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.
WRITTEN CORRESPONDENCE:

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

E-MAIL: HQAFCESA.CEXF@tyndall.af.mil

INTERNET:  HQ AFCESA Fire and Emergency Services PUBLIC WEB PAGE:

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

FAX:  (850) 283-6383
DSN 523-6383

For technical order improvements, correcting procedures, and other inquiries, please use the above media most convenient.
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 Retaining out of date rescue information can negatively affect the user’s operability and outcome of emergencies.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.

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NOTE

Chapter 6 contains emergency rescue and mishap response information for the following aircraft:

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AIRCRAFT ENTRY

1. NORMAL ENTRY
   a. Lift handle and rotate handle clockwise to release upper half of door.
   b. Raise upper door.
   c. Rotate lower door handle, located in interior center of lower door, to the open position.
   d. Release safety catch, located on left end of lower door, and gently lower door to full open position.

2. EMERGENCY ENTRY
   NOTE:
   Emergency escape window is the fourth window on the right side.
   a. Depress button marked PUSH and rotate handle down.
   b. Push the window into cabin.

3. CUT-IN
   NOTE:
   Do not attempt to chop windshield.
   a. Cut around side windows as required.
ENGINE SHUTDOWN AND AIRCREW EXTRACTION

1. ENGINE SHUTDOWN

a. Simultaneously lift locking mechanism and pull Thrust Levers AFT into the cut-off position.

b. Pull Engine Fire T-Handles, located on upper portion of pilot’s instrument panel.

c. Place battery (2) switches, located on lower left of pilot’s instrument panel, to the OFF position.

2. AIRCREW EXTRACTION

a. Unlatch lap belts and remove shoulder harness from crewmember(s).

NOTE:
Passenger seats are equipped with lap belts only.
AIRCRAFT DANGER AREAS

JT8D TURBOFAN ENGINE HAZARD AREAS
AT IDLE THRUST

INTAKE DANGER AREAS

18 FEET

4 FEET

NOSE COWL FORWARD EDGE

AXIAL DISTANCE BEHIND AIRCRAFT

FEET

METERS

0

30

60

90

120

150

0

10

20

30

40

100 MPH (161 KMPH)

50 MPH (80 KMPH)

100° F (38° C)

200° F (93° C)
JT8D TURBOFAN ENGINE HAZARD AREAS
AT TAKEOFF THRUST

AXIAL DISTANCE BEHIND AIRCRAFT

METERS

FEET

INTAKE DANGER AREAS

25 FEET

25 FEET

300°F (149°C)

200°F (93°C)

150°F (65°C)

100°F (38°C)

50 MPH (80 KMPH)
(TO 512 FT 157M)

100 MPH (161 KMPH)

200 MPH (322 KMPH)

300 MPH (483 KMPH)

400 MPH (644 KMPH)
AIRCRAFT DANGER AREAS-Continued

WHEEL AND/OR BRAKE FIRES:
Wheels are equipped with fusible plugs designed to melt and deflate the tire when the temperature is excessive. Use of BCF (halon) is preferred if tires are pressurized. Dry chemical, fog, or foam are acceptable. If all tires are deflated, any fire extinguishing agent may be used. Cool down time for hot brakes is 40 minutes minimum.

**WARNING**

Approach landing gear from forward or aft of wheel when fighting a wheel fire as wheels and tires may explode.

**NOTE:**
- Radar systems are not normally operated during ground operations of the aircraft. Be aware that radar may be running during an emergency, but does not pose a threat if exposure is minimal.
- The APU is located between the left and right wheel wells. The intake is in the LH wheel well and the exhaust is in the top rear wing root area of the right wing.
- The main and APU batteries are located in the pressurized electronic equipment compartment access door. The battery is equipped with a 115 degree F. temperature switch. Disconnect the battery cable by loosening the hand knob and lifting the plug off of the terminals.
AIRCRAFT FLAMMABLE MATERIAL

NOTE:
Crew and passenger oxygen bottles are located in the forward baggage compartment just aft of the door. Each bottle has a shutoff valve located on the top of the bottle.
NOTE:
The C-22B is a Boeing 727-100 airframe. Model differences for the 100, 200 and 200F are depicted.
C-22B

AIRCRAFT EMERGENCY AND SAFETY EQUIPMENT

FORWARD ENTRY DOOR
- Slide Press Gauge
- Fire Extinguisher (water)
- Emergency Flashlights

OVERHEAD BIN (Row 1)
- First Aid Kit
- Megaphone

BULKHEAD
- Life Raft (2)

GALLEY
- Firefighter’s Gloves
- EEBD

OVERHEAD BIN (Row 7)
- First Aid Kit

OVERHEAD BIN (Row 17)
- LPU Demo (2)
- Megaphone
- First Aid Kit

AFT CABIN WALL
- Oxygen Bottles (2)
- Barrier Strap

AFT JUMPSEAT AREA
- Emergency Light Switch
- Fire Extinguisher (Water)
- Emergency Flashlight (2)

LAVATORY
- Fire Extinguisher (Thermal)
- Smoke Detector

FORWARD STORAGE COMPARTMENT
- (LPU (2) Signal Kit EEBD)

OVERHEAD BIN (Row 2)
- OXYGEN BOTTLES (2)

GALLEY
- Fire Extinguisher (HALON)

GALLEY DOOR
- Slide Press Gauge
- Light Switches
- Water Quantity Gauge
- Compressor Switch

OVERHEAD BIN (Row 1)
- First Aid Kit

OVERHEAD BIN (Row 8)
- EEBD

OVERHEAD EXITS
- Escape Ropes

OVERHEAD EXITS
- Escape Ropes

AFT CABIN WALL
- Fire Extinguisher (HALON)

AFT STORAGE COMPARTMENT
- EEBD
- VIP Kit
- LPU (3)

LAVATORY
- Fire Extinguisher (Thermal)
- Smoke Detector

AIRSTAIR AREA
- Aft Airstair Control
NOTE:
The C-22B is a 727-100 model.
SKIN PENETRATION POINTS-Continued

ENGINE PENETRATION POINTS

LEFT SIDE OF ENGINE

RIGHT SIDE OF ENGINE
SPECIAL TOOLS/EQUIPMENT
Power Rescue Saw
12 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. OVERWING ESCAPE HATCHES - Push panel in, located top center of hatches, and push hatches inward and up.
   b. FORWARD ENTRY DOOR - Pull external handle, located on entry door, outward; rotate clockwise and pull door out to open position.
   c. MID GALLEY DOOR - Pull external handle, located on galley door right forward side outward; rotate counterclockwise and pull door out to open position.
   d. 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.)
   e. 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.)
   f. 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.
ENGINE AND APU SHUTDOWN

1. ENGINE AND APU SHUTDOWN
   a. Retard throttles or thrust levers, located on pilot’s center console, to the CLOSED position.
   b. Restart start levers, located on pilot’s center console, to IDLE CUTOFF position.
   c. In case of engine fire, pull engine fire T-handle, located on center ceiling control panel or on pilot’s light shield, for appropriate engine. Activate discharge switches as necessary.
   d. In case of APU fire, pull APU fire switch located on rear flight deck wall. Activate discharge switch as necessary.
   e. Place Master Switch, located on rear flight deck wall, down to OFF position.
   f. Locate Battery Switch, located on upper left flight engineer’s panel, lift switch guard up and place switch in OFF position.

NOTE: OPTIONAL LOCATION FOR T-HANDLES IS ON THE PILOT’S LIGHT SHIELD.
2. AIRCREW EXTRACTION

NOTE:
If seat tracks are not damaged during crash landing, use adjustable seat control handles to retract seats to aft position.
Third crewmember may have to be extracted first to make room for the pilot and co-pilot seat adjustments.

a. Unlatch lap belt and remove shoulder harness from pilot and co-pilot by rotating the rotary buckle.

b. For easier extraction, use seat adjustments for fore and aft, vertical, recline, and inside armrest.

c. Unlatch lap belt and remove shoulder harness from flight engineer or third crewmember by rotating the rotary buckle.

d. For easier extraction, use seat adjustments for fore and aft, vertical, and swivel for facing positions. Depress swivel seat control handle and rotate seat clockwise so that crewmember faces aft.

e. Passenger seats are equipped with lap belts only.

NOTE:
Co-pilot's seat controls located opposite.
SKIN PENETRATION POINTS

FUSELAGE (BOTH SIDES) AFT OF AND BELOW THE TRAILING EDGE OF THE WING

AFT FUSELAGE (LEFT SIDE) FORWARD OF DOOR ON LEFT SIDE AT APPROXIMATELY F.S. 370 IN LINE WITH THE VERTICAL CENTER OF THE DOOR.

ENGINE NACELLES (OUTBOARD SIDE EACH ENGINE) BELOW THE ENGINE CENTERLINE. IN LINE WITH THE WING’S LEADING EDGE.

FORWARD FUSELAGE (BOTH SIDES) AFT OF FORWARD DOOR AT APPROXIMATELY F.S. 153 IN LINE WITH THE VERTICAL CENTER OF THE DOOR WINDOW.

FUSELAGE (BOTH SIDES) AFT OF AND BELOW THE TRAILING EDGE OF THE WING

AFT FUSELAGE (LEFT SIDE) FORWARD OF DOOR ON LEFT SIDE AT APPROXIMATELY F.S. 370 IN LINE WITH THE VERTICAL CENTER OF THE DOOR.

ENGINE NACELLES (OUTBOARD SIDE EACH ENGINE) BELOW THE ENGINE CENTERLINE. IN LINE WITH THE WING’S LEADING EDGE.
AIRCRAFT ENTRY

1. NORMAL ENTRY
   a. Turn handle on main cabin entry door clockwise and pull to open.
   b. Turn handle on forward cargo loading door clockwise and pull to open.

2. EMERGENCY ENTRY
   a. Turn handle on any of two forward emergency exits left and right clockwise and pull to open.
   b. Turn handle on flight compartment emergency exit clockwise and pull to jettison.
   c. Turn handle on main cabin entry door clockwise and pull to open.
   d. Turn handle on forward cargo loading door clockwise and pull to open.

3. CUT-IN
   a. Cut-in area each fuselage side aft of wing.
ENGINE SHUTDOWN AND AIRCREW EXTRACTION

1. ENGINE SHUTDOWN

a. Retard fuel levers, located on center console, to OFF position.

b. Retard LP valve levers, located in overhead console, to SHUT position.

c. If fire buttons are illuminated or if there is evidence of fire in the vicinity of the engines, actuate the Fire Extinguisher Push Buttons located in the center overhead engine services panel.

d. Place electrical master switch, located left overhead electrical switch panel, to OFF position.

2. AIRCREW EXTRACTION

a. Unlatch lap belts and remove shoulder harness from crewmembers.

NOTE:
Passenger seats are equipped with lap belts only.
AIRCRAFT DIMENSIONS

WING SPAN
57 FT 0 IN
(17.37 M)

LENGTH
59 FT 4.25 IN
(18.09 M)

HEIGHT
6 FT 8 IN
5.08 M)
AIRCRAFT HAZARDS

NOTE:
The C-26 is a joint service aircraft used by the USAF, US Army, US Navy, and State Department for drug interdiction.

ALCOHOL-WATER (AWI) FLUID MIXTURE

The C-26 (SA 227-DC model) uses an alcohol-water mixture composition (CAWI system) with a quantity of 14 US gallons or 54 liters. The mixture is Methyl Alcohol 40% and water 60%. Prior to flight the CAWI tank will be full. The interconnected storage tanks are located between the fuselage lower skin and the wing belly panel. Common plumbing is routed through each wing leading edge to each engine.

WARNING

Methyl Alcohol (Methanol) is a violent poison and can not be made non-poisonous. In case of accidental contact, flush with water immediately. Methanol vapors are toxic and extremely flammable. Do not smoke, generate sparks, or expose Methanol to open flame.

OXYGEN BOTTLE AND SHUTOFF VALVE LOCATION

The C-26 (SA 227-DC) contains one oxygen bottle located beneath the equipment rack aft of the aft cargo compartment bulkhead. Oxygen lines are routed to the pilot and co-pilot and along the right side of the fuselage to the passengers. A shut-off valve is located on each regulator.
AIRCRAFT HAZARDS-Continued

1. BATTERY DISCONNECT

NOTE:
Aircraft is equipped with two 24 volt 23 Ah Ni/Cd batteries.

a. Remove battery access panels from upper surface of left and right inboard wing.

b. Disconnect main battery quick disconnect by turning battery disconnect knob counterclockwise.

c. Disconnect minor battery quick disconnects by turning connectors counterclockwise.
AIRCRAFT ENTRY - SA226/227 MODELS

1. NORMAL/EMERGENCY ENTRY
   a. Push in on forward end of entry door handle. Door is located on forward left side of aircraft.
   b. Rotate entry door handle down, clockwise, to open.
   c. Pull out on door handle. (Door is hinged at the bottom and will rotate out from the top).

2. CARGO DOOR AND PASSENGER BULKHEAD
   a. The cargo door handle operates same as the forward entry door handle. Cargo door must be lifted up to open. Cargo door is located on aft left side of aircraft.
   b. Optional bulkhead separates passenger compartment and cargo compartment. The bulkhead may be removable and may contain a door. Can also be used as an emergency entry and exit.

3. CUT-IN
   a. Cut along window lines. There are no cut-in marks painted on the aircraft. The area 14 inches above and 3 inches below the window will offer the least resistance for forced entry.

NOTE: Oxygen system is 1850 PSI.
EMERGENCY EXITS AND
PERSONNEL EGRESS

1. EMERGENCY EXITS

NOTE:
Escape hatches (windows) cannot be opened from outside the aircraft. Two hatches are located on the overwing right side and one hatch is located on the overwing left side of aircraft. Do not use as an entry.

a. Pull emergency handle, located above each emergency exit hatch window.

b. Pull hatch inward and place to the side or discard outside. Hatch opening can now serve as an exit for passengers and an entry point for rescue team members.

2. PERSONNEL EGRESS

NOTE:
Although not recognized by the FAA as an emergency exit, the cargo door (which can be opened from inside the aircraft) is available as an emergency exit.

WARNING

Do not use main entry door for emergency exit if left engine is still running. Personnel can walk into path of rotating propellers causing serious injury or death.

a. Personnel can egress through main entry doorway, and three emergency exits over the wings.

b. As an alternative, if time permits, remove the aft cargo compartment bulkhead or open cargo compartment door and open the cargo doorway and exit. Cargo/baggage may have to moved out of the way to exit.
ENGINE SHUTDOWN

1. ENGINE SHUTDOWN

a. Ensure at least one battery switch is ON (forward position). Battery switches are located straight forward of pilot's control column.

b. Push stop buttons, located below left instrument panel. (Approx. 5 inches to right of battery switches.)

c. Place both battery switches to OFF (center) position.

d. Pull both engine stop and feather knobs, located on center pedestal just below engine controls, full aft. Controls are red.
CABIN CONFIGURATION
AND AIRCREW EXTRACTION

1. CABIN CONFIGURATION

2. AIRCREW EXTRACTION

   NOTE:
   Crew seat armrests can be lowered by depressing a latch under the arm rest.

   a. Unlatch pilot and co-pilot lap belts and shoulder harness(es)
   b. Unlatch passenger lap belts.

   NOTE:
   If seat tracks are not damaged due to crash, seat adjustment levers, located inboard of each seat at floor level, can be used to retract seat to full aft position. Passenger seats may or may not be equipped with shoulder harnesses.
NOTE:
All dimensions are in feet/inches (in millimeters).

SKIN PENETRATION POINTS

LANDING GEAR MAX EXT

ELEV AXIS

HORIZ

SKIN PENETRATION POINT (LEFT SIDE)
**AIRCRAFT HAZARDS INFORMATION**

- A: PROPELLER DISINTEGRATION ZONE
- B: PROPELLER BLAST
- C: ENGINE EXHAUST GASES
- D: APU EXHAUST GASES
- E: ENGINE PROPELLER DISK
- F: STARTER
- G: ENGINE TURBINE DISK
- H: APU TURBINE DISK

**Legend for Hazards**

- PROPELLER SUCTION AND BLAST
- APU ENGINE EXHAUST
- ENGINE EXHAUST

**Graphs**

- Distance in Feet: 0, 4, 25, 50, 100
- Temperature in °C: 0, 4, 25, 50, 130, 500
MAXIMUM PERMISSIBLE EXPOSURE LEVEL (MPEL)

In order to avoid the envelope in which the radiation level exceeds the U.S. Government standard of 10 mW per square centimeter, all personnel should remain beyond the distance indicated in the illustration below. The distance to the MPEL boundary is calculated upon the basis of the largest antenna available with the system, rated output power of the transmitter and in the non-rotating or boresight position of the antenna. With a scanning beam, the power density of the MPEL boundary is significantly reduced.
AIRCRAFT CONFIGURATIONS

TROOP TRANSPORT CONFIGURATION
34 SEATS MAXIMUM

COMPARTMENTS C D E F G H I K L M N
FRAME 9 11 13 15 18 20 23 25 27b 29 31 33
ROW B
ROW A

NUMBER OF SEATS PER ROW IN
TROOP TRANSPORT CONFIGURATION
ROW A NO. OF PLACES 17
TYPE OF SEAT 7 DOUBLE
3 SINGLE
ROW B NO. OF PLACES 17
TYPE OF SEAT 7 DOUBLE
3 SINGLE

TROOP PARATROOP CONFIGURATION
24 SEATS MAXIMUM

PARATROOP CONFIGURATION
24 SEATS MAXIMUM

TROOP PARATROOP CONFIGURATION
ROW A NO. OF PLACES 12
TYPE OF SEAT 6 DOUBLE
ROW B NO. OF PLACES 12
TYPE OF SEAT 6 DOUBLE

NUMBER OF SEATS PER COMPARTMENT

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AIRCRAFT CONFIGURATIONS—Continued

MATERIAL TRANSPORT CONFIGURATION

TROOP SEATS ON THE RAMP (SINGLE TYPE)

TROOP SEAT SIDE ROWS

TROOP TRANSPORT CONFIGURATION
TROOP/PASSENGERS - 32 PERSONNEL

MATERIAL TRANSPORT CONFIGURATION
AIRCRAFT CONFIGURATIONS-Continued

- AEROMEDICAL EVACUATION CONFIGURATION
  - 24 LITTERS AND 5 ATTENDEES

- PARATROOP AIRDROP CONFIGURATION
  - 24 PERSONNEL

- REtrieval Winch

- Static Line Anchor Cable

- ROWS OF STRETCHERS

- PERSONNEL SEATS
AIRCRAFT ENTRY

1. NORMAL ENTRY

a. Pull the external control handle on the crew entrance door, located bottom center of door. Door is equipped with a stairway.

b. The two paratroops doors are located on the right and left sides of the fuselage, behind the landing gear fairings. The doors are opened by rotating the unlocking handle clockwise and pushing (or pulling) inward and sliding the doors upward.

2. EMERGENCY ENTRY

a. There are three upper exit hatches located on the aircraft’s backbone. The unlock handles are located at center of each hatch and can be unlocked by depressing two throttle buttons and rotating the handle clockwise. Hatches are hinged and will open inward.

b. A toilet exit hatch, located on right side of aircraft opposite crew entrance door, can be opened by depressing hatch button and rotating hinged lever downwards to unlock the hatch bolts. Hatch is hinged and will open inward.

NOTE:
TOTAL FUEL - 3170 US GALS.
AIRCRAFT ENTRY-Continued

NOTE:
If pip-pins are installed, entry through hatches cannot be accomplished. Pip-pins prevent accidental opening. They will be removed before flight.

c. Flight compartment windows can be removed once unlocked, by pulling a ring located on the upper aft part of each window.

3. CUT-IN

a. Two cut-in areas are provided to the rear of each paratroop door on the fuselage defined by black corner markings.

4. PARATROOP DOOR OPERATION

a. Unlocking from the outside, rotate center handle counterclockwise, push door inward to stops, and force door over stops by pushing upward and inward on lower door surface.

b. Unlocking from the inside, raise and turn center handle and rotate clockwise, pull door inwards using upper left hand hold, and force door over stops by pulling upward and inward on lower door surface.

NOTE:
All aircraft doors and hatches (with the exception of pilot's and copilot's windows that can be opened from the inside) can be opened both from inside and outside and for this reason can be used in case of emergency, both to evacuate the aircraft and to carry out rescue operations from the outside.
AIRCRAFT ENTRY-Continued

5. EMERGENCY HATCH ACCESS LADDER INSTALLATION

a. Insert the upper end at the ladder into the ladder hold down. (See detail A.)

b. Push the ladder upward.

c. Align with the fastening studs on the floor.

d. Push the ladder downward until it engages with the fastening studs on the floor. (See detail B.)

NOTE:
Escape ropes are provided at each upper exit hatch. Length of rope is approximately 20 ft.

WARNING

Upper exit hatches open inward and can cause head injuries if allowed to free fall.
ENGINE SHUTDOWN AND AIRCrew EXTRACTION

1. ENGINE SHUTDOWN

a. Pull Fire T-handles located at center overhead console.

NOTE:

When the POWER lever is in the REVERSE sector, pulling the FIRE PULL handle does not operate the propeller feathering system.

b. Place PROP. COND lever in feather position.

CAUTION

If the engine is at a high power setting, pulling the FIRE PULL handle or placing the PROP COND lever to FEATHER will cause an OVERTORQUE condition.

c. Place ENG. COND lever in STOP position.

d. Push FIRE T-handles, if a fire indication persists, to discharge agent.

e. Place the BATTERY SWITCH to OFF.

f. Extract personnel and evacuate aircraft.
AIRCREW EXTRACTION-Continued

2. AIRCREW EXTRACTION

a. Release the four point harnesses by rotating the dial at the center hook-up point for the pilot/copilot and observer/instructor seats.

b. Release the loadmaster from his seat by releasing the two point seat belt.

c. Extraction can be made easier by adjusting the crew seats to the fully outboard position. Observer/instructor seat should be adjusted fully aft, extract crewmember, then reposition seat fully forward allowing room for extraction of pilot and copilot.

d. Passengers do not have shoulder harnesses. Release passengers from two point seat belts.
AIRCREW SEATS

PILOT'S AND CO-PILOT'S SEAT (UPPER AND LOWER GRAPHIC)

THIRD CREW MEMBER'S SEAT (UPPER AND LOWER GRAPHIC)
AEROMEDICAL OXYGEN SYSTEM COMPONENTS AND PORTABLE O2 BOTTLES LOCATIONS

1. AEROMEDICAL OXYGEN SYSTEM
   a. See details A-D for component location.

2. PORTABLE O2 BOTTLES
   a. Five portable O2 bottles are in the aircraft. Three in the cockpit and two in the cargo compartment, one located in the latrine and one in the two additional mounting locations located in the right rear of the cargo compartment.

AIRCRAFT EXPLOSIVES

1. AIRCRAFT FLARES. (Not pictured.)
   a. Aircraft is equipped with a total of six flares: 3 green and 3 red. Class C explosive.
   b. Aircraft is equipped with a pyrotechnic pistol that is used to fire the above signal flares. The location of the pistol is housed in a compartment closed by a small door on the right side of the cockpit above the main circuit breaker panel.

2. EXTINGUISHER CARTRIDGES
   (Not pictured.)
   a. The right, left engines and APU are equipped with extinguisher bottles explosive cartridges. These cartridges are 1.4 rated. Extinguishers utilize Halon 1211.
SKIN PENETRATION POINTS

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.
AIRCRAFT HAZARDS
JET ENGINE INTAKE/EXHAUST AREAS AT IDLE

**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.

![Diagram of aircraft intake and exhaust areas](image)

**EXHAUST HAZARD AREA**

**INLET HAZARD AREA**

**DETAIL A**

- **ENTRY CORRIDOR**
  - **RADIUS 9' (2.74M)**
  - **ENTRY CORRIDOR**
  - **ANGLE 45°**

**SEE DETAIL A**

**EXHAUST HAZARD AREA**

175' (53.34M)
AIRCRAFT HAZARDS-Continued

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.

---

**Diagram Instructions**

- SEE DETAIL A
- ENTRY CORRIDOR
- RADIUS 15' (4.88M)
- ENTRY CORRIDOR 45°
- INLET HAZARD AREA
- 400' (121.02M)
- 1900' (579.12M)

---

**Detailed Areas**

- **INLET HAZARD AREA**
- **ENTRY CORRIDOR**
- **RADIUS 15' (4.88M)**
- **ENTRY CORRIDOR 45°**
- **EXHAUST HAZARD AREA**
- **SEE DETAIL A**
- 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.

GROUND IDLE CONDITION

BREAKAWAY CONDITION

MAXIMUM TAKEOFF CONDITION
AIRCRAFT HAZARDS-Continued

AUXILIARY POWER UNIT EXHAUST WAKE

NOTE:
Measurement in feet.

FT/SEC - MPH X 1.487
1 MPH = 1.609 KM/HR
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: 1 FT = 0.3048 M
1 LB = 0.4536 KG
AIRFRAME MATERIALS
STRUCTURE AND COMPOSITES

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)
C-32A T.O. 00-105E-9

EMERGENCY RESCUE ACCESS

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

ENTRY DOORS

CHOP OUT LOCATIONS

CARGO DOOR (COMBI)
CARGO DOOR (RT SIDE)
OPERATING INSTRUCTIONS ON DOOR

ENTRY DOORS

CHOP OUT LOCATIONS

APU ACCESS

EMERGENCY EXITS

AVERAGE DISTANCE-
FLOOR LEVEL TO GROUND:
WHEELS RETRACTED: 6 FT 6 IN
WHEELS EXTENDED: 13 FT
INTERIOR ARRANGEMENT AND CAPACITY

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

C-32A

EFFECTIVITY: TAIL # 99-0004 ONLY

CREW AREA:
10 BUSINESS CLASS
42 IN. PITCH

CONFERENCE AREA:
8 PASSENGERS

DISTINGUISHED VISITOR
STATEROOM: 5 PASSENGERS

GENERAL SEATING:
32 BUSINESS CLASS - 42 IN. PITCH

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

EXITS

FORWARD

CREW REST
AREA

CSO STATION

DISTINGUISHED
STATEROOM

CONFERENCE
AREA

STAFF
SEATING

REAR PASSENGER AREA

DOCUMENT
CENTER
LOWER CARGO DOORS AND COMPARTMENTS

NOTE:
Measurements are given in inches (centimeters).

[1] THIS DOOR IS INSTALLED ON SOME INITIAL AIRCRAFT

NO.1 CARGO DOOR
42.5 H X 55 W (108 X 140)

NO.2 CARGO DOOR
44 H X 55 W (112 X 140)

FORWARD CARGO COMPARTMENT

AFT CARGO COMPARTMENT

STATION 1490
OF THE CARGO DOOR

STATION 590
OF THE CARGO DOOR

CARGO DOOR
SPECIAL TOOLS/EQUIPMENT
Power Rescue Saw
35 Foot Ladder
Fire Drill II

AIRCRAFT ENTRY
1. NORMAL/EMERGENCY
   a. To open entry and service doors: push handle release latch.
   b. Pull butterfly handle from recess and rotate 180 degrees in direction of “open” arrow.
   c. Pull door outward.
   d. To open overwing escape hatches (if installed): lift lower portion of handle away from the side of the aircraft.
   e. Continue to raise handle to the pull up position.
   f. Push hatch inward and upward.
   g. To open number 3 emergency exit: push on “push” panel to gain access to handle.
   h. 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
   a. Cut along window lines as last resort.

WARNING: FOR EMERGENCY USE ONLY
Stand to side of door and pull handle. Door falls outward and down. Escape slide inflates immediately.
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 pin 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 "AIRSTAIR 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.
ENGINE, APU SHUTDOWN AND AIRCREW EXTRACTION

1. ENGINE SHUTDOWN
   a. Retard thrust levers, located on pilot's center console, to RETARD position.
   b. Place fuel control switches, located on pilot's center console under thrust levers, to CUT OFF position.
   c. 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.
   d. 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.
   e. Rotate APU control switch, located on pilot's overhead panel to OFF.
   f. Press battery switch, located on pilot's overhead center panel left side, to OFF.

2. AIRCREW EXTRACTION
   a. Unlatch lap belts and remove shoulder harness from crewmembers.
   b. Depress control handles and rotate flight engineer's seat from left to right.
   c. 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
C-37A

AIRCRAFT PAINT SCHEME

GULFSTREAM V

UNITED STATES OF AMERICA

USAF

79400

T.O. 00-105E-9
### AIRCRAFT DIMENSIONS

#### GENERAL DATA

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
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<tbody>
<tr>
<td>Wing Area</td>
<td>1136.5 Sq. Ft.</td>
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<tr>
<td>Aspect Ratio</td>
<td>6.89</td>
</tr>
<tr>
<td>Quarter Chord Sweep</td>
<td>27.00 degrees</td>
</tr>
<tr>
<td>Taper Ratio</td>
<td>0.268</td>
</tr>
<tr>
<td>MAC</td>
<td>171.19 In.</td>
</tr>
<tr>
<td>Horizontal Tail Area</td>
<td>260.85 Sq. Ft.</td>
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<tr>
<td>Vertical Tail Area</td>
<td>155.00 Sq. Ft.</td>
</tr>
<tr>
<td>Cabin Length</td>
<td>51.08 Ft.</td>
</tr>
<tr>
<td>Total Volumn</td>
<td>1,902 Cu. Ft.</td>
</tr>
<tr>
<td>Cabin Volumn</td>
<td>1,681 Cu. Ft.</td>
</tr>
<tr>
<td>Engine</td>
<td>(2ea) BR710-48</td>
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<tr>
<td>Takeoff Thrust - SLS</td>
<td>14,465 lb. (Installed)</td>
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<tr>
<td>Max Takeoff Gross Wt.</td>
<td>89,000 lb</td>
</tr>
<tr>
<td>Max Zero Fuel Wt.</td>
<td>53,300 lb</td>
</tr>
<tr>
<td>Max Usable Fuel Wt.</td>
<td>41,000 lb</td>
</tr>
<tr>
<td>Manf’s Bare Wt. Empty</td>
<td>38,000 lb</td>
</tr>
</tbody>
</table>

### WINGSPAN

- **OVERALL WINGSPAN**: 93.47 FT (1121.69 IN)
- **WINGSANP**: 88.50 FT (1062.00 IN)

### OVERALL HEIGHT

- **OVERALL HEIGHT**: 25.30 FT (303.64 IN)

### OVERALL LENGTH

- **OVERALL LENGTH**: 96.40 FT (1156.82 IN)
NOTE:
- The C-37A is a Gulfstream V airframe modified for USAF missions, similar to the C-20. Its purpose is a Presidential, VP, or VIP, small airframe carrier. It will land where Air Force One or the C-32A (757-200) can not.
- Depending on the type of operation being carried out, the following areas of the aircraft are to be considered danger or caution areas. These areas are intended as a general reference for ramp and rescue personnel.

BMW Rolls-Royce AeroEngine

- INLET AREA
  - FIRE ZONE 1
  - FIRE ZONE 2
  - ECC THERMAL PROTECTION BOX

- EXHAUST AREA
  - TAKE-OFF KEEP OUT ZONE
  - GROUND IDLE KEEP OUT ZONE
  - JET EXHAUST KEEP-OUT ZONES T10 ENGINE OPERATION
  - GROUND IDLE THRUST
  - AIRCRAFT STATIC - SEA LEVEL ISA - NO WIND
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.

**WARNING**

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.

**WARNING**

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

NOTE:
Ailerons on A/C 521 & 542 are metal-riveted sheet metal.

NOTE:
Composite materials are used extensively on this aircraft (Gulfstream V) to save weight and increase strength. Composite materials include metallic and non-metallic structures for bulkheads, doors, flight controls, floor panels, fairings, nacelles, panels, pylons, radome, tailcone, and winglets.

- EPOXY FIBERGLASS
- EPOXY GRAPHITE
- BONDED ALUMINUM
- KEVLAR

Diagram labels include:
- WINGLET
- AFT PRESSURE BULKHEAD
- SPOILERS
- AUXILIARY PRESSURE BULKHEAD
- CABIN FLOOR
- RADOME
- ECS RAM AIRSCOOP
- FILLET PANEL
- INLET
- FAN COWL DOOR
- TAILCONE EXHAUST UNIT
- AILERON TAB
- AILERON
- ELEVATOR
- VERTICAL OUTLET FAIRING
- FILLET PANEL
- MAIN LANDING GEAR STRUT DOOR
- MAIN LANDING GEAR DOOR
- NOSE LANDING GEAR STRUT DOOR
- NOSE LANDING GEAR DOORS
FLAMMABLE FLUIDS AND COMPONENTS

- HYDRAULIC RESERVOIRS
- ENGINE OIL L&R
- FIRE ACCESS SCREEN (BOTTOM OF NACELLES)
- PORTABLE FIRE EXTINGUISHER
- WATER FIRE EXTINGUISHER
- OXYGEN BOTTLES
- EMERGENCY CUTOUTS TOP OF FUSELAGE (CAA/MILITARY REQUIREMENTS)
- PASSENGER COMPARTMENT
- LAVATORY
- PRESSURE BULKHEAD
- WING TANKS (TOTAL CAPACITY 6,150 U.S. GALS.)
- TAIL ACCESS DOOR
- APU/ENGINE FIRE EXTINGUISHER
- BATTERIES (2)
AIRCRAFT ENTRY

1. NORMAL ENTRY
   a. Push inner latch handle.
   b. Pull out latch handle.
   c. Pull door open.
   d. Main door will not open fully with landing gear up.

2. EMERGENCY ENTRY
   NOTE:
   Two emergency exits are located on each side of the aircraft.
   a. Push button to open access panel.
   b. Pull handle, located inside access panel up to release window and push window in.

3. CUT-IN
   CAUTION
   Windshield panels cannot be chopped or broken out.
   a. Cut fuselage as required.
MAIN ENTRANCE DOOR, INTERIOR AND EXTERIOR BAGGAGE COMPARTMENT DOORS

ALTERNATIVE ENTRY INTO AIRCRAFT BY USING EXTERIOR AND INTERIOR BAGGAGE COMPARTMENT DOORS
**TAIL COMPARTMENT AND LADDER**

**TAIL COMPARTMENT DOOR HANDLE**
Flush mounted handle releases door locking mechanism.

**COUNTERBALANCE SYSTEM**
Holds door up after it has been locked. Door is pulled down against force of counterbalance. When in the full down position, two jury rods lock to the overcenter position to a latch mounted on the door.

**LOCKING PINS**
Used to secure ladder in adjusted positions.

**LADDER INSTRUCTIONS**
1. To lower ladder, remove 2 pip pins thru door brackets at lower end of door.
2. Lift ladder up and aft to clear latch housing, then lower.
3. Lower bottom extension and reinstall pip pins thru door brackets.
4. To remove ladder, follow step 1 and 2, then lower. Ladder tracks are aligned with rollers, then pull.
ENGINE AND APU SHUTDOWN

NOTE:
Each fire handle is capable of rotation to two positions after placement in the OUT position. The positions are labeled DISCH 1 for the right fire bottle and DISH 2 for the left fire bottle. When it is necessary to discharge a fire bottle, ALWAYS use DISCH 1 first. This will discharge extinguishing agent from the RIGHT fire bottle, preserving the LEFT fire bottle for APU protection. Only the LEFT fire bottle can be used for APU protection.

NOTE:
The Fire Detection and Warning System detects overheat or fire in the engines, engine pylons, APU, and passenger/tail areas.

1. ENGINE and APU FIRES

NOTE:
Appropriate handle will be illuminated red indicating fire. Fire extinguishing systems receives its power from the main batteries. DO NOT push battery switches to OFF until engine/APU shutdown is complete.

a. In case of engine fire, pulling the fire L-handle located on the forward portion of the flightdeck center pedestal, shuts off the engine generator, fuel, hydraulic fluid to and from the associated engine.

b. In case of APU fire, select the APU MASTER to Off. Depress the APU FIRE EXT switch to discharge the LEFT fire bottle into the APU enclosure.

2. ENGINE SHUTDOWN

a. Pull throttles, located on the center pedestal, to the shut position.
b. Pull fire L-handles (do not rotate if no fire), located to right and left of the throttles.
c. Turn oxygen switches to OFF.
d. Push main battery switches to OFF.

3. APU SHUTDOWN

a. Place APU Master to OFF.
AIRCREW EXTRACTION

1. AIRCREW EXTRACTION

   a. Disconnect restraints by rotating rotary buckle in either direction.

   b. Position seats using various control handles to position crewmember for extraction.

   c. Passenger seats are equipped with seat belts only.
INTERIOR CABIN CONFIGURATION

- FAX MACHINE/PAPER SHREDDER/1 CU FT SAFE/COMPUTER PRINTER/STU 111 RADIO TELEPHONE
- STAFF WORK CREW REST
- 12 MAN LIFE RAFT
- 14.2" LCD MONITOR
- MAGAZINE/ATLAS RACK
- 14.2" LCD
- EMERGENCY EXIT
- GALLEY
- CLOSET
- VACUUM TANK
- 30 GALLON WATER SYSTEM
- STORAGE
- DOOR ACTUATOR AREA
- 12 MAN LIFE RAFT
- 14.2" LCD
- MAGAZINE/ATLAS RACK
- POCKET DOORS
- EMERGENCY EXIT
- GALLEY ANNEX
- JUMP SEAT
- VANITY ENTERTAINMENT/STORAGE
- ELECTRONIC EQUIPMENT
- MAIN ENTRANCE DOOR
- 99.00" AUX RACK
- STORAGE DOOR
- ACTUATOR AREA
- ELECTRONIC EQUIPMENT
- FAX RACK
- VANITY
AIRCRAFT DIMENSIONS

21 FT
(6.40 m)

54 FT 7 IN
(16.64 m)

18 FT 2 IN
(5.54 m)

55 FT 7 IN
(16.94 m)
AIRCRAFT DANGER AREAS
INLET AND EXHAUST

NOTE:
The C-38A or Astra is an Israeli built aircraft for the US Air Force. The aircraft's mission is to replace the older C-21 and augment the C-9 Nightingale medivac, target towing, photo-reconnaissance, threat simulation and flight inspection missions. The C-38A can be configured with the SPECTRUM AEROMED 500 LP modular life support for air evacuation. This aircraft is also known commercially as the Astra SPX BIZ-Jet.

WARNING
Do not operate engines with emergency exits removed or left engine above idle with cabin entrance door open. Ground and rescue personnel should wear ear protection during engine operation.

If blast deflector is not available, area must be clear 100 feet aft of aircraft.

Distance from engine exhaust to blast deflector.
AIRCRAFT DANGER AREAS
HF-9000 AND RADAR DANGERS

WARNING

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.

WARNING

The Airborne Weather Radar (AWR) WXR-840 or the Turbulence Weather Radar System TWR-850 safe distance for human exposure to radiation is 2 feet (0.65 meters). Ground and rescue personnel should take necessary and reasonable precautions to ensure that personnel and equipment sensitive to microwave radiation are kept safely beyond this distance while within the illumination pattern.

WARNING

Oil Handling - Prolonged contact with MIL-L-5606 oils may cause skin rash. The areas of skin and clothing contacting this oil should be thoroughly washed immediately. Areas in which this oil is used shall be adequately vented to reduce mist and fumes to a minimum.

WARNING

Frequent skin contact with MOBIL 254 lubricating oils may result in permanent paralysis, since this oil contains an additive that is poisonous and readily absorbed through the skin. Do not allow this oil to remain on the skin longer than necessary.
NOTE:
Oxygen system is pressurized to 65 to 95 psig through a pressure reducer, which directly feeds the crew system.
The passenger system is fed through an altitude control regulator. There is no third or therapeutic subsystem on this model.

WARNING

Wear chemical goggles and protective gloves. Hydraulic fluid may cause eye, nose and skin irritation. Avoid prolonged breathing or repeated contact with skin.

NOTE:
Hydraulic fluid for the main system is contained in a reservoir located in the rear left side of the baggage compartment at station 390. The reservoir has a fluid capacity of 3890 cc and supplies fluid to operate the ailerons, wheel brakes, landing gear, nose wheel steering and air brakes. Maximum pressure is 3300 psi.

OXYGEN AND HYDRAULIC SYSTEMS

OXYGEN PRESSURE SWITCH
PASSENGER OXYGEN CONTROL PANEL (FWD OF RH CONSOLE)
OXYGEN CYLINDER 1850 PSIG (RH SIDE OF NOSE COMPARTMENT)
OVERBOARD DISCHARGE LINE
FILLER VALVE
PASSENGER MASK STOWAGE COMPARTMENTS (OXYGEN FLOW AT 70 PSI, ACTIVATED AT 13,500 +/- 500 FEET)
OXYGEN SHUTOFF VALVE (Valve must be closed when system is not in use.)
PRESSURE TRANSMITTER
NO.1 MANIFOLD
RETURN FILTER
AUXILIARY RESERVOIR
PRESSURE FILTER
ELECTRIC MOTOR
MAIN MANIFOLD ASSEMBLY
FIRE SHUTOFF VALVE
MAIN RESERVOIR
PRESSURE FILTER
RETURN FILTER
AIR PRESSURE REGULATOR
PRESSURE FILTER
BLEEDER VALVE
COMPOSITE MATERIALS

NOTE:
The structures are fabricated from aluminum alloy, alloy steels, stainless steel, titanium and the list composites.
SPECIAL TOOLS/EQUIPMENT
Power Rescue Saw
Fire Drill II

AIRCRAFT ENTRY

NOTE:
The main entrance/airstair for crew and passengers can be opened from the inside or outside when the cabin is depressurized.

1. NORMAL ENTRY
   a. To open the main entrance, located on the left forward fuselage, rotate the external locking handle, and unlock the door. Operation of the door handle will deflate the door seal. Door will open outward pivoting on two hinges in the lower door sill in a dampened free fall.

2. EMERGENCY ENTRY
   a. Use step 1a for main entrance.
   b. Remove either emergency plug-type exit doors, located over each wing, by using the corresponding PUSH handle at center top of door. The emergency doors open inward. Do not place door into egress path.
   c. To remove emergency door internally, pull off the cover to expose the EXIT-PULL handle, located at the top center of the door, pull handle and door inward. Do not place door into egress path.

3. CUT-IN
   a. Cut-in as required.
NOTE:
The configuration to the right is for VIP/personnel transport. The illustrations below depict the SPECTRUM AERO-MED LP 500. The two pictures below depict two types of systems possibly installed. Passenger seats are removed for air evacuation.
ENGINE/APU SHUTDOWN

1. ENGINE SHUTDOWN

NOTE:
If engine or APU is on fire, do place battery switch to OFF. Battery power is required to operate the fire suppression system.

a. Pull thruster levers to CUT-OFF position.

NOTE:
Each engine nacelle has a fire detection and extinguishing system. There are two zones, the accessories and combustor sections. If FIRE light comes on, a fire in zone 1 is present. If OVERHT light comes on, a fire in zone 2 is present. If either FIRE or OVERHT light comes on together with the corresponding light within PRESS TO TEST pushbutton, the warning should be considered false.

b. In case of an engine fire, the FIRE light will illuminate. Press the appropriate FIRE/OVERHT pushbutton.

c. If the FIRE light stays on, press ARM/EMPTY pushbutton. If fire does not go out within 30 seconds, press the remaining ARM/EMPTY pushbutton.

d. Place BATT MASTER switch to OFF.

e. Turn off oxygen shutoff valve if time allows.

2. APU SHUTDOWN

a. Press the APU FIRE PUSH switch, located on the copilot’s instrument panel, to arm the fire extinguishing system and close the fuel shutoff valve.

b. In case of fire, press the FIRE EXT pushbutton.

c. Place BATT MASTER switch to OFF.
AIRCRAFT PAINT SCHEME
APPLICABILITY: USAF C-40B (VIP TRANSPORT)
AIRCRAFT PAINT SCHEME #1
APPLICABILITY: USAF C-40C (C-22 REPLACEMENT)
AIRCRAFT PAINT SCHEME #2

APPLICABILITY: USAF C-40C (C-22 REPLACEMENT)
AIRCRAFT DIMENSIONS

EFFECTIVITY:
737-700 WITH WINGLETS

<table>
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<th>METERS</th>
<th>2</th>
<th>4</th>
<th>6</th>
</tr>
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<tr>
<td>FEET</td>
<td>6</td>
<td>15</td>
<td>20</td>
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</tbody>
</table>

110' 4" (33.63m)
34' 0" (10.36m)
15' 10" (4.83m)
12' 4" (3.76m)
105' 7" (32.18m)
75' 6" (23.01m)
41' 3"
41' 4" (12.60m)
13' 5" (4.09m)
117' 5" (35.79m)
47' 1" (14.35m)
APPROX 8' (2.44m)
18' 9" (5.72m)
C-40

737-600/700/800 MAIN FUEL TANKS WITH C-40 AUXILIARY TANKS LOCATIONS

FUEL CAPACITY: 6878 US GALS

- Auxiliary Fuel Tank Locations - 3 aft/2 fwd for C-40A/B/C
- Winglets (as installed)
- Vent Surge Tank
- Auxiliary Power Unit and Oil Tank
- Portable Oxygen Bottles located varies throughout passenger cabin
- APU Fuel Line
- APU Emergency Control Panel located in RT wheel well area
- Hydraulic Brake Accumulators in wheel well
- Fuel Tank #1
- Center Fuel Tank 4299 Gal (16273 Litres)
- Engine Oil Tank RT side each engine
- Portable Oxygen Bottle behind First Officer or Co-Pilot
- Crew Oxygen Bottle fwd cargo area
- Fuel Tank #2 1288 Gal (4876 Litres) (both #1 & #2 same amount)
- System A & B and Standby hydraulic reservoirs in wheel well
- Hydraulic Brake Accumulators in wheel well
- Fuel Capacity: 6878 US Gals
The C-40A aircraft configuration is a modified 737-700 IGW/QC (Quick Change) jetliner which increases the logistical capabilities of the U.S. Navy's worldwide fleet. It can be configured as an all-passerger, all-cargo or combination of the two. Designated C-40A, the aircraft will be used for the Navy Unique Fleet Essential Airlift (NUFEA) mission, transporting both passengers and cargo around the world. The C-40A can operate in three configurations: an all-passerger (121) configuration, an all-cargo configuration of up to eight pallets, or a combination (or "combi") configuration that will accommodate up to 70 passengers and three cargo pallets.
The C-40B aircraft configuration is a 737-700 IGW (Increased Gross Weight). This aircraft is specifically designed for VIP transport operated by the USAF.

26 Total Passengers and 11 Crew*
* Available Crew Seats:
  - 4 Crew Rest Seats
  - 4 Flight Attendant Seats
  - 3 Flightdeck Seats
  - 1 CSO Seat
The C-40C illustrated here is the current and proposed cabin configuration. This is the low volume with Divan configuration.

**CURRENT CONFIGURATION**
- 44 Total Passengers
- 8 Conference
- 4 Crew Seating

**PROPOSED CONFIGURATION**
- 40 Total Passengers
- 34 B/C Passengers
- 6 Conference
- 4 Crew Seating

- ADDED CROSS-AISLE CURTAIN
- ADDED LAV F AND REVISED G7 (LOSS OF 2 SEATS)
- INDEPENDENT AREA LIGHTING CONTROL
COMPOSITE MATERIALS LOCATIONS

- **GRAPHITE**
- **FIBERGLASS**
- **FIBERGLASS/GRAPHITE**

- **RUDDER**
- **TAIL CONE**
- **ELEVATOR**
- **AILERON**
- **WINGLETS (AS INSTALLED)**
- **TRAILING EDGE PANELS**
- **DORSAL FIN**
- **FLAP TRACK FAIRINGS**
- **WING-TO-BODY FAIRING**
- **INBOARD AND OUTBOARD FIXED TRAILING EDGE**
- **OUTBOARD FIXED LEADING EDGE (FIBERGLASS)**
- **THRUSTR REVERSER**
- **INBOARD FIXED LEADING EDGE LOWER SKIN PANEL (FIBERGLASS)**
- **NOSE LANDING GEAR DOOR (GRAPHITE)**
- **RADOME**
- **AILERON TAB**
- **WING-TO-BODY FAIRING**
AIRCRAFT ENTRY
-600/-700/-800 BOEING BUSINESS JET SERIES

1. NORMAL/EMERGENCY ENTRY

**CAUTION**

When passenger and service doors are opened from outside, chutes will automatically deploy.

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

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

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

2. PILOT’S SLIDING WINDOW (RH & LH) CARGO AND RH ONLY PASSENGER AIRCRAFT

a. To open window from outside: push in external access door.

b. Pull external release handle and slide window open.

3. CARGO DOOR OPERATION (IF INSTALLED)

a. To open cargo door 1, unlock the external door handle.

b. Verify unlocked light is illuminated.

c. Hold the UP TO CANOPY switch in position until door motion stops.

4. CUT-IN

a. Cut into fuselage as the last resort. Metal cutting portable power equipment is required. Use caution when cutting due to passenger location in relation to cutting location.
ENGINE SHUTDOWN

1. ENGINE SHUTDOWN

a. Retard thrust levers, located on pilot’s center console, to RETARD position.

b. Retard engine start levers, located on pilot’s console, to CUT OFF position.

c. 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.

d. 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.

e. Place APU master switch up to OFF position OR OFF position. (Switch type can vary.)

f. Lift guard and place battery switch, located on pilot’s center overhead panel, to OFF position.
AIRCREW EXTRACTION

1. AIRCREW EXTRACTION

NOTE:

Due to the possibility of several configurations for seating and cargo, the following seat arrangements may or may not be encountered. The flight deck configuration is fixed with two seats. There is no flight engineer seat. If seat tracks are not damaged during crash landing use adjustable seat control handles to retract seats to aft position.

a. FLIGHTDECK SEATS - Unlatch lap belt and remove shoulder harness from the pilot and co-pilot. Use horizontal adjustment handle on pilot's and copilot's seat, and swivel adjustment handle to position seats.

b. Raise armrests to up position and depress armrest adjustment release under pilot's and copilot's armrests, and raise up to position.

c. Rotate lap belt release mechanism, remove shoulder harness and crotch strap (as applicable).

d. CONSOLE SEATS - These seats may be equipped with a shoulder harness and lap belt. Unlatch restraints as necessary to free occupants.

e. PASSENGER'S SEATS - Passengers seats are equipped with lap belts only. Lift center latch connecting both sides of belt to release occupant.
EMERGENCY RESCUE ACCESS

1. EMERGENCY RESCUE ACCESS

a. Use the two forward entry doors.

b. Use the two overwing escape doors.

c. Use the two aft service doors.

AVERAGE DISTANCE - FLOOR LEVEL TO GROUND
WHEELS RETRACTED: 5 FT
WHEELS EXTENDED: 8 FT. 6 IN.
1. EMERGENCY EXITS AND EVACUATION ROUTES

a. Use the two forward entry, two overwing escape, two aft service doors, or the two forward flightdeck sliding windows as emergency exits.

b. The sliding #2 window emergency exits are equipped with stowed ropes or straps used to lower personnel who choose these exits. These windows can be opened externally as well as internally. To open either window, depress trigger, turn handle back and inboard. Slide window until it locks in the open position.

c. Use the evacuation route closest to your location. Some doors are equipped with emergency chutes that are automatically deployed when a door or hatch are opened from the inside.