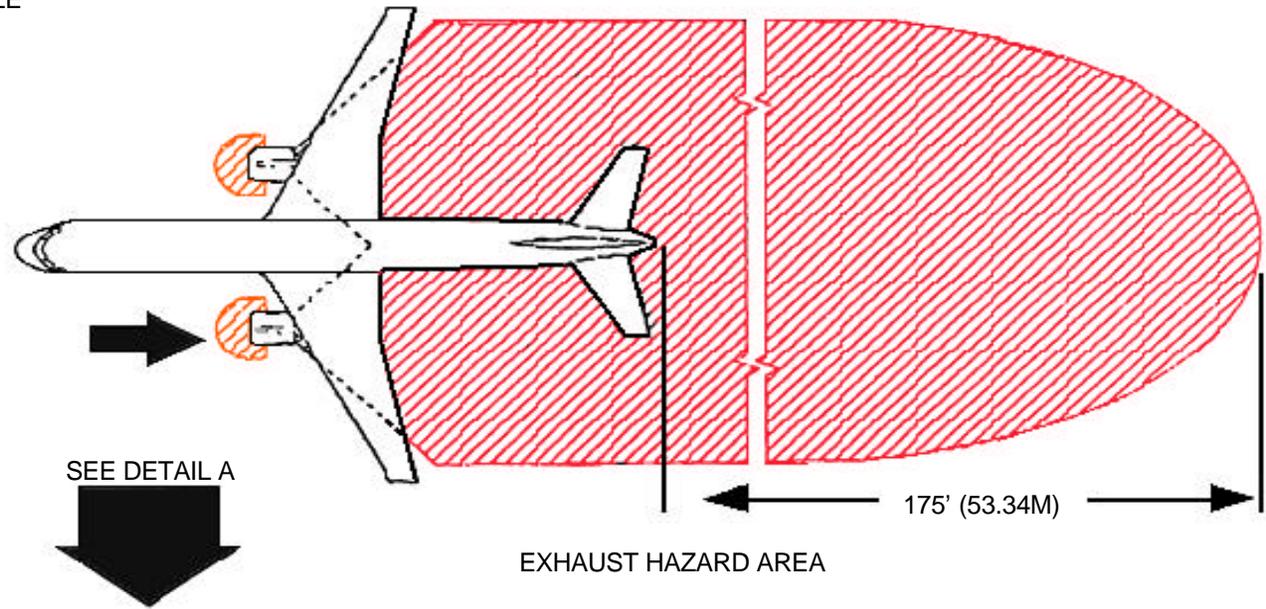
JET ENGINE INTAKE/EXHAUST AREAS AT IDLE

C-32A

T.O. 00-105E-9

## WARNING

- If surface wind is reported greater than 25 knots, increase distance of intake boundary by 20%.
- If ramp surfaces are slippery, additional precautions such as cleaning the ramp will be necessary to provide personnel safety.



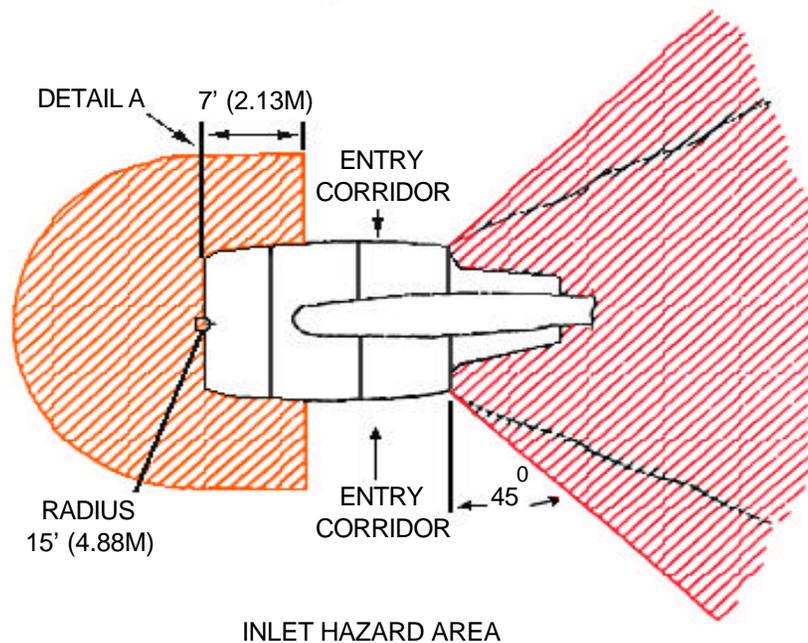
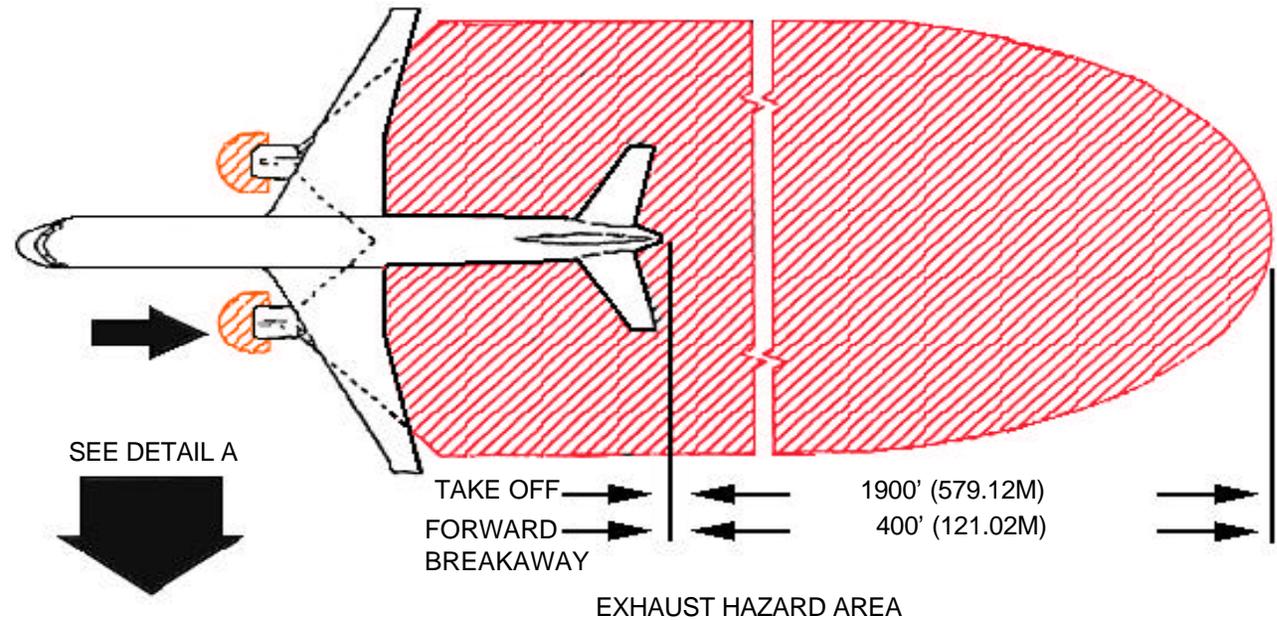
# AIRCRAFT HAZARDS-Continued

C-32A

## JET ENGINE INTAKE/EXHAUST AREAS AT FORWARD BREAKAWAY AND TAKEOFF THRUST

### WARNING

- If surface wind is reported greater than 25 knots, increase distance of intake boundary by 20%.
- If ramp surfaces are slippery, additional precautions such as cleaning the ramp will be necessary to provide personnel safety.
- Ground personnel must stand clear of these hazardous zones and maintain communication with flight compartment personnel during engine running.



# AIRCRAFT HAZARDS-Continued

## JET ENGINE REVERSE IDLE

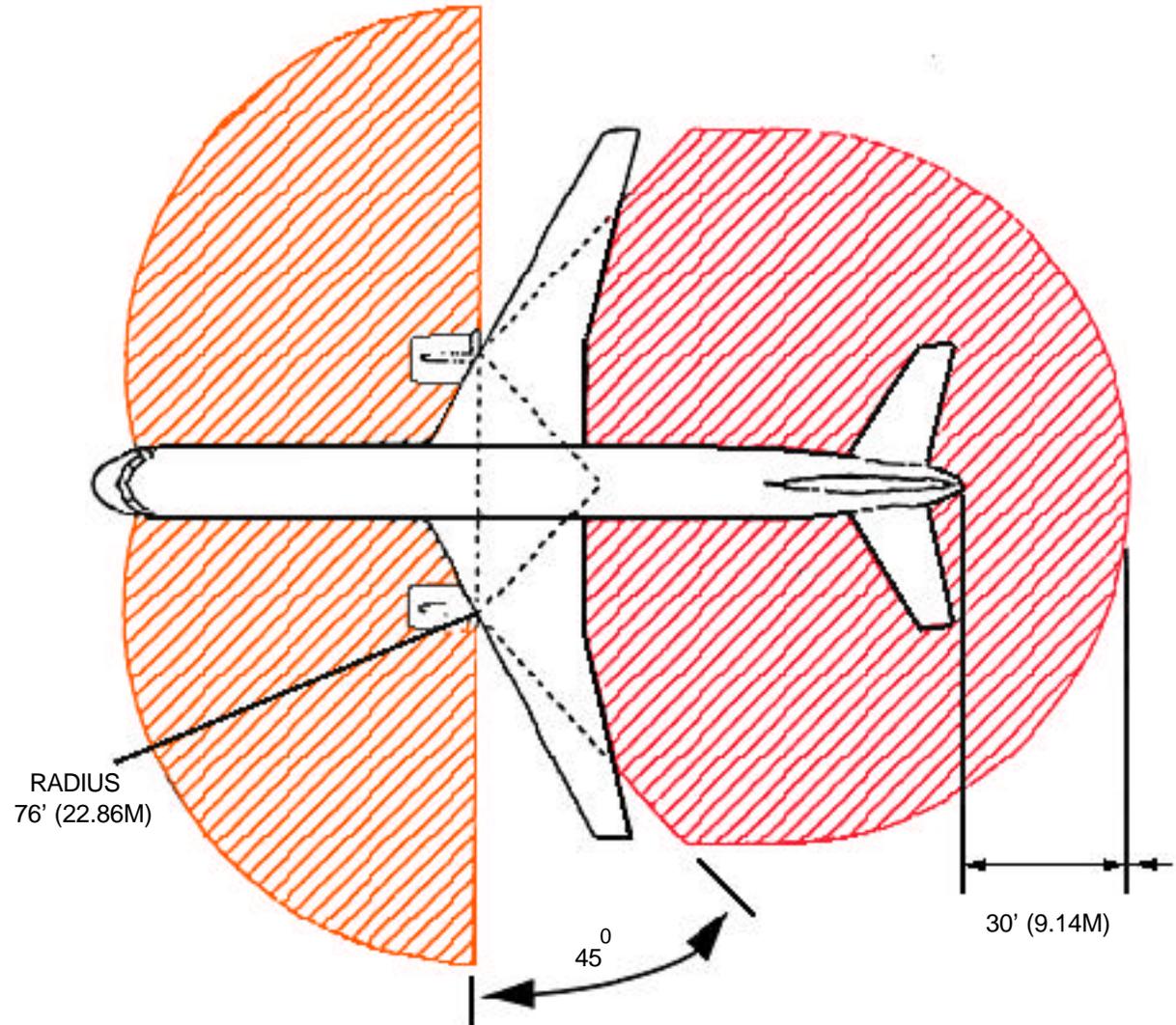
C-32A

**WARNING**

- If ramp surfaces are slippery, additional precautions such as cleaning the ramp will be necessary to provide personnel safety.
- Ground personnel must stand clear of these hazardous zones and maintain communication with flight compartment personnel during engine running.

**CAUTION**

For maintenance, engine operation in reverse thrust is limited to minimum idle power.



# AIRCRAFT HAZARDS-Continued

## RADIATION HAZARDS

### NOTE:

#### MAXIMUM PERMISSIBLE EXPOSURE LEVEL (MPEL)

In order to avoid the envelope in which the radiation level may exceed the U.S. Government standard of 10 milliwatt per square centimeter, all personnel should remain beyond the distance indicated in the illustration. The distance to the MPEL boundary is determined by calculating the near field/far field intersection per FAA Advisory Circular 20-68B.

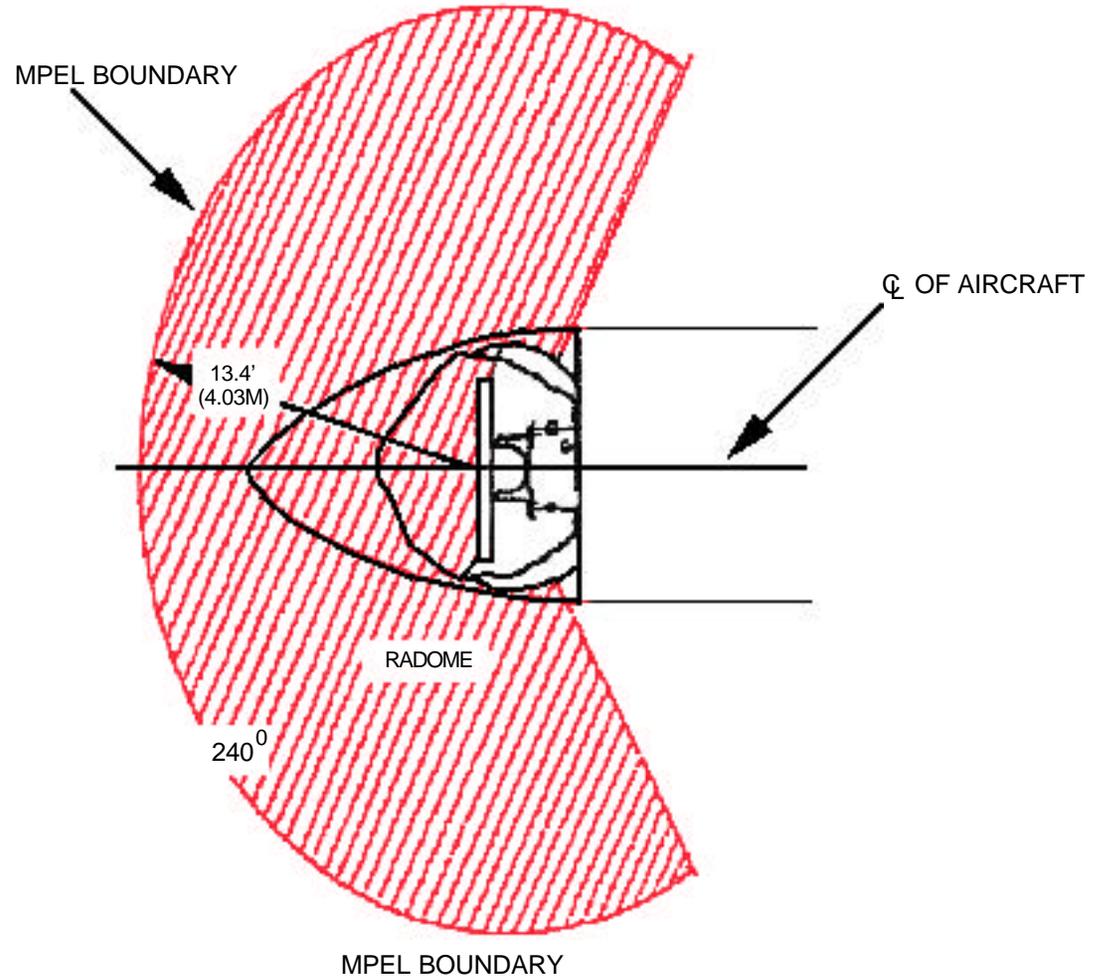
### WARNING

The C-32A radome generates microwave radiation. Improper use or exposure may cause serious bodily injury. Maintain prescribed safe distance when standing in front of a radiating antenna. Never expose eyes or any part of the body to an unterminated waveguide.

The HF-9000 High-Frequency Communications System can cause serious burns from direct contact when the system is transmitting. Do not touch the RF output terminal on the antenna coupler, the antenna lead-in wire, the insulated feedthrough, or the antenna itself. When operated into an antenna, it may produce electromagnetic fields near the antenna that exceed OSHA recommended maximum limits.

DO NOT operate the Airborne Weather Radar (AWR) during refueling of the aircraft nor when within 300 feet (91.44 meters) of other refueling operations.

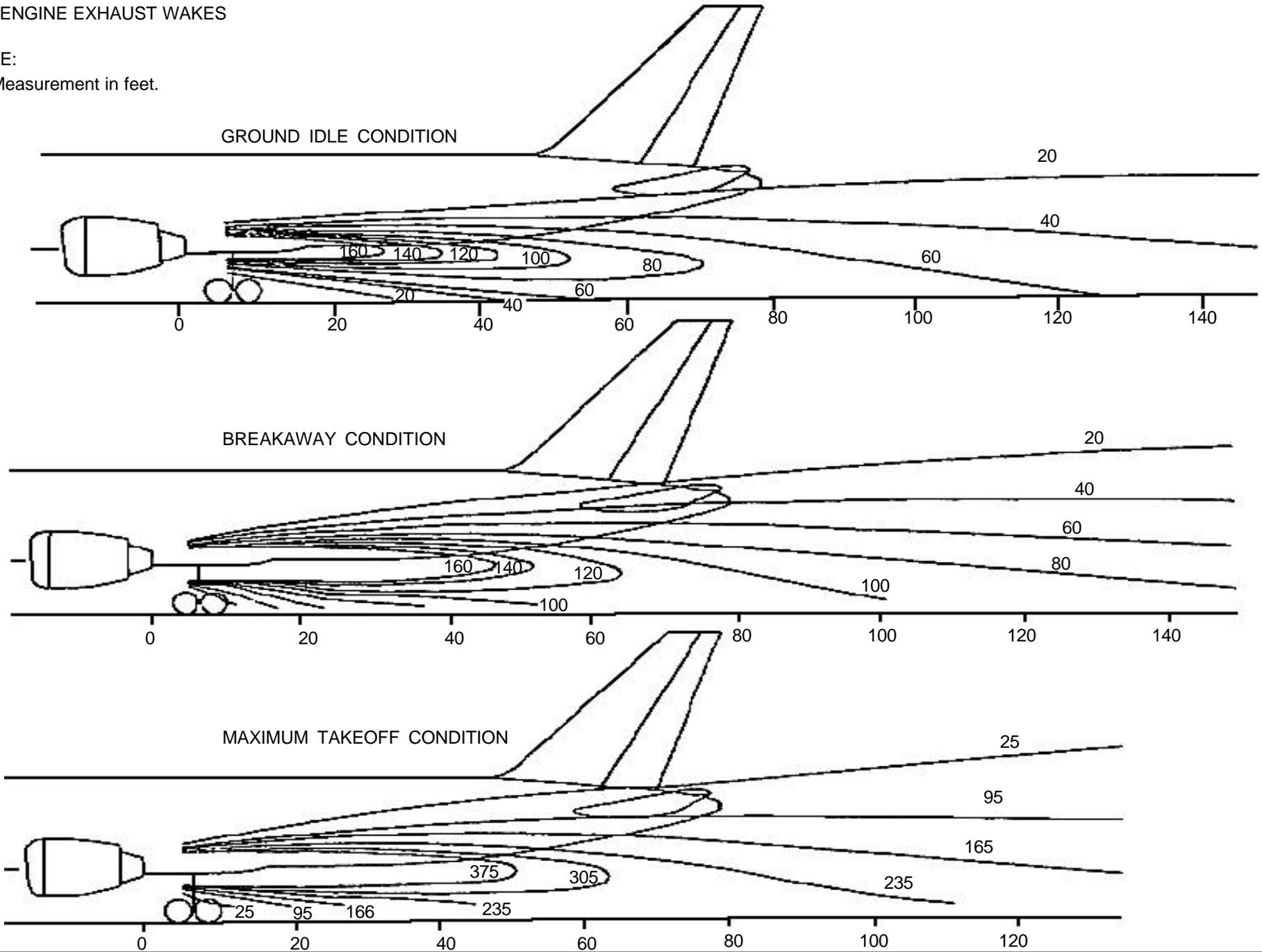
DO NOT operate the AWR within 15 feet (4.57 meters) of ground personnel or containers holding flammable or explosive material.



# AIRCRAFT HAZARDS-Continued

## JET ENGINE EXHAUST WAKES

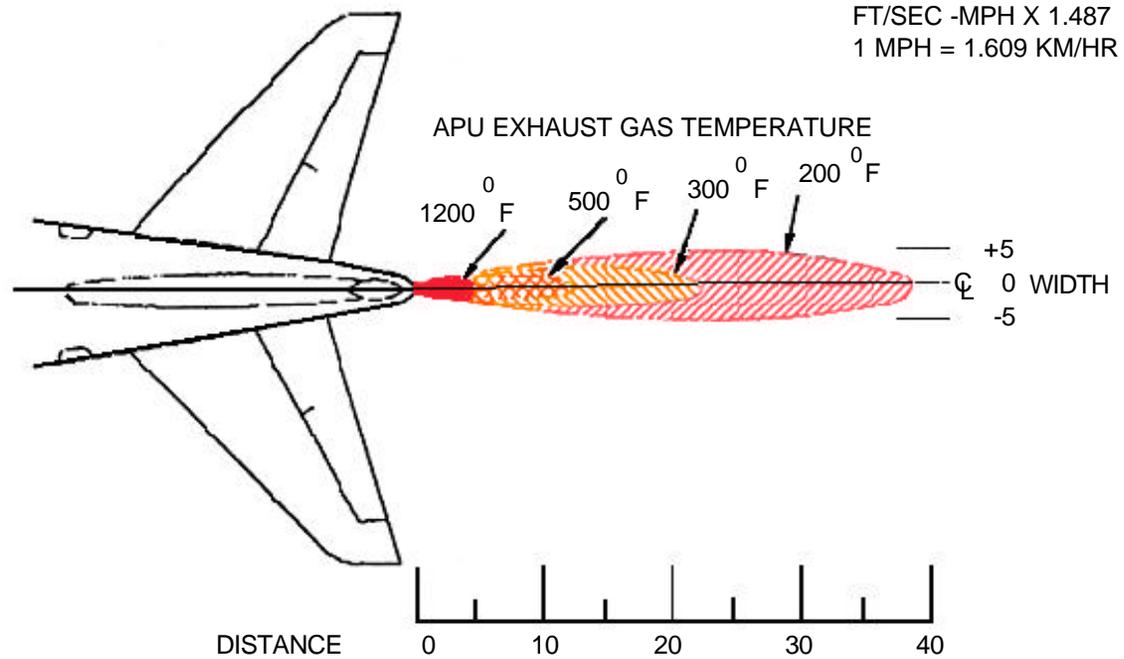
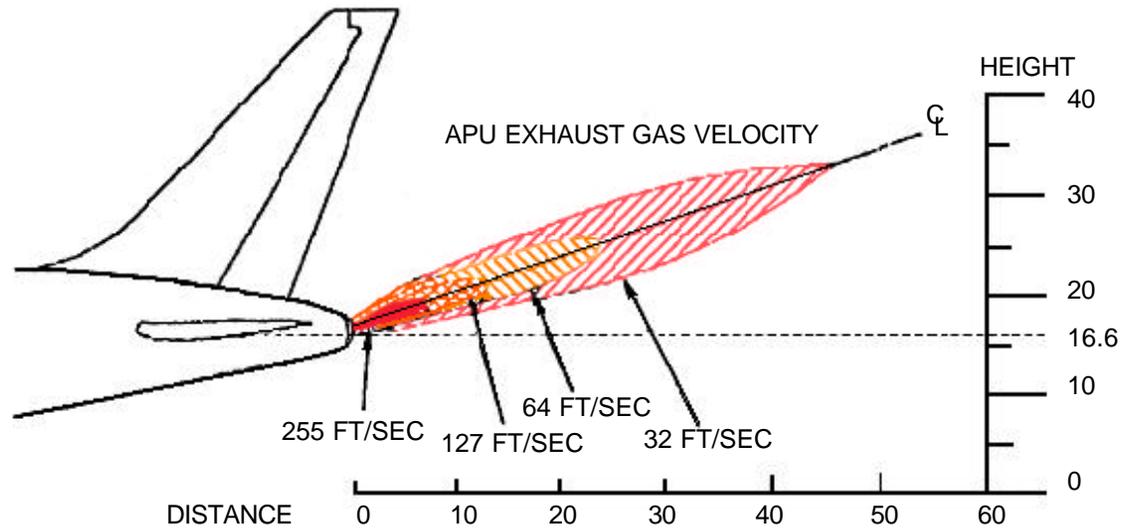
NOTE:  
Measurement in feet.



# AIRCRAFT HAZARDS-Continued

## AUXILIARY POWER UNIT EXHAUST WAKE

NOTE:  
Measurement in feet.



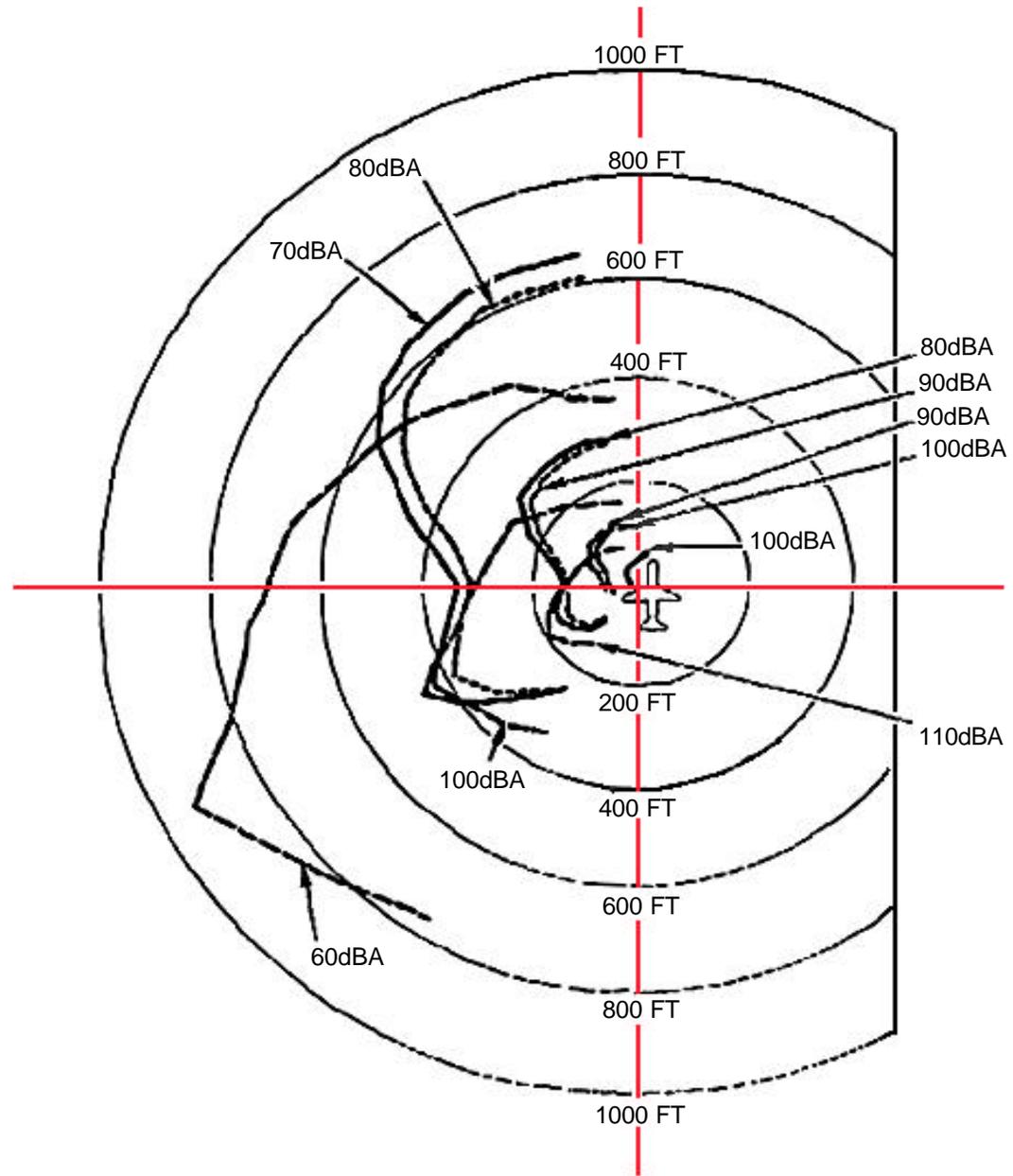
# AIRCRAFT HAZARDS-Continued

## JET ENGINE NOISE AREAS

NOTE:

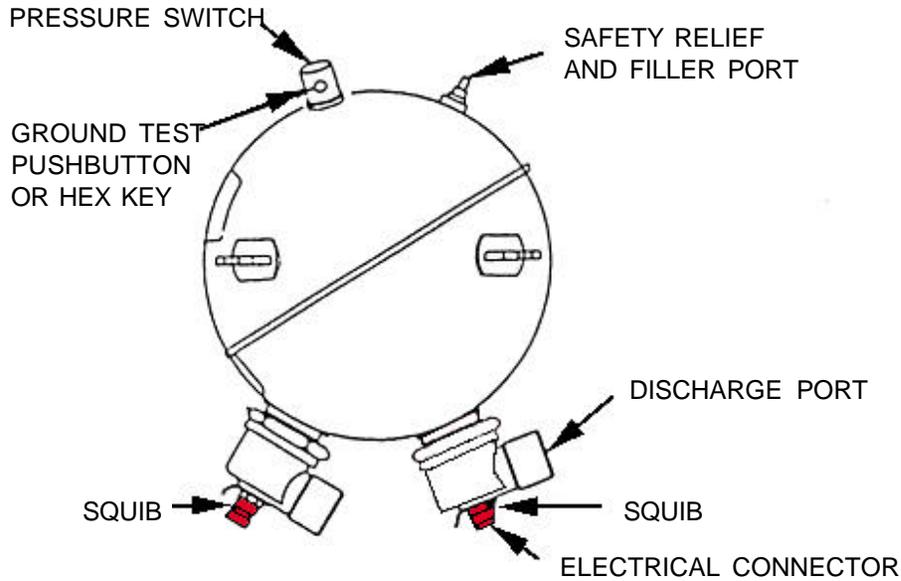
- 1,969 LBS OF THRUST
- - - - - 6,300 LBS OF THRUST
- - - - - 36,800 LBS OF THRUST

METRIC CONVERSION: 1FT= .3048M  
 1LB= 0.4536KG

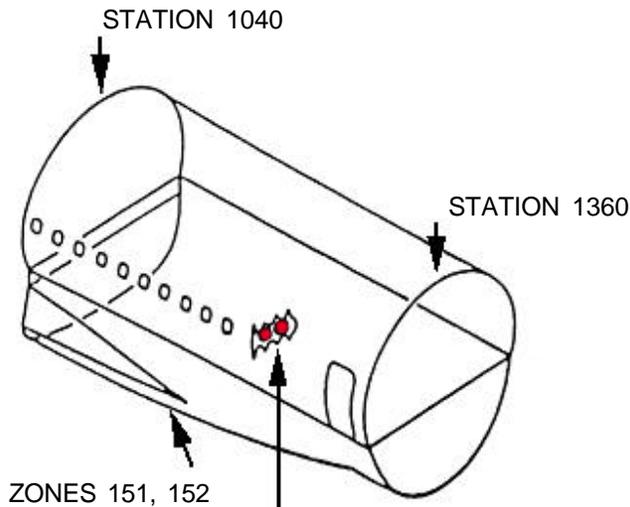
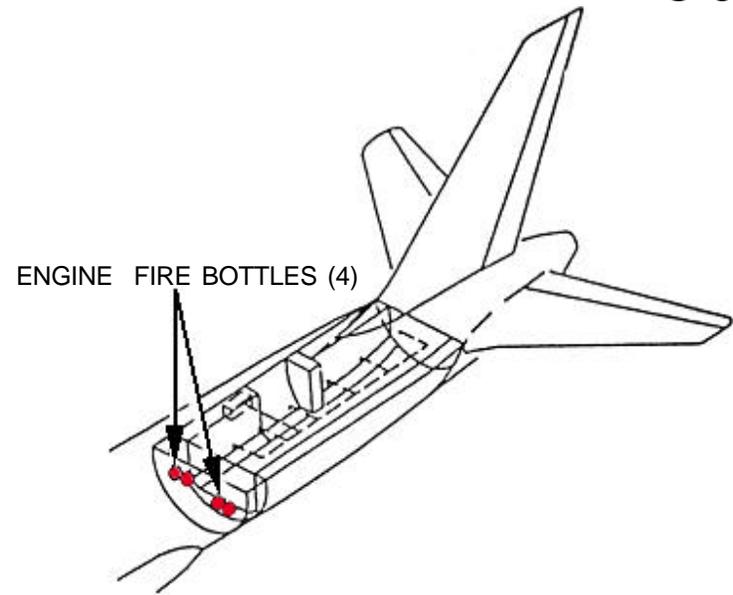


# AIRCRAFT HAZARDS-Continued

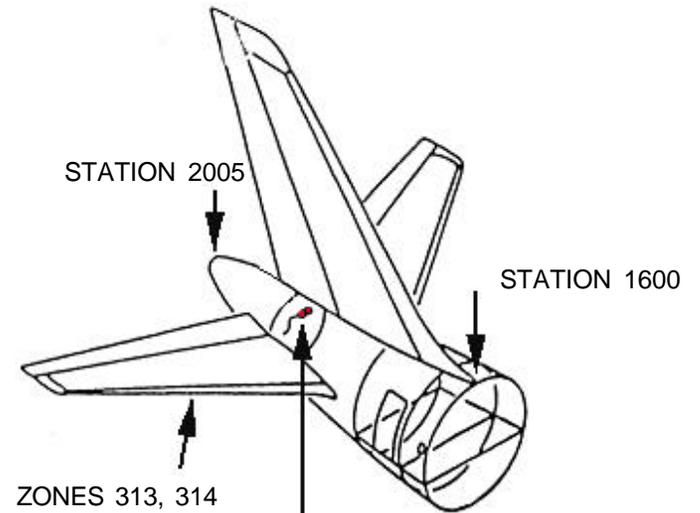
## FIRE EXTINGUISHING SYSTEM PYROTECHNIC CARTRIDGES AND LOCATIONS



TYPICAL FIRE EXTINGUISHER BOTTLE



CARGO FIRE BOTTLES (2)



APU FIRE BOTTLES (2)

# AIRFRAME MATERIALS

## STRUCTURE AND COMPOSITES

C-32A

### NOTE:

The airframe materials for the C-32A are titanium, titanium alloy, carbon fibre, carbon-reinforced aramid-fiberglass, aramid and carbon epoxy preimpregnated raw material.

### LEGEND:

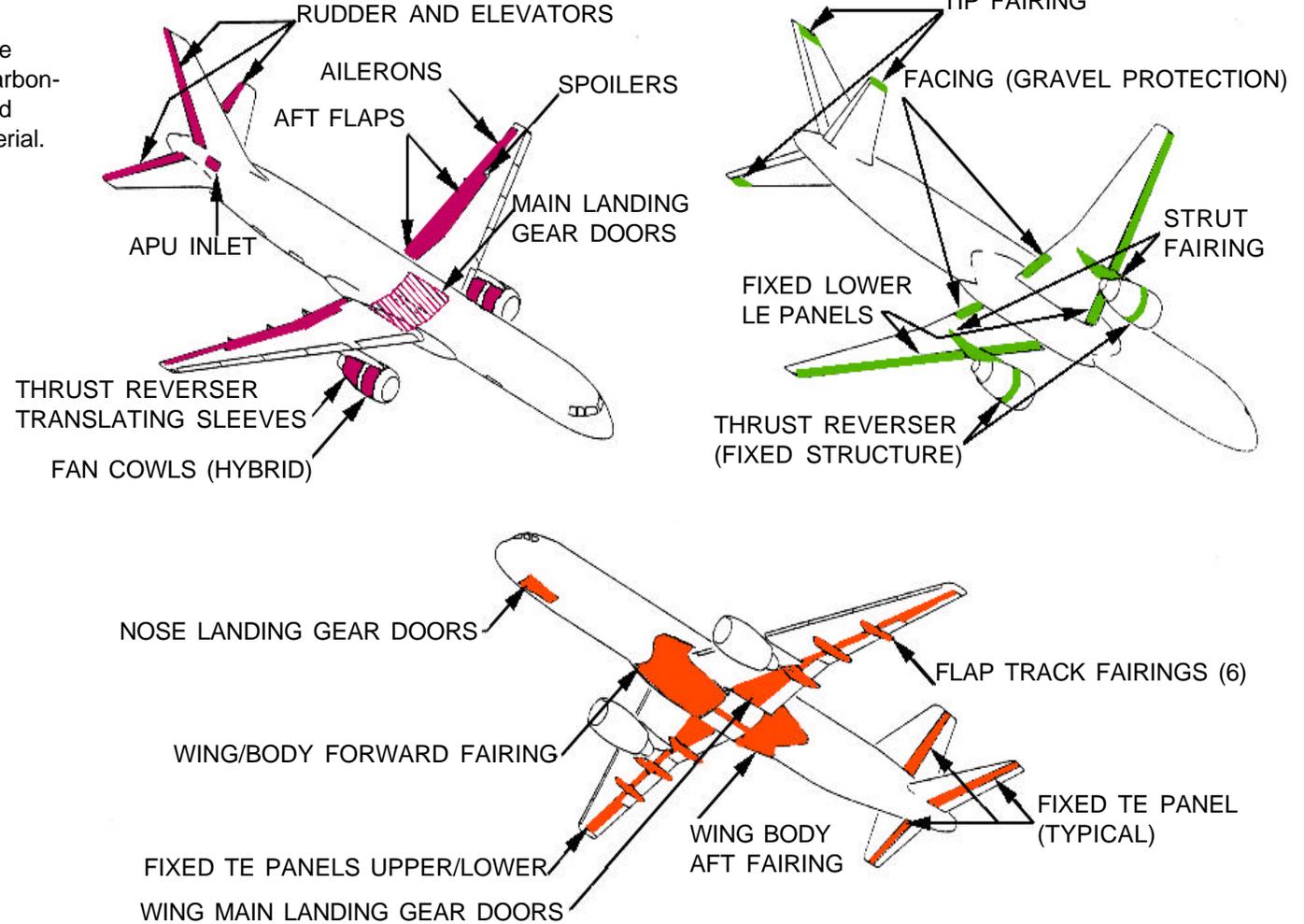
LE Leading edge

TE Trailing edge

 CARBON-ARAMID (HYBRID)

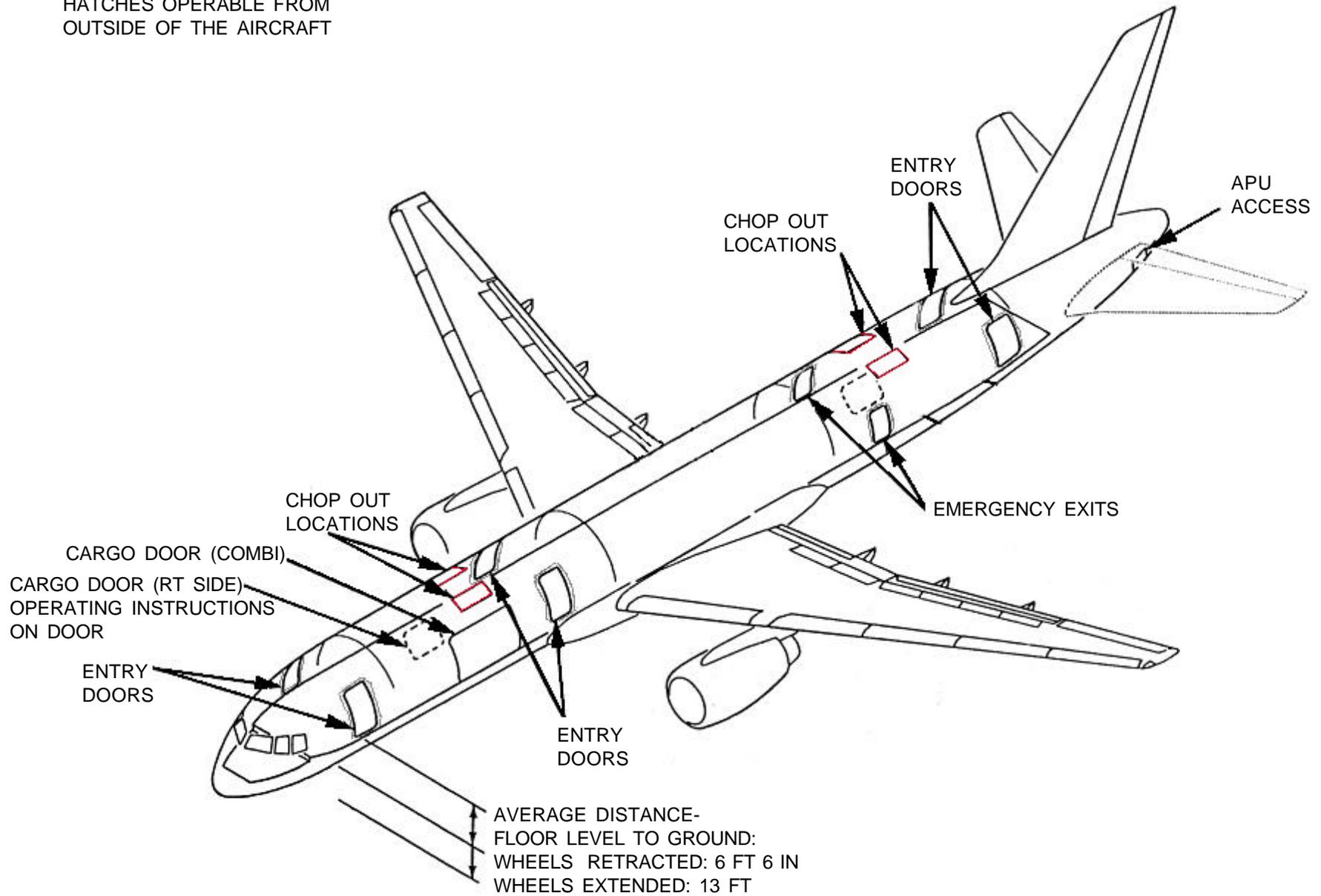
 ARAMID

 CARBON-ARAMID-FIBERGLASS (HYBRID)



# EMERGENCY RESCUE ACCESS

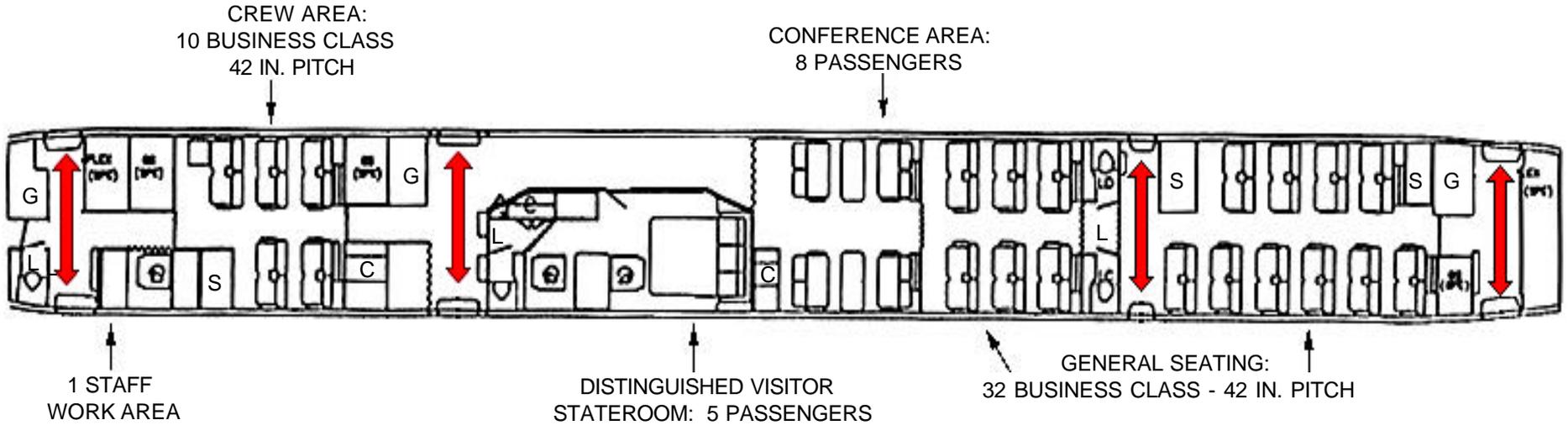
 2" BAND OF GRAY COLOR  
 AROUND ALL DOORS AND  
 HATCHES OPERABLE FROM  
 OUTSIDE OF THE AIRCRAFT





# INTERIOR ARRANGEMENT AND CAPACITY

EFFECTIVITY: TYPICAL ARRANGEMENT  
56 TOTAL PASSENGERS WITH 7 ATTENDANTS  
(NEXT CABIN MOD: 3 YEARS)

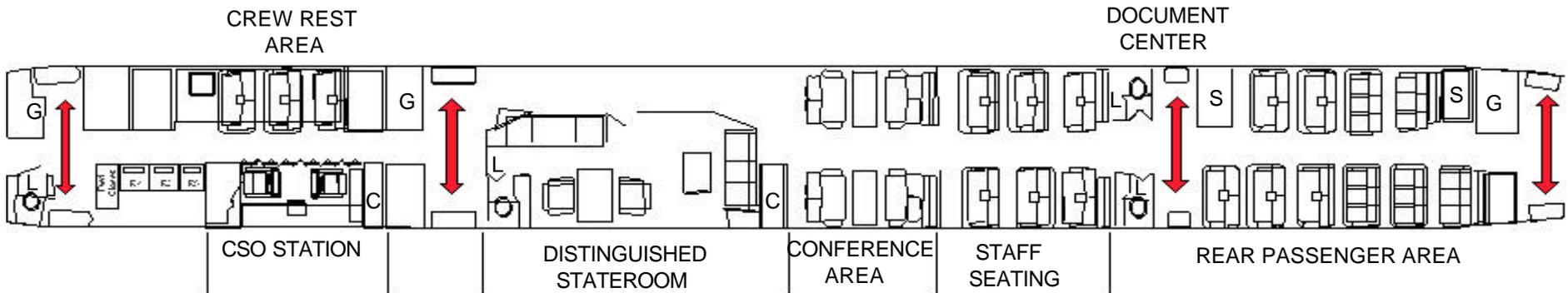


↑ EXITS

C: CLOSET  
G: GALLEY  
L: LAVATORY  
S: STOWAGE



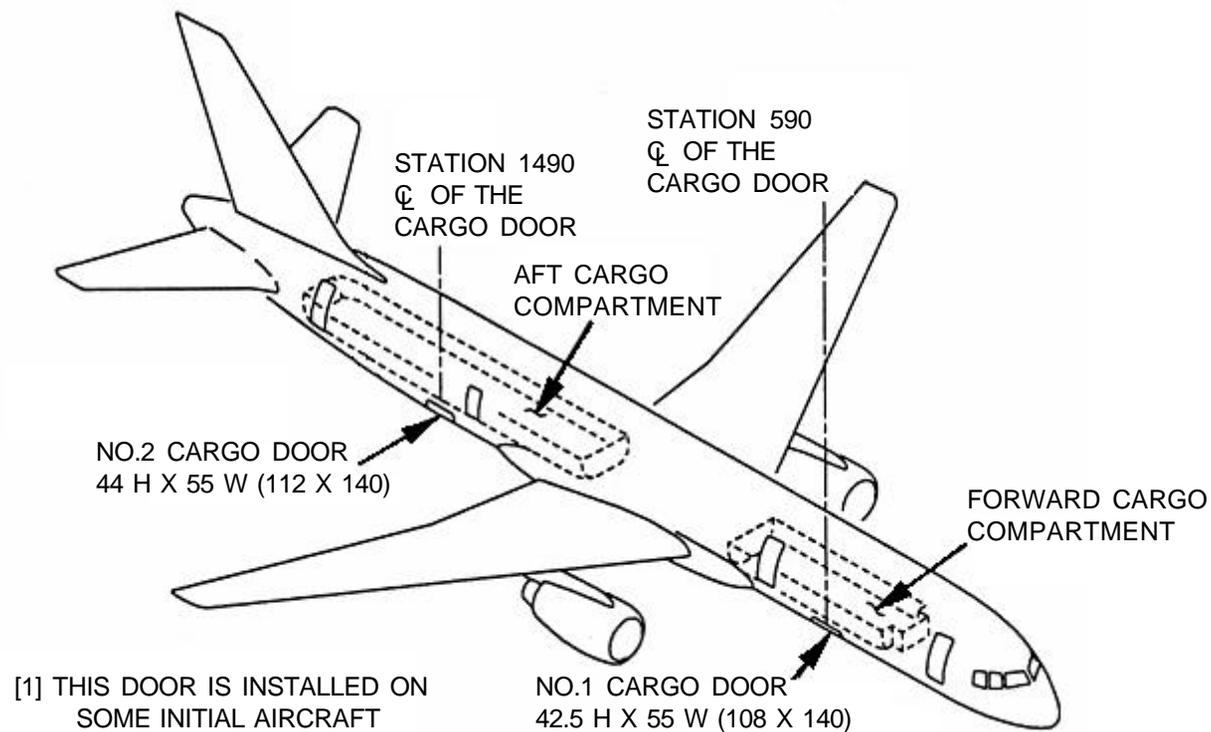
EFFECTIVITY: TAIL # 99-0004 ONLY



# LOWER CARGO DOORS AND COMPARTMENTS

**NOTE:**

Measurements are given in inches (centimeters).



## SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw  
35 Foot Ladder  
Fire Drill II

C-32A

## AIRCRAFT ENTRY

## 1. NORMAL/EMERGENCY

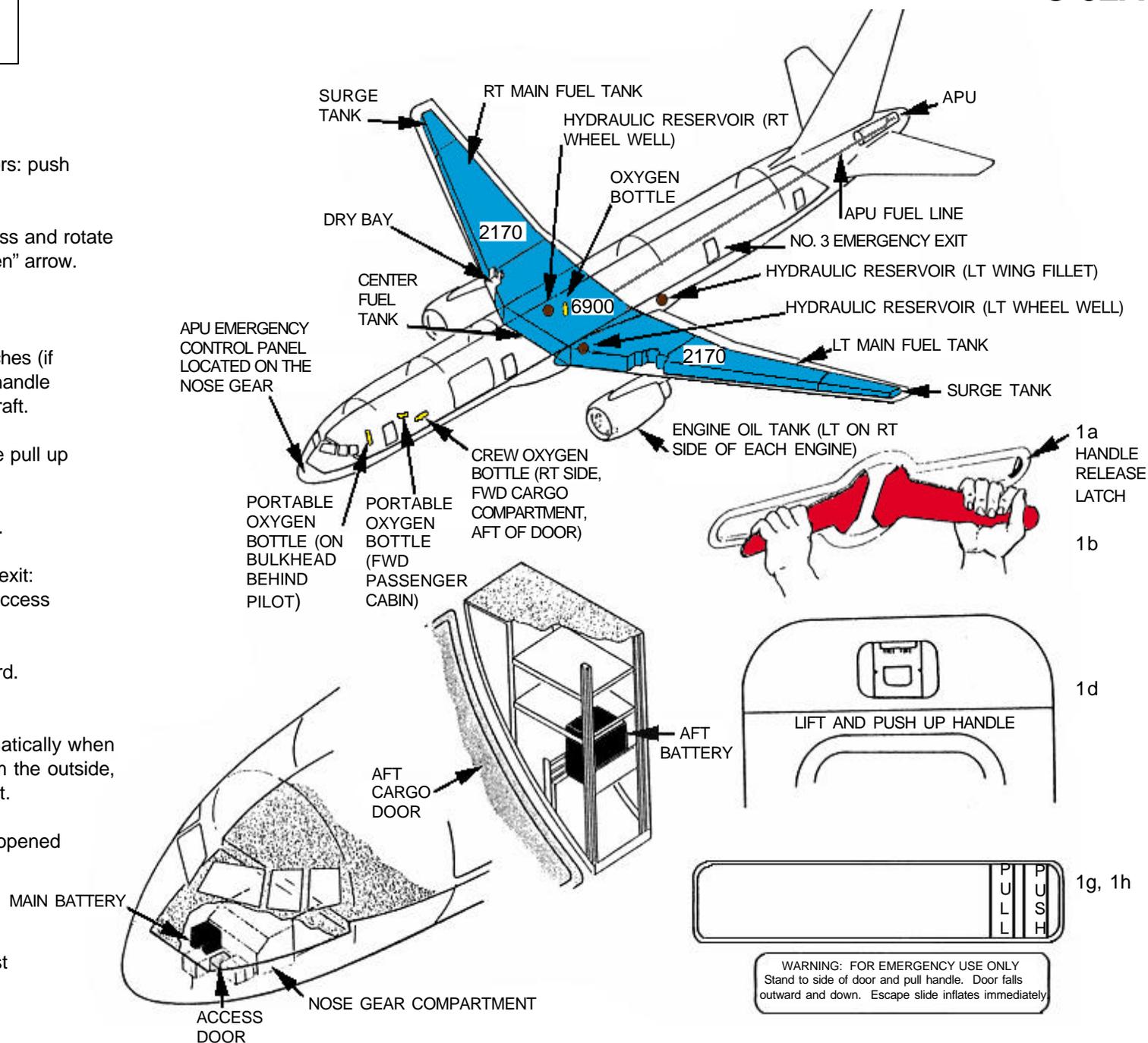
- To open entry and service doors: push handle release latch.
- Pull butterfly handle from recess and rotate 180 degrees in direction of "open" arrow.
- Pull door outward.
- To open overwing escape hatches (if installed): lift lower portion of handle away from the side of the aircraft.
- Continue to raise handle to the pull up position.
- Push hatch inward and upward.
- To open number 3 emergency exit: push on "push" panel to gain access to handle.
- Pull handle forward and outward.

## NOTE:

- Escape slide disarms automatically when door or hatch is opened from the outside, except No. 3 emergency exit.
- Cockpit windows cannot be opened from the outside.

## 2. CUT-IN

- Cut along window lines as last resort.



# AIRSTAIR OPERATION

## 1. AIRSTAIR OPERATION

The airstair is manually moved from the closet to the deployed position in the doorway and from the deploy position back to the closet. Once the airstair is in the deploy position it is hydraulically operated and electrically controlled. A control box for the operation of the airstair and step lights is mounted adjacent to the door entry. A micro switch, located under the floor will be depressed by the FWD latch pen fitting enabling a "READY" light to illuminate on the control panel signifying that the airstair is locked in place and safe to extend. Pressing and holding the "EXTEND" switch will provide power to an electric motor that will drive the hydraulic pump. When the "LATCH" light illuminates the "EXTEND" switch may be released and the airstair will continue to extend by gravity. To retract the airstair, simply push and hold the "RETRACT" switch until the airstair is fully retracted. Once fully retracted it may be placed back in the closet and secured. The "POWER ON" switch/light indicates power is available. Power is provided from three battery bus circuit breakers located on the P6 panel and through an electrical connector receptacle adjacent the door opening. While electrical power is connected and available the airstair segments may be illuminated by pressing the "AIRSTAIRS LIGHTS" switch.

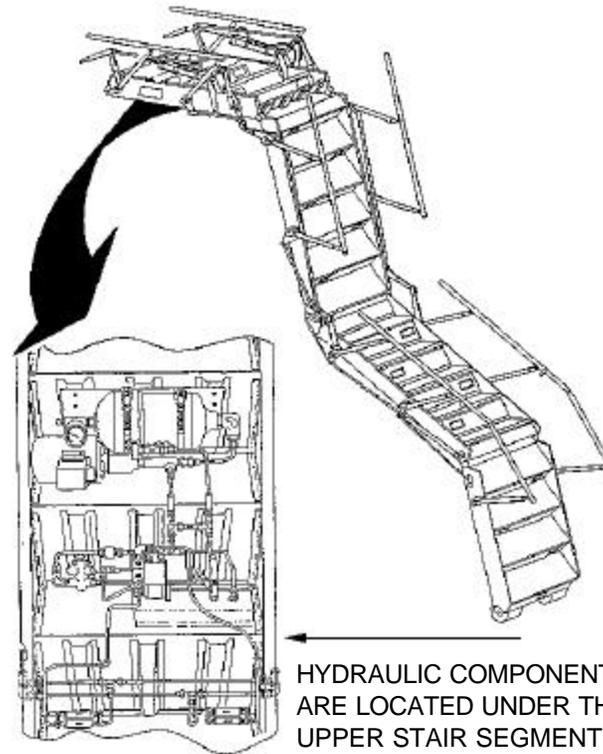
### CAUTION

Airstair deployment is limited to winds and/or gusts below 30 knots.

### NOTE:

While moving stair through door opening, be advised of possible rubbing impact with decorative doorframe.

The control panel is made up of six indicating lights. The center lights provide indication only and the fwd and aft lights are switchlights that also provide control.



HYDRAULIC COMPONENTS ARE LOCATED UNDER THE UPPER STAIR SEGMENT

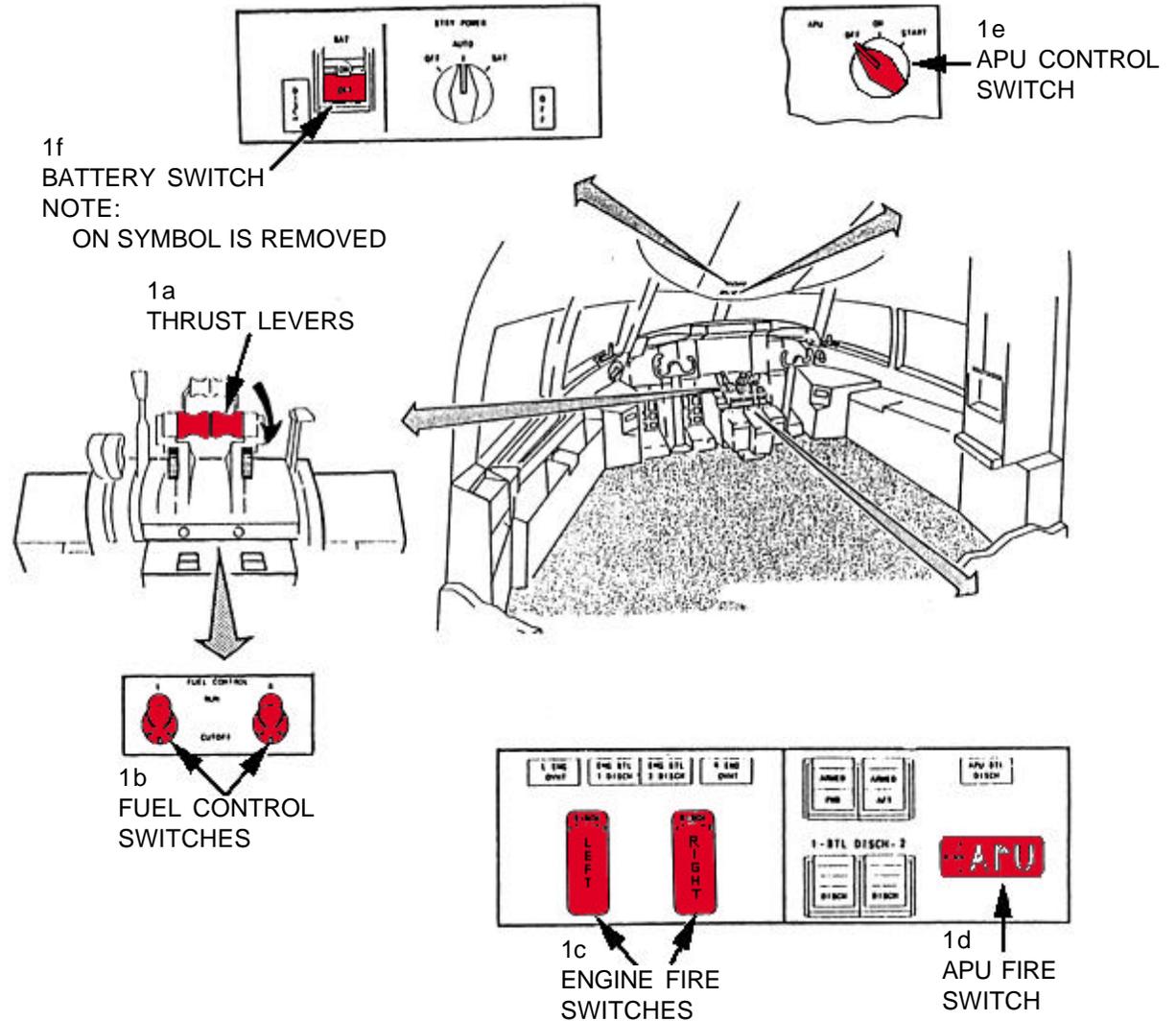


# ENGINE, APU SHUTDOWN AND AIRCREW EXTRACTION

C-32A

## 1. ENGINE SHUTDOWN

- Retard thrust levers, located on pilot's center console, to RETARD position.
- Place fuel control switches, located on pilot's center console under thrust levers, to CUT OFF position.
- In case of engine fire, pull engine fire switches, located on pilot's center console. Turn left or right to release agent. If not illuminated, push and hold the button under the switch to release.
- In case of APU fire, pull APU fire switch, located on pilot's center console to the right of the engine fire switches. Turn switch up or down to release agent. If not illuminated, push and hold the button under the switch to release.
- Rotate APU control switch, located on pilot's overhead panel to OFF.
- Press battery switch, located on pilot's overhead center panel left side, to OFF.



## 2. AIRCREW EXTRACTION

- Unlatch lap belts and remove shoulder harness from crewmembers.
- Depress control handles and rotate flight engineer's seat from left to right.
- Passenger seats are equipped with lap belts only.

### NOTE:

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

CRITICAL SWITCH LOCATIONS AND THEIR OPERATION ARE SHOWN WITH THE EXPANDED VIEWS OF THE CONTROL MODULES