

WELCOME TO TECHNICAL ORDER 00-105E-9, 1 FEBRUARY 2006, REVISION 11.

THIS IS SEGMENT 15 COVERING CHAPTERS 11 AND 12.

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



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

SEGMENT 15 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 Retaining out of date rescue information can negatively affect the user's operability and outcome of emergencies.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>
11	T-1A	ALL	File updated. Incorporates Safety Supplement - 4, dated 9 August 2005.
11	T-6A	ALL	File updated. Incorporates Safety Supplement - 3, dated 5 August 2005.

NOTE

Chapter 11 contains emergency rescue and mishap response information for the following aircraft:

USAF	DA20-C1
USAF	T-1A
USAF	T-3A
USAF	T-6A
USAF	T-37
USAF	T-38
USAF	T-39/B
USAF	T-41
USAF	T-43
JOINT SERVICE	OT-47B, UC-35A/B/C/D, TR.20

CHAPTER 11

U.S. AIR FORCE

TRAINER

AEROSPACE EMERGENCY RESCUE AND MISHAP RESPONSE INFORMATION

11-1. INTRODUCTION AND USE.

11-2. This section contains emergency rescue and mishap response information illustrations in alpha-numerical order relative to type and model of aircraft. This arrangement of illustrations is maintained from Chapter 4 throughout the remainder of the publication.

11-3. GENERAL ARRANGEMENT.

11-4. Aircraft type designation has been positioned in the upper right corner of the horizontal illustration for rapid identification. Additional aids to rapid orientation are:

a. Recent technological advances in aviation have caused concern for the modern firefighter. Aircraft hazards, cabin configurations, airframe materials, and any other information that would be helpful in fighting fires, the locating and rescue of personnel will be added as the information becomes available.

b. Suggested special tools/equipment are listed in the upper left corner, on the Aircraft/Entry page of each listed aircraft.

c. Procedural steps covering emergency/normal entrances, cut-ins, engine/APU shutdown, safetying ejection/escape systems, and aircrew extraction are outlined on the left side of each page with coordinated illustrations on the right.

d. Illustrations located on right side of pages are coordinated with text by numerals and small letters depicting both paragraph and subparagraph on the page.

e. Each illustration is consistently colored and/or pattern keyed to highlight essential emergency rescue information.

f. Details are pulled directly from the illustration to highlight an area, thus eliminating unnecessary searching for desired information.

AIRCRAFT PAINT SCHEMES



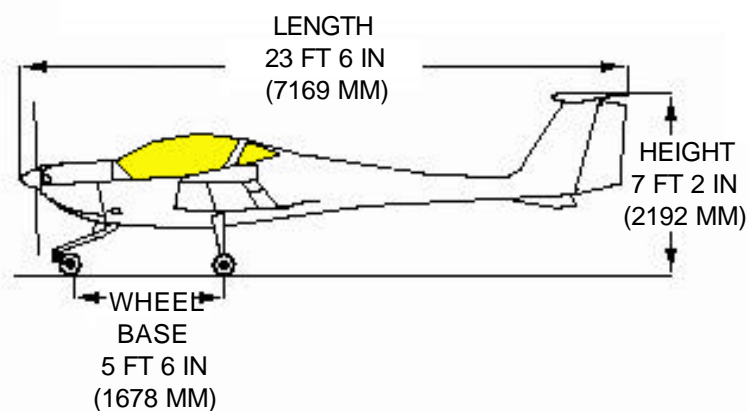
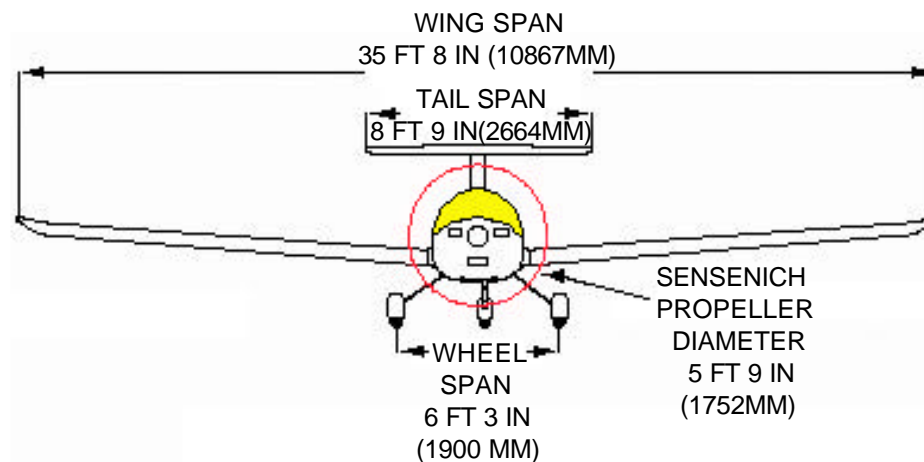
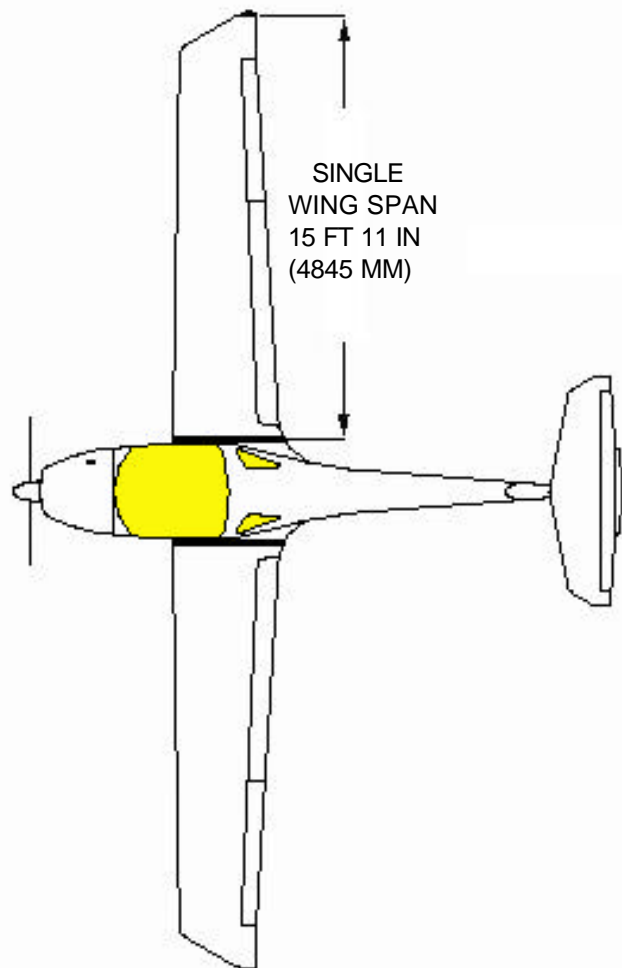
AIRCRAFT DIMENSIONS

NOTE:

Dimensions are approximate - for reference only.
Dimensions are Feet - Inches (MM).

DA20-C1

T.O. 00-105E-9



GENERAL INFORMATION

The DA20-C1 Falcon will replace the retired T-3A Firefly trainer aircraft and be used to train students at the Air Force Academy. The European designation is the DV 20.

The DA20-C1 is a two seat aircraft designed and manufactured by Diamond Aircraft Industries of London, Ontario Canada. It is principally intended for primary flight training. The DA20-C1 features advanced composite structure, single engine, conventional configuration with low wing and T-tail, and tricycle landing gear. The flight crew of 2 are seated in a side-by-side arrangement.

The fuselage is constructed of Glass Reinforced Plastic (GRP) with local Carbon Reinforced Plastic (CRP) reinforcement in local high stress areas.

AIRFRAME MATERIALS

The fixed seat shells are of GRP construction.

The GRP firewall is clad with Fiberfrax insulating material with a stainless steel skin. Engine cowlings are fire protected by fire resistant paint.

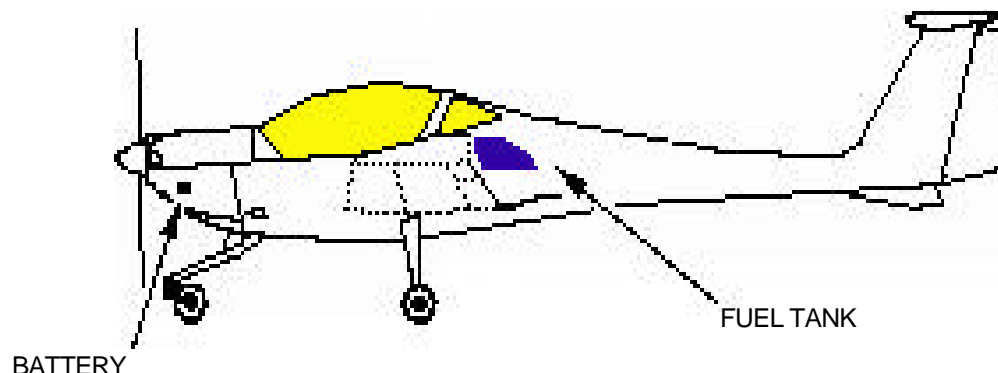
The wing skins are of GRP/FOAM/GRP sandwich construction. The I section spar is constructed of CRP poltruded spar caps that are joined with a GRP/FOAM sandwich construction spar web.

The rudder halves are of GRP/FOAM/GRP sandwich construction. The horizontal stabilizer and elevator are GRP/FOAM/GRP sandwich construction with local CRP reinforcement.

The propellor blades are of wood core construction with composite skins and aluminum or polycarbonate bonded edge inserts.

ELECTRICAL SYSTEM

Electrical power is circuit protected by panel mounted circuit breakers for each circuit. The system is 12 volt.



FUEL SYSTEM

The aluminum 20.5 US gallon fuel tank is located aft of the occupants and below the baggage compartment floor. The engine runs on 100LL aviation fuel.

PROPULSION SYSTEM

The engine is a Teledyne Continental Motors IO-240 B3B. The engine cycle with 4 horizontally opposed cylinders.

OIL SYSTEM

Aircraft piston engine oil with a 6 US quart capacity.

BATTERY LOCATION

The battery is located in the firewall, under the engine cowlings. Battery is 20 A/hr.

Additional information for the DA20-C1 may be found by referring to the FAA Type Certificate No. TA4CH.

SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw
Fire Drill II

DA20-C1

AIRCRAFT ENTRY

1. NORMAL AND EMERGENCY ENTRY

NOTE:

There is no canopy jettison/fracture feature for this aircraft.

- a. The canopy is unlatched by rotating unlock handles on both sides of the aircraft. The canopy is hinged at the rear and is opened by lifting the canopy after unlatching. The internal unlock handles are directly connected to the external handles.
- b. Steps are located on both sides of the aircraft fuselage in front of the wing roots. Hand holds are located on the front side of the instrument panel to assist climbing in or out of the cockpit.

NOTE:

The stationary seats form part of the fuselage moulding and spar frame work and are fixed in an almost bench-like configuration that cradles the crew in a reclining position.

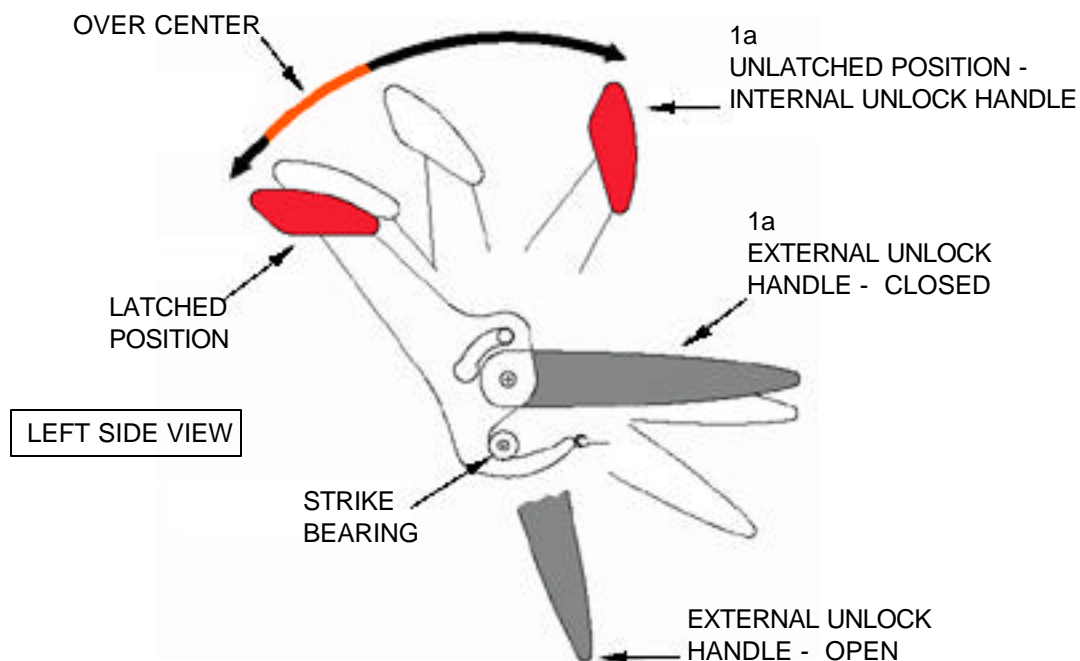
2. CUT-IN

- a. If canopy fails to open, cut-in as necessary.

3. TRAINING TIPS

NOTE:

The first 20 inches outboard of the wing root is reinforced. During training protect the finish in this area with upside down carpet or similar. The wing is slippery so the carpet may need to be fixed in place. No hard sole shoes. The area outboard of this 20 inches should not be used for training, but during an emergency access over the wing, structure will remain intact.



1a
RIGHT SIDE VIEW OF UNLOCKING HANDLE



1b
STEP

ENGINE AND ELECTRICAL SHUTDOWN

1. ENGINE SHUTDOWN

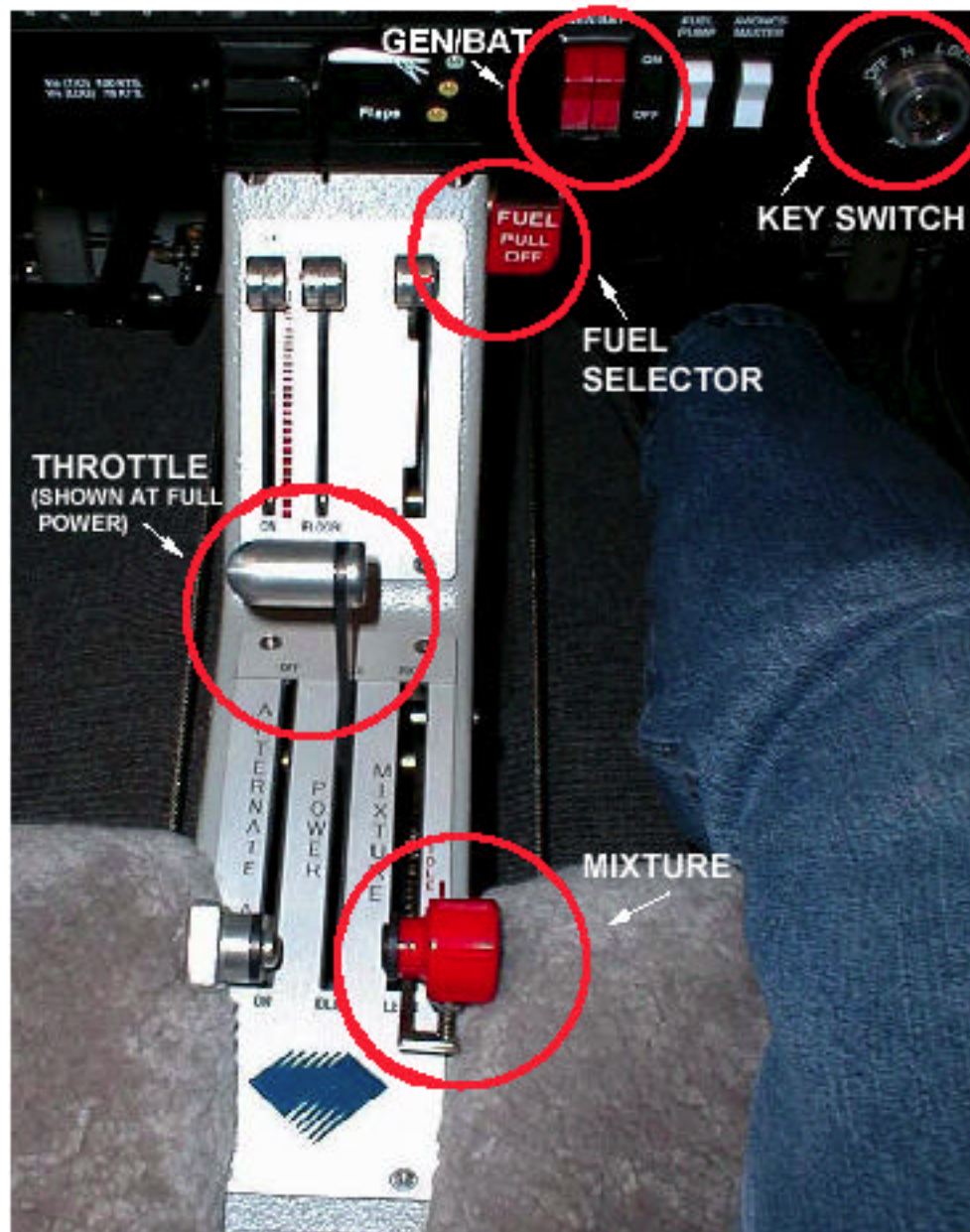
- The engine is shutdown by moving the throttle and mixture control, located on the center console, to the fully AFT position. The mixture control is colored RED.
- The key switch, located to the right of the GEN/BAT switches, is then turned counterclockwise to the OFF direction.
- The fuel selector, located under the instrument panel beside the center console, is then pulled to the fully AFT position. Fuel selector is colored RED.

2. ELECTRICAL SHUTDOWN

- Electrical power switch, located on the right side of instrument panel, is shutdown by placing the GEN/ BAT master switch in the OFF position. The electrical power switch is colored RED.



CENTER CONSOLE LOOKING FORWARD



ENGINE AND ELECTRICAL SHUTDOWN CONTROLS

AIRCREW EXTRACTION

1. AIRCREW EXTRACTION

NOTE:

- The seats are not explosively loaded.
- The seat arrangement is side- by- side. The pilot is located on the right side (USAF configuration only) and the student passenger is located on the left side. The seats are non-adjustable.
 - Disconnect occupants from seats by releasing the safety harness on the lap belt this will also release the shoulder portions on the harness. Both pilot and passenger seat restraints are identical.

DA20-C1

T.O. 00-105E-9



1a
SEAT ARRANGEMENT



1b
RESTRAINT SYSTEM

AIRCRAFT PAINT SCHEME

T-1A

T.O. 00-105E-9



AIRCRAFT DIMENSIONS

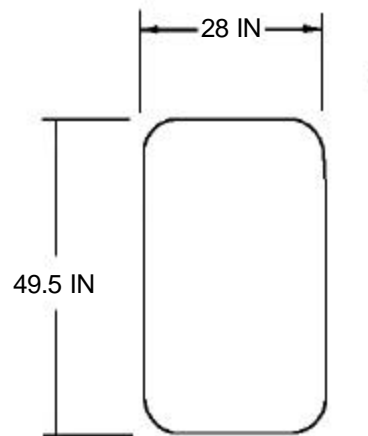
T-1A

INTERIOR AREAS

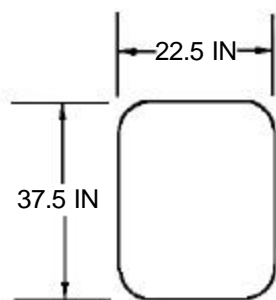
LENGTH 223 Inches

WIDTH 60 Inches

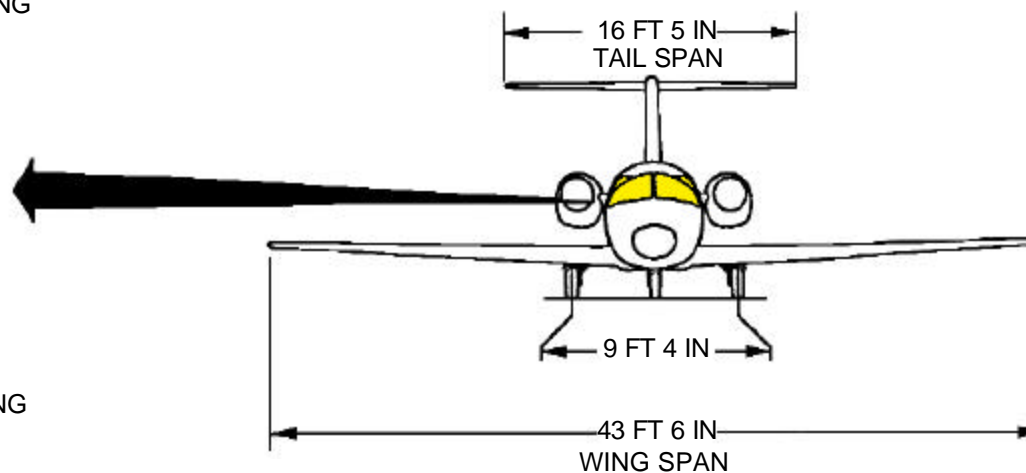
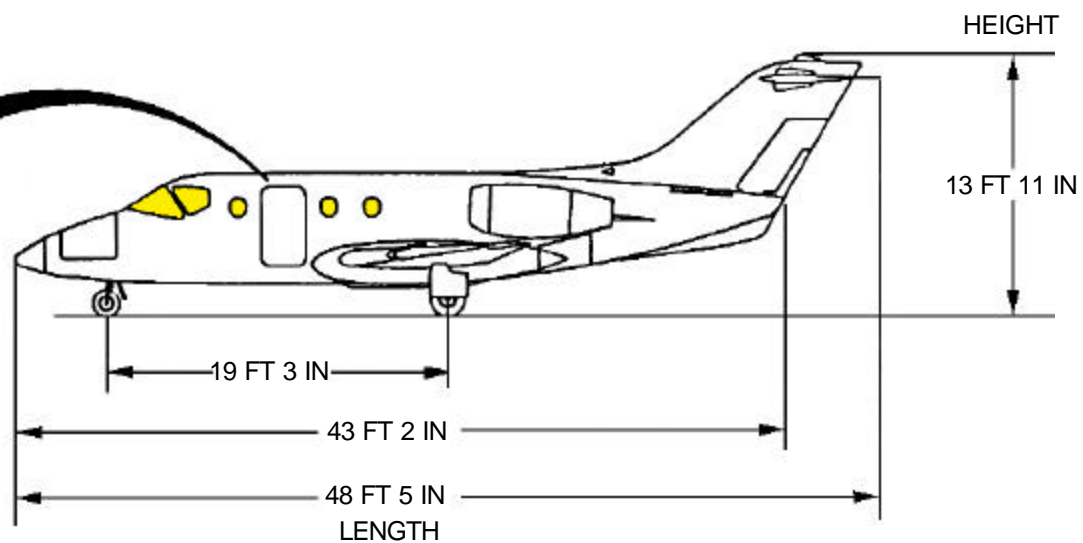
HEIGHT 57 Inches



ENTRANCE DOOR OPENING



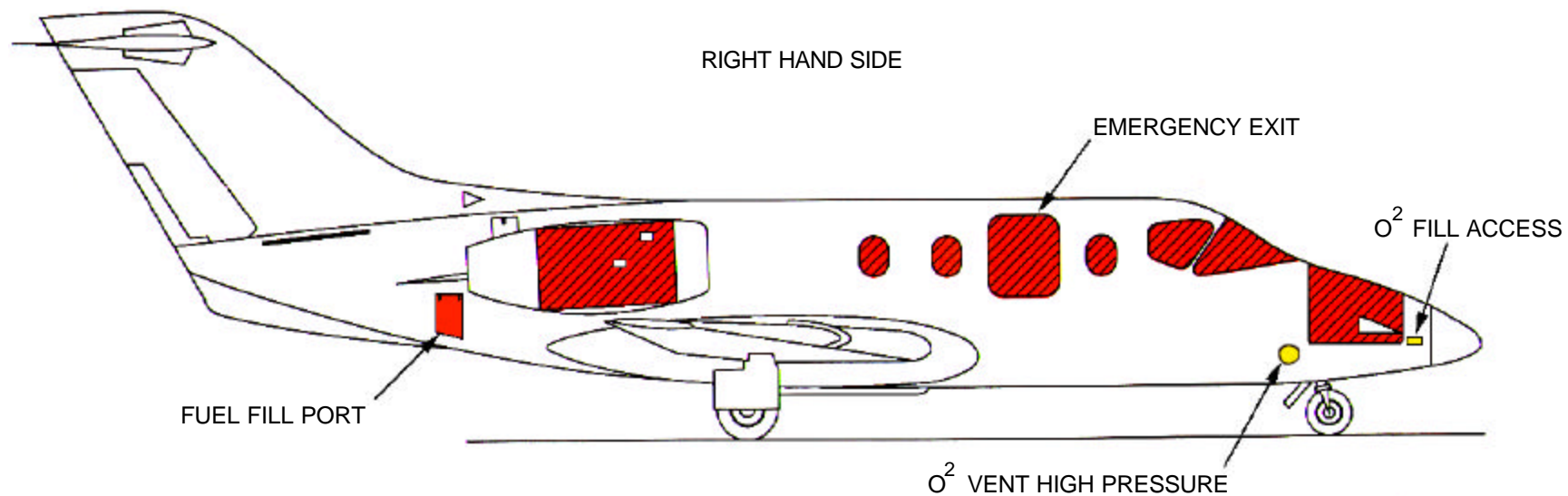
ESCAPE HATCH OPENING



AIRCRAFT SKIN PENETRATION POINTS, FIRE ACCESS, AND SERVICING LOCATIONS

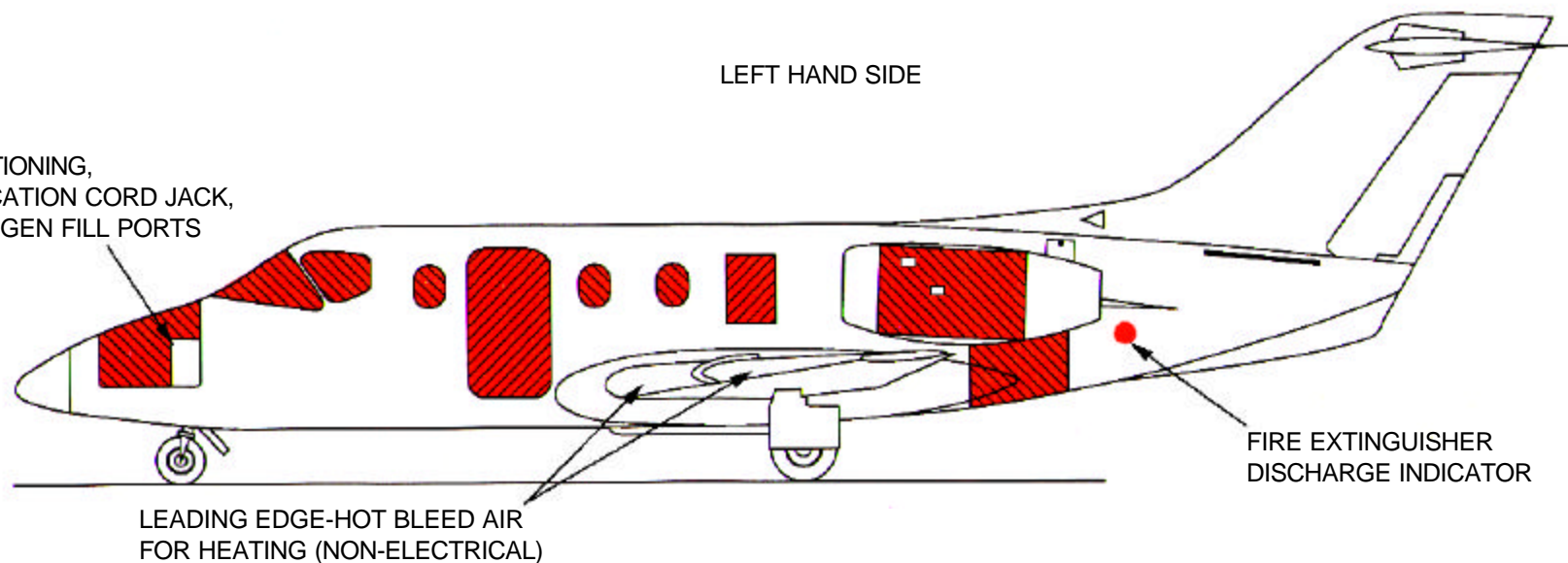
T-1A

RIGHT HAND SIDE



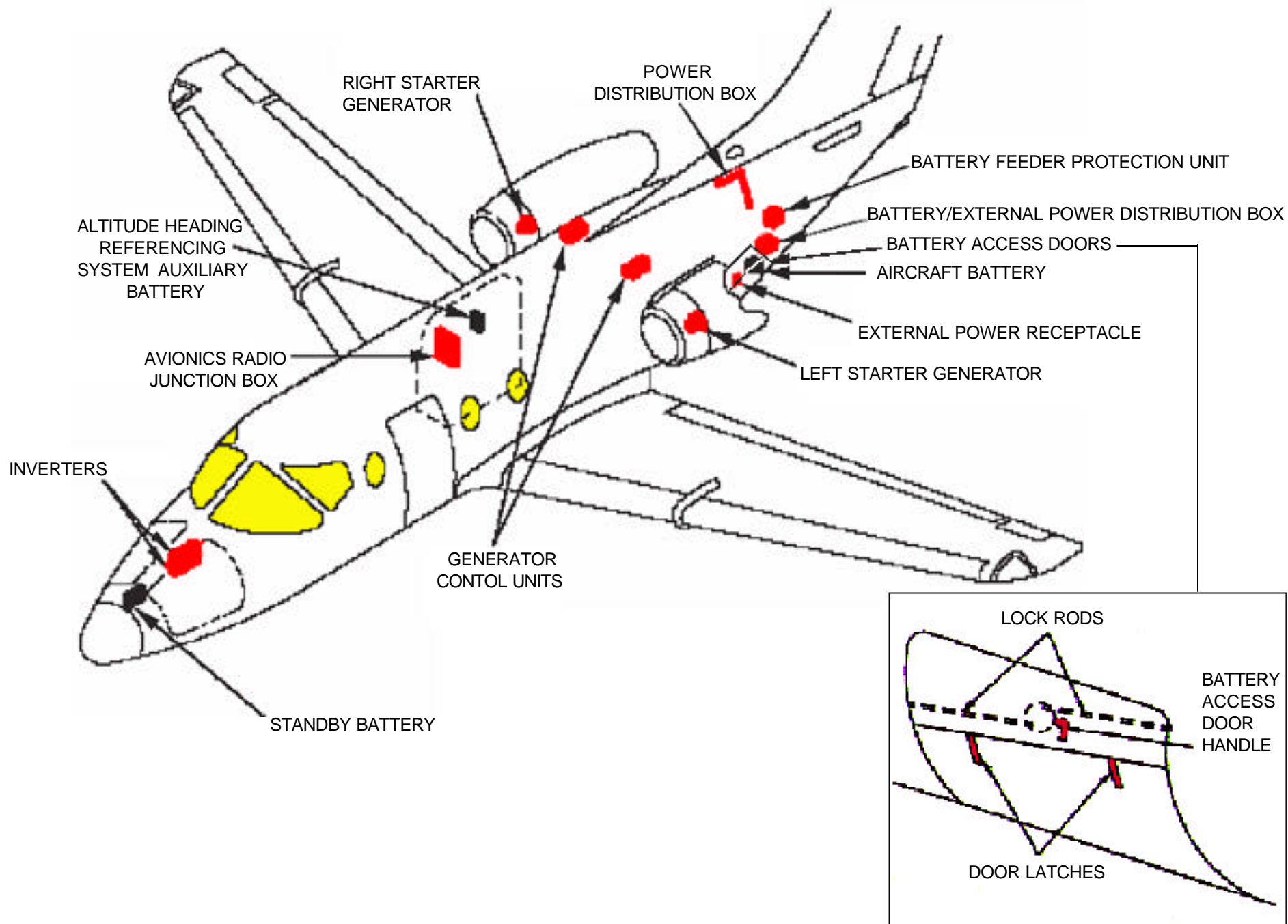
LEFT HAND SIDE

AIR CONDITIONING,
COMMUNICATION CORD JACK,
AND NITROGEN FILL PORTS



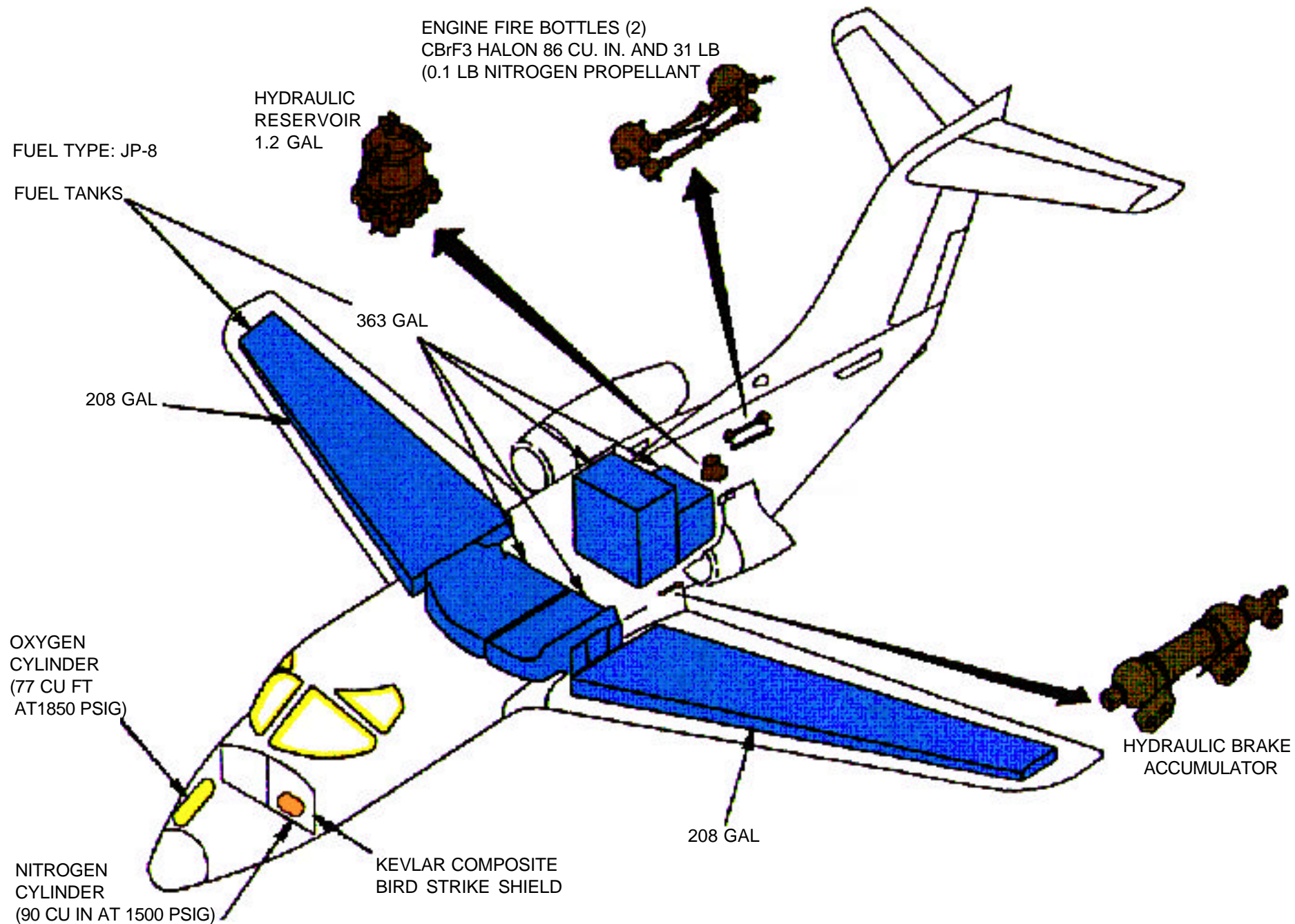
POWER SYSTEMS AND COMPONENT LOCATIONS

T-1A

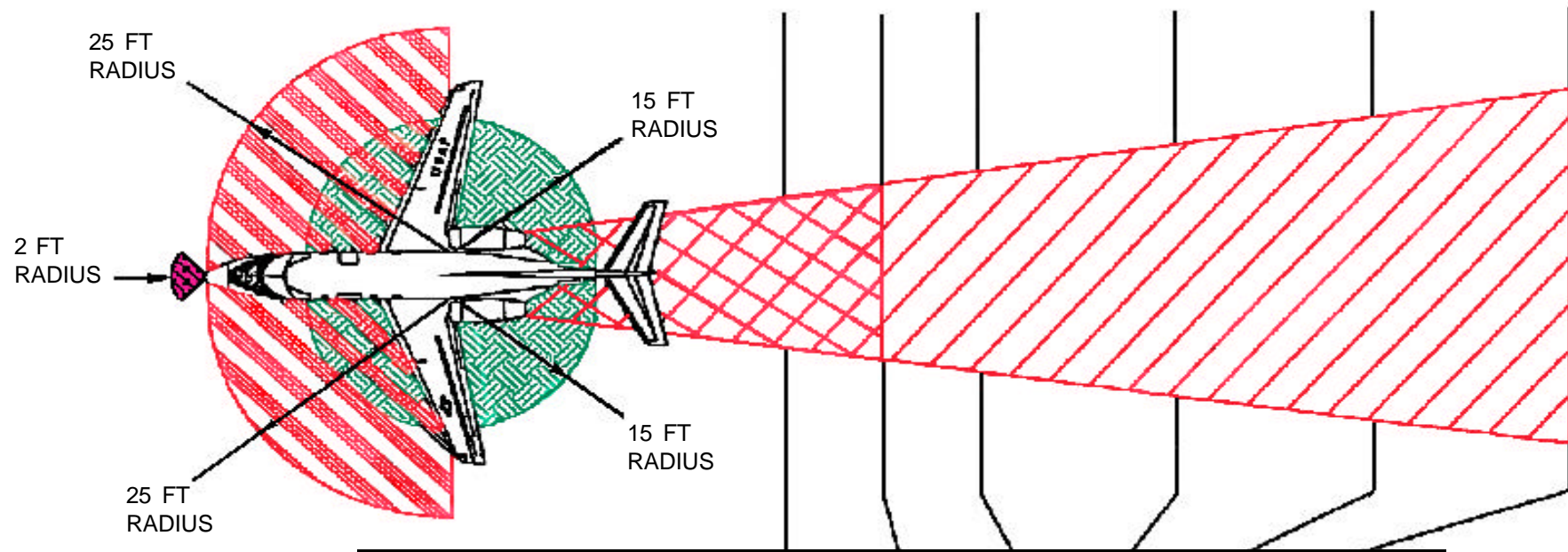


FUEL, HYDRAULIC, OXYGEN, NITROGEN AND FIRE BOTTLE LOCATIONS

T-1A



DANGER AND HAZARD AREAS



	DISTANCE FT.	0	20	30	40	60	80	100
IDLE THRUST	TEMPERATURE °F	650 ⁰	141 ⁰	91 ⁰				
	VELOCITY KNOTS	300	59	31				
TAKEOFF RATED THRUST	TEMPERATURE °F	1000 ⁰	250 ⁰	200 ⁰	160 ⁰	140 ⁰	130 ⁰	120 ⁰
	VELOCITY KNOTS	600	295	190	140	80	55	40


 RADAR DANGER AREA


 TAKEOFF RATED INTAKE


 MAIN LANDING GEAR TIRE AVOIDANCE


 TAKEOFF RATED THRUST EXHAUST


 IDLE THRUST EXHAUST

SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw
Fire Drill II

T-1A

AIRCRAFT ENTRY

1. NORMAL ENTRY (EXTERNAL ONLY)

- a. Push release button, located beside main entrance door handle to release cabin pressure.
- b. Push left side of door handle to expose handle.
- c. Turn door handle one quarter turn clockwise to unlock main entrance door and pull door outward.
- d. Grasp step assembly or chord and pull outward.
- e. When steps start downward movement, support steps and lower to extended position.

2. EMERGENCY ENTRY (EXTERNAL ONLY)

- a. Push release lock, located right side fuselage front of wing.
- b. Pull handle to unlock escape hatch.

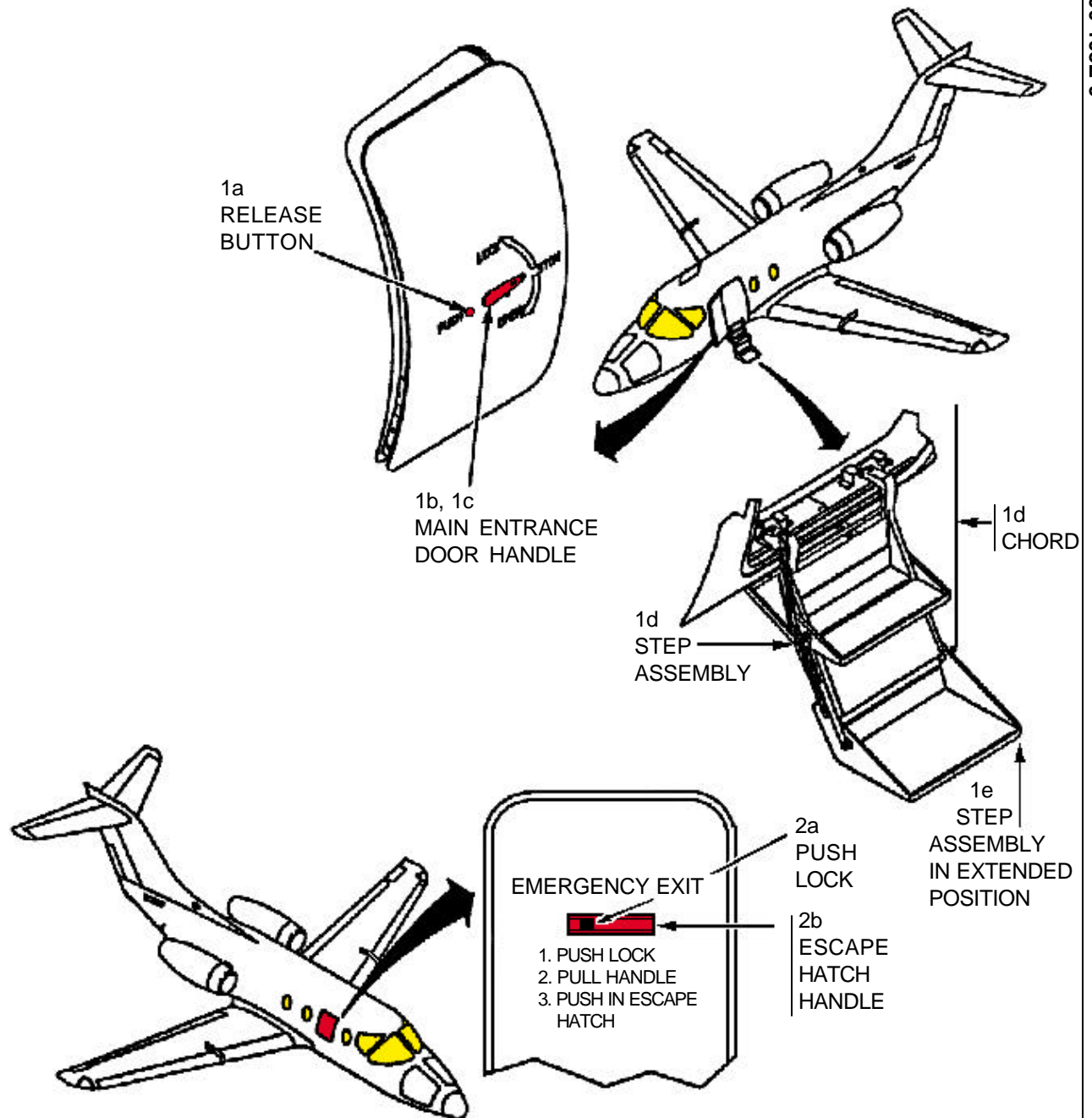
CAUTION

Do not place hatch in the pathway of escape.

- c. Push escape hatch inward to gain entry.

3. CUT-IN

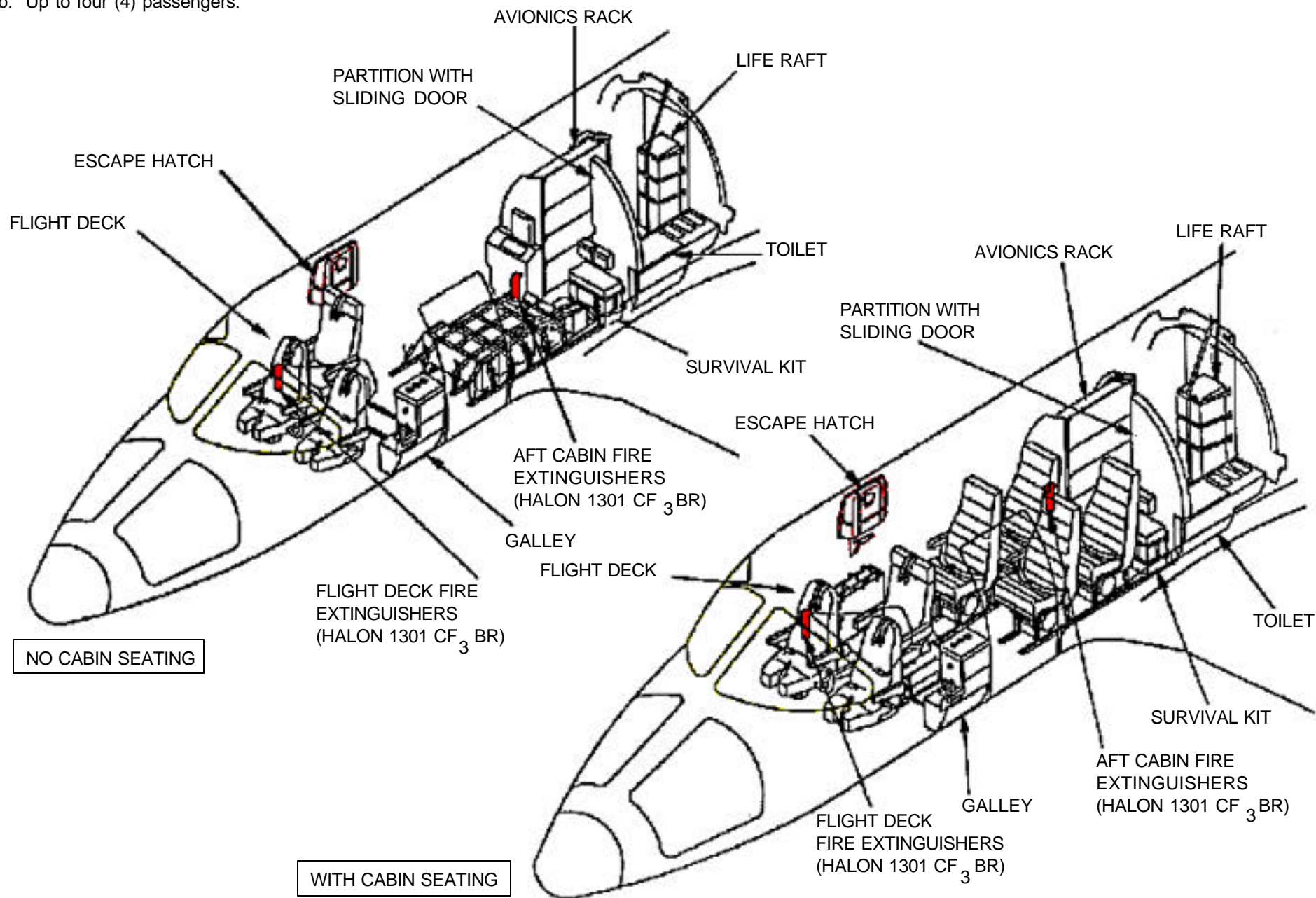
- a. Cut-in normal and emergency entrances. If entrances are jammed, cut around fuselage windows.



CABIN ARRANGEMENTS

T-1A

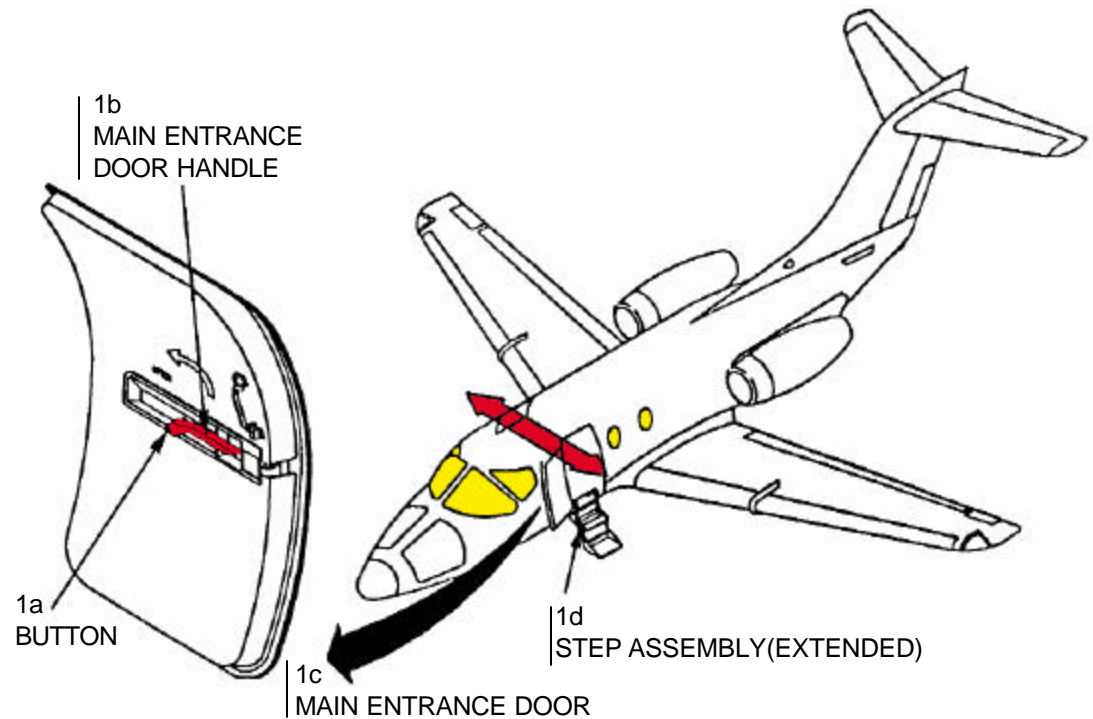
1. NORMAL CAPACITY
 - a. Three (3) crewmembers.
 - b. Up to four (4) passengers.



AIRCRAFT EXIT

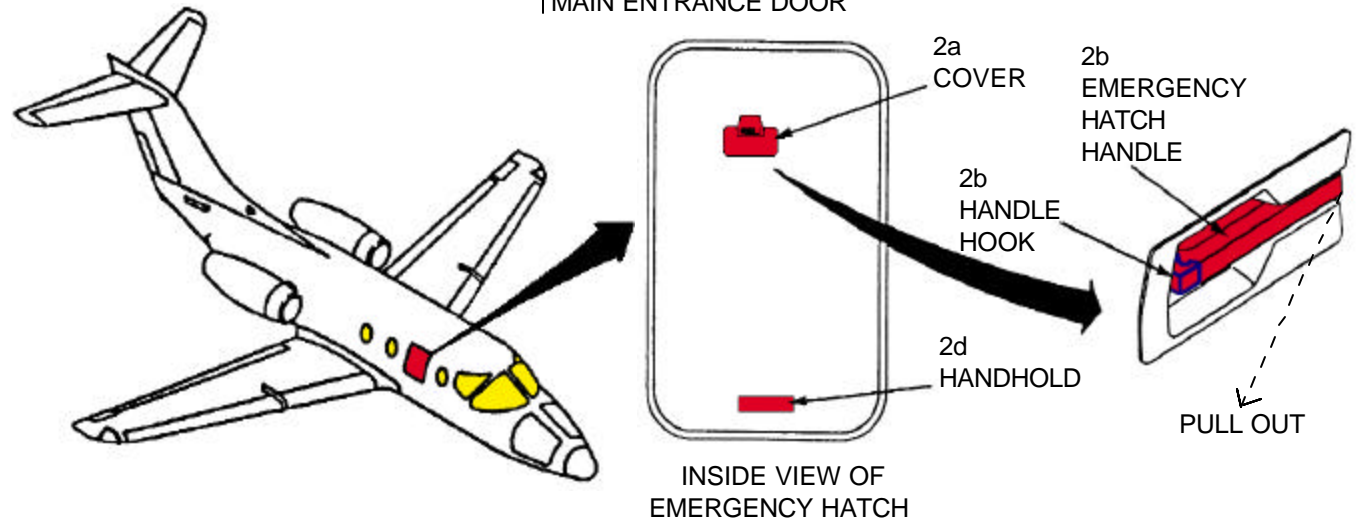
1. NORMAL EXIT (INTERNAL ONLY)

- Push button, located on door handle of the main entrance door, to release door handle.
- Turn door handle, located on main entrance door, counterclockwise to unlock door.
- Push door outward.
- Push step assembly outward.
- Support steps and lower to extended position.



2. EMERGENCY EXIT (INTERNAL ONLY)

- Pull cover free. Cover is located on upper center portion of the emergency hatch.
- Push handle hook, located under cover, with thumb and pull handle.
- Lift top of emergency hatch to extend into aircraft.
- Lift emergency hatch using handhold, located on lower center portion of the emergency hatch, to clear hinges.
- Remove emergency hatch to an area that will not impede egress.



ENGINE SHUTDOWN

T-1A

1. ENGINE SHUTDOWN

- Raise two finger lifts, located below throttle knobs on center console.
- Retard throttle levers, located on center console, to aft/down to the CUT OFF position.

NOTE:

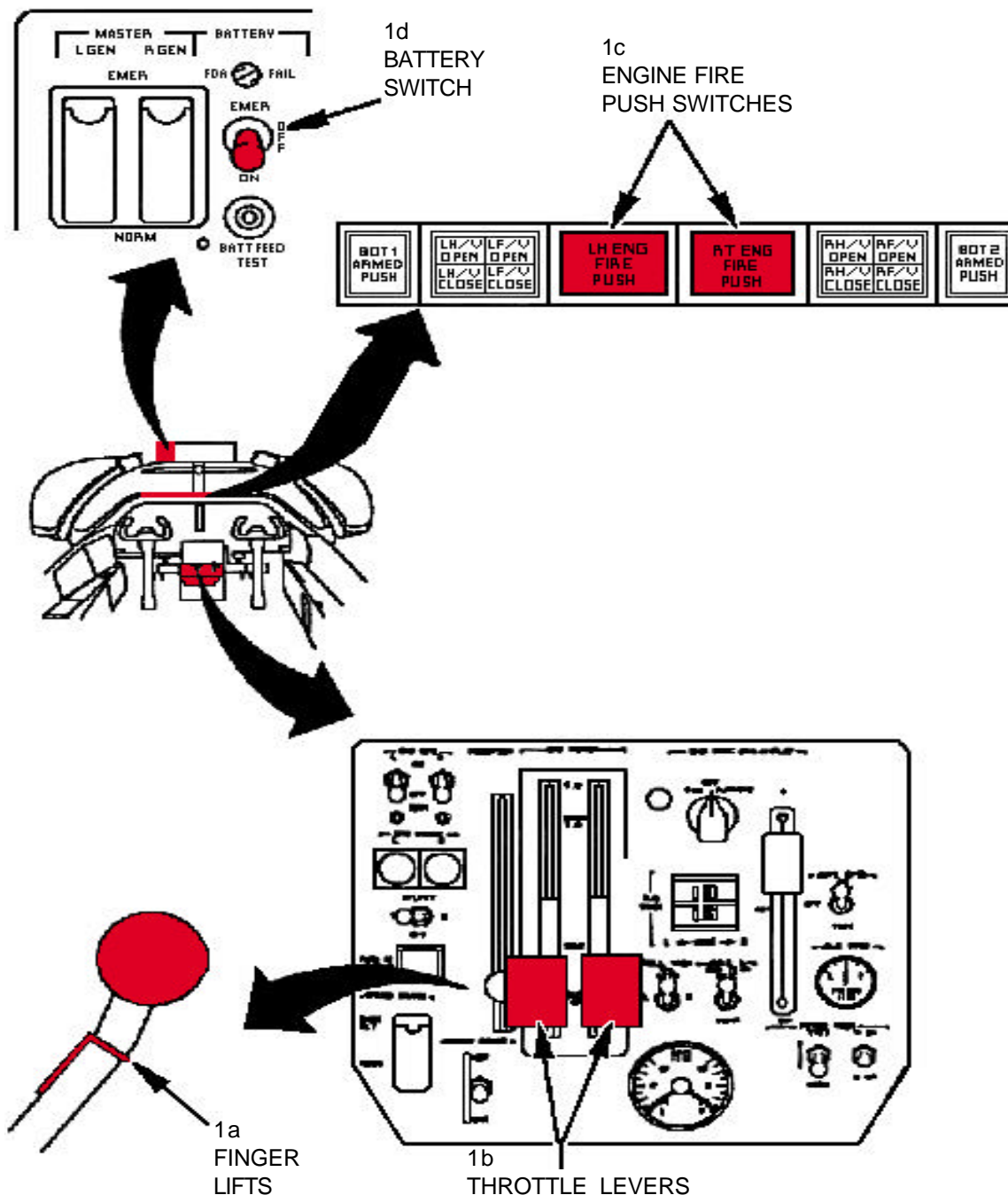
If engines are to be shutdown using the ENG FIRE PUSH switches, located top center of shroud panel, the battery switch must be ON or extinguishment system can not be activated.

- If engines fail to shutdown, raise the protective covers then push both ENG FIRE PUSH switches, located top center of the shroud panel, to activate fire extinguisher agent.
- Place battery switch to OFF position, located on overhead console upper left side.

NOTE:

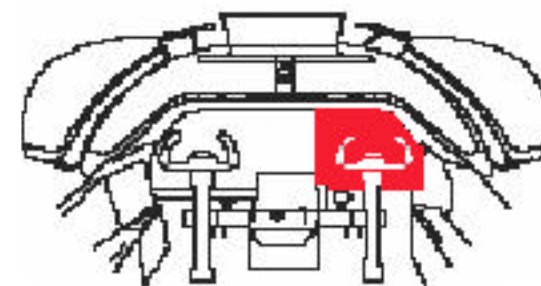
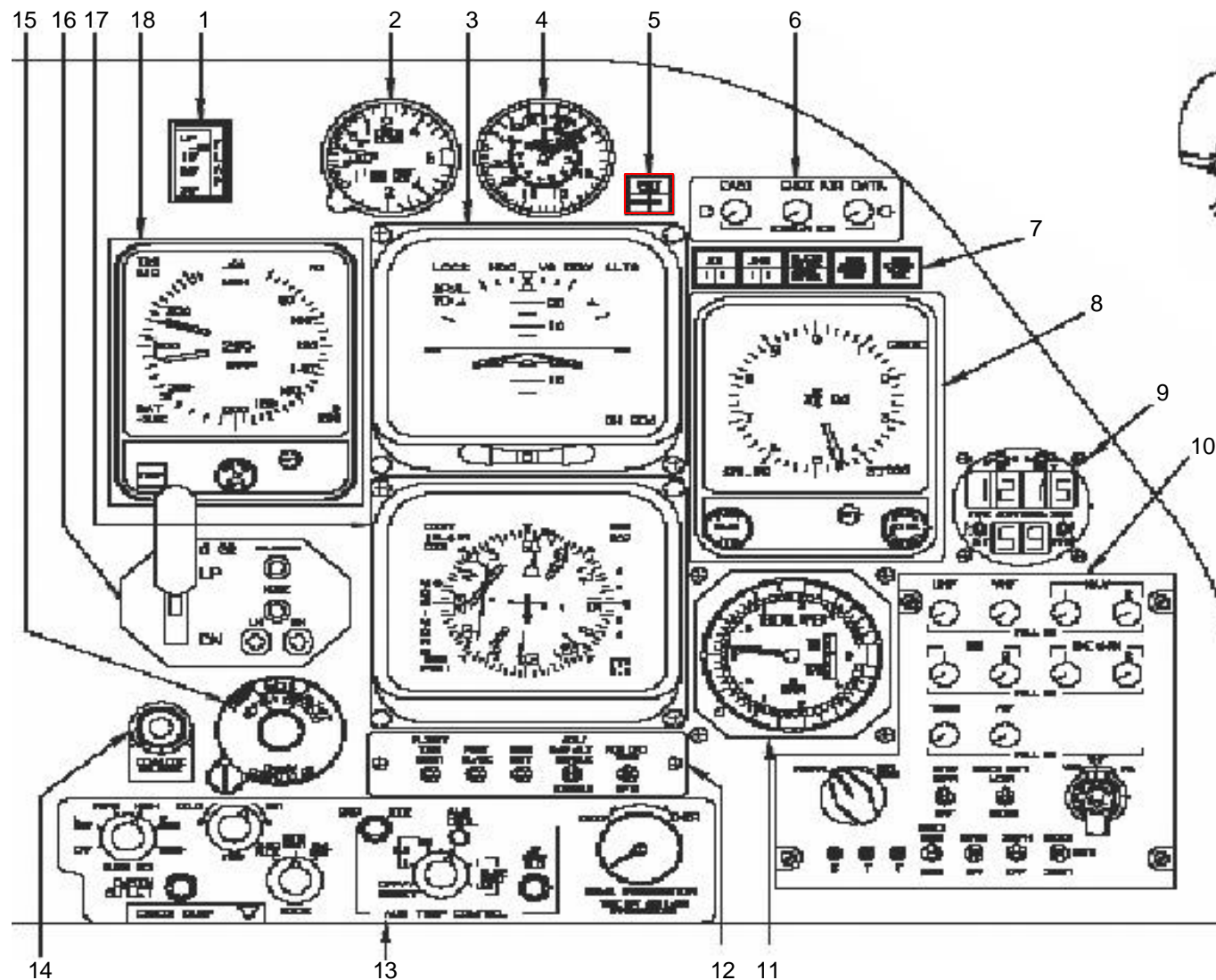
If the standby battery serves as a backup battery to the main battery.

- Push standby battery pack switch to the OFF position, located on the forward instrument panel. (See item 5 on page T-1A.11 on co-pilot's flight instrument panel.)



ENGINE SHUTDOWN-Continued

T-1A

CO-PILOT'S FLIGHT
INSTRUMENT PANEL
(TYPICAL)

1. FLAP POSITION INDICATOR
2. CABIN RATE-OF-CLIMB INDICATOR
3. ELECTRONIC ATTITUDE DIRECTOR INDICATOR
4. CABIN PRESSURE DIFFERENTIAL INDICATOR
5. STAND BY BATTERY PACK SWITCH LIGHT
6. EFIS/AIR DATA DIMMING PANEL
7. CO-PILOT'S INSTRUMENT PANEL ANNUNCIATORS

8. ALTIMETER
9. DIGITAL CLOCK
10. CO-PILOT'S AUDIO CONTROL PANEL
11. RA/VSI INDICATOR
12. CO-PILOT'S SWITCH PANEL
13. ENVIRONMENTAL CONTROL PANEL
14. LANDING GEAR HANDLE DOWNLOCK RELEASE

15. PRESSURIZATION CONTROLLER
16. LANDING GEAR CONTROL UNIT
17. ELECTRONIC HORIZONTAL SITUATION INDICATOR
18. MACH/AIRSPEED INDICATOR

AIRCREW EXTRACTION

T-1A

1. AIRCREW EXTRACTION

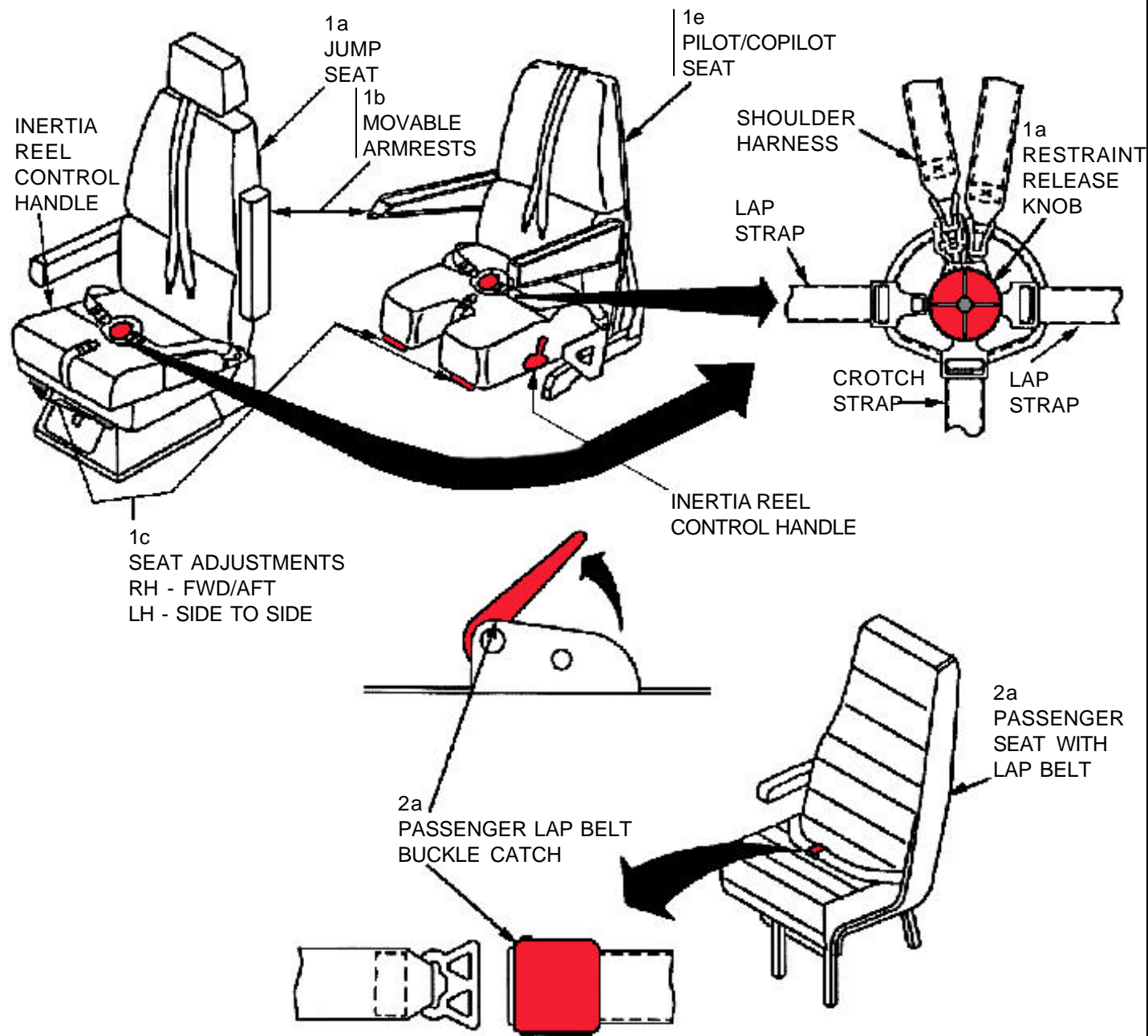
NOTE:

Jump seat, located behind pilot's seats, may block access to the pilot's seats. Inertia reel control handle can be cycled to move or stabilize occupant prior to extraction. Move forward to lock, aft to unlock.

- a. If jump seat is occupied, release occupant from restraint system by turning buckle release knob a quarter turn in either direction.
- b. Position jump seat's left armrest up to facilitate removal then remove and extract occupant.
- c. Release jump seat by pulling lever on forward seat bottom.
- d. Remove and stow jump seat on right side of cabin.
- e. For pilot seats, release five point restraint system by turning the buckle release knob a quarter turn in either direction.
- f. Raise applicable armrest to facilitate removal then remove and extract pilots.

2. PASSENGER EXTRACTION

- a. Release lap belt by raising buckle catch.

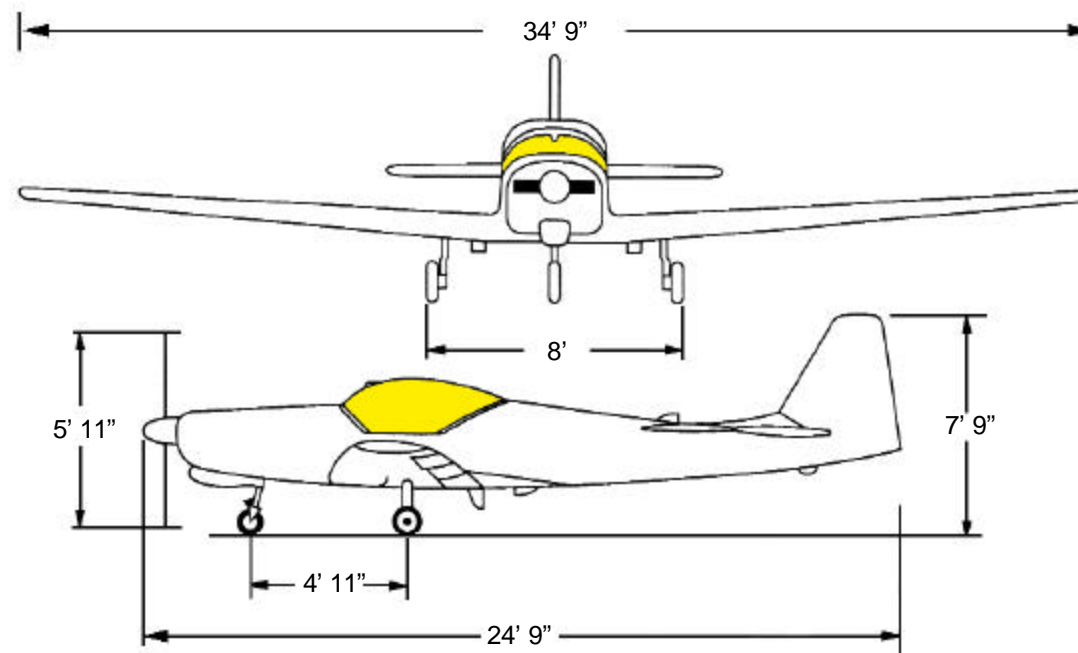
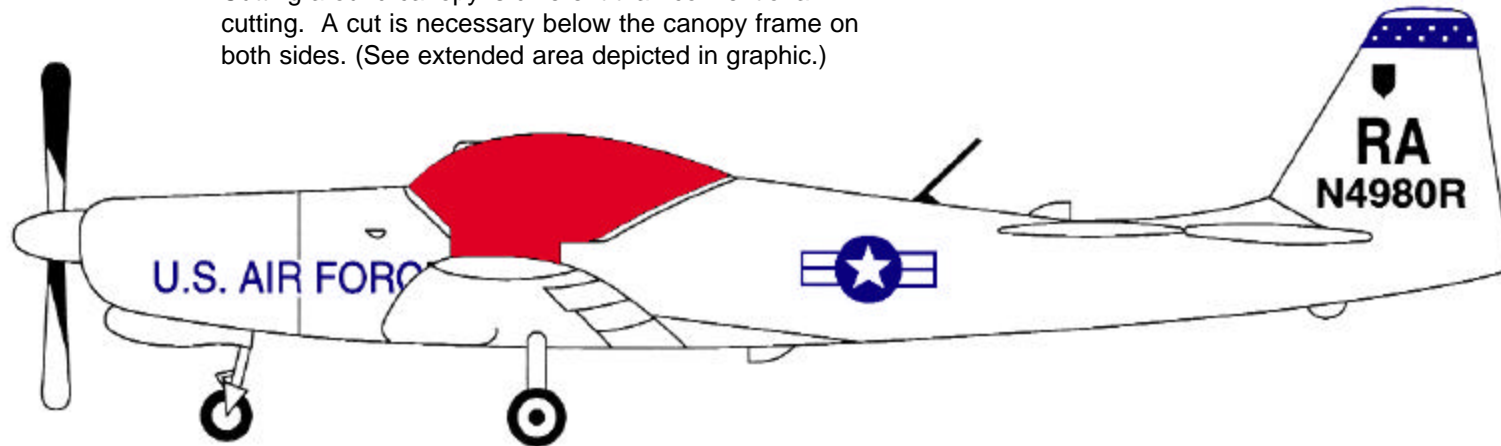


AIRCRAFT CANOPY CUT-IN AND DIMENSIONS

T-3A

NOTE:

Cutting around canopy is different than conventional cutting. A cut is necessary below the canopy frame on both sides. (See extended area depicted in graphic.)

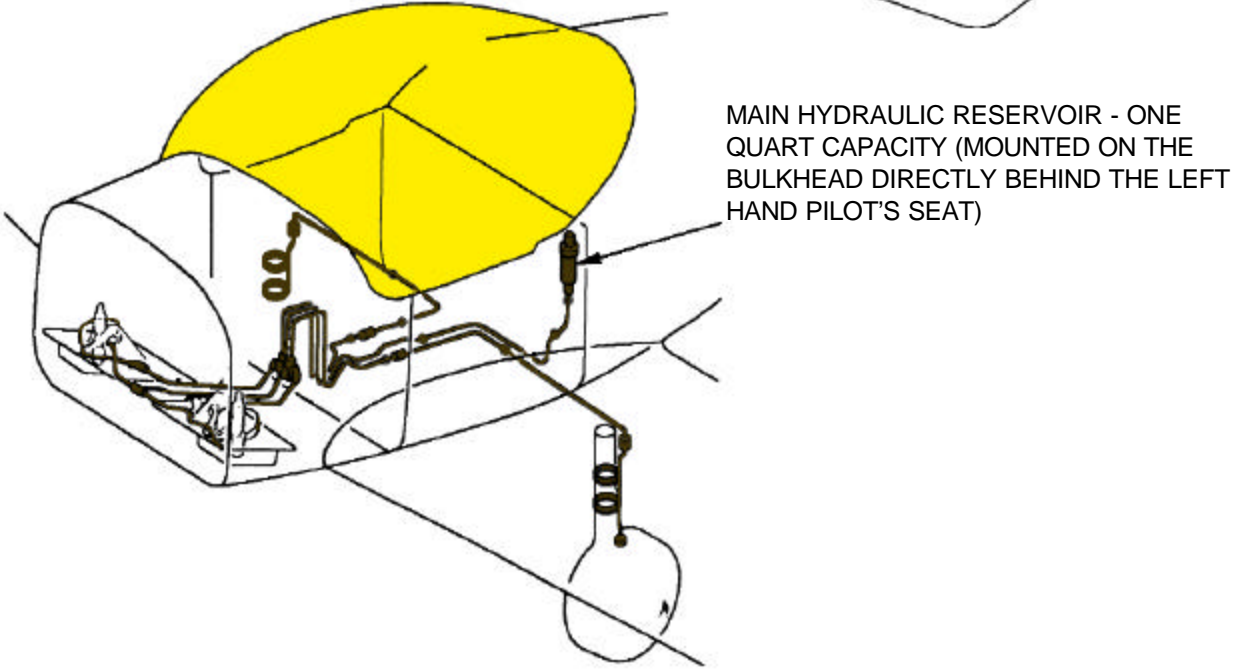
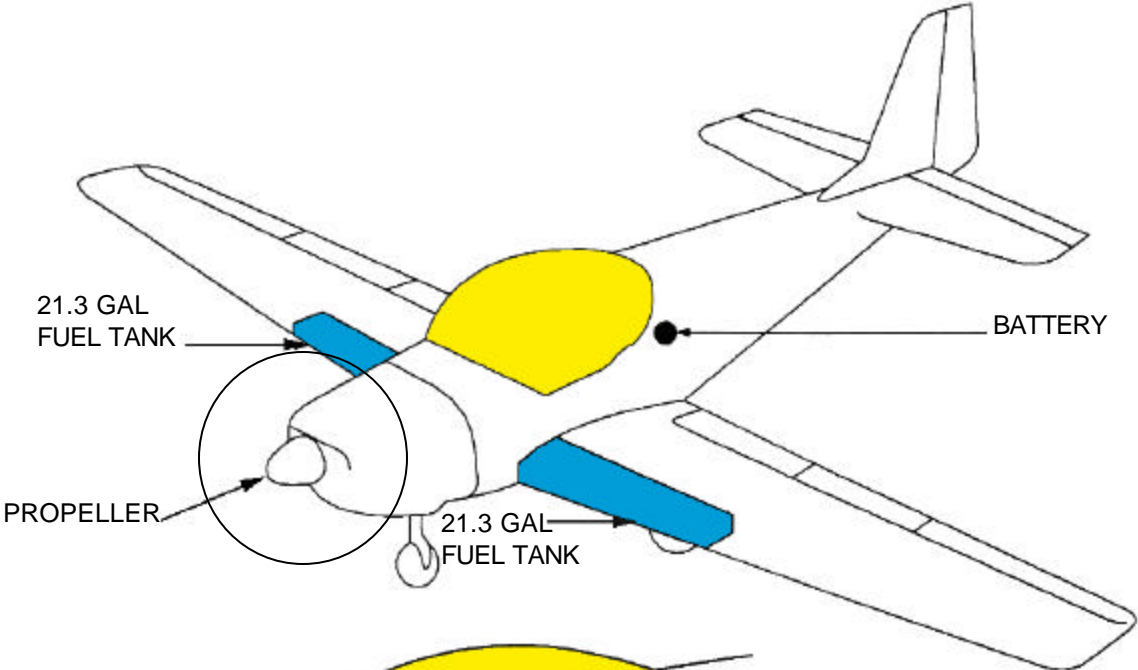


NOTE:
 Fuel lines run from forward portion of wing tanks along inside of cockpit wall (floor level - both sides) to selector valve and on through right side of firewall.

MATERIALS SYSTEM DESIGNATION IS FIBER/RESIN:

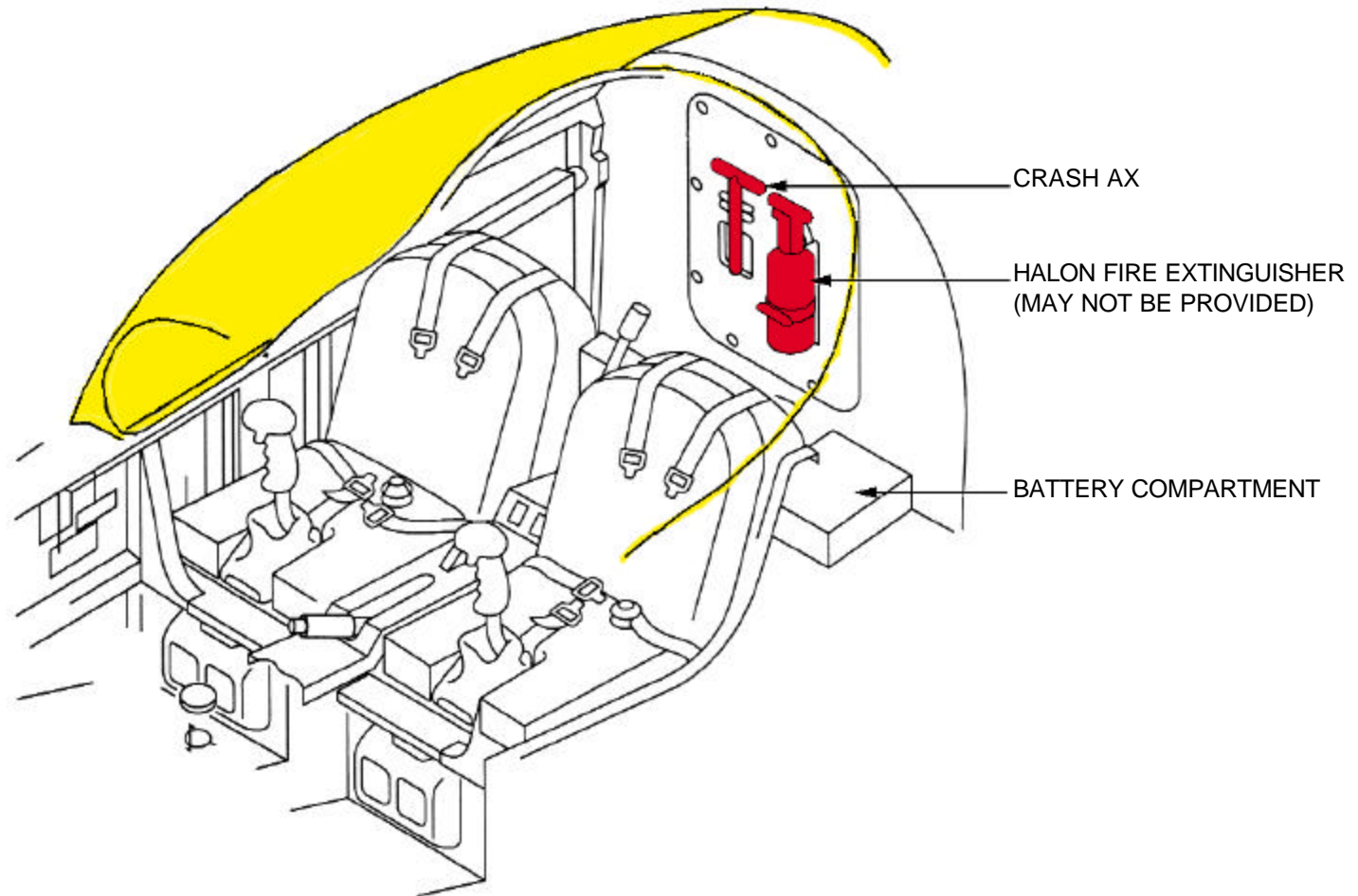
C = CARBON
 GL = GLASS
 E = EPOXY

LOCATION	SYSTEM
ENGINE COWLING	G/C/E
AIR INTAKE BOX	G/E
FUSELAGE LONGERON	G/E
SPAR CAP	G/E
WINDSCREEN	C/E
CANOPY HOOP	C/E



COCKPIT ARRANGEMENT

NORMAL CAPACITY
Two (2) Crewmembers

T-3A

SPECIAL TOOLS/EQUIPMENT
Power Rescue Saw
Fire Drill II

AIRCRAFT ENTRY

1. NORMAL ENTRY

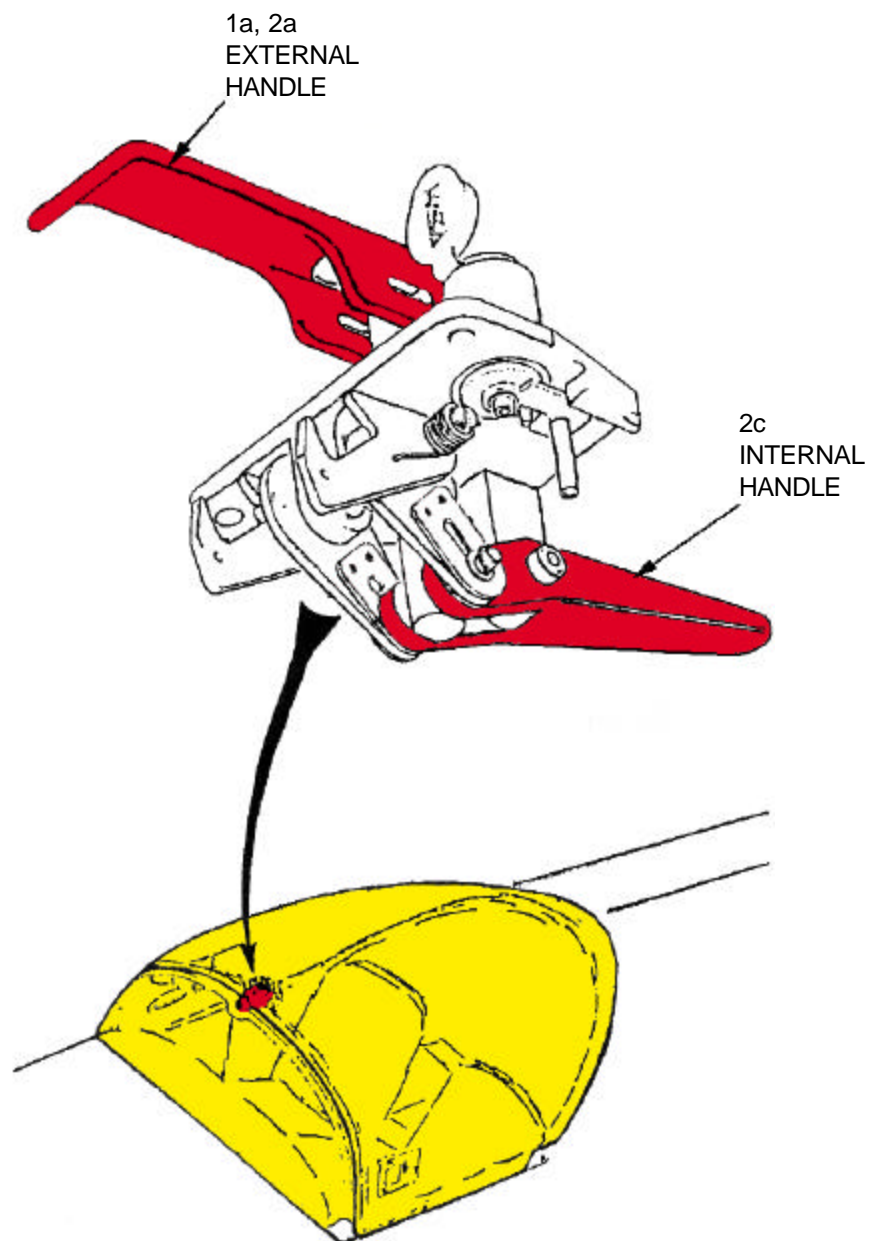
- a. Pull external handle, located forward center of canopy and windshield, up to unlock canopy.
- b. Slide canopy aft.

2. EMERGENCY ENTRY

- a. Pull external handle, located forward center of canopy and windshield, up to unlock canopy.
- b. Slide canopy aft.
- c. If external handle is damaged or broken off, access internal handle, push handle down and slide canopy aft.

3. CUT-IN

- a. Cut along canopy frame on all four sides.



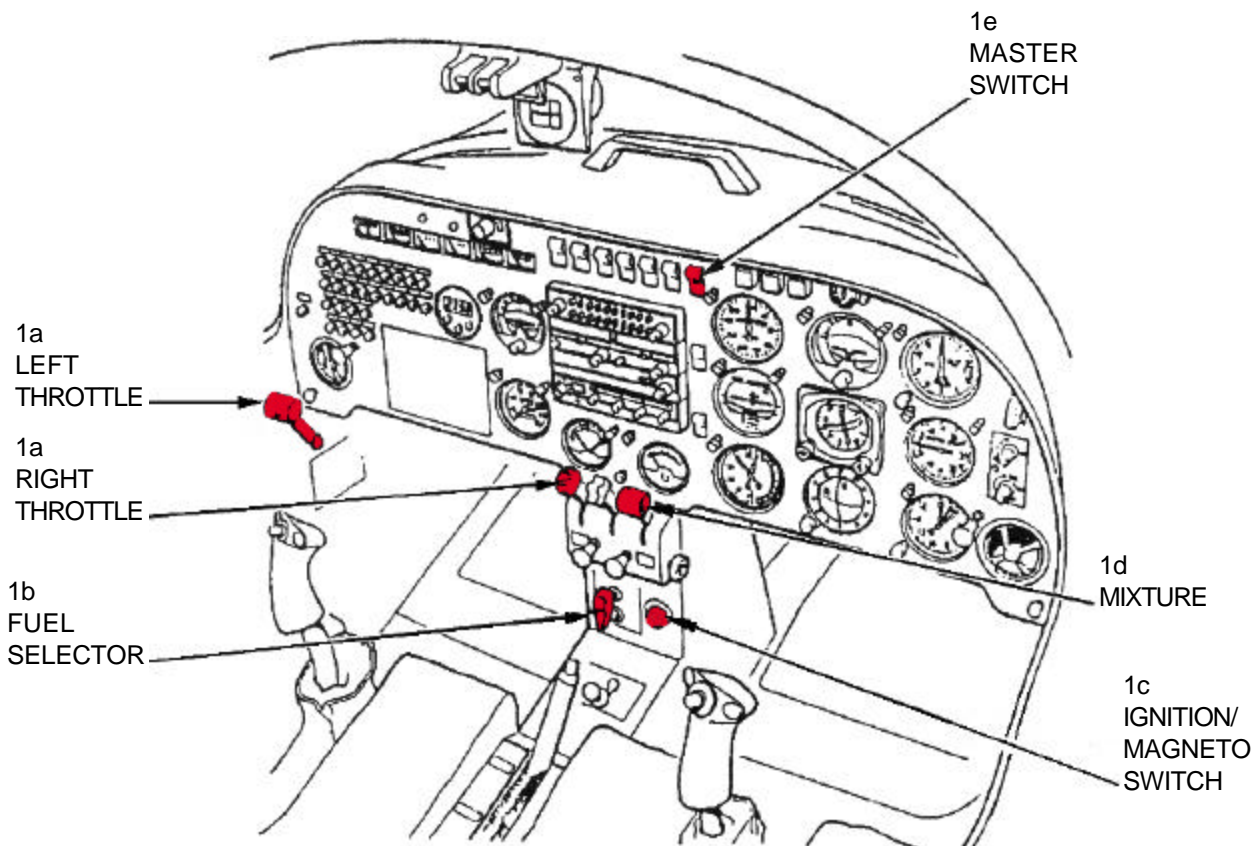
ENGINE SHUTDOWN

1. ENGINE SHUTDOWN

NOTE:

DO NOT OPERATE MASTER SWITCH until procedures are completed. Electrical power is needed for various switches to function properly.

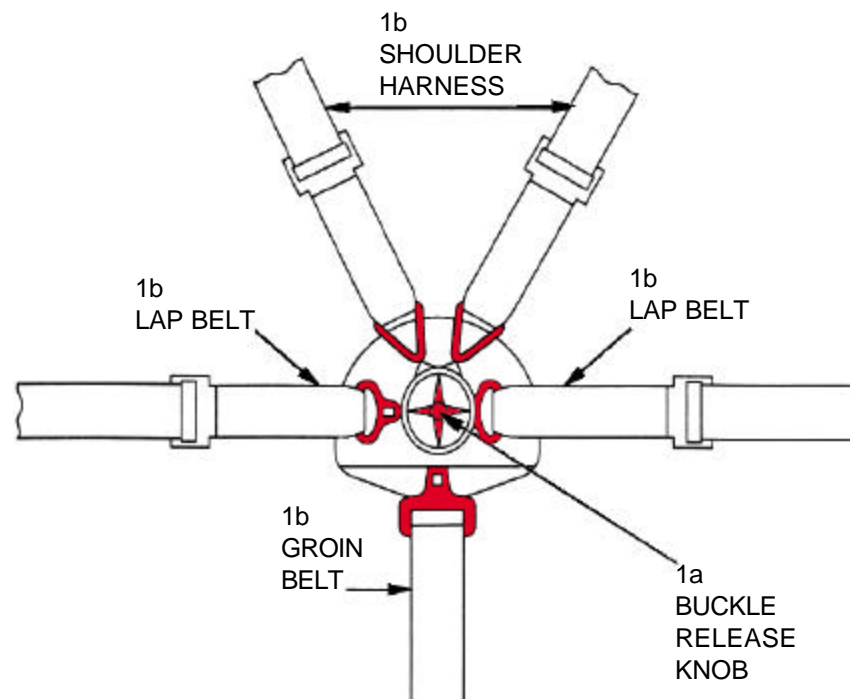
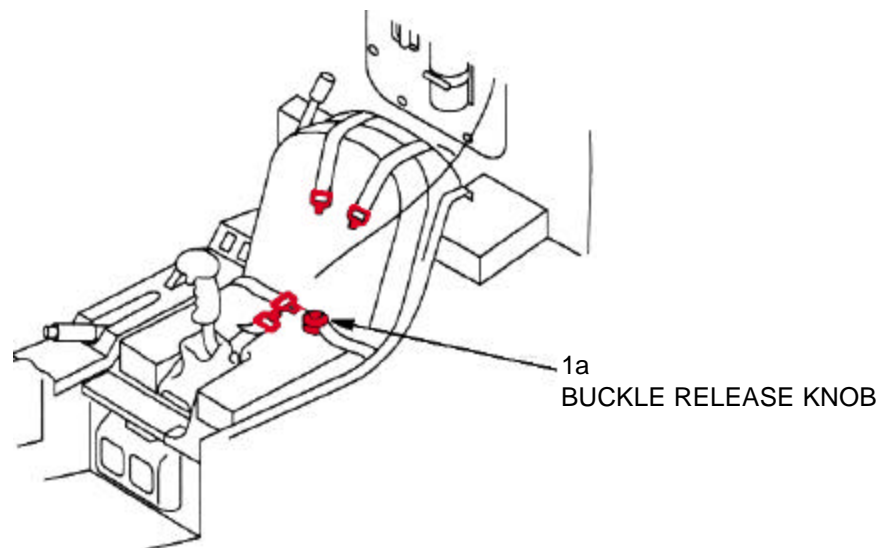
- a. Retard throttle lever, located on center console, to aft/down CUT-OFF position.
- b. Turn fuel selector switch, located on center console, fully counterclockwise to OFF.
- c. Turn magnetos (keyed switch), located on center console, fully counterclockwise to OFF.
- d. If time permits, retard mixture lever, located on center console, to aft/down CUT-OFF position.
- e. Turn master switch, located on upper center of instrument panel, to OFF to remove electrical power.



AIRCREW EXTRACTION

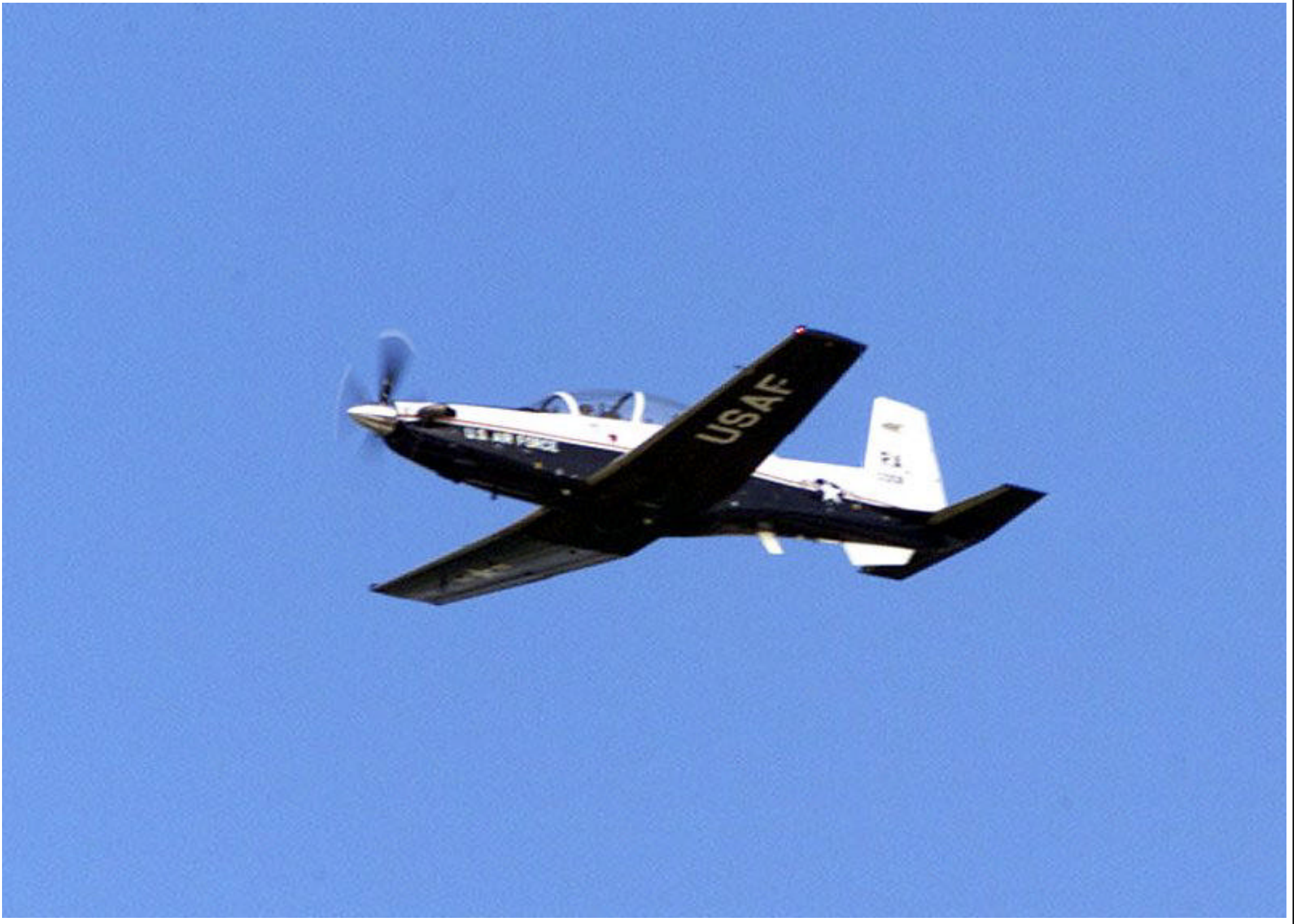
1. AIRCREW EXTRACTION

- a. Turn buckle release knob, located at center of restraints on occupant, to release restraint system.
- b. Clear shoulder harnesses, lap belts, and groin belt from crewmembers to prevent entanglement during extraction.
- c. Extract crewmembers carefully. Use Kendrick Kit or spine board if applicable.



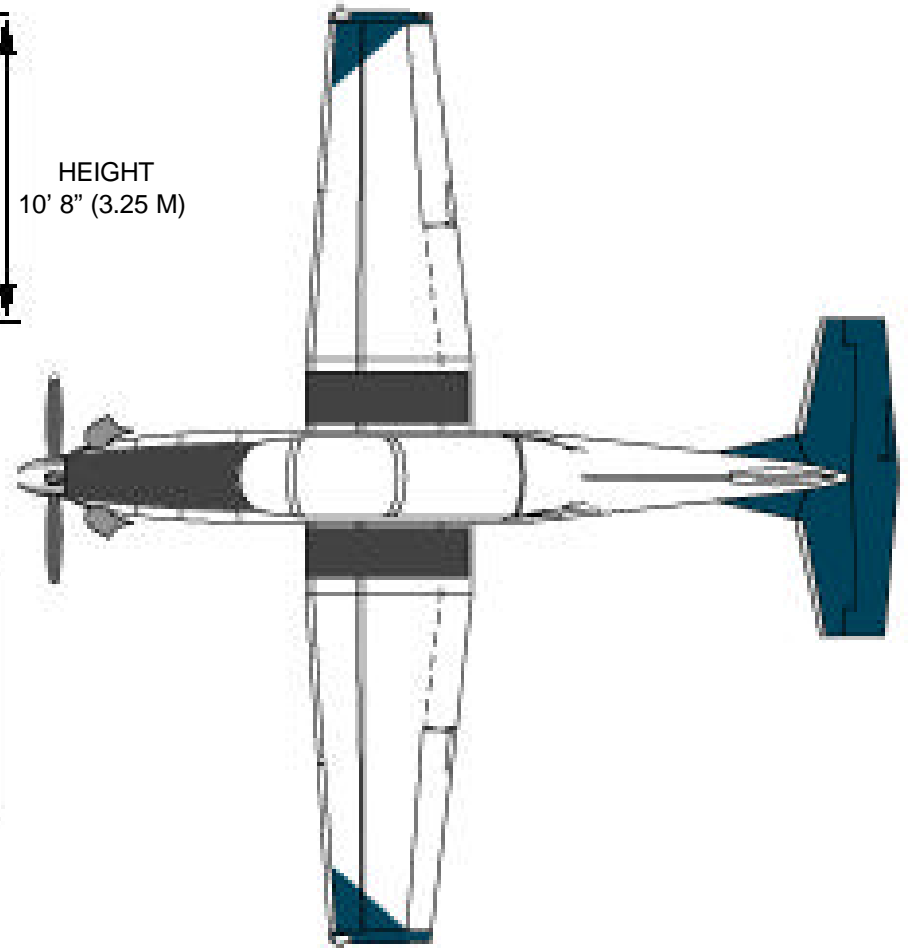
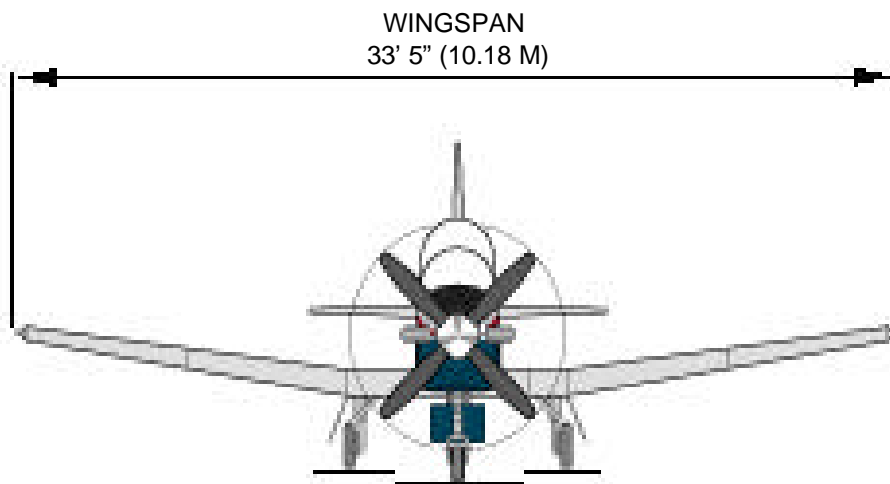
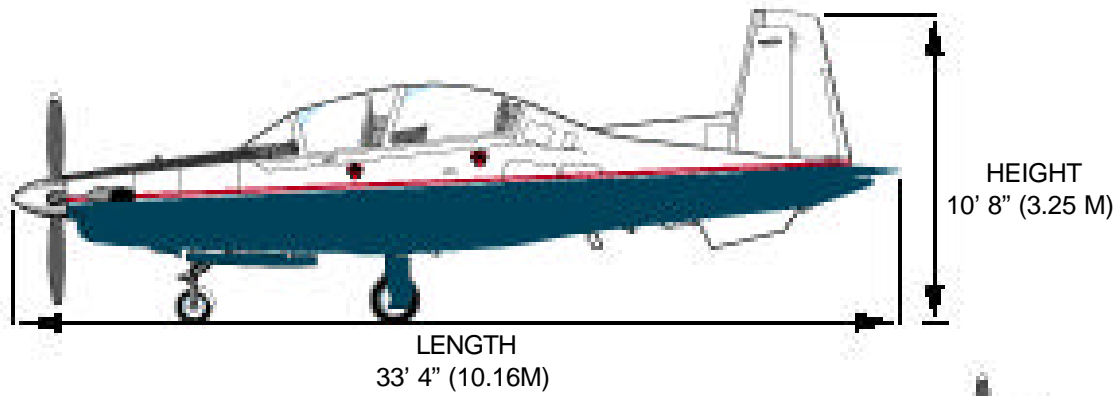
AIRCRAFT PAINT SCHEME

T-6A



AIRCRAFT DIMENSIONS

T-6A



AIRCRAFT HAZARDS

FLAMMABLE FLUIDS AND HAZARDOUS MATERIALS

NOTE:

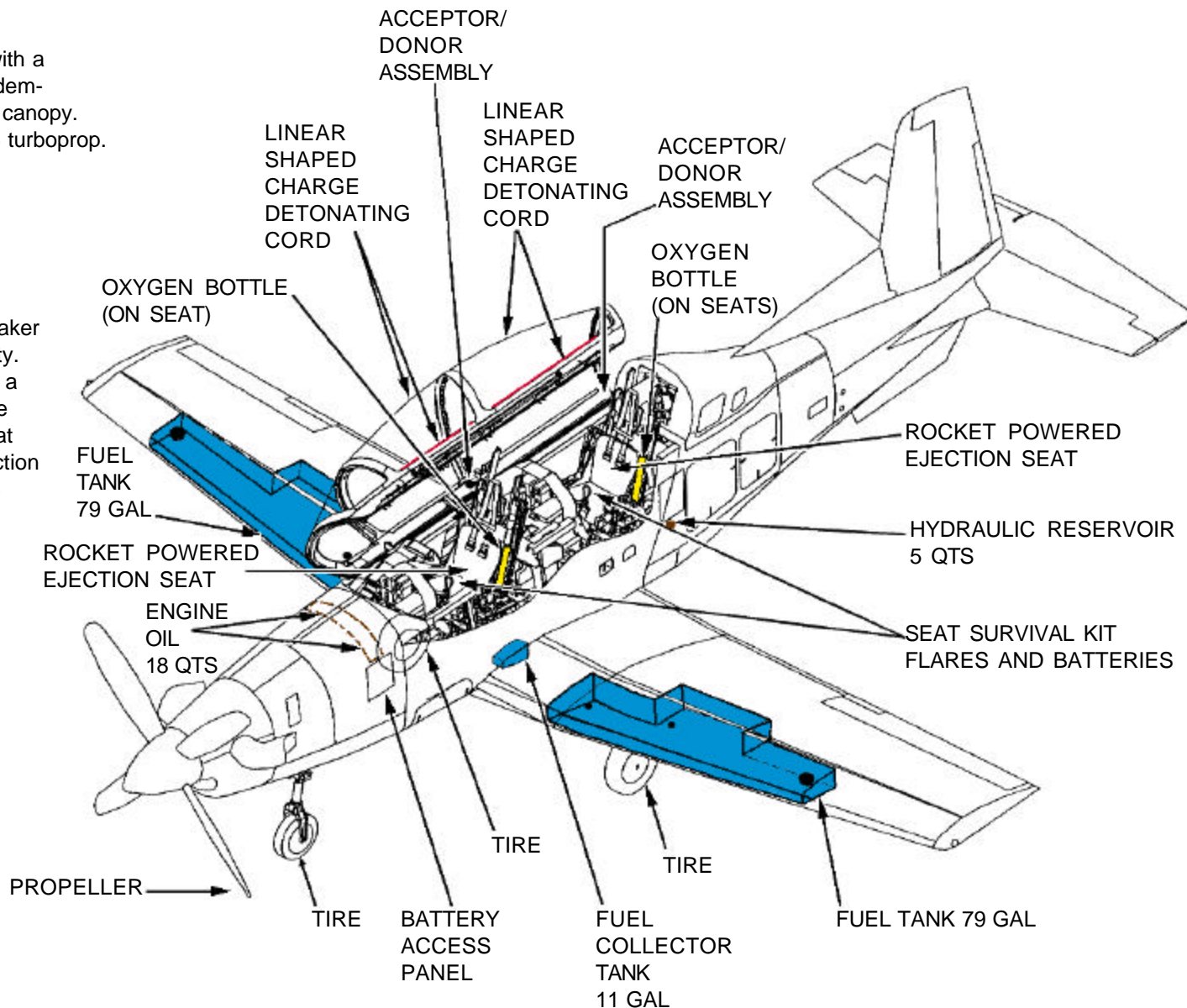
The T-6A is a low wing monoplane with a pressurized, two place, stepped, tandem-seating cockpit under a side opening canopy. Engine is a Pratt & Whitney PT6A-68 turboprop.

ENGINE FUEL:

JP-5, JP-8, JET A, JET A1, AND JET B

WARNING

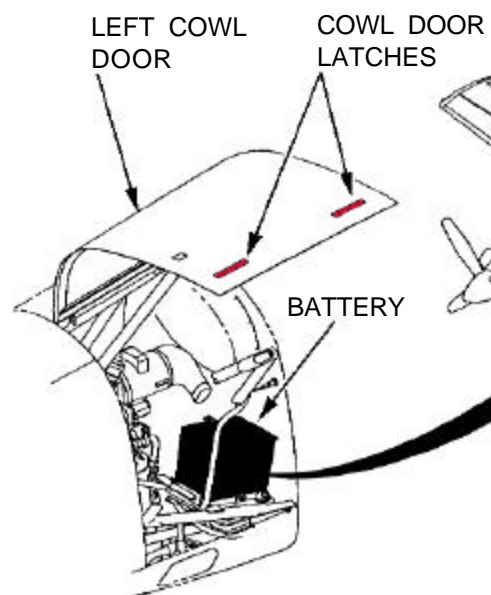
Aircraft is equipped with two Martin-Baker ejection seats with zero-zero capability. The ejection system is equipped with a Command Select Valve located on the forward instrument panel of the aft seat occupant which is used to select ejection sequence. Always work around these components to insure a safe rescue.



AIRCRAFT HAZARDS-Continued

BATTERY AND AUXILIARY POWER SUPPLY LOCATION

BATTERY:
ONE 24 VOLT

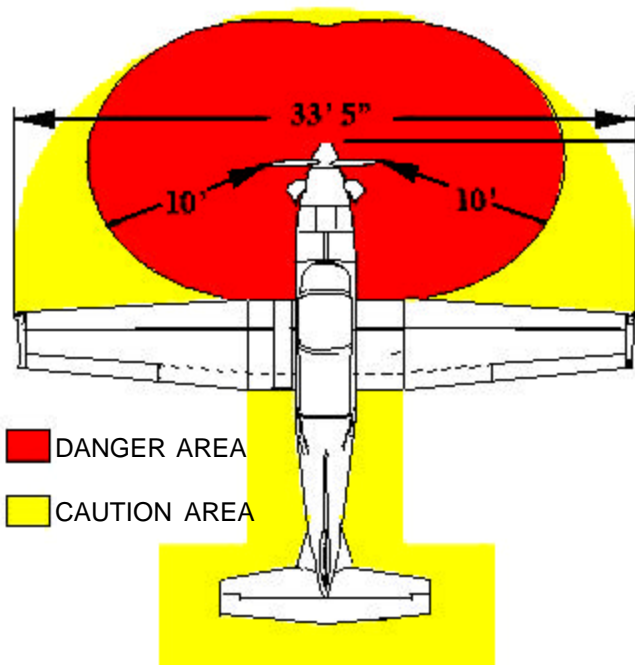


AUXILIARY POWER
SUPPLY AVIONICS RACK

AUXILIARY
POWER
SUPPLY

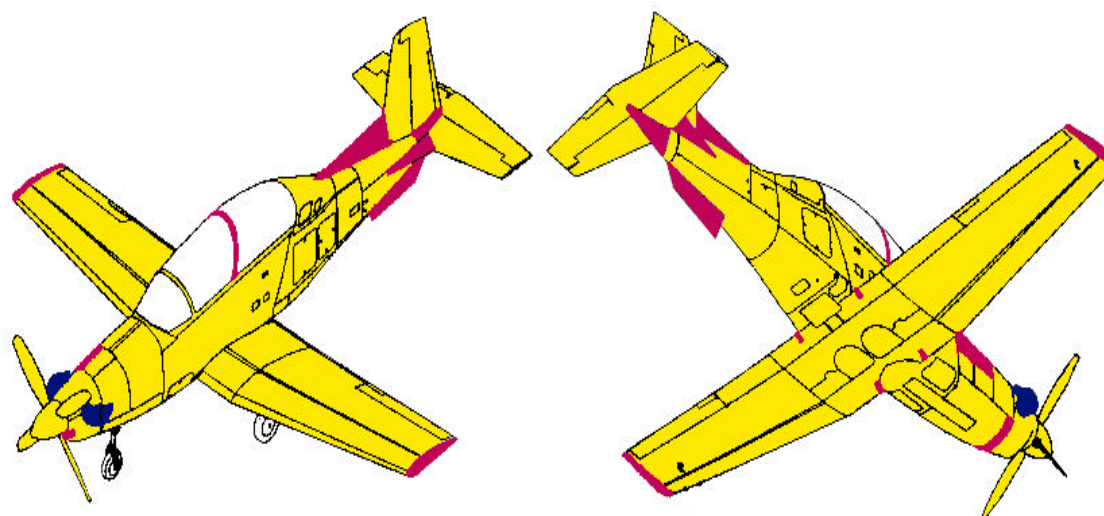
KNURLED
LOCKING
KNOB

PROPELLER DANGER AND PROPELLER WASH CAUTION AREAS



AIRFRAME
MATERIALS

ALUMINUM
FIBERGLASS
STEEL



T-6A

SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw
Crash Ax

T-6A

AIRCRAFT ENTRY

1. NORMAL ENTRY

NOTE:

Approach aircraft from left wing. Enter aircraft from left side of fuselage where the canopy open handle is located.

- a. Push unlock button, located forward of canopy open handle, to unlock canopy.
- b. Rotate canopy open handle clockwise to the open position.

NOTE:

Canopy is secure when in the full open position.

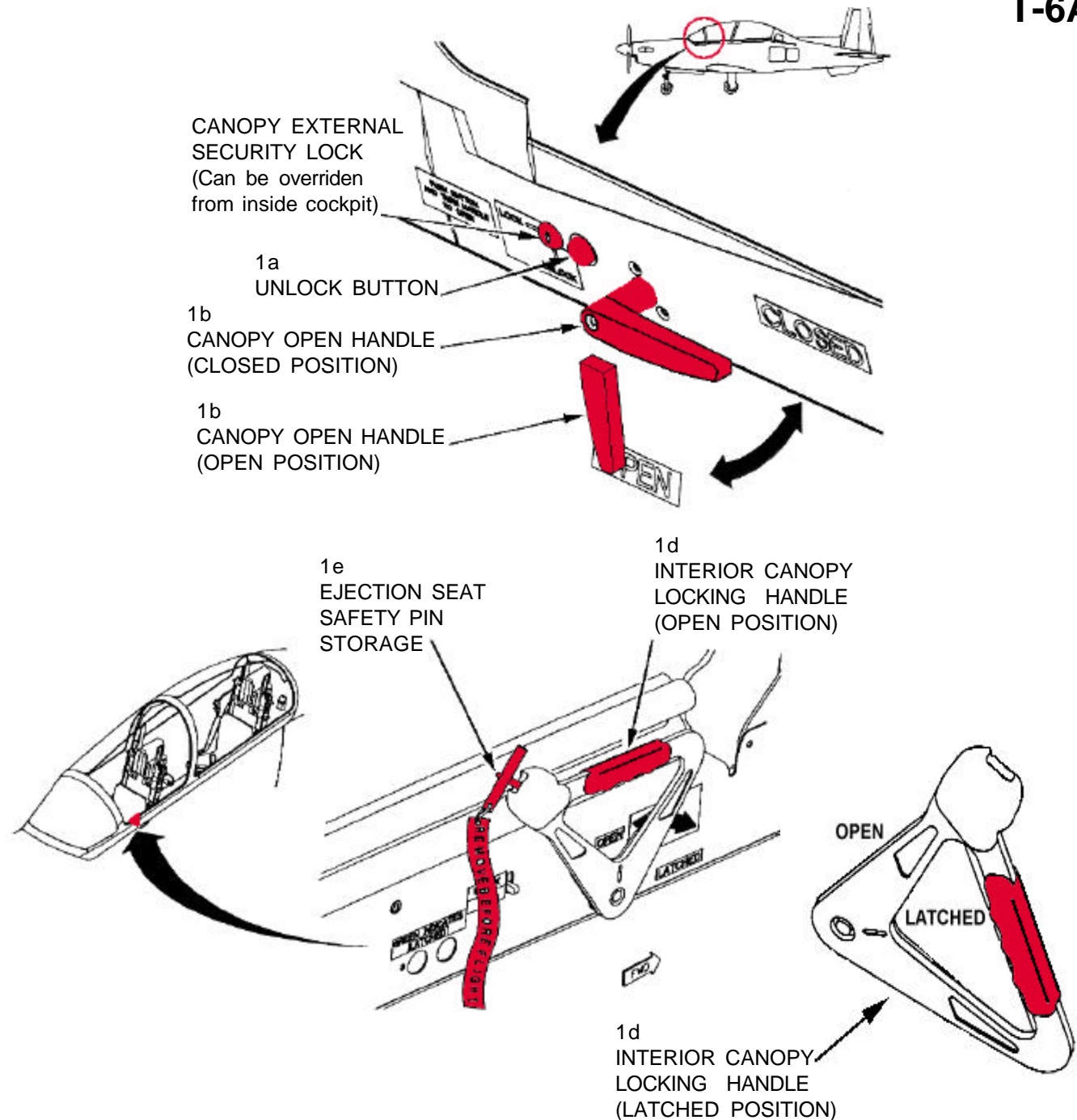
- c. Lift canopy up using the open handle.
- d. Rotate the interior canopy locking handle, located on the left canopy sill, to the CLOSED/LATCHED position.
- e. Normally, the ejection seat safety pin is stored in the internal canopy locking handle. Handle can be rotated with pin installed.

2. INTERNAL CANOPY LOCK HANDLE OPERATION

NOTE:

The following is for information only and not part of the entry procedures.

- a. Rotate the interior canopy locking handle, located on the left canopy sill, to the CLOSED/LATCHED position.



AIRCRAFT ENTRY-Continued

2. EMERGENCY ENTRY

NOTE:

Canopy fracturing system (CFS) is installed.
Canopy does not jettison.

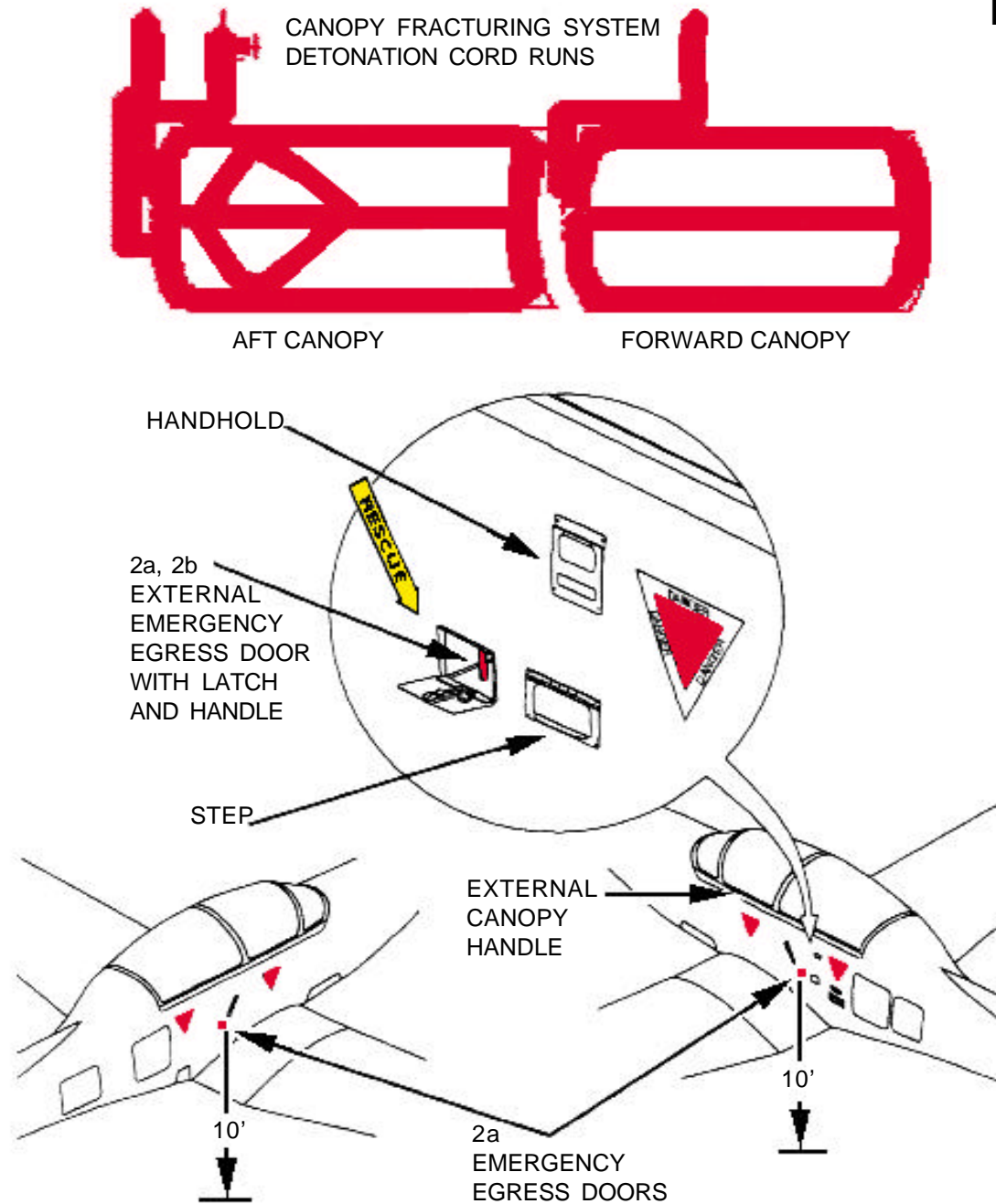
WARNING

Detonation cord is glued to inside of canopy. Face away from aircraft when initiating system due to possibility of flying fragments of canopy plexiglass.

- a. Open external emergency egress door, located near either wing trailing edge on side fuselage.
- b. Push latch on egress door, located on either side fuselage under aft canopy sill.
- c. If CFS safety pin is installed, remove pin and then remove "T" handle by pulling outward and aft.
- d. Pull "T" handle and lanyard out to full extension of 10 feet.
- e. Face away and pull sharply to initiate canopy fracturing system. Both transparencies will fracture and fall away.

3. CUT-IN

- a. If CFS system is inoperative, use power rescue saw or crash ax to gain cockpit entry.



T-6A

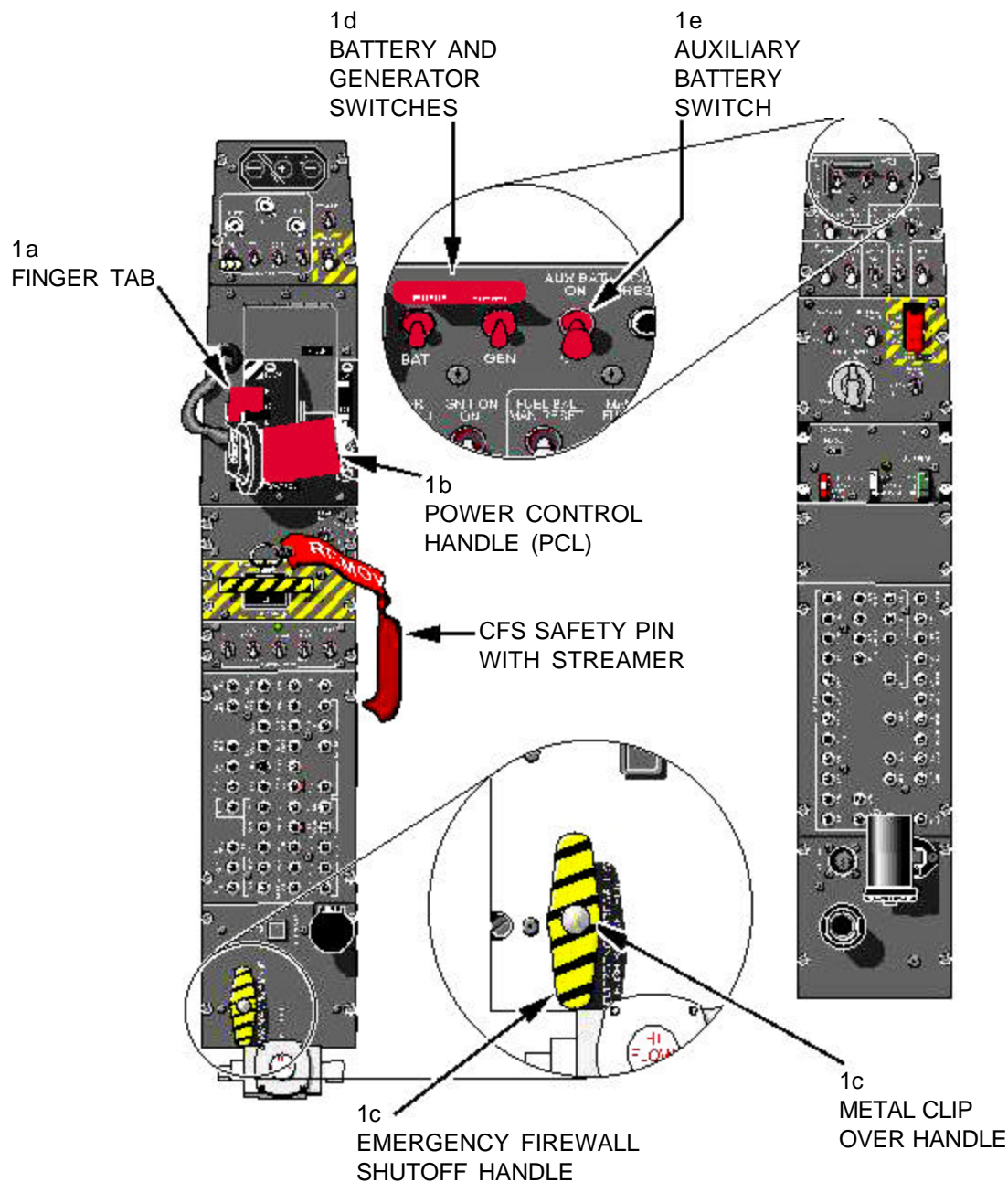
ENGINE SHUTDOWN

1. ENGINE SHUTDOWN

NOTE:

Emergency engine shutdown (to include shutting off fuel, hydraulics, and bleed air supply via the firewall shutoff handle), can be accomplished in the front cockpit only. If the front cockpit is not accessible and the engine needs to be shutdown, normal engine shutdown can also be accomplished from the rear cockpit. (In the event the front cockpit controls are not accessible or damaged, and the engine is still running, the PCL can also be placed to "OFF" from the rear cockpit.)

- Move power control lever (PCL) to idle and raise finger tab, located on the forward side of throttle handle.
- Retard power control handle (PCL), located on left console, to full aft OFF position.
- Remove metal clip and pull emergency firewall shutoff handle, located on left aft control panel of forward cockpit, to the UP position.
- Place battery and generator gang switches, located on right horizontal control panel, aft or down to OFF position.
- Lift up and move auxiliary battery switch, located right side battery/generator switch on right console, aft to OFF position.



SAFETYING EJECTION SEAT AND CANOPY FRACTURING SYSTEM

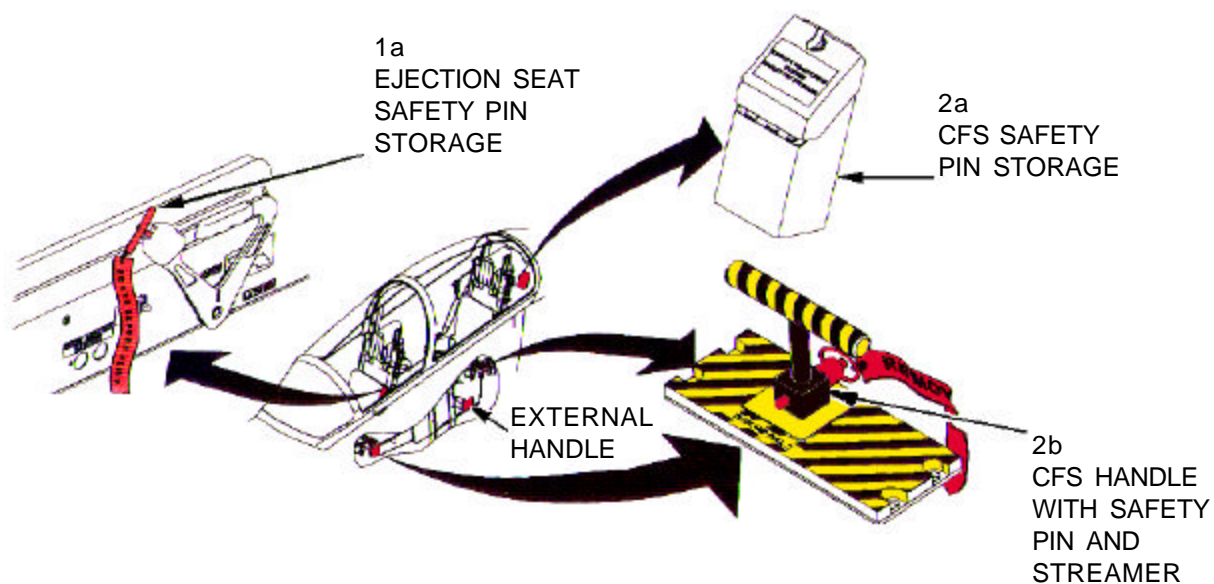
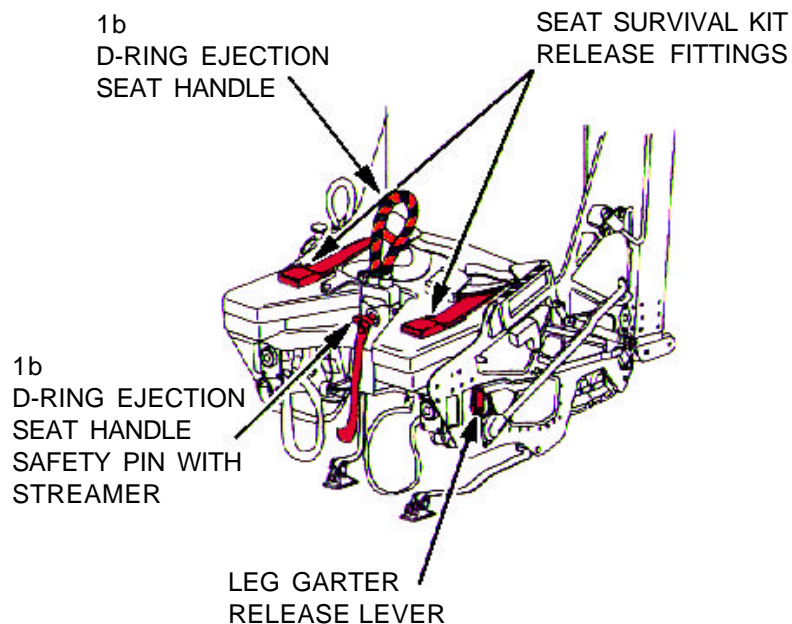
T-6A

1. SAFETYING EJECTION SEAT

- a. Ejection seat safety pins are normally stored in the canopy unlock handle, located on the left canopy sill.
- b. Insert seat safety pin into D-ring ejection seat handle, located front center of both seats to prevent inadvertent ejection during extraction of crew members.

2. CANOPY FRACTURING SYSTEM (CFS)

- a. CFS safety pins are stored in the pin storage box on the aft cockpit bulkhead.
- b. Insert CFS safety pins in the CFS handles located on the left consoles in both cockpits.



AIRCREW EXTRACTION

1. AIRCREW EXTRACTION

WARNING

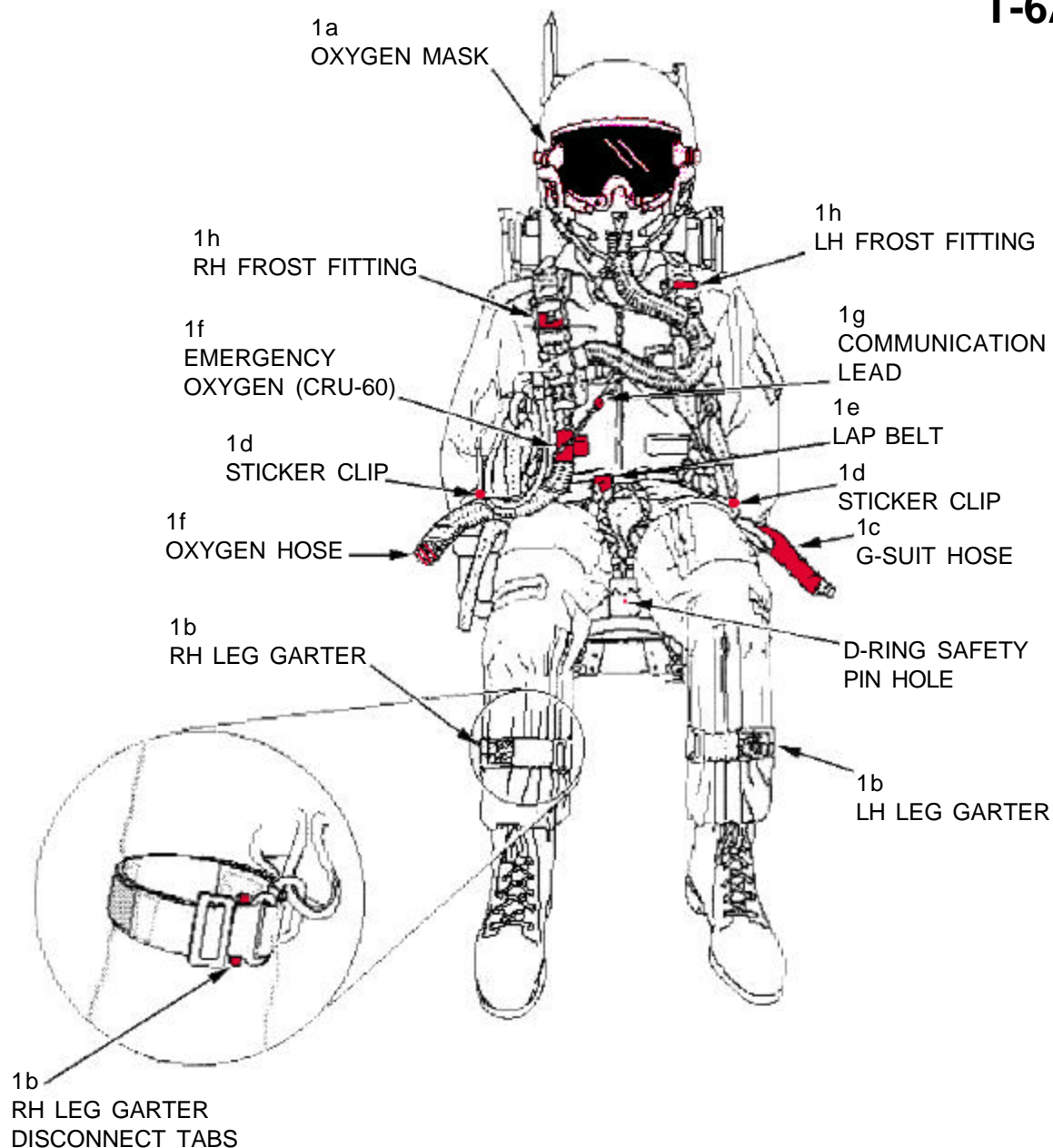
Insure safety pins are installed in D-ring ejection seat handle and CFS handle to prevent inadvertent ejection and detonation of the canopy fracturing system.

- a. Remove oxygen mask, if not previously done.
- b. Disconnect quick release connector on right and left leg garters at crew member's shins by squeezing tabs inward.
- c. Disconnect anti-G suit connection, located on left side of crew member, by pulling apart.
- d. Disconnect survival kit sticker clips from left and right torso harness V-rings.
- e. Unlatch lap belts connection and lay lap belts aside.
- f. Disconnect oxygen and emergency oxygen hoses, located on right side of crew member, by pulling hoses apart.
- g. Disconnect communication lead, located on oxygen hose, by pulling apart.

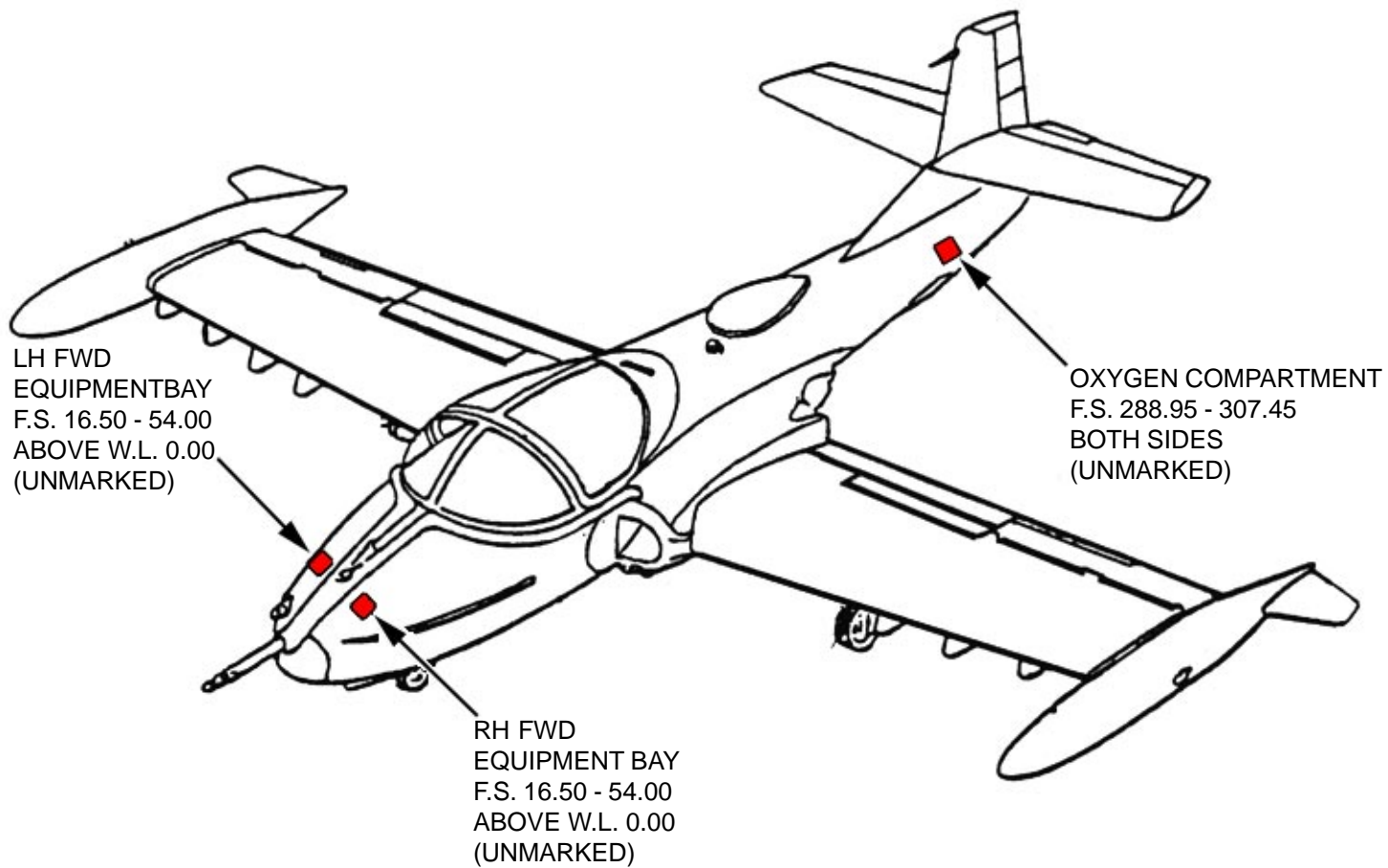
NOTE:

Torso harness contains strobe lights with batteries.

- h. Unlatch right and left parachute frost fittings/risers from torso harness and lay shoulder harness straps aside.
- i. Remove crew members carefully.

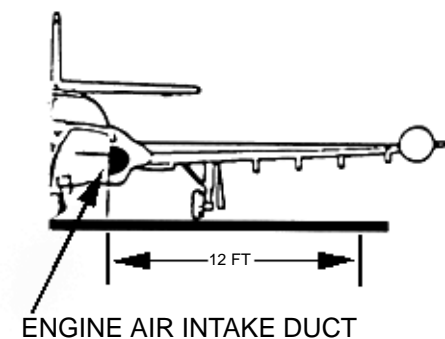
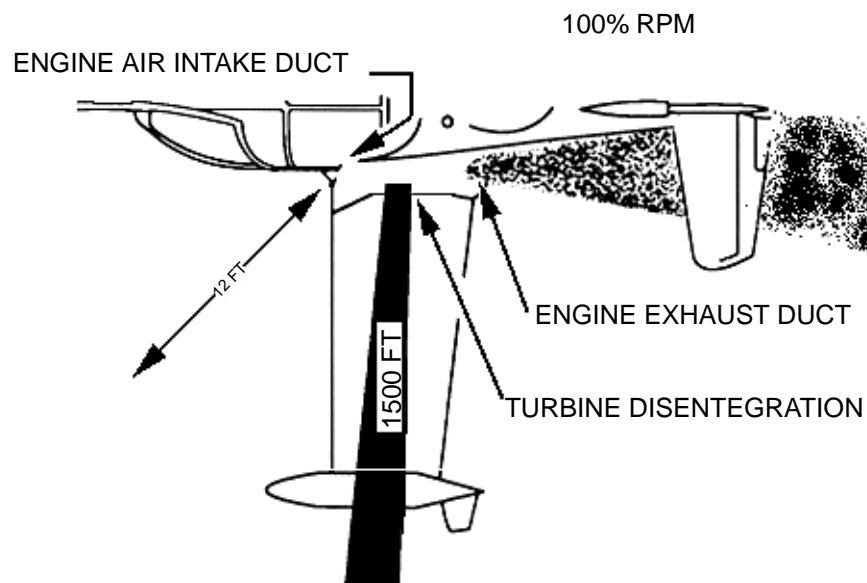


T-6A



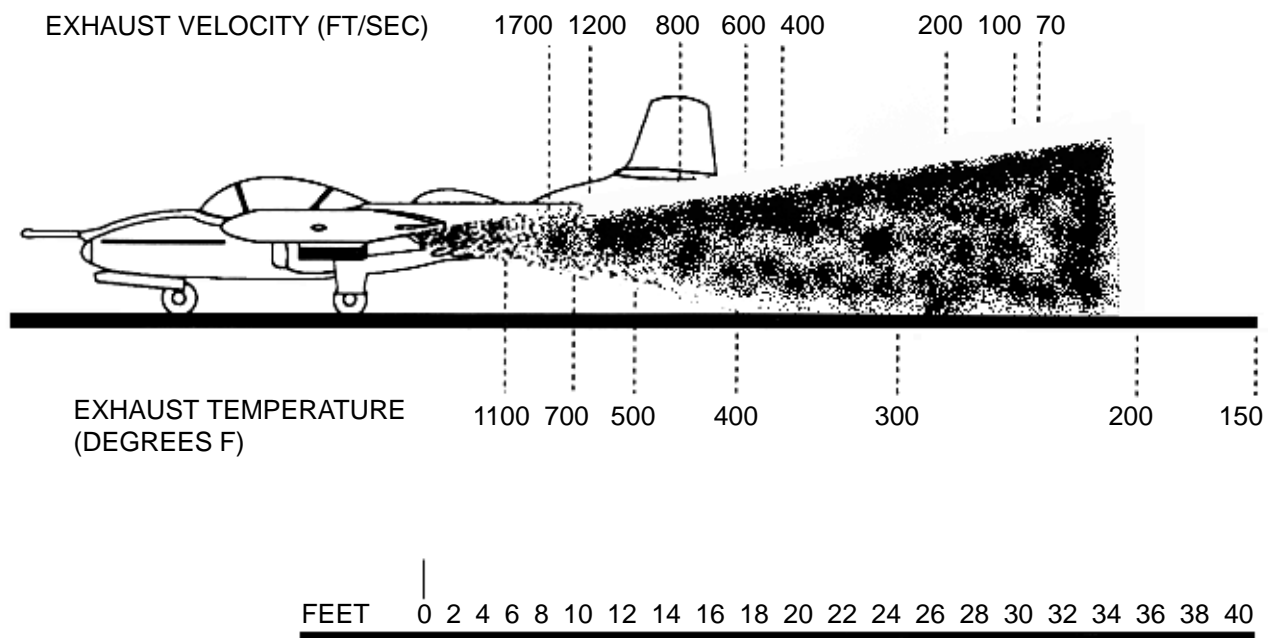
AIRCRAFT HAZARD INFORMATION

T-37



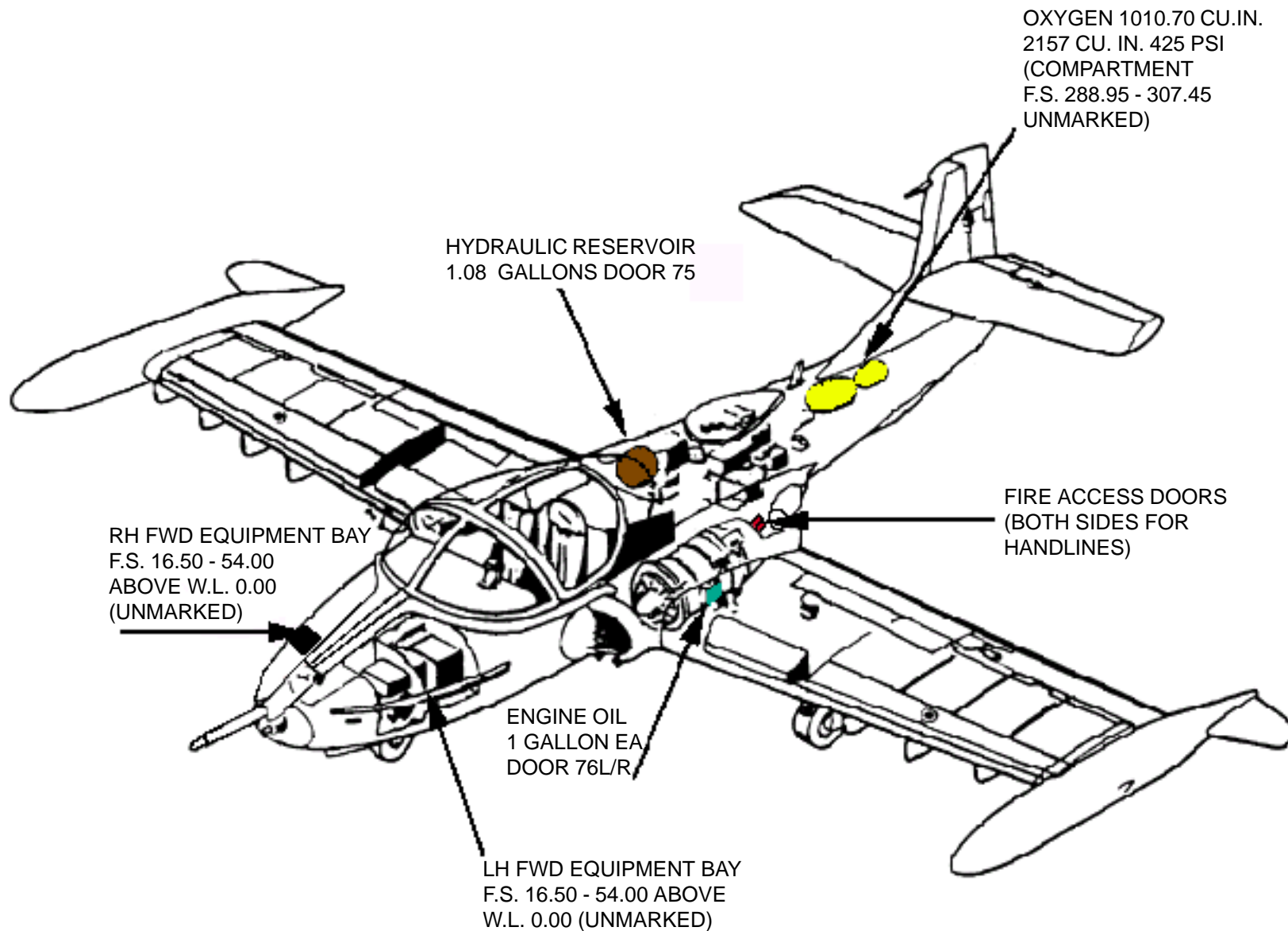
WARNING

Suction at the engine intake duct is sufficient to kill or severely injure personnel drawn into, or against, the duct.



AIRCRAFT HAZARD INFORMATION - Continued

T-37



SPECIAL TOOLS/EQUIPMENT
Power Rescue Saw
Darming Tool
Entry Tool, Locally Manufactured

AIRCRAFT ENTRY

1. NORMAL ENTRY

- Press latch and open canopy access release door, located on left side of fuselage below canopy, place canopy circuit switch to aft EXTERNAL position.
- Unzip lining, extend entry tool through and push canopy downlock handle to aft position.
- Place external canopy open/close switch, located next to canopy circuit switch, aft, to open position, and hold until canopy reaches full open.

2. MANUAL ENTRY

- Press latch and open canopy access release door, located on left side of fuselage below canopy, place canopy circuit switch to aft EXTERNAL position.
- Unzip lining, extend entry tool through and push canopy downlock handle to aft position.
- Pull and hold de-clutch T-handle out and raise canopy to full open position.

NOTE:

Two fire protection personnel, one each side, are required to raise canopy.

WARNING

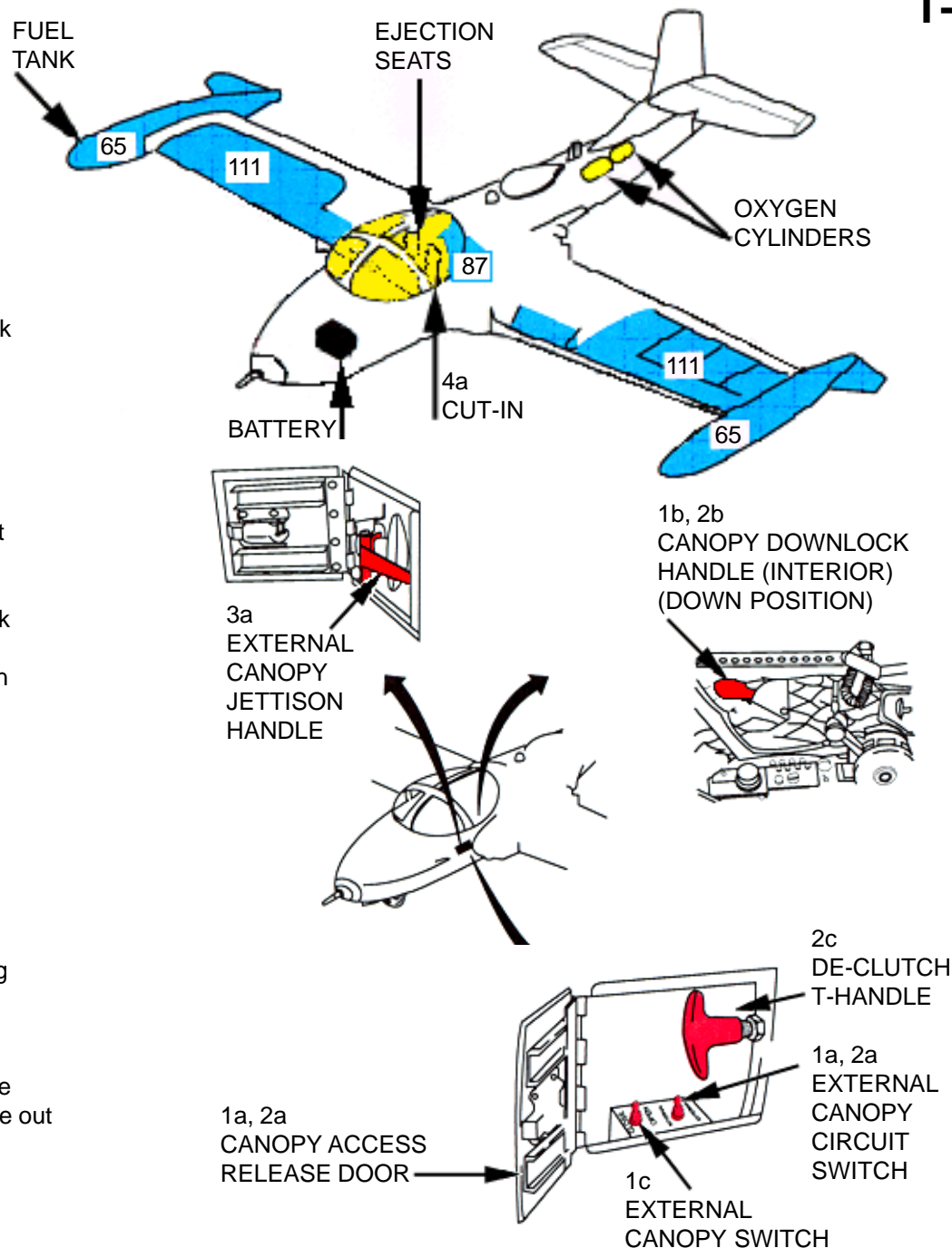
If canopy de-clutch T-handle is pulled out when the canopy is in the open position (full or partial) the canopy will slam shut causing injury to personnel under it.

3. EMERGENCY ENTRY

- Press latch and open emergency canopy door, located on left side of fuselage below canopy, and pull external canopy jettison handle out and forward. (T-handle for internal, I-handle for external.)

4. CUT-IN

- Cut canopy along canopy frame.



ENGINE SHUTDOWN

1. ENGINE SHUTDOWN

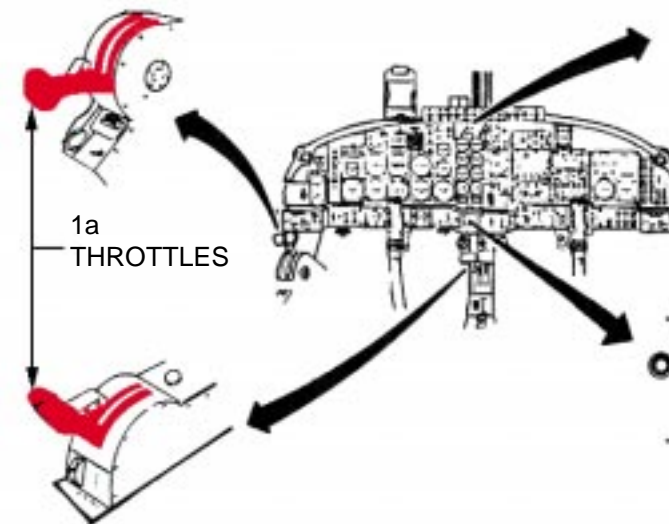
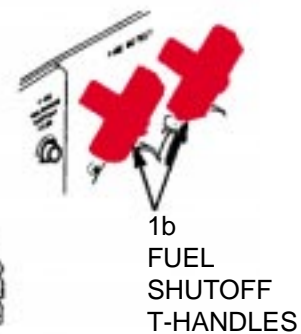
NOTE:

Engines cannot be shutdown using the pilot's (left) throttle.

- a. Raise throttles, located on instructor's quadrant, and retard to full aft CUT-OFF position.
- b. Pull fuel shutoff T-handles.
- c. Place battery switch, located center on instrument panel, to OFF position.

PILOT'S
THROTTLES

INSTRUMENT PANEL



INSTRUCTOR'S
THROTTLES

SAFETYING EJECTION SYSTEM AND AIRCREW EXTRACTION

1. NORMAL SAFETYING EJECTION SEAT

- a. Insert arming handle safety pins in lower right side of both ejection seats.

2. EMERGENCY SAFETYING EJECTION SEAT

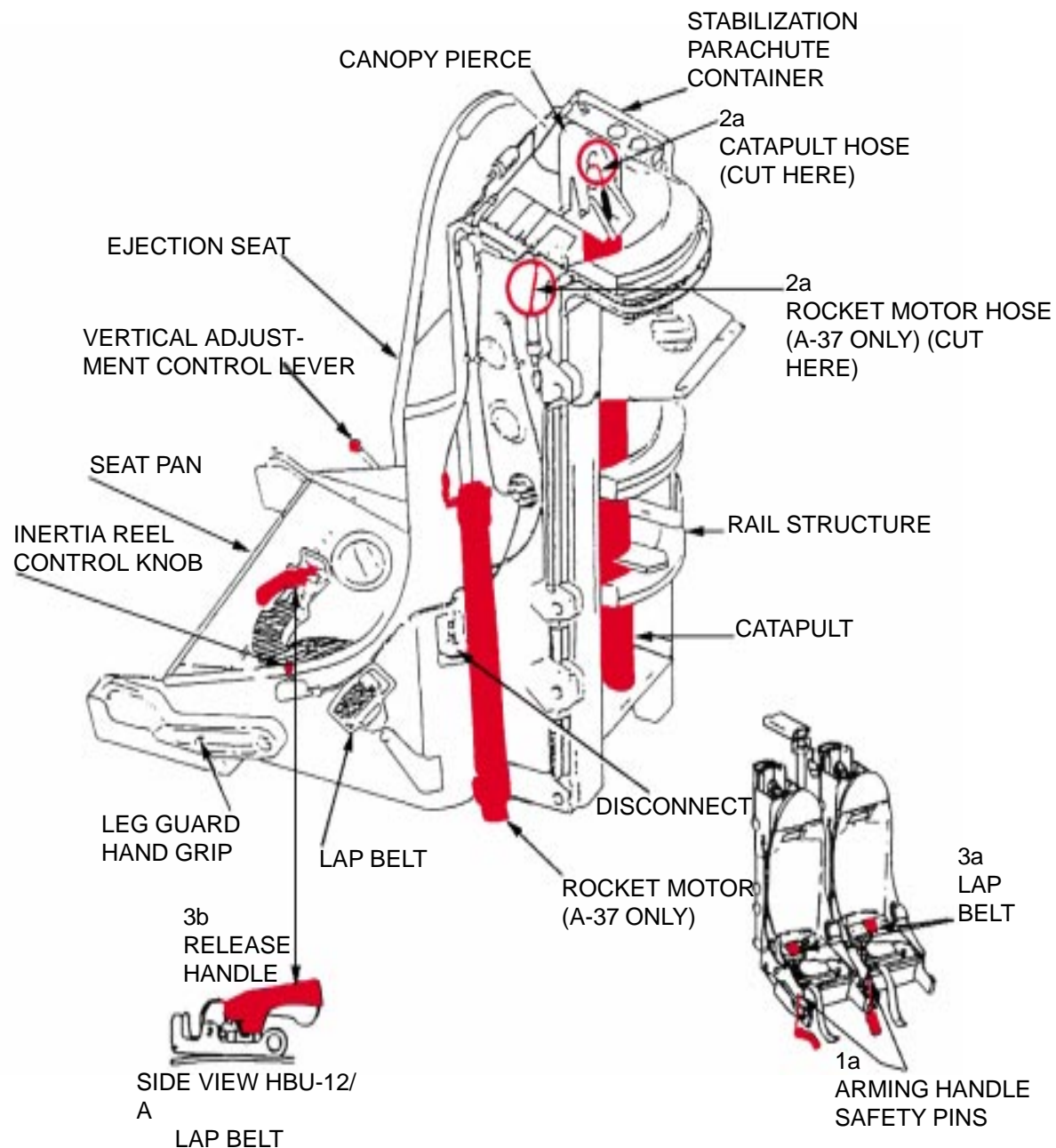
- a. Cut catapult hose located behind headrest just aft of canopy piercer and cut rocket motor initiator hose located on outboard side of both seats.

3. AIRCREW EXTRACTION

- a. Unlatch lap belt and remove shoulder harness from crewmember(s).
- b. On HBU-12/A lap belt, squeeze together the black and silver grips of the handle and lift up. Separate belt and remove gold key. Remove shoulder harness/negative "G" restraint strap loop ends.

NOTE:

Use pilot's throttle to throttle back engines.
Seats must be safetied before engines are shutdown at instructor's throttle.



AIRCRAFT SKIN PENETRATION POINTS, DIMENSIONS, AND HAZARD AREAS

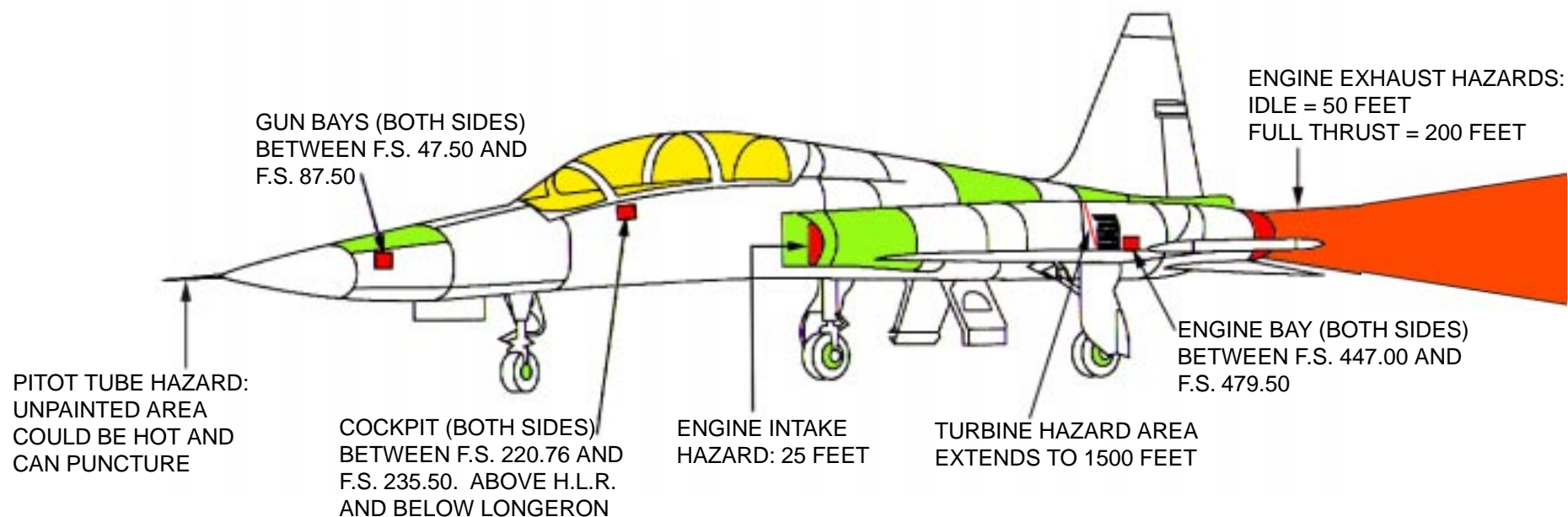
DIMENSIONS:

WING SPAN 25 FEET
HEIGHT 12.9 FEET
LENGTH 46.3 FEET

WARNING

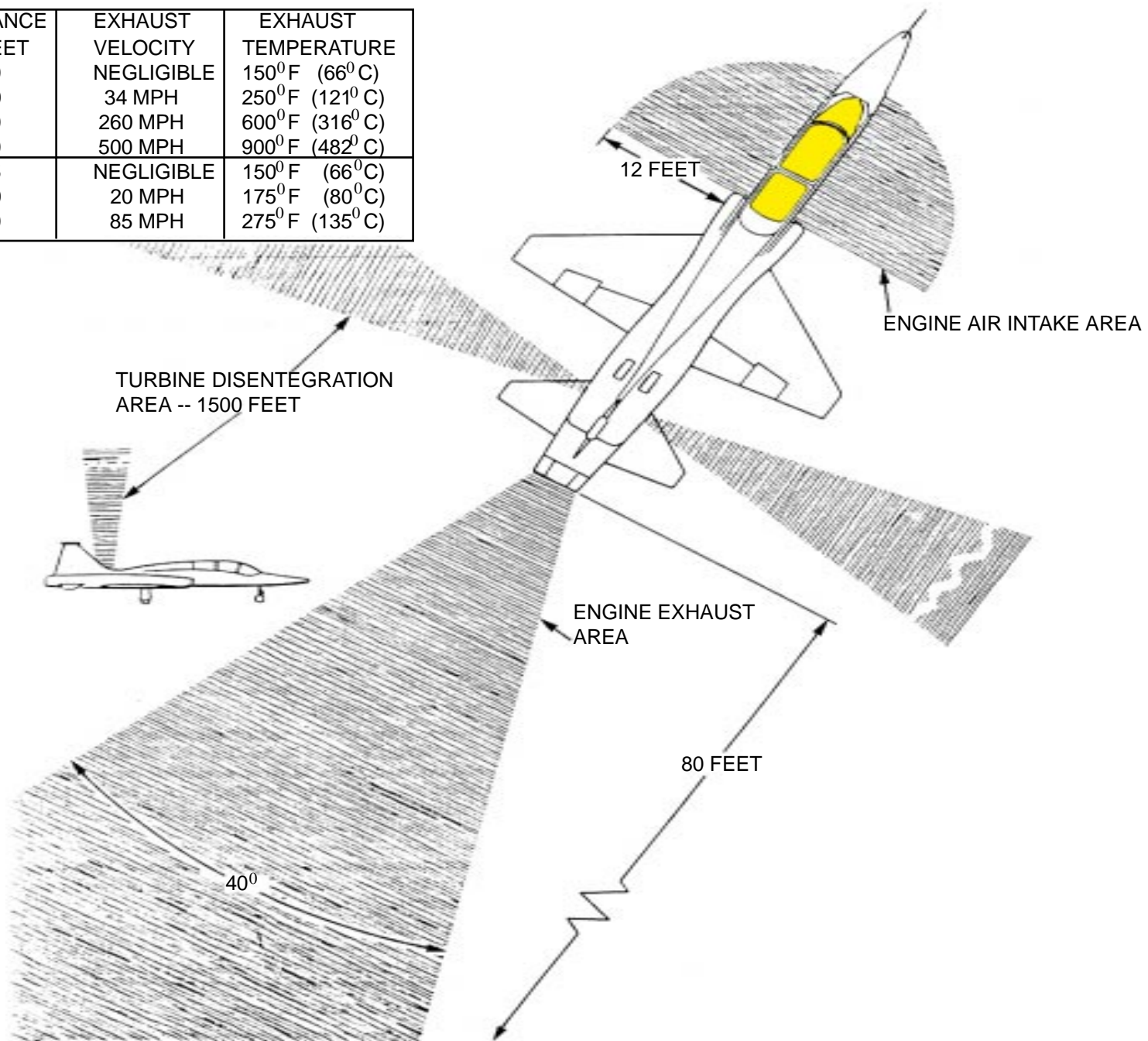
Magnezium fires should be fought with dry chemical and not water. Water usage will spread fire.

- PLEXIGLASS
 - WINDSHIELD AND CANOPIES
- MAGNEZIUM
 - WHEELS
 - AFT OF NOSE CONE
 - COCKPIT
 - INTAKE COVERINGS
 - CENTER OF FUSLAGE
 - FORWARD ENGINE AREA
 - AREA AROUND VERTICAL STABILIZER



AIRCRAFT HAZARD AREAS

	DISTANCE IN FEET	EXHAUST VELOCITY	EXHAUST TEMPERATURE
MAXIMUM THRUST	80	NEGLIGIBLE	150 ⁰ F (66 ⁰ C)
	60	34 MPH	250 ⁰ F (121 ⁰ C)
	30	260 MPH	600 ⁰ F (316 ⁰ C)
	20	500 MPH	900 ⁰ F (482 ⁰ C)
TAXI THRUST (IDLE)	35	NEGLIGIBLE	150 ⁰ F (66 ⁰ C)
	30	20 MPH	175 ⁰ F (80 ⁰ C)
	20	85 MPH	275 ⁰ F (135 ⁰ C)



SPECIAL TOOLS/EQUIPMENT

Dearming Tool
Power Rescue Saw
Safety Pin P/N 50615
Fire Drill II

AIRCRAFT ENTRY**1. NORMAL ENTRY**

- a. Push latches to open door, located on left side of fuselage.

CAUTION

Opening canopy under windy conditions could cause inadvertant canopy separation from aircraft.

- b. Pull handle(s) out until engaged and rotate clockwise to unlock and raise canopy, give canopy assistance while rotating handle.

NOTE:

Canopies are secure when raised to full open position.

2. EMERGENCY ENTRY

- a. Push latch on canopy jettison access door, located on left and right side of forward fuselage, to open.
- b. Pull canopy jettison D-handle, approximately 6 feet to jettison both canopies.

3. CUT-IN

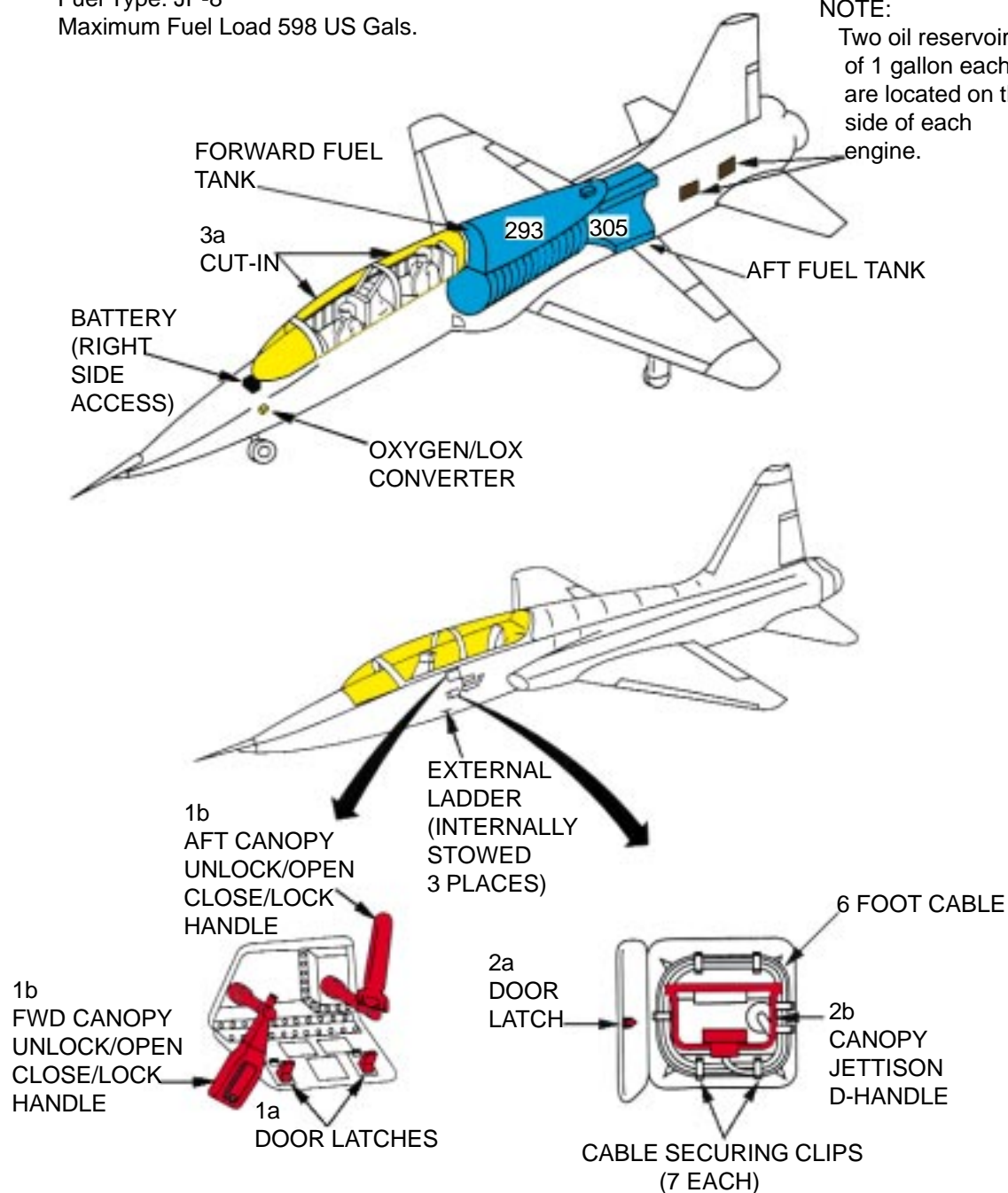
- a. Cut canopy along canopy frame on all 4 sides.

NOTE:

Fuel Type: JP-8
Maximum Fuel Load 598 US Gals.

NOTE:

Two oil reservoirs of 1 gallon each are located on the side of each engine.



ENGINE SHUTDOWN

1. ENGINE SHUTDOWN (FWD COCKPIT ONLY)

NOTE:

AETC operated aircraft have a throttle gate installed on the aft portion of the throttle console in the forward cockpit. The throttle gate must be disengaged prior to proceeding.

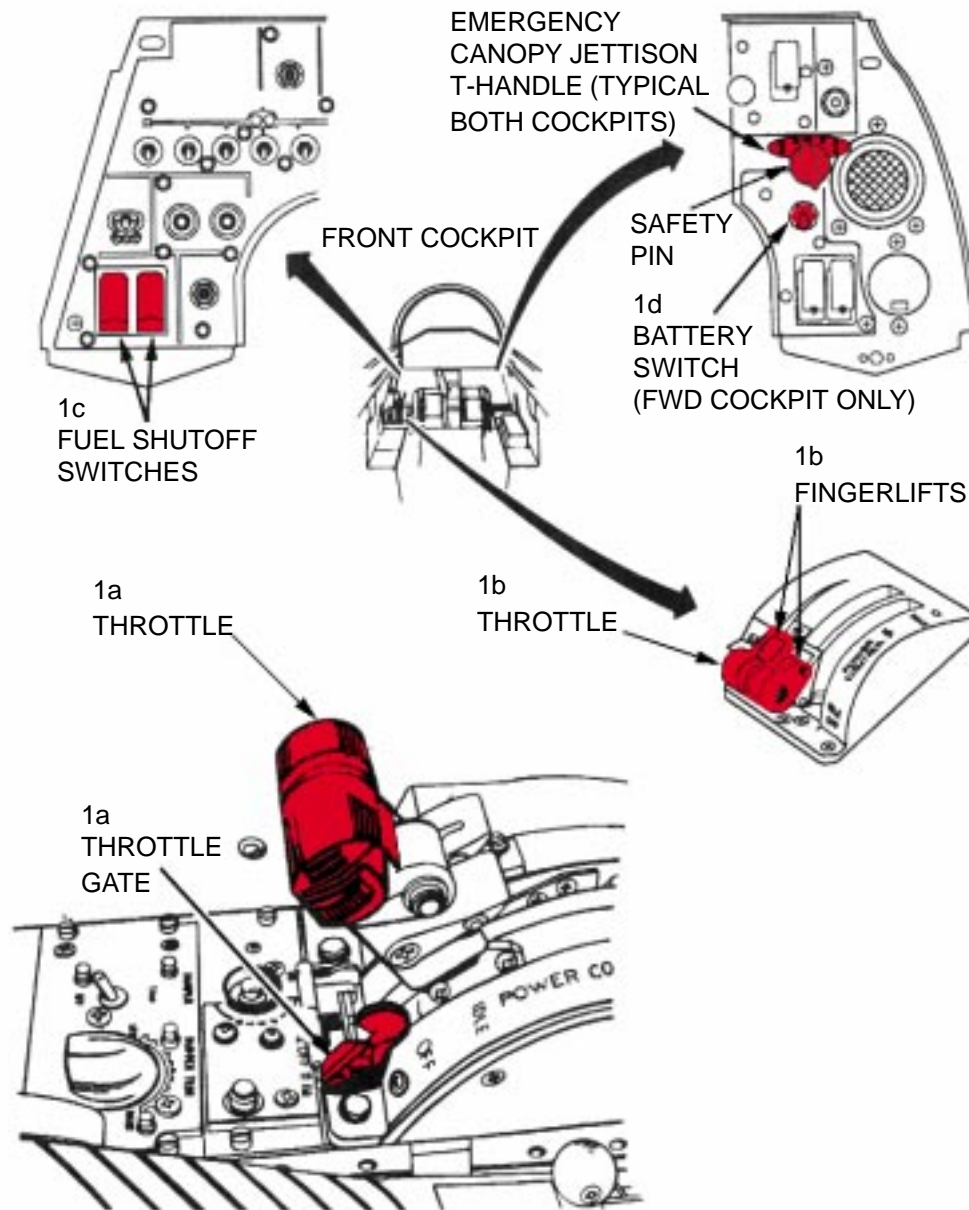
- For AETC aircraft only: Disengage throttle gate by pushing the red release arm inboard (toward ejection seat).
- For conventional aircraft: Raise finger lift and retard throttle, located on left console panel, to full aft OFF position.
- Push red guards down and place fuel shutoff switches to closed position. Wait 10 seconds for fuel valve to operate.
- Place battery switch, located on right vertical control panel, down to OFF position.

NOTE:

- Engines can be throttled to idle from rear cockpit.
- If engines fail to shutdown, turn battery switch ON and place fuel shutoff switches, located on left vertical panel, to CLOSED position. Place battery switch to OFF position.

WARNING

If emergency canopy jettison T-handle has been actuated, but canopy has not jettisoned, cut canopy hose at top aft of seat structure to prevent inadvertent canopy jettison.



SAFETYING EJECTION SYSTEM AND AIRCREW EXTRACTION

1. NORMAL SAFETYING EJECTION SEAT

- Insert seat safety pin in right seat leg brace, forward of ejection control handle, to prevent inadvertent ejection during extraction.

NOTE:

Flight status safety pins are normally stored in container mounted on left forward console.

2. EMERGENCY SAFETYING EJECTION SEAT

- Cut catapult hose, located right side and aft of head-rest.

NOTE:

Dearming tool must be 90 degrees to the handle in order to cut drogue gun ballistic hose properly.

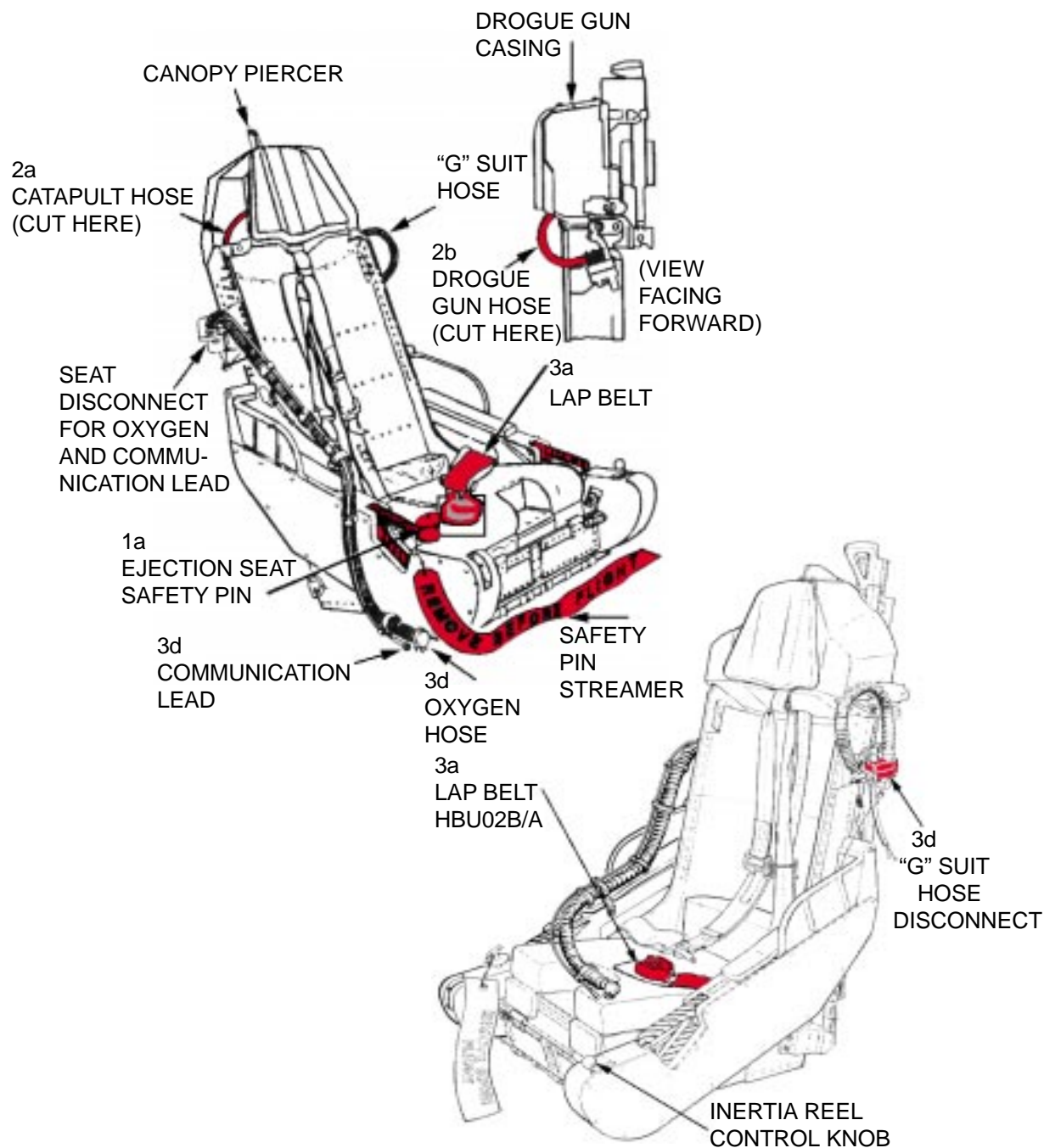
- Cut drogue gun ballistic hose on top left side of seat.

3. AIRCREW EXTRACTION

- Unlatch safety belt and remove shoulder harness from crewmember(s).
- On HBU-12/A lap belt, squeeze together the black and silver grips of the handle and lift up. Separate belt and remove gold key. Remove shoulder harness/negative "G" restraint strap loop ends.
- Disconnect survival kit from crewmember by pulling emergency survival kit. Release handle located on right side of kit, if attached.
- Disconnect "G" suit hose, oxygen hose, and communication lead, and oxygen mask if applicable.

NOTE:

- The HBU-28/A automatic lap belt is used on some T-38 seats.
- Some aircraft are not equipped with survival kits.



AIRCRAFT ENTRY

1. NORMAL ENTRY

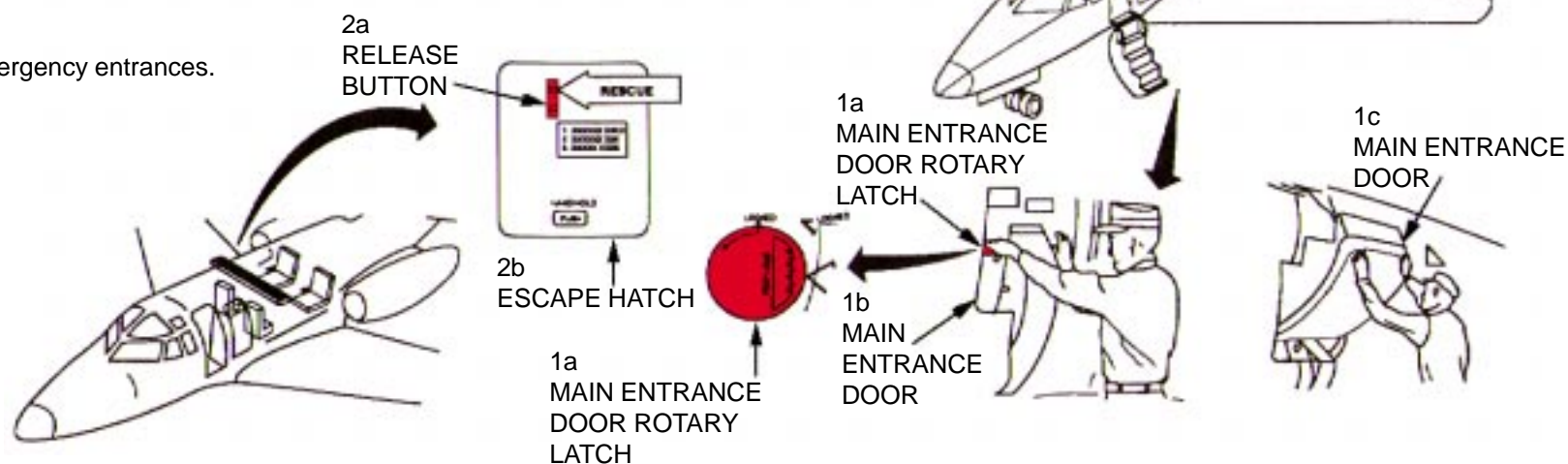
- a. Turn rotary latch, located forward left side fuselage, one quarter turn counterclockwise to unlock main entrance door.
- b. Apply even pressure on lower section of door. Door will move inward several inches and then top of door will rotate outward and start a downward swing.
- c. When door starts downward movement, support door and lower to extended position.

2. EMERGENCY ENTRY

- a. Push release button, located right side of fuselage over wing, and pull handle to unlock escape hatch.
- b. Push escape hatch in to gain entry. Do not block path of egress with removed hatch.

3. CUT-IN

- a. Cut in normal and emergency entrances.



ENGINE SHUTDOWN AND AIRCREW EXTRACTION

1. ENGINE SHUTDOWN

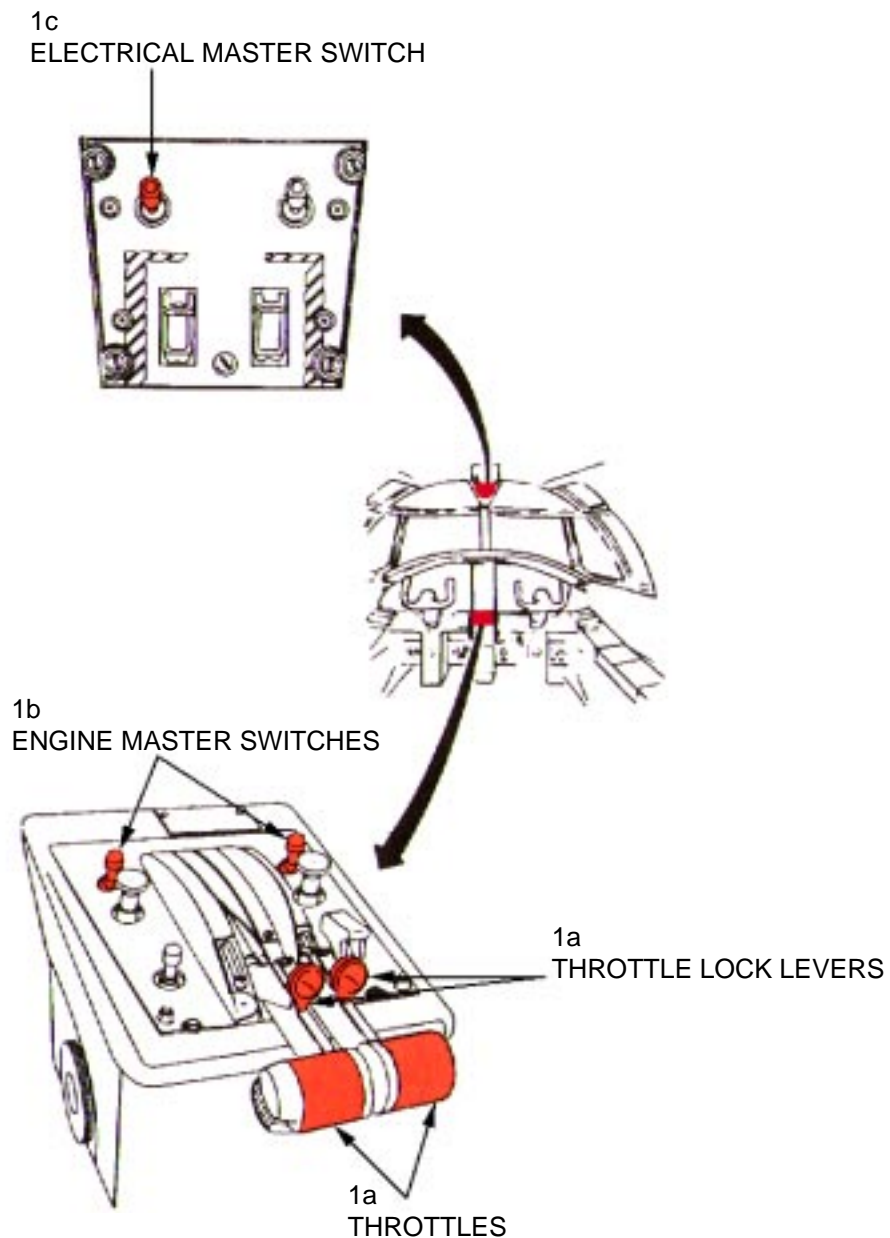
- a. Push throttle lock levers forward and retard throttles aft located on pilot's center console, to CLOSED position.
- b. Place engine master switches, located on pilot's center console, to OFF position.
- c. Place electrical master switch, located on overhead control panel, to OFF position.

2. AIRCREW EXTRACTION

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

NOTE:

If seat tracks are not damaged during crash landing, use adjustable seat control to retract seat in aft position to aid in removing crewmember(s).



TEST BED CONFIGURATION FOR T-39B AIRCRAFT

TAIL NUMBER: 59-2873
**GLOBAL POSITIONING
SYSTEM (GPS)**

PASSENGER CAPACITY: 6

ADDITIONAL OXYGEN BOTTLES: NO

LOX Converters: NO

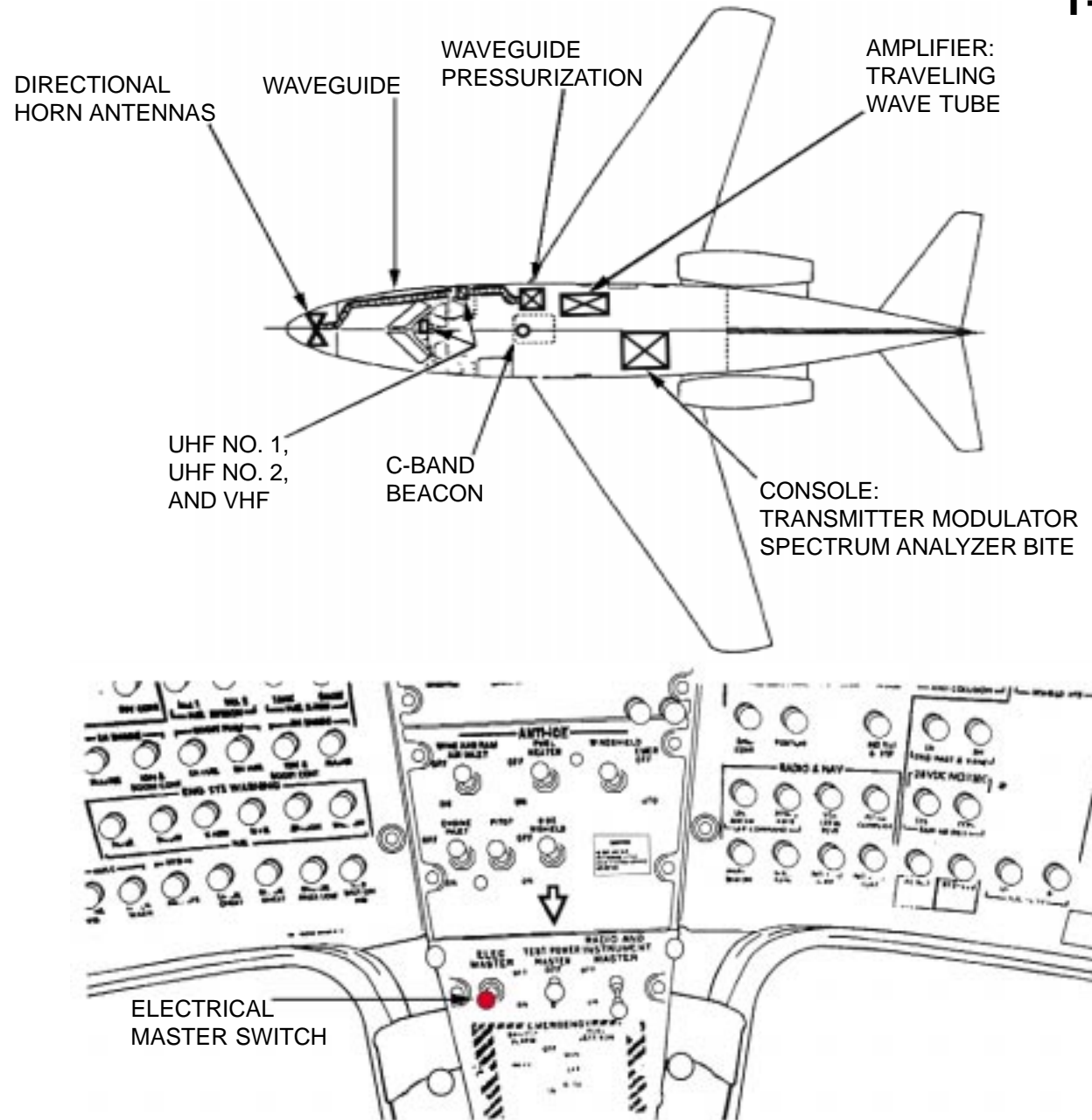
Nitrogen Bottles: NO

Modified Escape Routes: NO

Changes for Engine/APU Shutdown: NONE

Changes in Electrical/Battery Power: The power for the project goes through a Test Master Power Switch (see graphic), located above pilot's head between the flight deck windows. During project testing, normal transfer of power is not accomplished until after Data is downloaded. During emergency, the shutdown of power follows standard Tech Order procedures.

HINDRANCES/DIFFERENCES: NONE



TEST BED CONFIGURATION FOR NT-39 AIRCRAFT

TAIL NUMBER: 59-2870 GLOBAL POSITIONING SYSTEM (GPS) IFF

PASSENGER CAPACITY: 6

AIRCREW MEMBER/SUPPORT PERSONNEL SEATING ARRANGEMENT: This aircraft cabin compartment normally has four (4) passenger seats. There is no center-facing passenger seat. Refer to graphic.

ADDITIONAL OXYGEN BOTTLES: NO

LOX Converters: NO

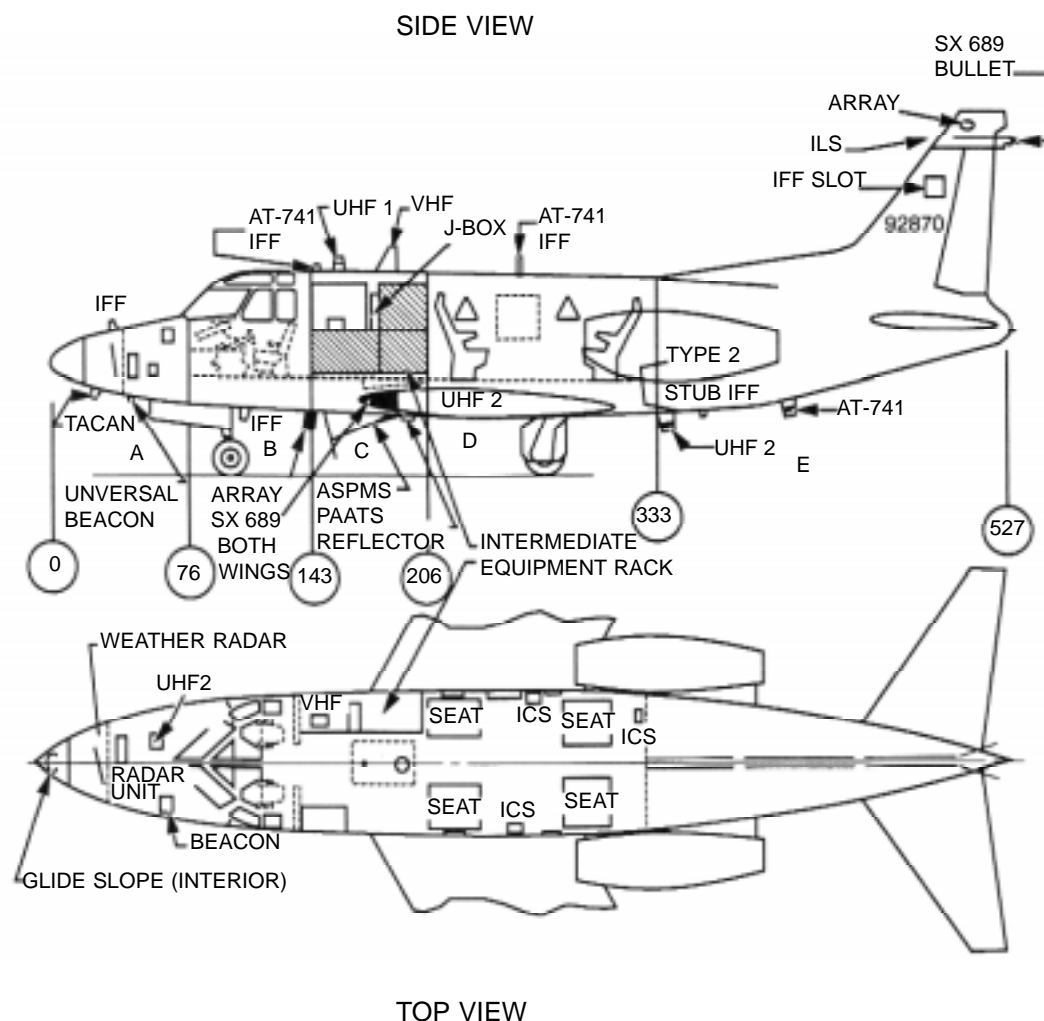
Nitrogen Bottles: NO

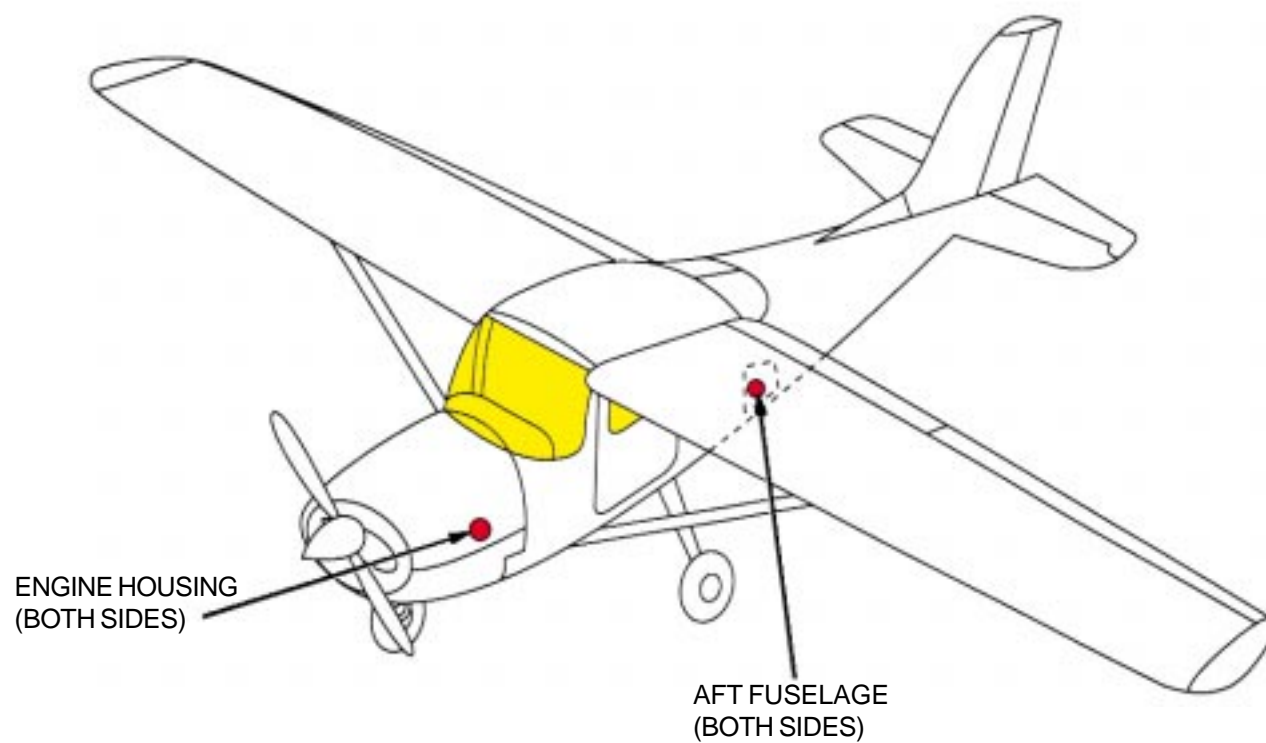
Modified Escape Routes: NO

Changes for Engine/APU Shutdown: NONE

Changes in Electrical/Battery Power: The power for the project goes through a Test Master Power Switch (see graphic for 59-2873), located above pilot's head between the flight deck windows. During project testing, normal transfer of power is not accomplished until after Data is downloaded. During emergency, the shutdown of power follows standard Tech Order procedures.

HINDRANCES/DIFFERENCES: NONE





SPECIAL TOOLS/EQUIPMENT

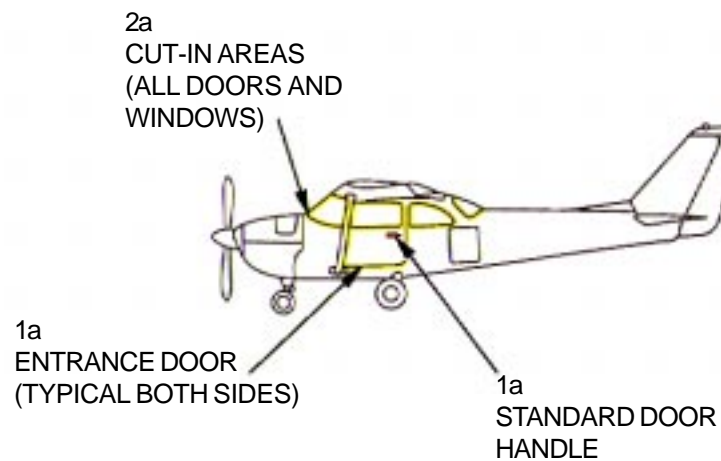
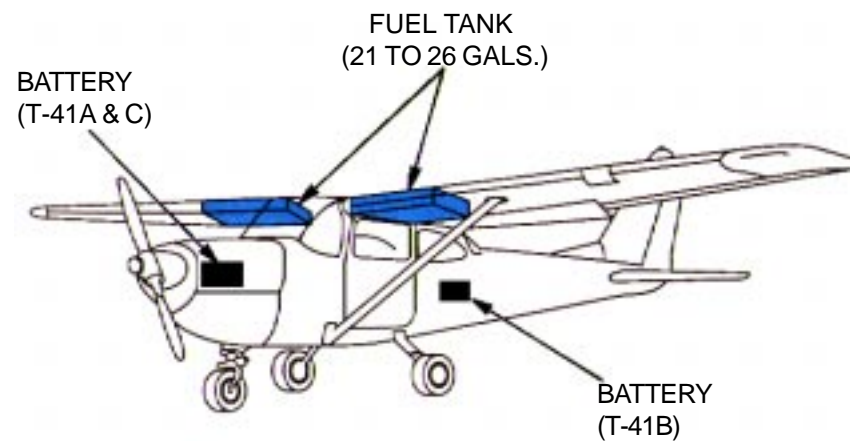
Claw Tool
Power Rescue Saw

1. NORMAL/EMERGENCY ENTRY

- a. Rotate door handle, located both sides forward fuselage, to down position and pull door outward.

2. CUT-IN

- a. Cut-in marked areas, located around all doors and windows.



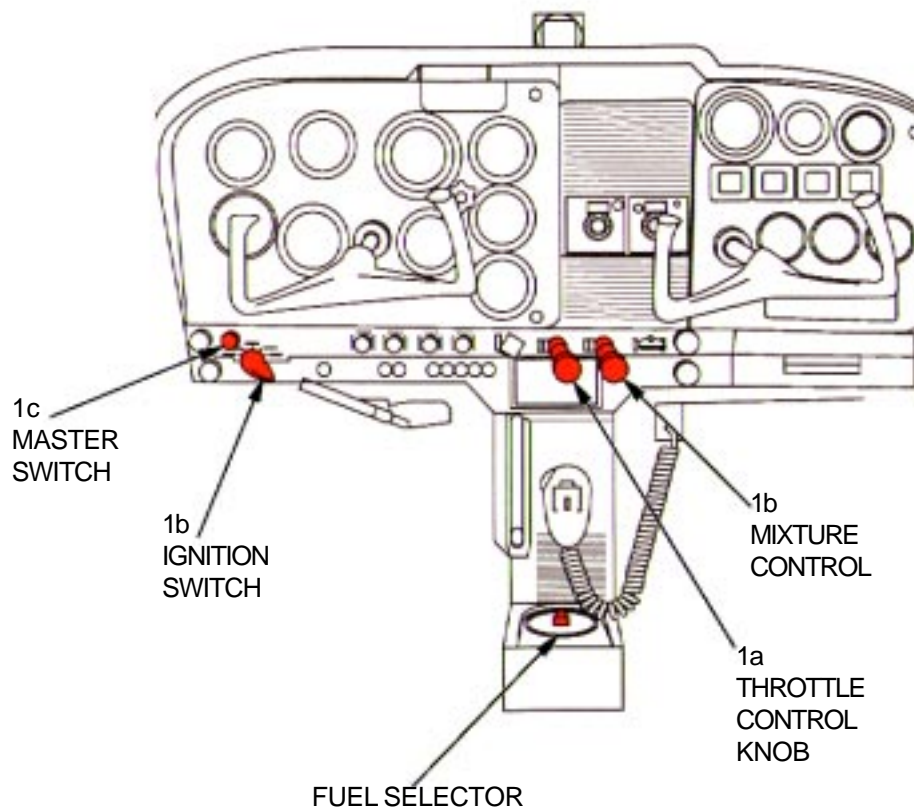
ENGINE SHUTDOWN AND AIRCREW EXTRACTION

1. ENGINE SHUTDOWN

- a. Depress lock and pull mixture control knob, located lower center control panel, full out.
- b. Rotate ignition switch, located lower left corner control panel, counterclockwise to OFF.
- c. Push in master switch, located lower left corner control panel.

2. AIRCREW EXTRACTION

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



AIRCRAFT HAZARDS

ENGINE DANGER AREAS

WARNING

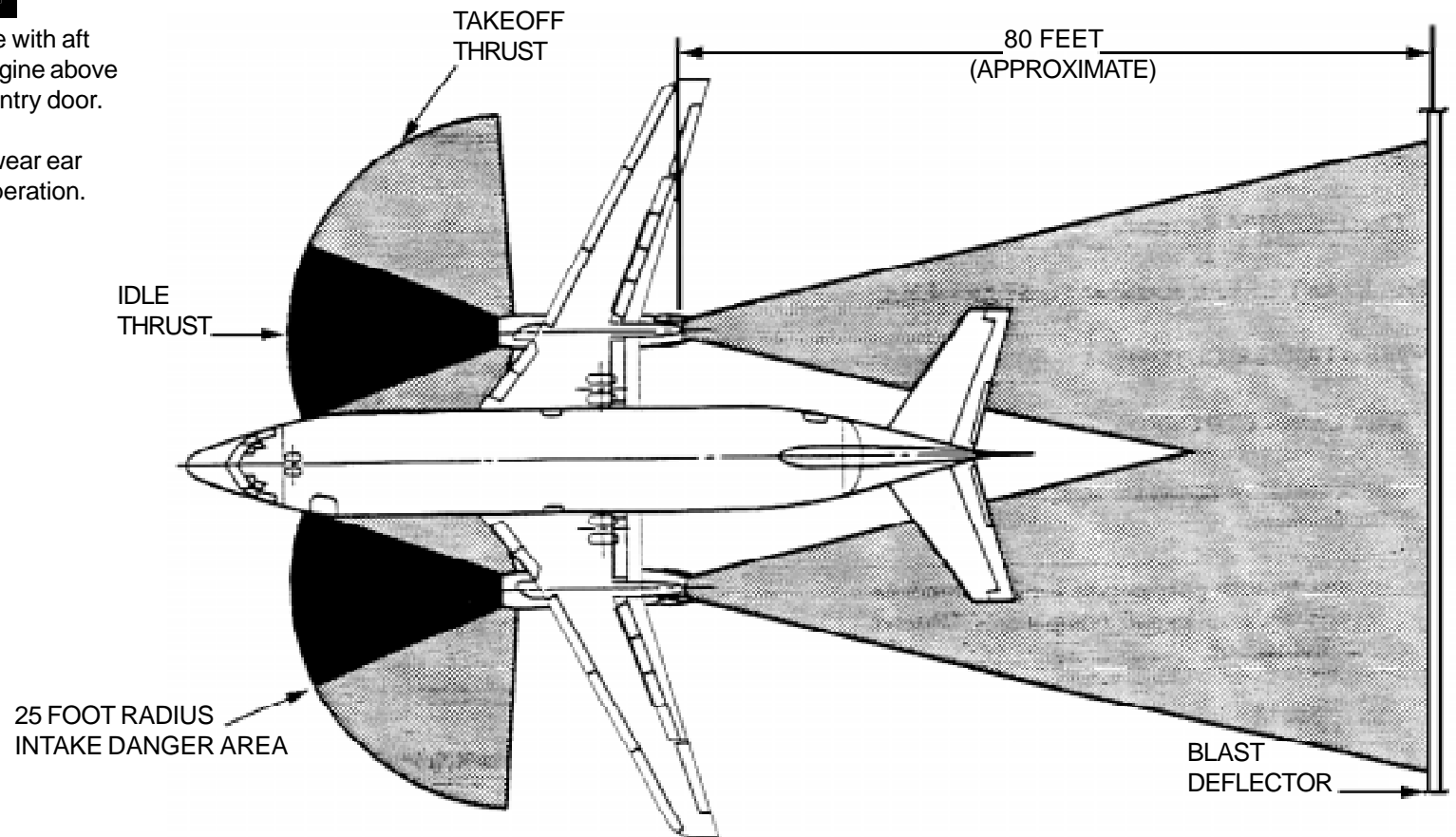
- Do not operate right engine with aft service door open or left engine above idle when using the main entry door.
- Ground personnel should wear ear protection during engine operation.

AIRCRAFT DIMENSIONS

Length 100' 0"

Wing Span 93' 0"




Height 37' 0"

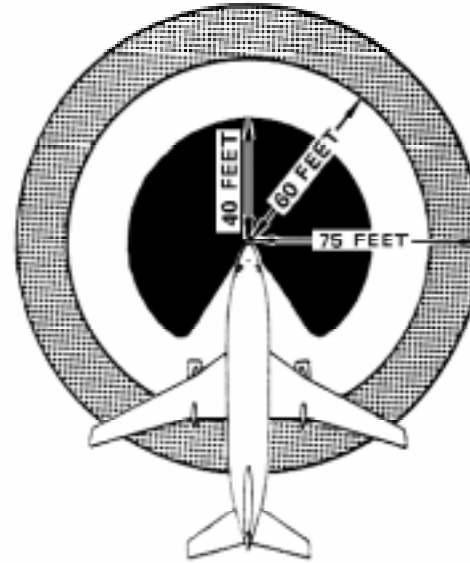


AIRCRAFT HAZARDS

RADAR RADIATION AREAS



WARNING

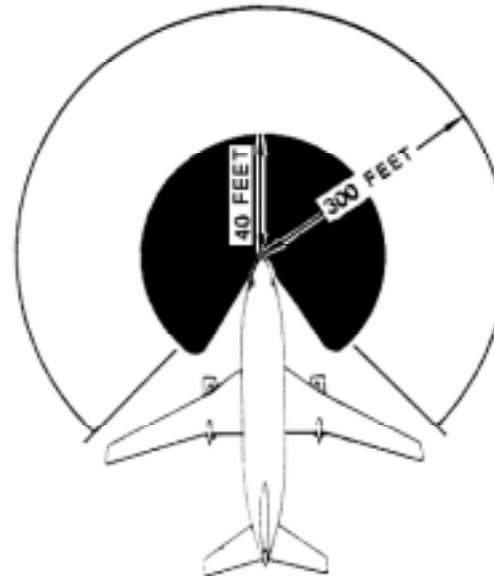
-  Personnel radiation-40 feet
-  Possible fuel ignition-60 feet
-  Possible electro explosive device-5 feet



LESS 34-1090

WARNING

-  Personnel radiation-40 feet
-  Possible fuel ignition or possible electro-explosive device-300 feet



WITH 34-1090

SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw

12 Ft Ladder

Fire Drill II

AIRCRAFT ENTRY

1. NORMAL ENTRY

- a. Pull handle release button in center of exterior airstair control handle, located on left side of fuselage aft and below airstair compartment door, rotate handle clockwise to extend airstair.
- b. Pull entry door handle in center of entry door, located on left forward side of fuselage, outward, rotate handle clockwise, and rotate door inward. Return handle to stowed position by pushing it inward and pull door outward to open position.
- c. Pull service door handle in center of service door, located on right aft side of fuselage, outward, rotate handle counter clockwise, and rotate door inward. Return handle to stowed position by pushing it inward, and pull door outward to open position.

2. EMERGENCY ENTRY

- a. Push in flush panel at top of overwing escape hatch(es), located on both sides of fuselage. Push hatch inward. Do not block egress path.

NOTE:

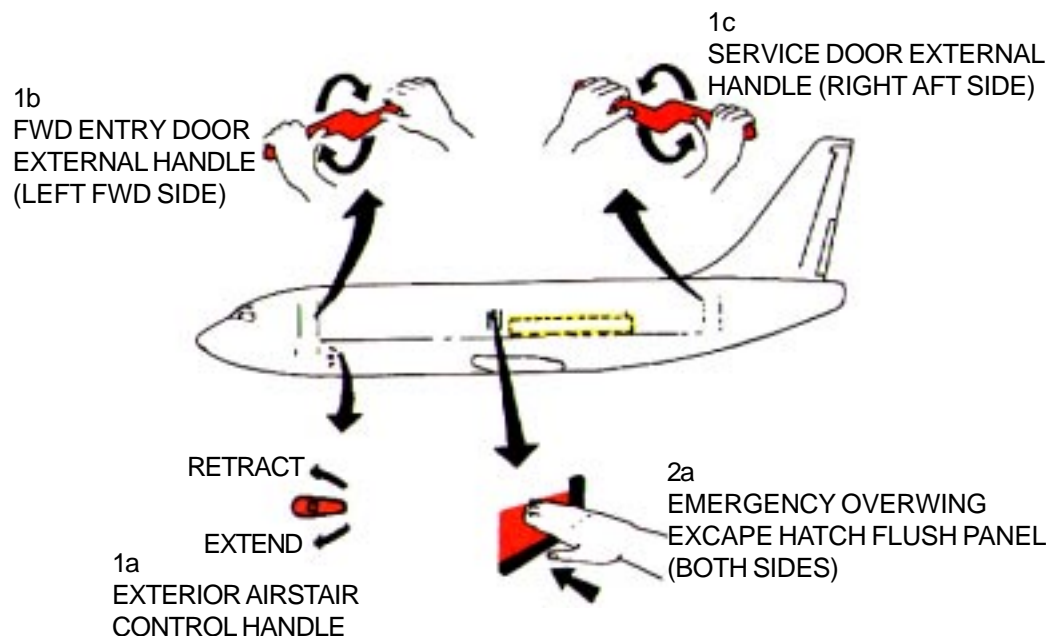
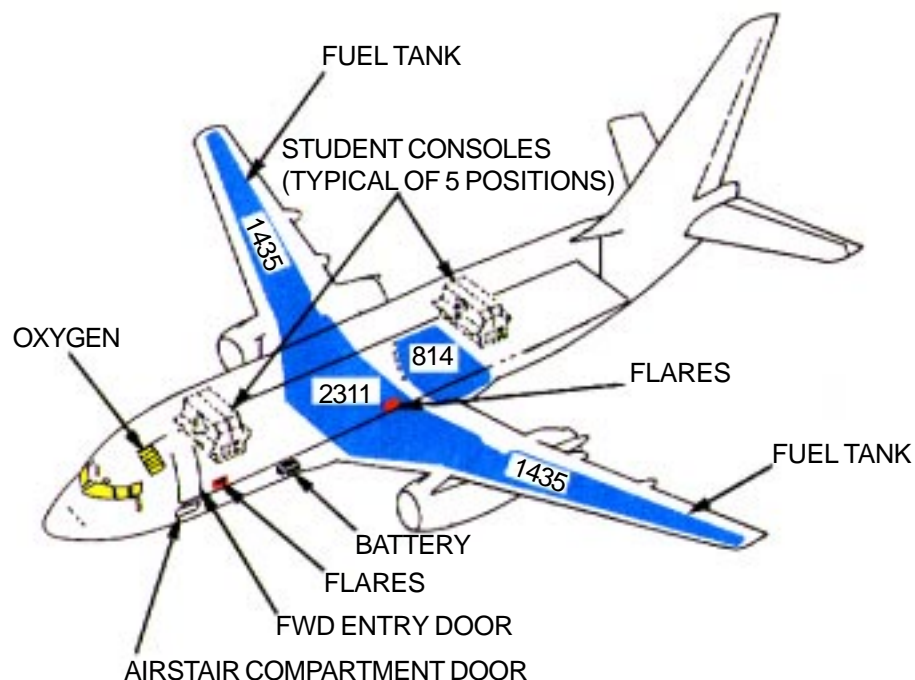
Pull external release handle, located below copilot's sliding window on right side of fuselage, and slide window aft.

3. CUT-IN

- a. Special cut-in area located above the trailing edge of left wing aft of overwing escape hatch, below windows and above floor.

NOTE:

Aircraft with serial numbers 72-0283, 72-0284, 72-0287 & 73-1154 disregard left cut-in areas.



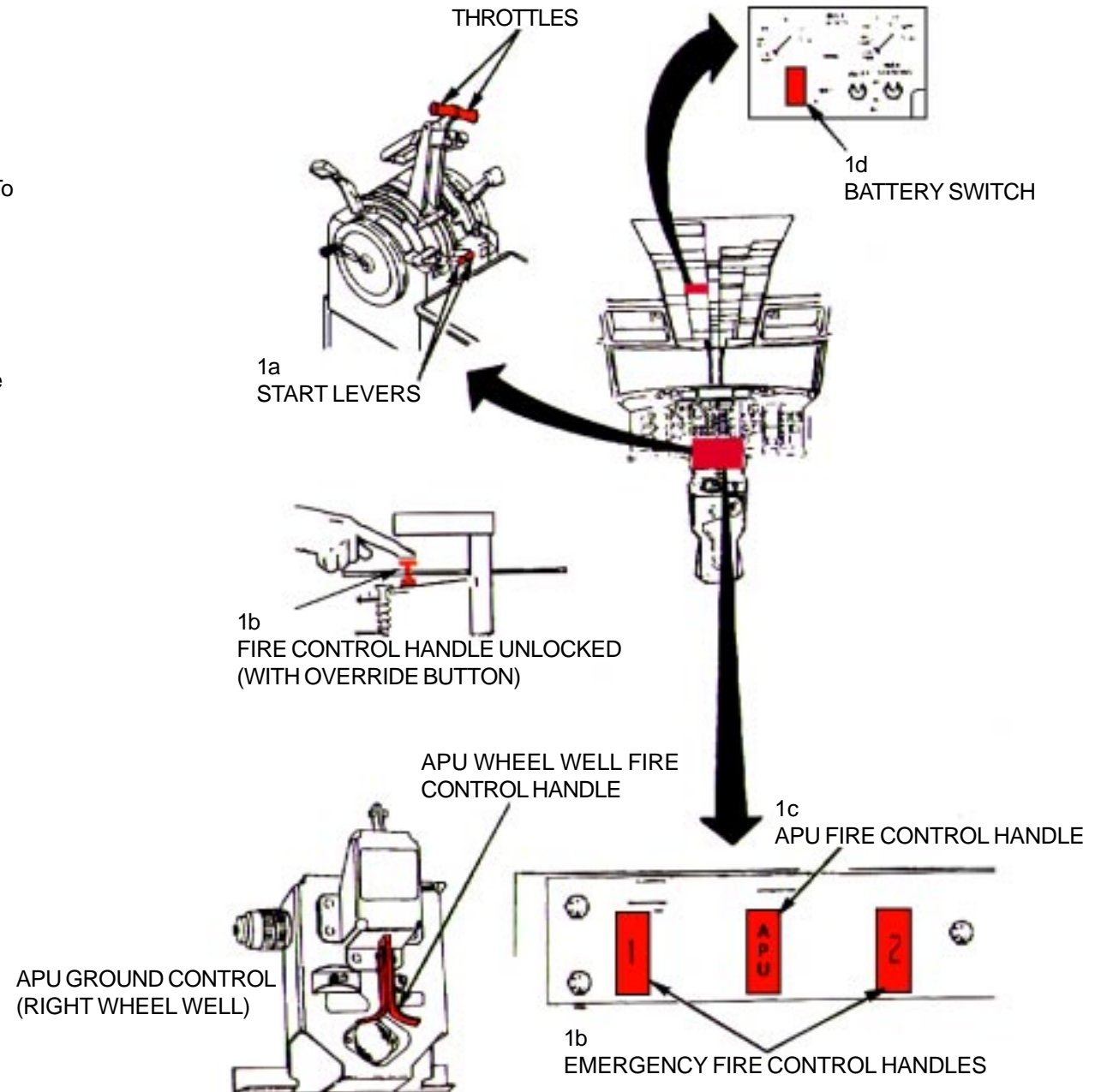
ENGINE SHUTDOWN

1. ENGINE SHUTDOWN

- Retard start levers, located on pilot's center console, to aft/down CUT-OFF position.
- Press override button under emergency fire control handles, pull emergency fire control handles, located on pilot's center console. To discharge agent, turn fire control handles right or left toward the affected engine.
- Pull APU emergency fire control handles, located between one and two engine shutdown handles on center console. To discharge agent, turn APU fire control handle right or left.
- Place battery switch, located on left half of overhead panel, to OFF position.

NOTE:

An APU Fire Control handle is located in the right wheel well.



AIRCREW EXTRACTION

1. AIRCREW EXTRACTION

NOTE:

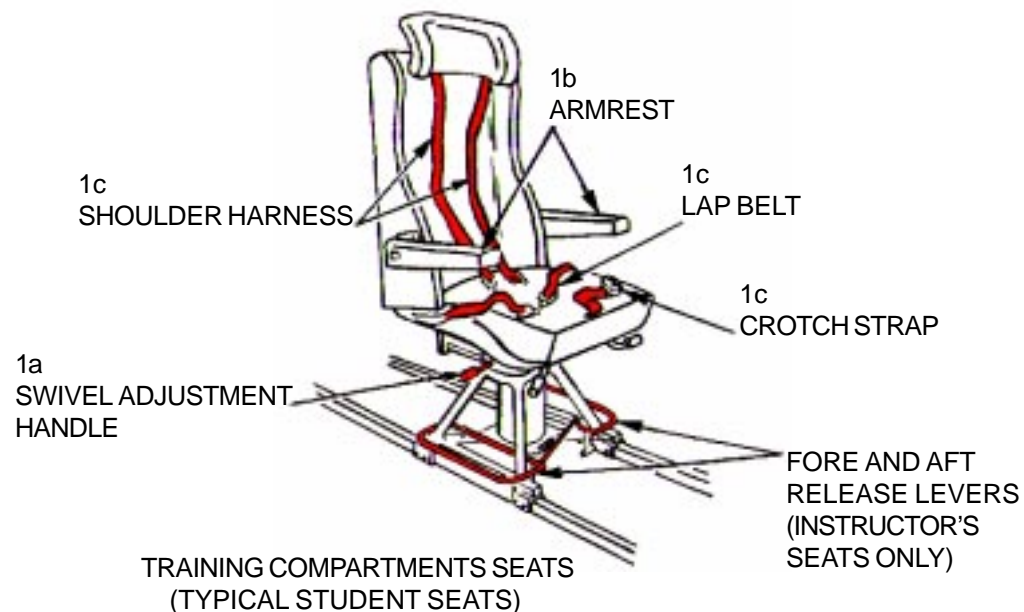
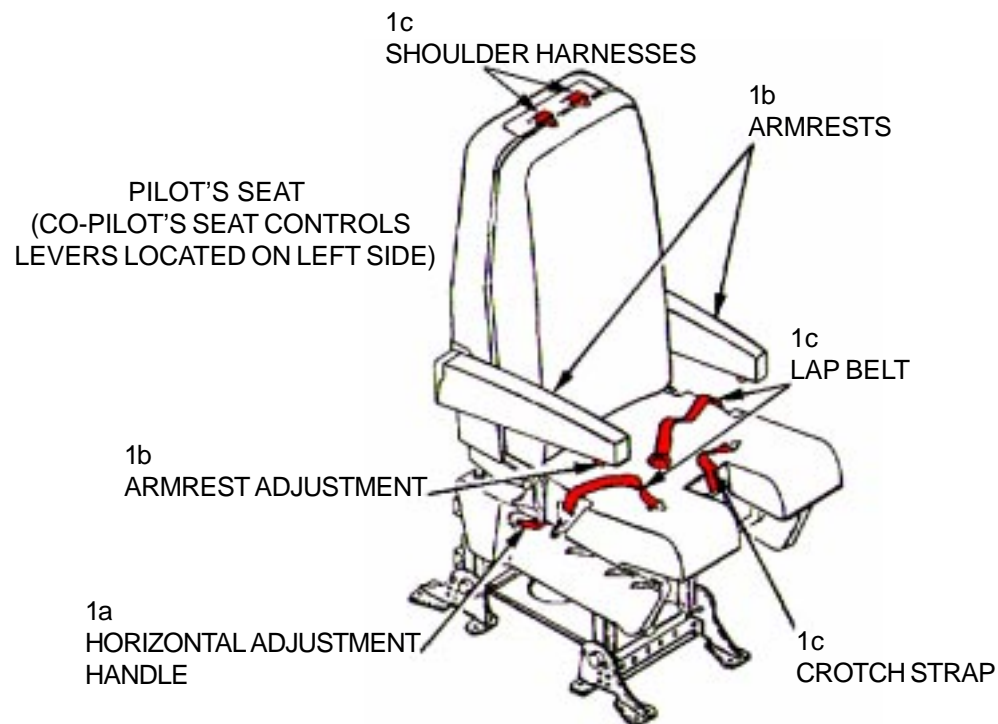
Observer's seat may block entry to flightdeck. Release seat by pulling levers on seat back and seat bottom. Stow seat in recess on right side of flightdeck entry way.

- a. If seat tracks are not damaged during crash landing, use horizontal adjustment handle on pilot's and copilot's seat, and swivel adjustment handle on training compartment seats, to position seats.

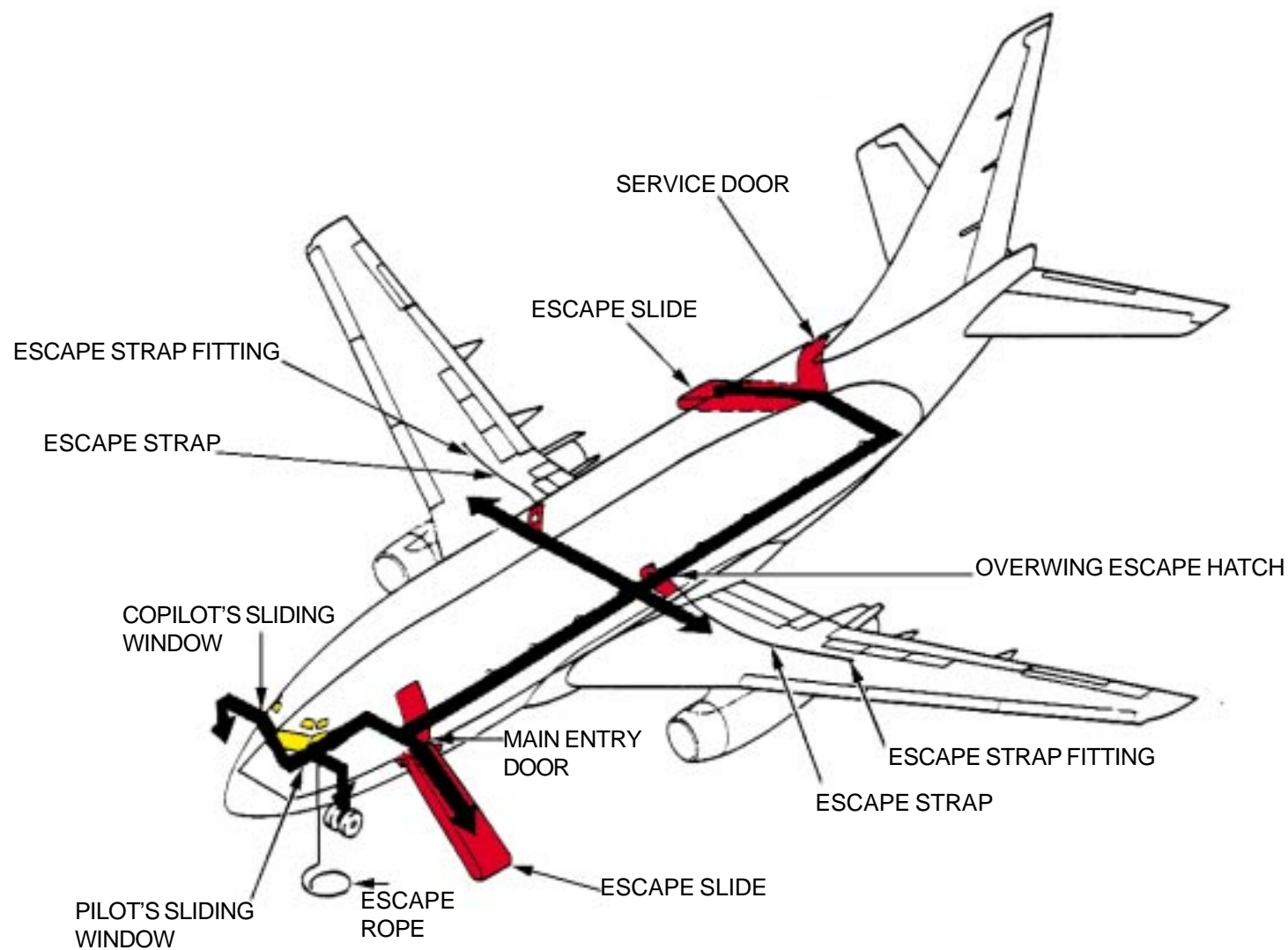
NOTE:

Instructor seats are equipped with fore and aft release levers which allow seat movement on rails. All other seats are securely fixed to the floor and are designed to swivel 360 degrees.

- b. Raise armrests to up position on training compartment seats, 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.



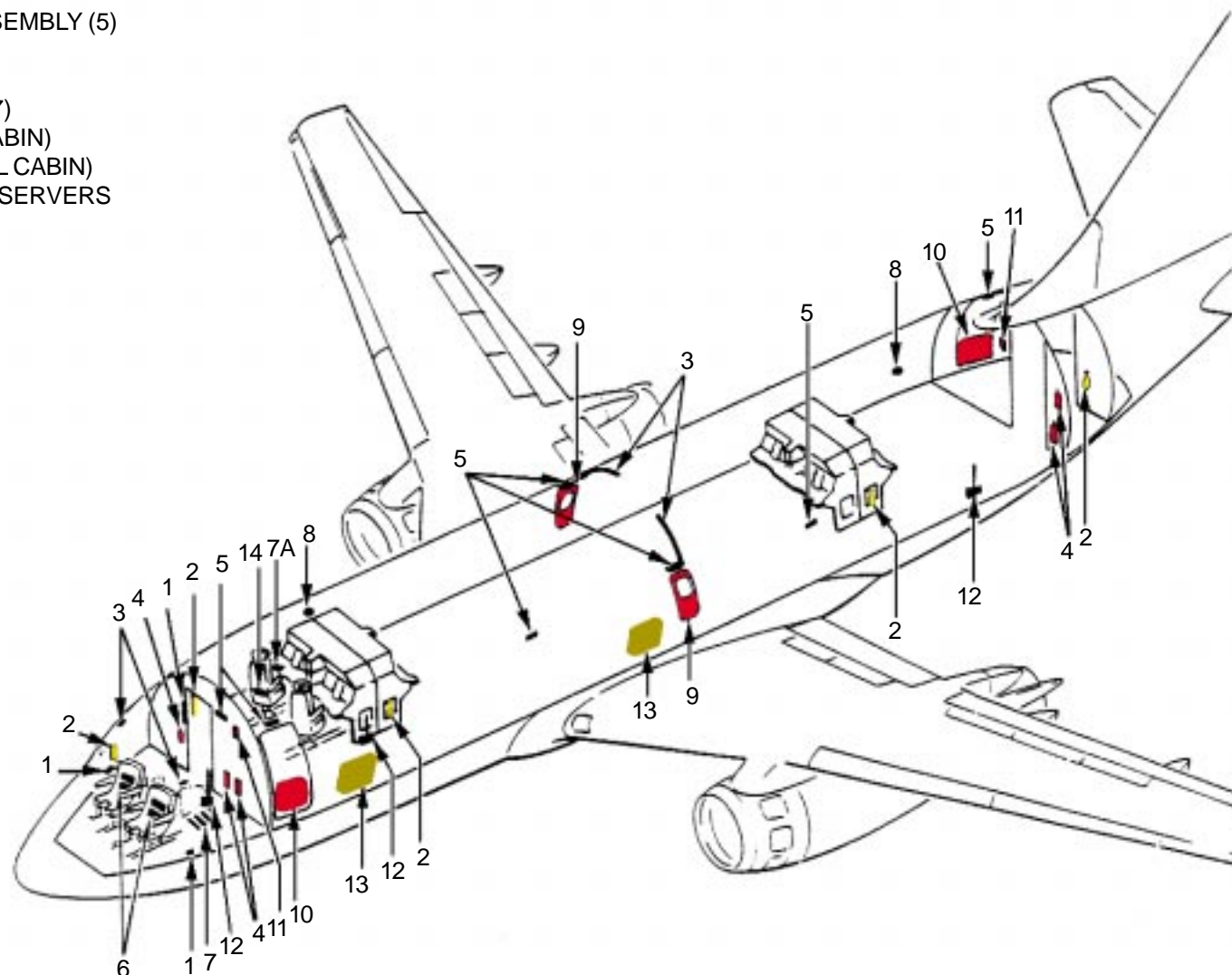
AIRCRAFT EMERGENCY EGRESS ROUTES



AIRCRAFT EMERGENCY EQUIPMENT LOCATION

LEGEND

1. SMOKE GOGGLES (13)
2. PORTABLE OXYGEN BOTTLE ASSEMBLY (5)
3. ESCAPE STRAP (4)
4. FIRE EXTINGUISHER (5)
5. PORTABLE EMERGENCY LIGHT (7)
6. LIFE PRESERVERS (CONTROL CABIN)
7. ANTI EXPOSURE SUITS (CONTROL CABIN)
- 7A. ANTI EXPOSURE SUITS/LIFE PRESERVERS (TRAINING COMPARTMENT)
8. EMERGENCY ALARM BELL (2)
9. ESCAPE HATCH (2)
10. ESCAPE SLIDE (2)
11. FIRST AID KIT (2)
12. CRASH AX (3)
13. LIFE RAFT (2)
14. EMERGENCY ESCAPE BREATHING DEVICE

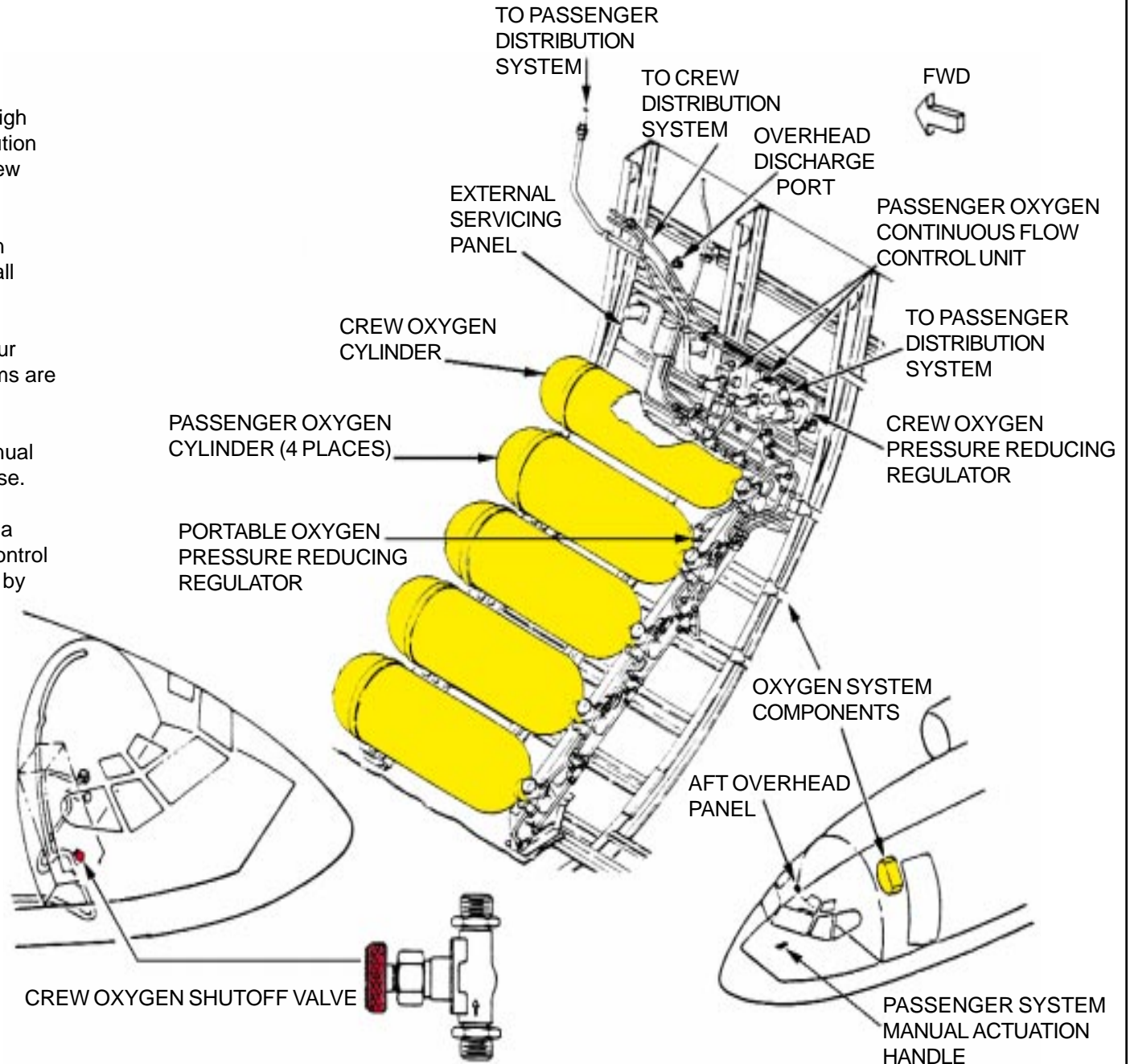


AIRCRAFT OXYGEN SYSTEMS

General Description and Operation

1. GENERAL

- a. The oxygen systems provide storage of high pressure gaseous oxygen and its distribution and delivery under low pressure to the crew and passengers.
- b. High pressure oxygen is stored in oxygen cylinders located on the right fuselage wall opposite the main left entry door.
- c. There is one crew oxygen cylinder and four passenger oxygen cylinders. The systems are not cross connected.
- d. The crew oxygen can be shutoff by a manual valve located behind the co-pilot, clockwise.
- e. The passenger oxygen can be shutoff by a manual valve located in a recess in the control cabin floor. Electrical activation ONLY is by a switch on the aft overhead panel in the control cabin. The system can not be electrically turned off.
- f. Five portable oxygen cylinder assemblies are located in the passenger cabin, and the control cabin, providing oxygen for first aid and walk-around use. See page T-43.7 item 2 for specific locations.



AIRCRAFT GENERAL INFORMATION, ENGINE HAZARDS AND DIMENSIONS

OT-47B

EFFECTIVITY:

This aircraft is considered a Joint Service aircraft. The commercial designation is Cessna 560 Citation Ultra and Encore and an improved versions of the Citation V. Both versions are considered a medium-range tracker/transport equipped with 7 seats; 3 forward facing and 4 double-club arrangement or a 8 seat double-club arrangement. Propulsion: two turbo-fan engines. Structure: all metal.

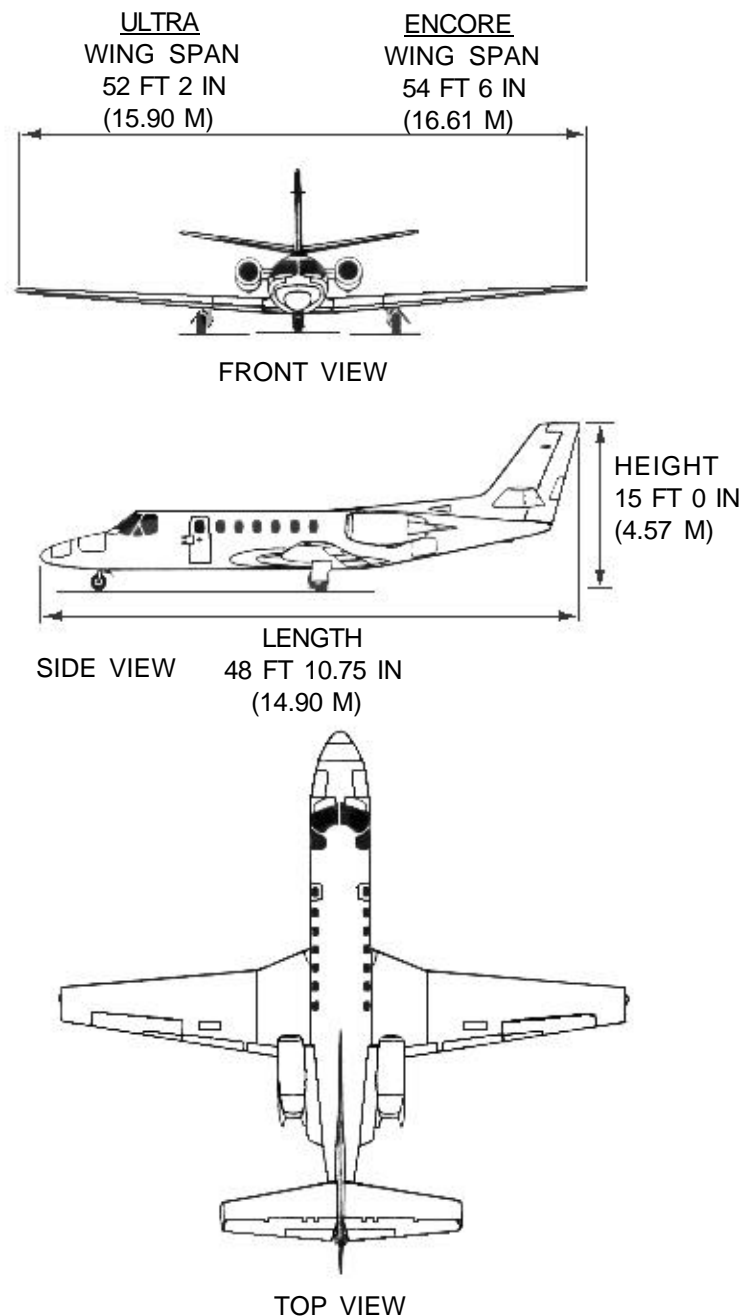
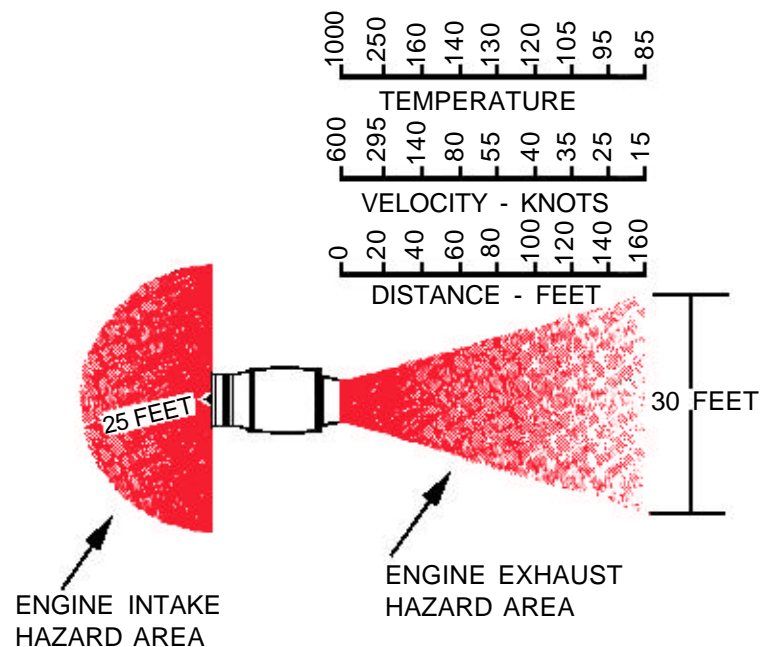
The Ultra version for the USAF designation is OT-47B, the US Army is UC-35A and the US Navy and Marines designation is UC-35C. The Spanish Air Force designation is TR.20.

The Encore version for the US Army is UC-35B and US Marines is UC-35D.

NOTE:

Length and height are the same for Ultra and Encore versions.

ENGINE HAZARD AREAS



AIRCRAFT HAZARDS

1. FLAMMABLE MATERIAL AND PRESSURE VESSEL LOCATIONS

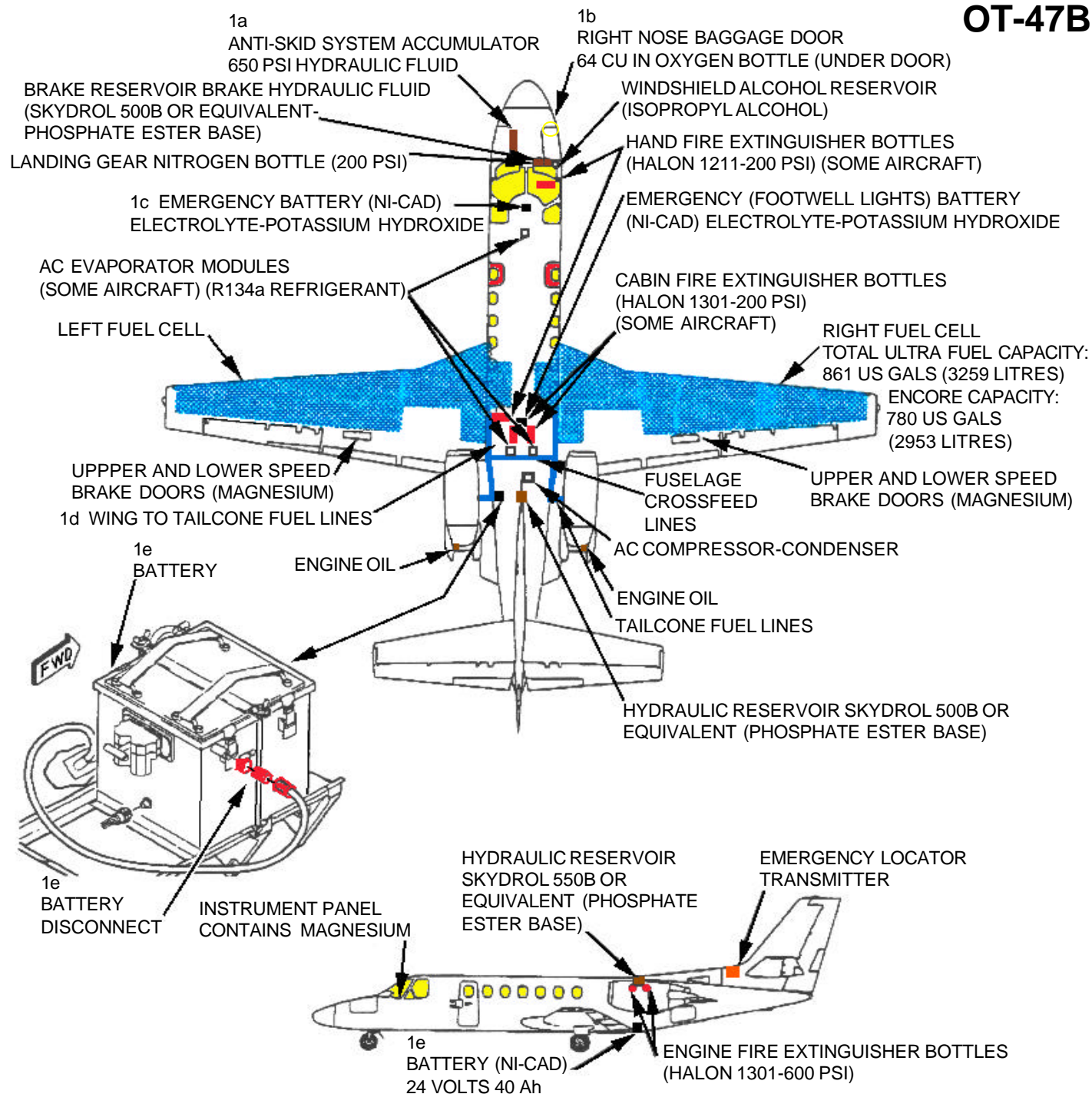
- Anti-skid system accumulator access is through left nose compartment door under avionics shelf.
- Right nose baggage door access brake reservoir, windshield alcohol reservoir and landing gear blowdown bottle behind baggage compartment upholstery panel. Oxygen bottle under baggage compartment door.
- Emergency battery. Inertial switch under headliner.
- Wing to tailcone fuel lines access is through wing to fuselage fairings.
- Battery is electrolyte-potassium hydroxide type is located in a sealed container approximately 30 inches forward of access door, vented to outside. To disconnect battery, unscrew knob and pull connector away from case.

WARNING

Cabin interior furnishings are fabricated from FAA approved materials. These materials may give off toxic fumes, melt and/or combust during exposure to extreme heat. Use of protective clothing and breathing apparatus are required until the area is declared safe.

WARNING

Ensure thrust reverser system is in the stowed position prior to tailcone entry.



SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw
Crash Ax
Fire Drill II

AIRCRAFT ENTRY

NOTE:

Oxygen lines are located in the Cut-In area at top of aircraft and may be pressurized. Shut off oxygen bottle prior to start of cutting operation if time permits. Rotate oxygen bottle knob to OFF position.

1. NORMAL ENTRY

NOTE:

Because of structure type and possible injury to passengers, it is recommended that access be directed to main entry and emergency exit doors.

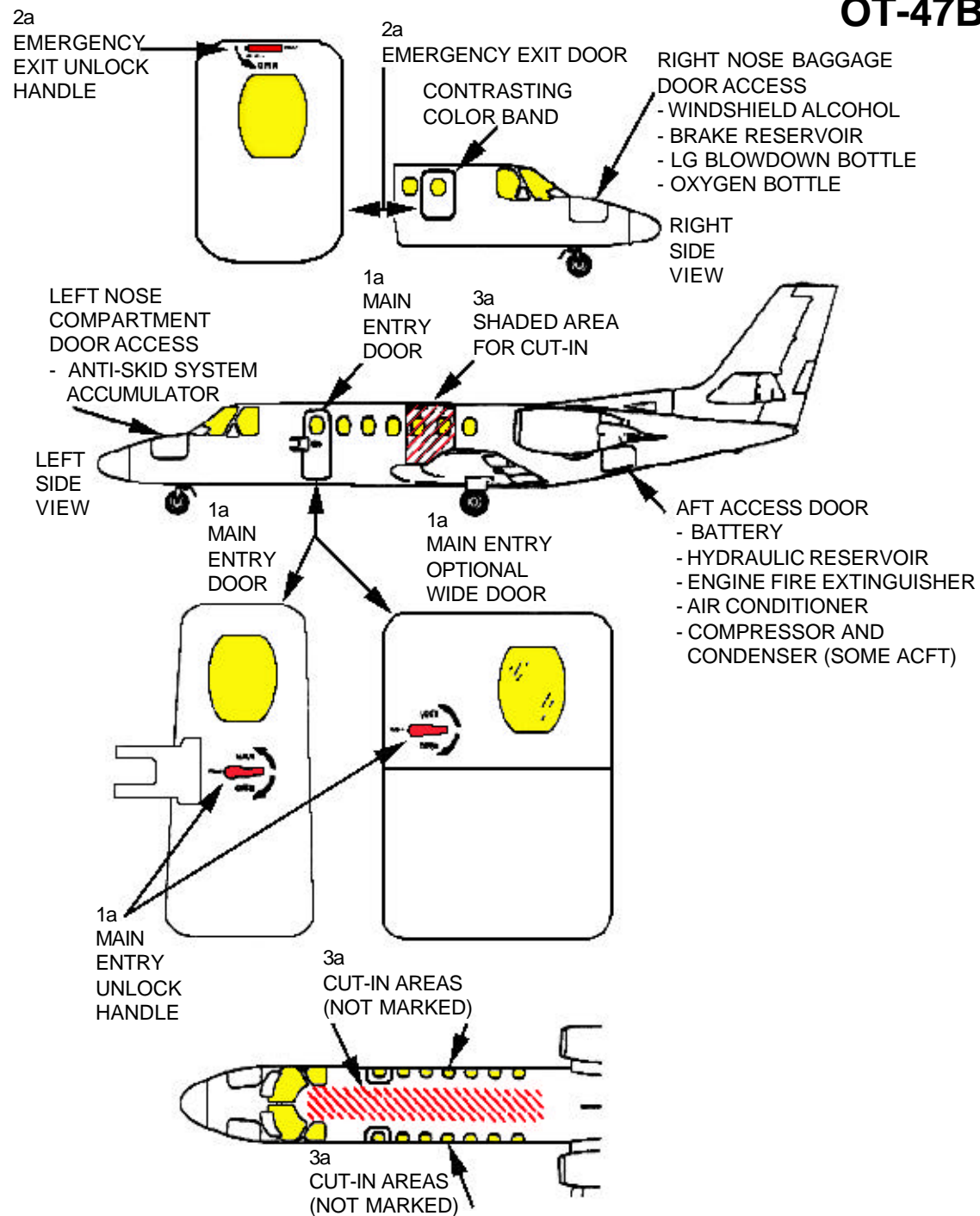
- a. Entry Door: Push in on large end of unlock handle, located on center of door, rotate handle clockwise, pull door out to open. If door is jammed, pry door outward.
- b. Wide Door (Optional): Push in on large end of unlock handle, located left of center of door, rotate handle clockwise, pull upper door, lift up lower door handle, located on top edge of lower door and pull lower door outward.

2. EMERGENCY ENTRY

- a. Push in on large end of handle, located top center of exit door, rotate handle counterclockwise to release latch, push exit door inward (do not block exit), if exit door is jammed, pry door inward.

3. CUT-IN

- a. Cut-in areas require metal cutting portable power equipment. To avoid injury to occupants, carefully cut out window and determine location of personnel inside aircraft before cutting.



OT-47B

ENGINE AND ELECTRICAL POWER SHUTDOWN

OT-47B

1. ENGINE AND ELECTRICAL POWER SHUTDOWN

NOTE:

The instrument panel depicts only items required for electrical and engine shutdown.

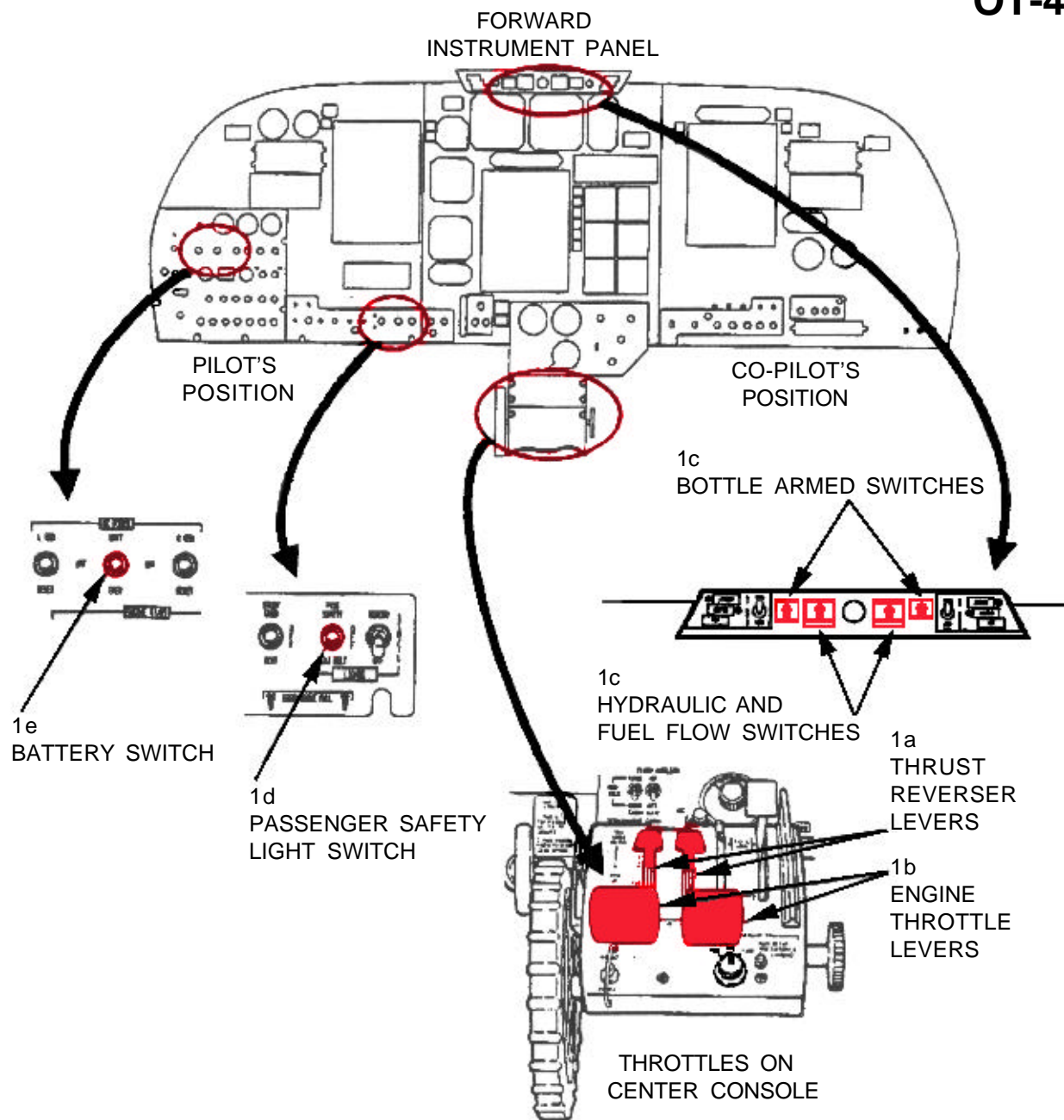
NOTE:

The aircraft is equipped with a small emergency battery and inertia switch that provide power to the cabin door and emergency escape hatch flood lights. In the event of an impact of 5 G's or more, these lights will illuminate and remain on until the inertia switch is reset.

NOTE:

If the emergency locator beacon is activated (on some aircraft), deactivate beacon.

- Pull thrust reversers, located on center console, aft to the OFF position.
- Pull engine throttle levers (2), located on center console, aft to the OFF position, to cut off fuel flow to engines.
- IN CASE OF ENGINE FIRE: push bottle armed switches (2), and press hydraulic and engine fuel flow switches (2), all located on top center instrument panel. (Battery switch must be on.)
- Place passenger safety light switch, located on pilot's lower instrument panel, to the OFF (center) position.
- Place battery switch, located on pilot's left instrument panel, to the OFF (center) position.



AIRCREW EXTRACTION

OT-47B

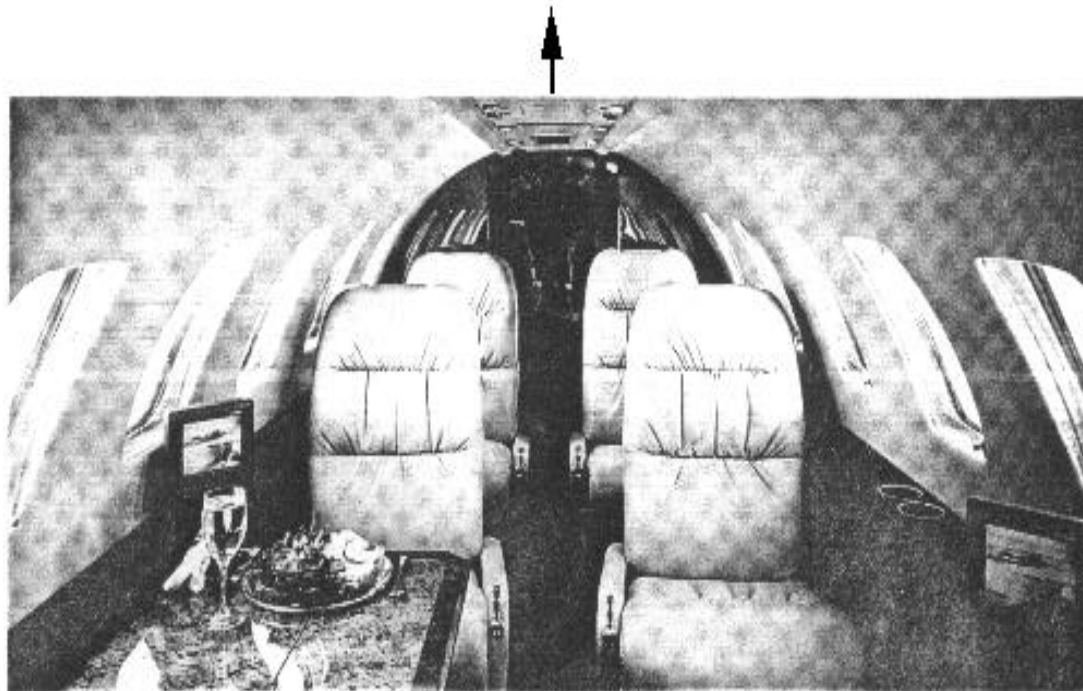
1. AIRCREW EXTRACTION

NOTE:

Aircraft is equipped with two seats in the flightdeck and five or six cabin seats. Last two cabin seats not pictured. Seats are removable to accomodate cargo, if necessary.

- a. Disconnect the four point release system restraints from the pilot and co-pilot by turning the circular buckle to release crew members. Restraint system consists of a seat belt and two shoulder harnesses. Seats can be adjusted up/down and forward/aft.
- b. Disconnect the three point release system restraints from the cabin occupants by pulling up on the restraint buckle. Restraint system consists of a seat belt and one shoulder harness. Seats can adjusted in the recline position and horizontally two inches on tracks toward center aisle.

CABIN INTERIOR
VIEW LOOKING FORWARD TOWARD FLIGHTDECK



NOTE

Chapter 12 contains emergency rescue and mishap response information for the following aircraft:

USAF	U-3
USAF	U-4
USAF	U-6
USAF	U-10
USAF	UV-18B
USAF	U-26A

CHAPTER 12

U.S. AIR FORCE

UTILITY

AEROSPACE EMERGENCY RESCUE AND MISHAP RESPONSE INFORMATION

12-1. INTRODUCTION AND USE.

12-2. This section contains emergency rescue and mishap response information illustrations in alpha-numerical order relative to type and model of aircraft. This arrangement of illustrations is maintained from Chapter 4 throughout the remainder of the publication.

12-3. GENERAL ARRANGEMENT.

12-4. Aircraft type designation has been positioned in the upper right corner of the horizontal illustration for rapid identification. Additional aids to rapid orientation are:

a. Recent technological advances in aviation have caused concern for the modern firefighter. Aircraft hazards, cabin configurations, airframe materials, and any other information that would be helpful in fighting fires, the locating and rescue of personnel will be added as the information becomes available.

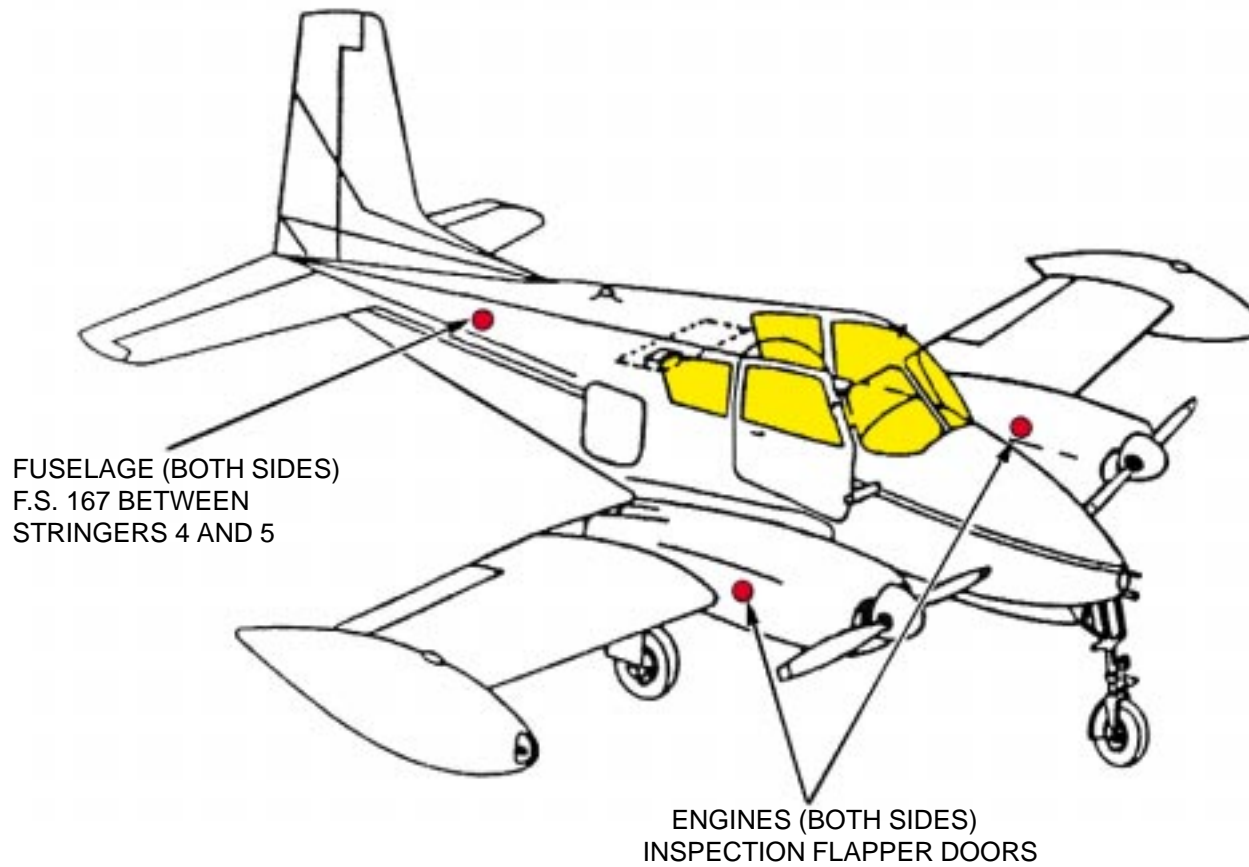
b. Suggested special tools/equipment are listed in the upper left corner, on the Aircraft/Entry page of each listed aircraft.

c. Procedural steps covering emergency/normal entrances, cut-ins, engine/APU shutdown, safetying ejection/escape systems, and aircrew extraction are outlined on the left side of each page with coordinated illustrations on the right.

d. Illustrations located on right side of pages are coordinated with text by numerals and small letters depicting both paragraph and subparagraph on the page.

e. Each illustration is consistently colored and/or pattern keyed to highlight essential emergency rescue information.

f. Details are pulled directly from the illustration to highlight an area, thus eliminating unnecessary searching for desired information.



SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw
Rescue Crash Ax

AIRCRAFT ENTRY

1. NORMAL ENTRY

- a. Push aft end of exterior door handle, located forward right fuselage cabin door.
- b. Pull handle out and rotate counterclockwise, and pull door open.
- c. Push recessed button, located aft right fuselage baggage compartment, and pull door open.

NOTE:

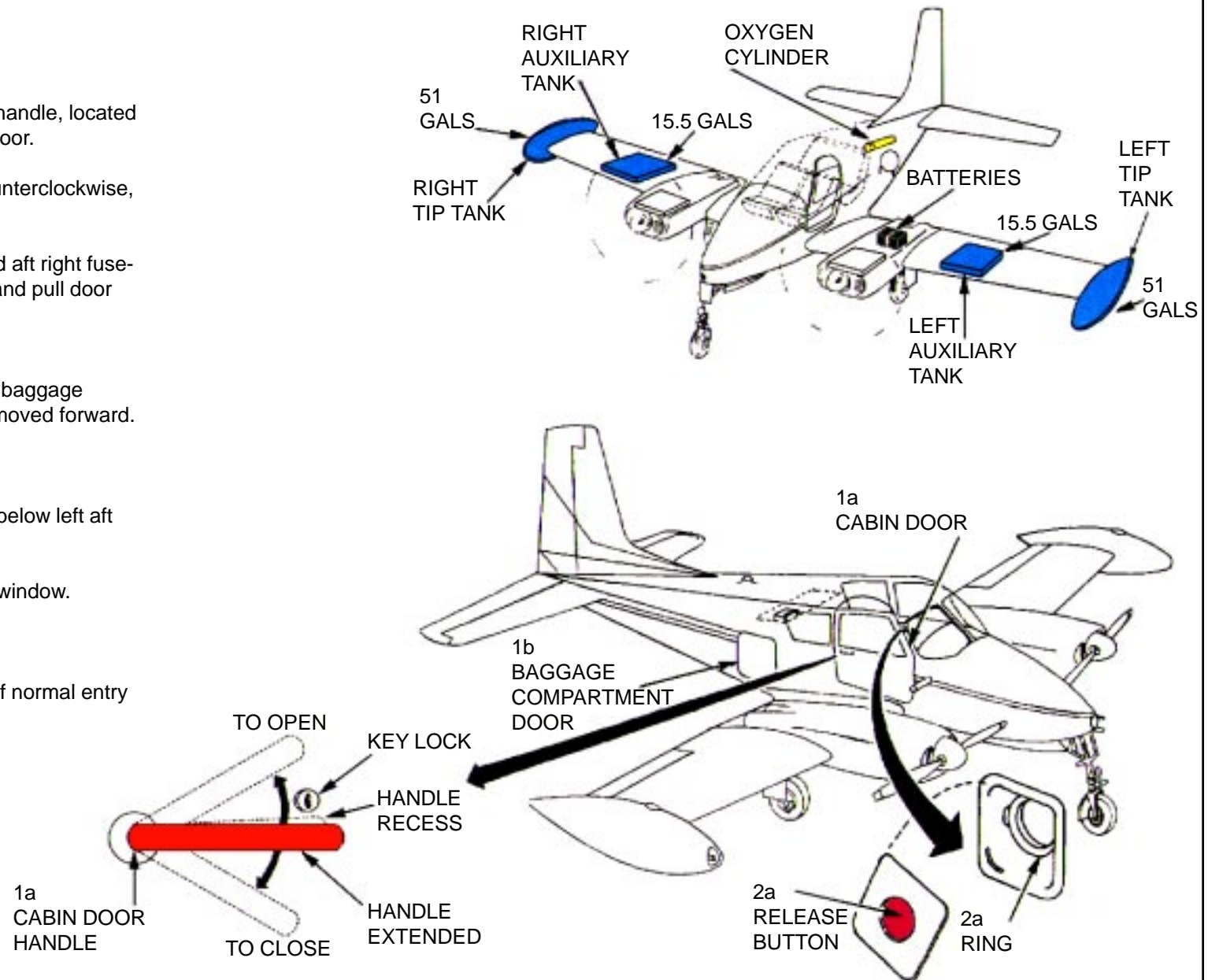
When gaining access through baggage compartment, seats must be moved forward.

2. EMERGENCY ENTRY

- a. Push release button, located below left aft window.
- b. Pull release ring and remove window.

3. CUT-IN

- a. Windows may be broken out if normal entry fails.



ENGINE SHUTDOWN AND AIRCREW EXTRACTION

1. ENGINE SHUTDOWN

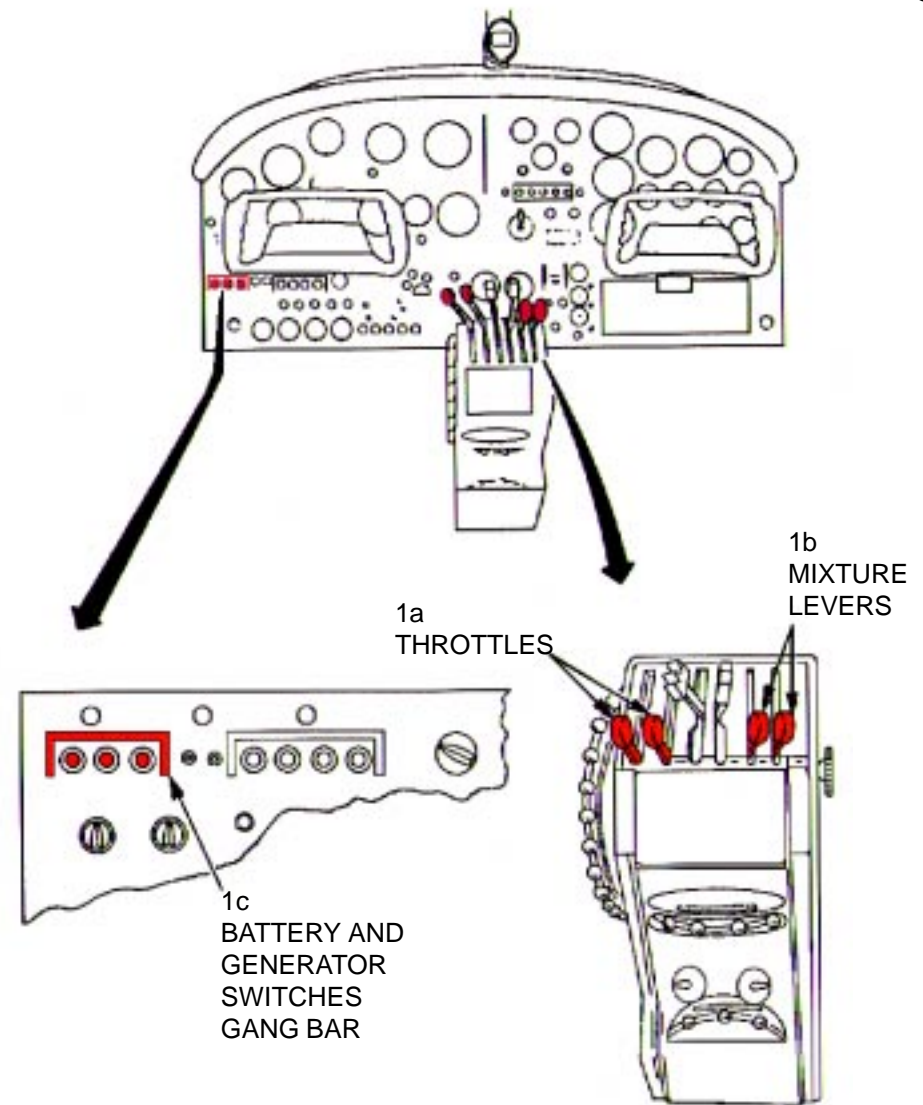
- a. Retard throttles, located center control panel, to CLOSED position.
- b. Retard mixture levers, located on center control panel, aft, to IDLE CUT-OFF.
- c. Pull battery switches gang bar, located lower side of center console, down to OFF position.

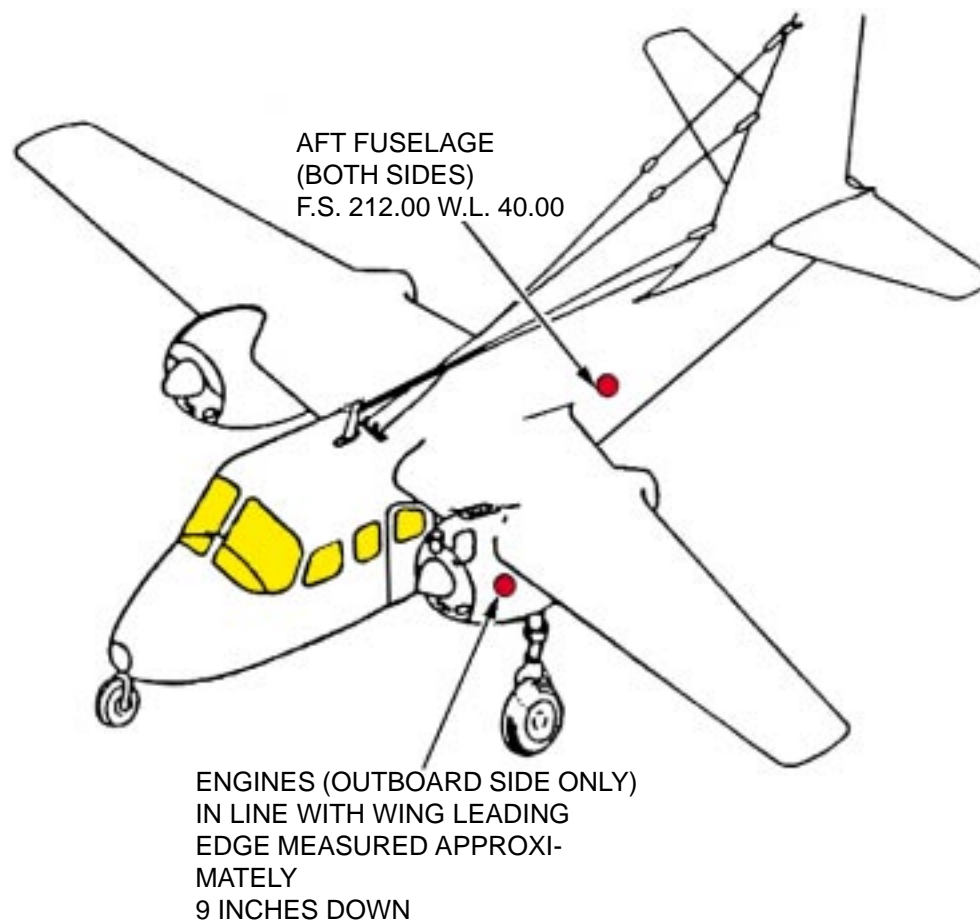
2. AIRCREW EXTRACTION

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

NOTE:

Passenger seats equipped only with lap belts.





SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw
Rescue Crash Ax

AIRCRAFT ENTRY

1. NORMAL ENTRY

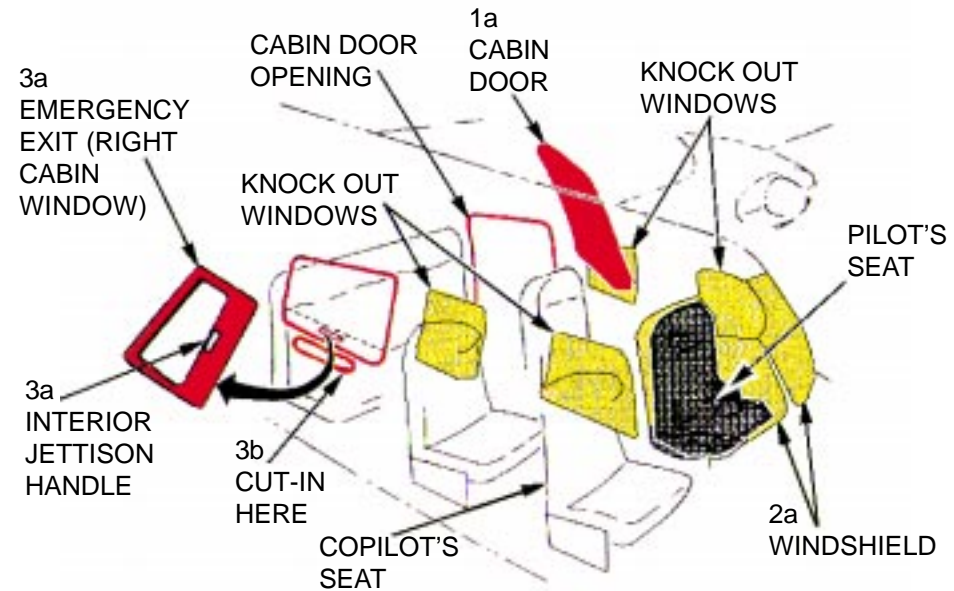
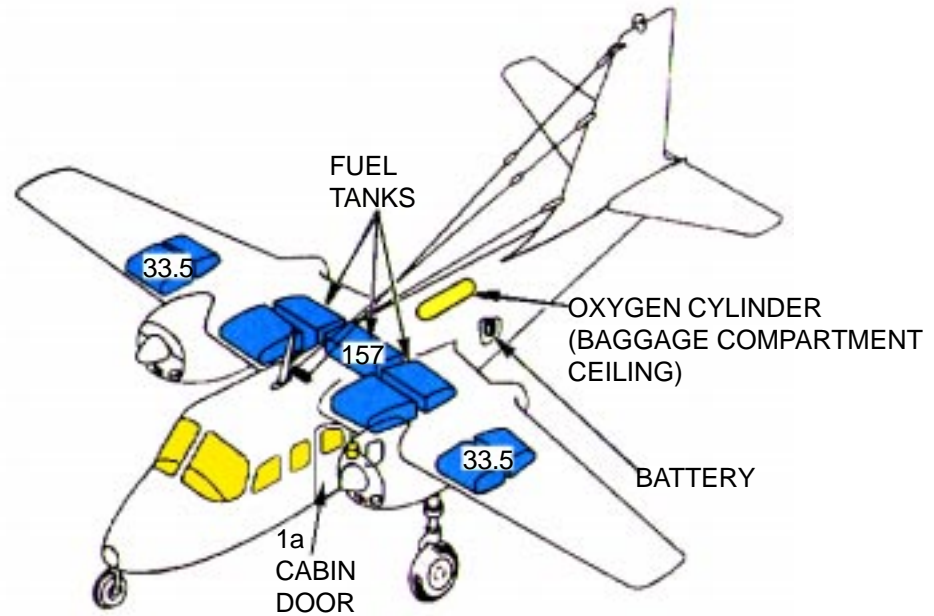
- a. Unlatch cabin door, located left forward side of fuselage.
- b. Pull cabin door outward.

2. EMERGENCY ENTRY

- a. Break windshield or windows, with rescue crash ax, if entrance cannot be gained through cabin door.

3. CUT-IN

- a. To obtain access to interior jettison handle on right cabin window, cut area directly below window.
- b. Cut cabin enclosure as required.



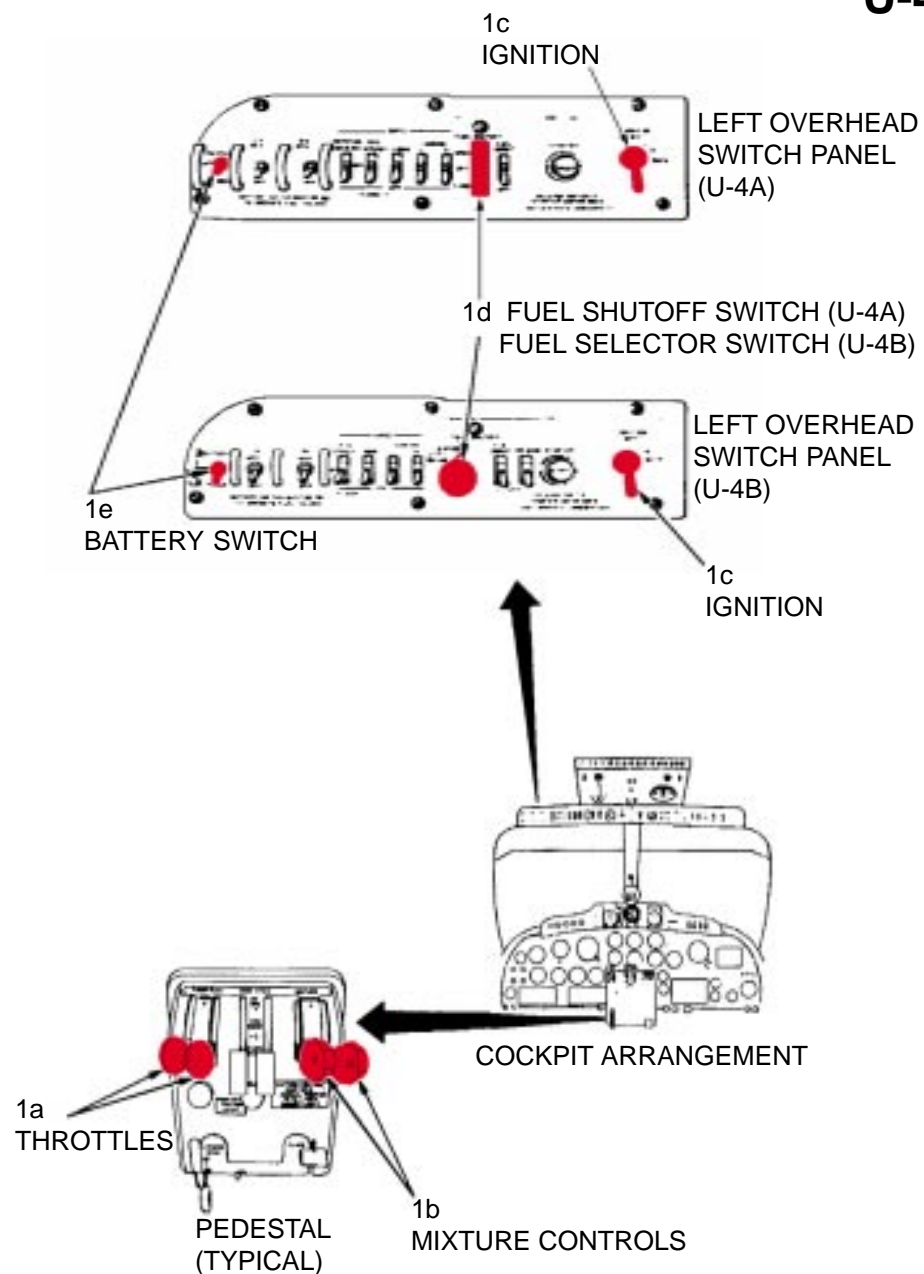
ENGINE SHUTDOWN AND AIRCREW EXTRACTION

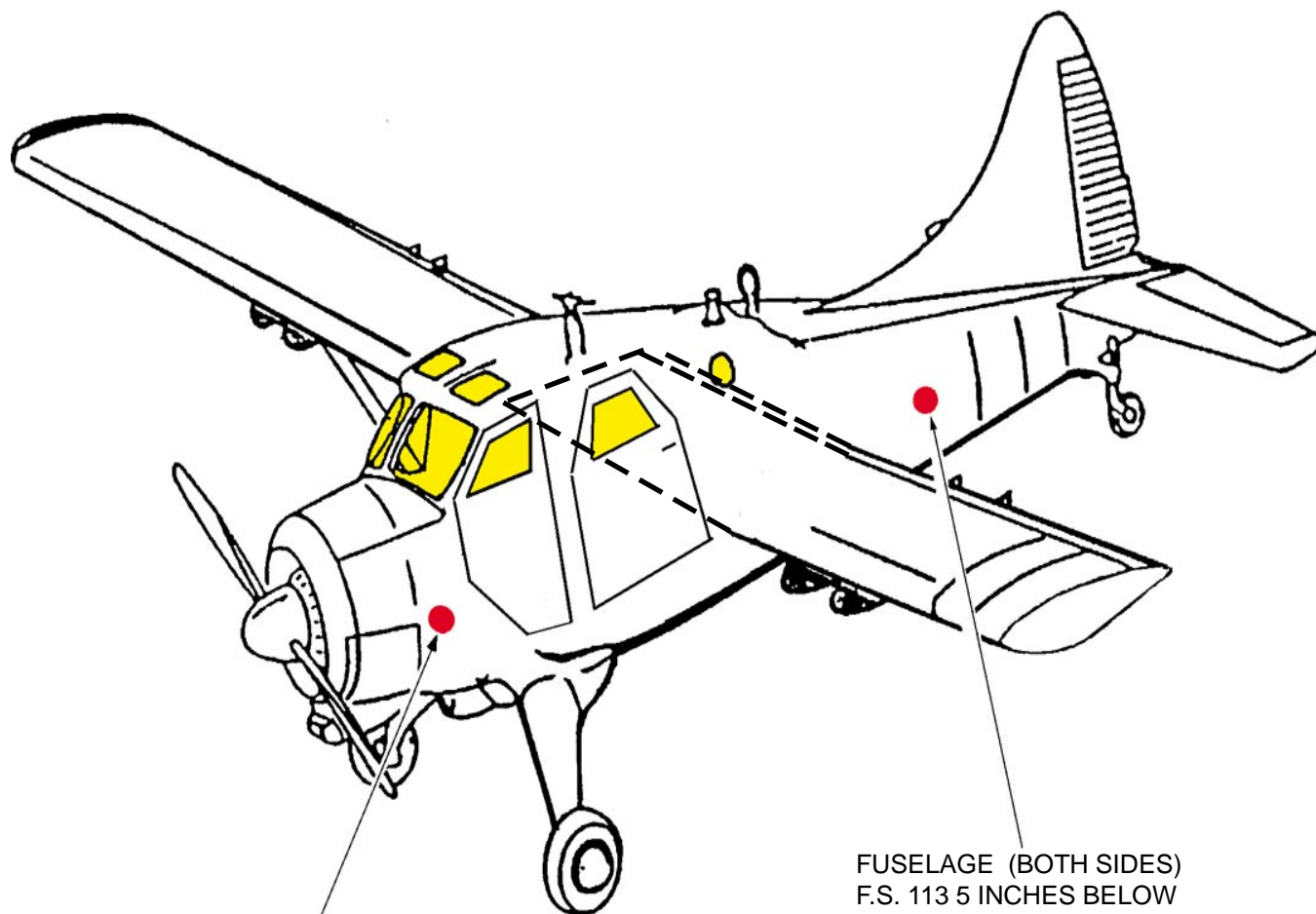
1. ENGINE SHUTDOWN

- Retard throttle levers, located on pedestal, to full CLOSED position.
- Retard mixture levers, located on pedestal, full aft to IDLE CUT-OFF.
- Rotate ignition switches, one each located on left and right switch panels, to OFF position.
- Place fuel shutoff valve switches - CLOSE (A models); place fuel selector switches - OFF (B models); located on left and right switch panels.
- Place battery switch, located on left switch panel, to OFF position.

2. AIRCREW EXTRACTION

- Unlatch lap belts from crewmember(s).





ENGINE (BOTH SIDES)
6 INCHES FORWARD OF
COCKPIT FIREWALL ALONG
AIRCRAFT CENTERLINE

FUSELAGE (BOTH SIDES)
F.S. 113 5 INCHES BELOW
AIRCRAFT CENTERLINE

SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw
Rescue Crash Ax

U-6

AIRCRAFT ENTRY

1. NORMAL ENTRY

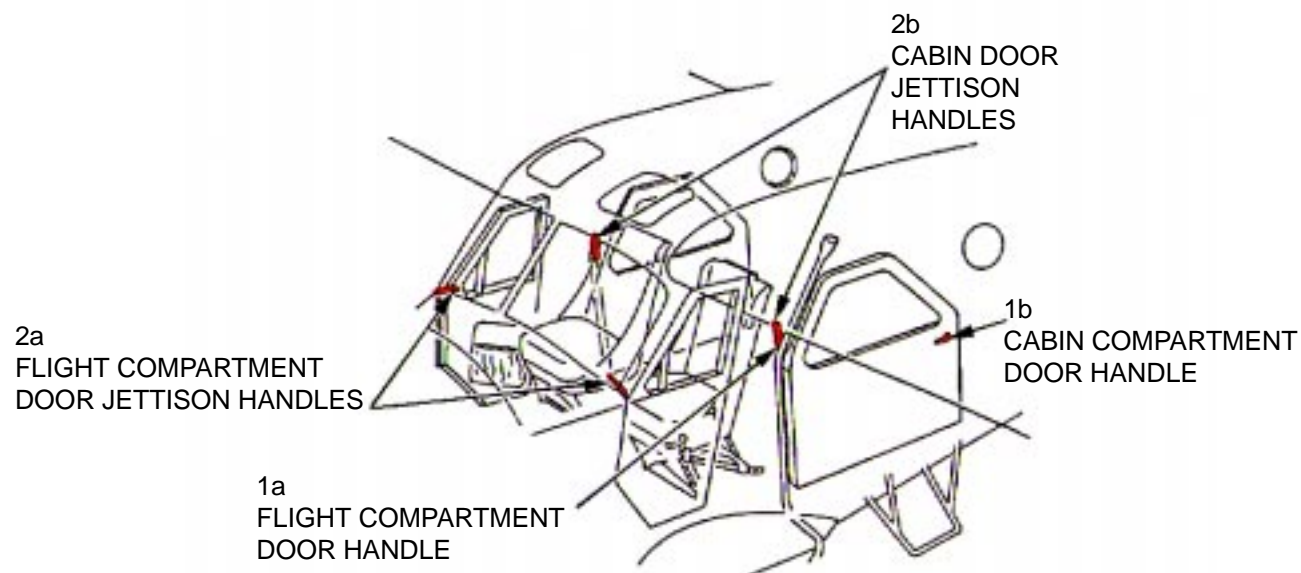
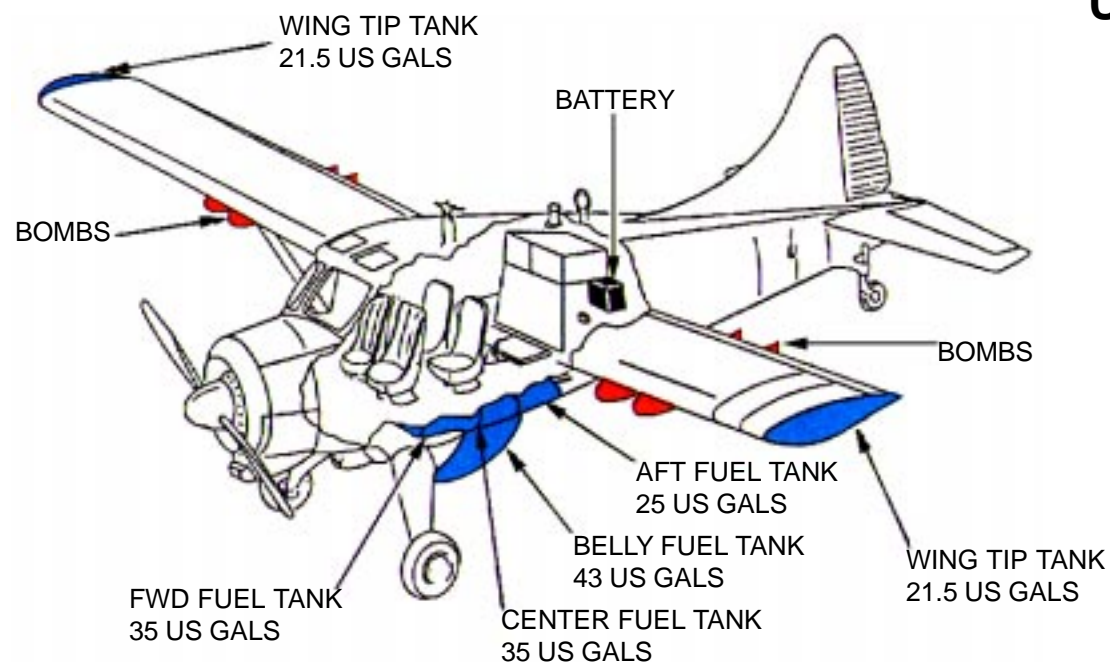
- a. Two flight compartment doors are located on each side of fuselage.
- b. Two cabin compartment doors are located aft of flight compartment doors on each side of fuselage.

2. EMERGENCY ENTRY

- a. Break window in flight compartment and pull jettison door lever, located forward of left and right fuselage doors, pull door aft, and pull door outward.
- b. Break window in cabin compartment and pull jettison door lever, located forward of left and right fuselage doors, forward or aft, and pull door outward.

3. CUT-IN

- a. Cut cabin enclosure as required.



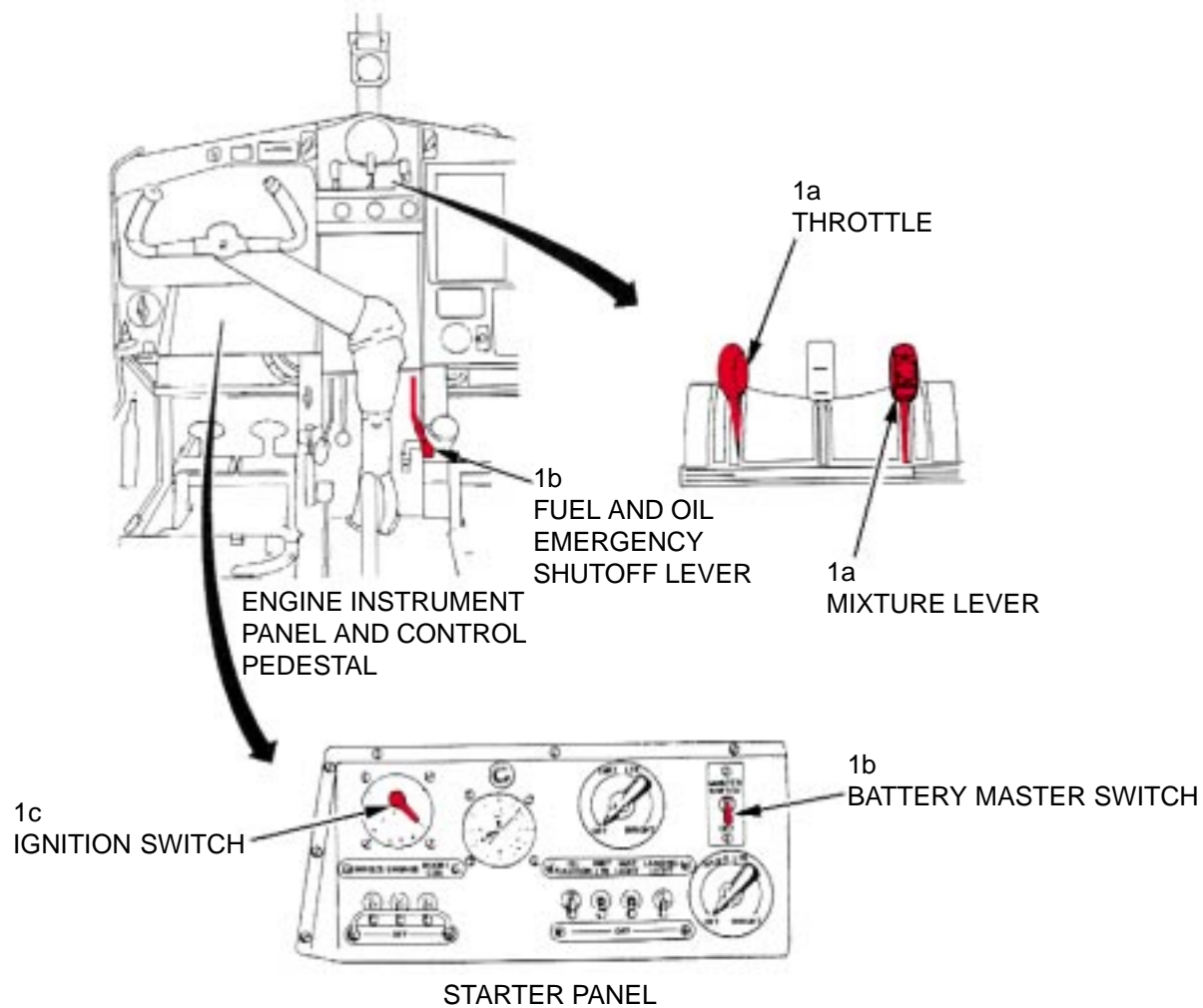
ENGINE SHUTDOWN AND AIRCREW EXTRACTION

1. ENGINE SHUTDOWN

- a. Retard mixture and throttle levers, located on upper center console, to CLOSED position.
- b. Place fuel and oil emergency shut-off lever, located on lower control pedestal, down to CLOSED position.
- c. Turn ignition switch, located on left side of forward console, to OFF position.
- d. Push battery master switch, located on left forward console, down to OFF position.

2. AIRCREW EXTRACTION

- a. Unlatch lap belt and remove shoulder harness from crewmember(s).
- b. Unlatch lap belt from passengers.



SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw
Crash Ax

U-10

AIRCRAFT ENTRY

1. NORMAL ENTRY

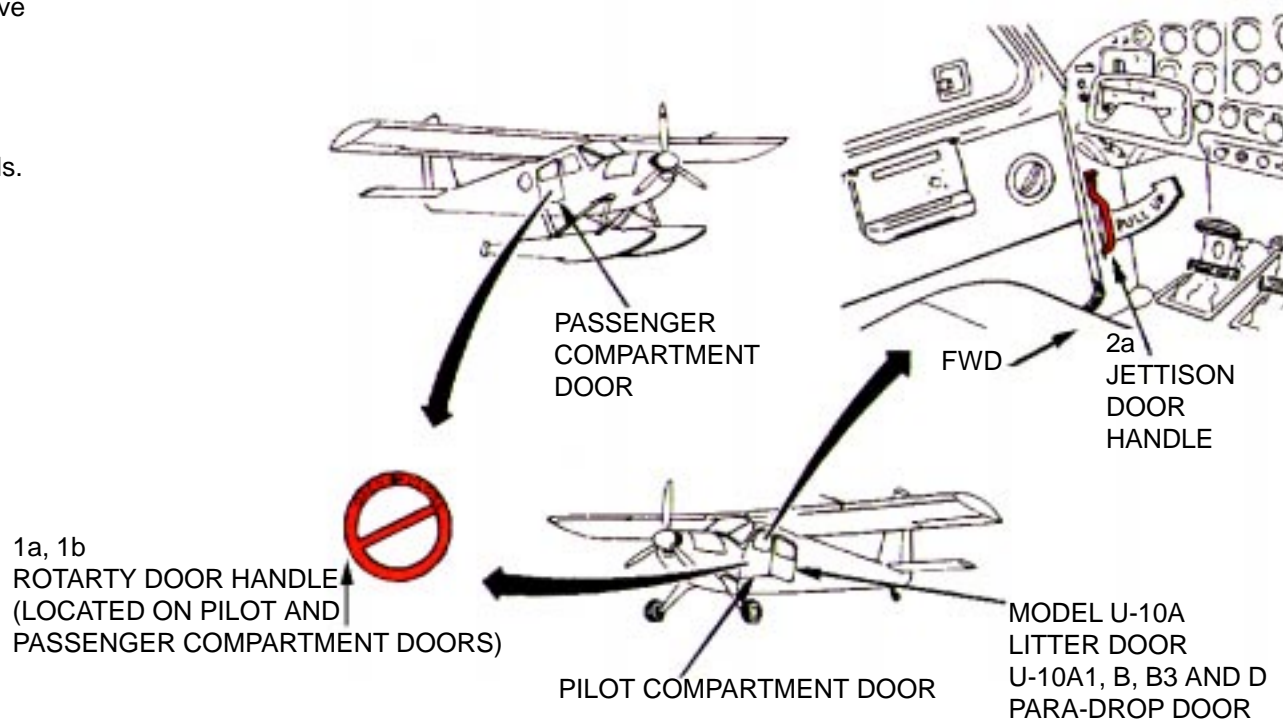
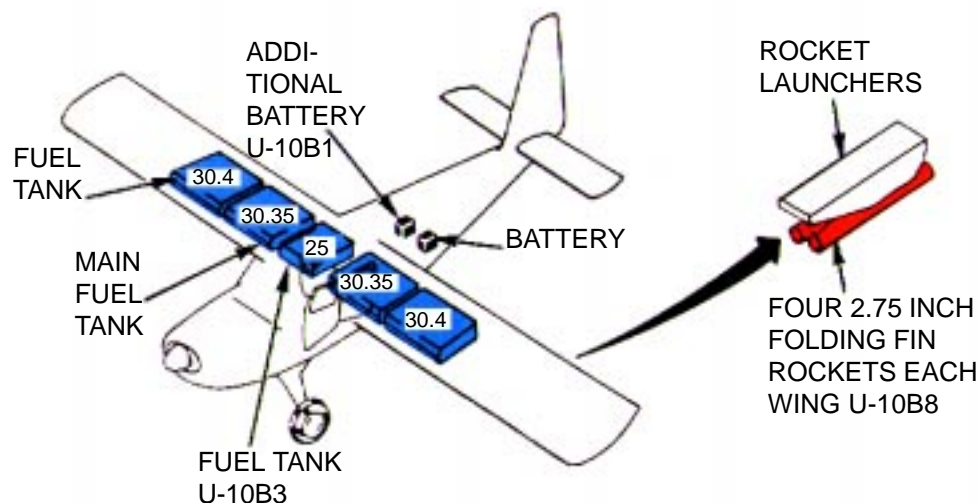
- a. Rotate pilot's compartment door handle, located left forward side fuselage, counterclockwise and open outward.
- b. Rotate passenger compartment door handle, located right rear fuselage, counterclockwise and open outward.

2. EMERGENCY ENTRY

- a. Break pilot's compartment door window, pull jettison door handle, located on forward door frame below forward console, up and remove door.

3. CUT-IN

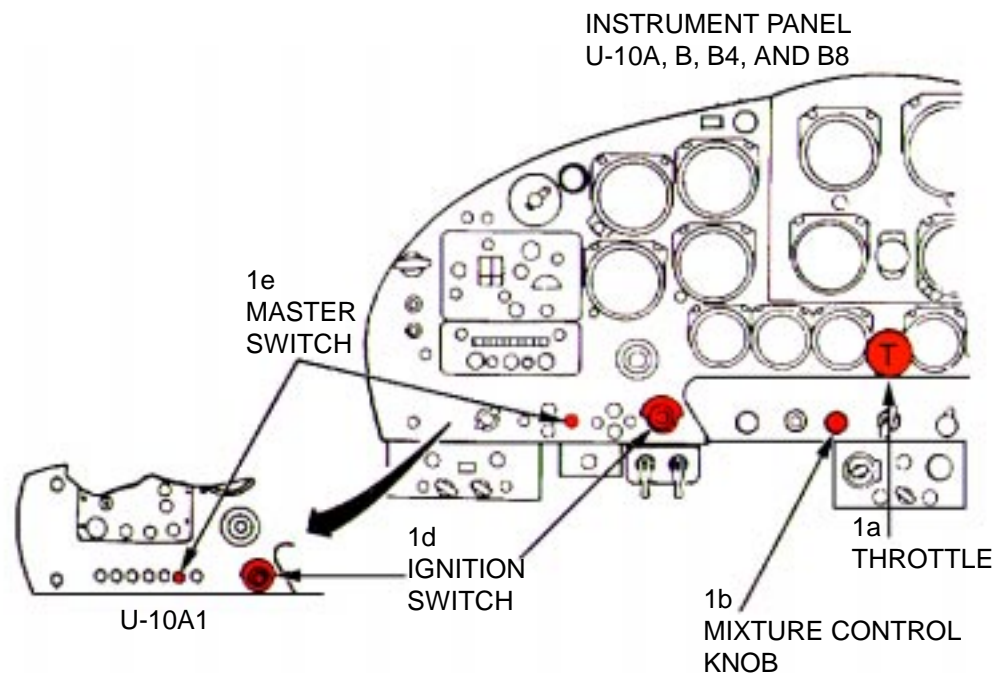
- a. Windows may be broken if normal entry fails.



ENGINE SHUTDOWN AND AIRCREW EXTRACTION

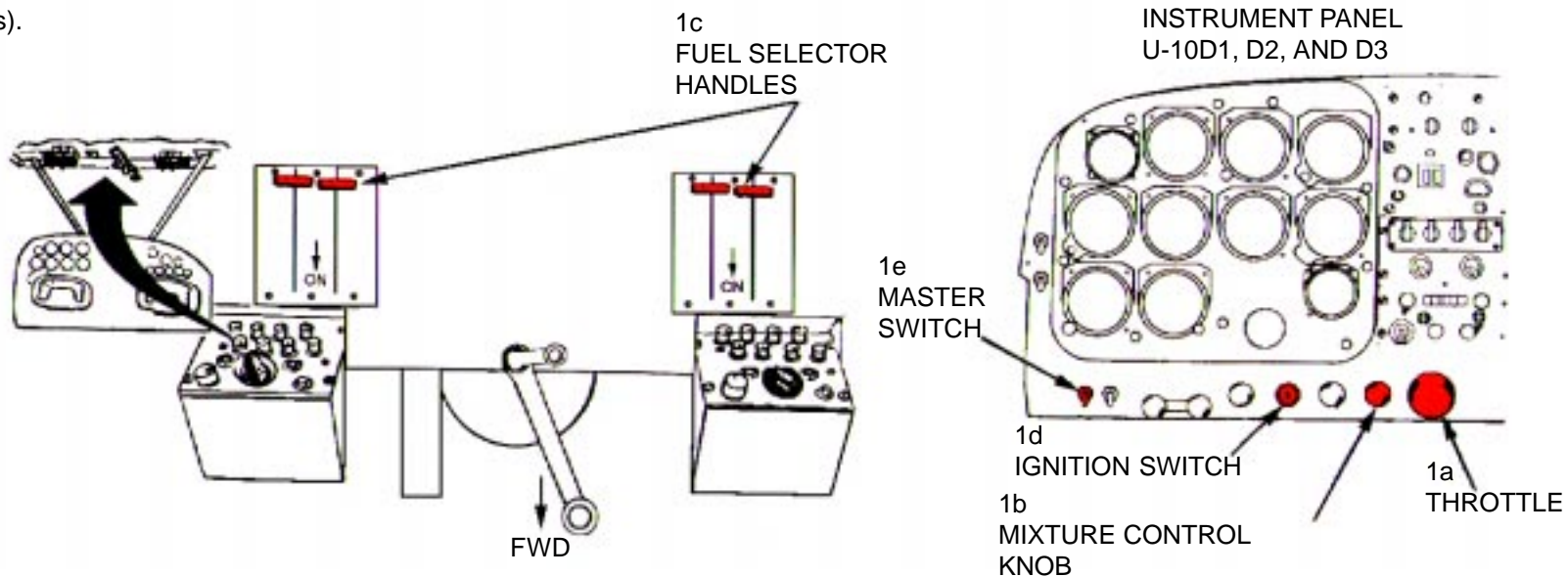
1. ENGINE SHUTDOWN

- Pull throttle knob, located on lower left center of instrument panel, aft to CLOSED position.
- Rotate mixture control knob, located on lower left center of instrument panel, counterclockwise and push in to IDLE CUTOFF position.
- Place fuel selector handles, located on overhead panel, to OFF position.
- Rotate ignition switch, located lower left center of instrument panel, to OFF position.
- Place master switch, located lower left corner of instrument panel, in OFF position.



2. AIRCREW EXTRACTION

- Unlatch lap belt and remove shoulder harness from crewmember(s).



AIRCRAFT HAZARDS

AIRCRAFT HAZARDS

Fuel Load: 380 gallons

Fuel tanks located under floor of passenger/paratroop section

- 182 gallons in fwd tank
- 198 gallons in aft tank

Oxygen: Two locations:

- 2 - 1800 PSI cylinders mounted in ceiling of aft baggage compartment for passengers. Emergency shutoff also located here.
- 1 - 1800 PSI cylinder mounted in nose for pilot and co-pilot. Emergency shutoff located on console.

Batteries: Two locations:

Beneath floor of rear baggage compartment.

Turbo propellers: Two 8' 6" diameter blades

Aircraft Materials:

- Skin is aluminum alloy
- Cabin floor is low density aluminum
- Tail section is high strength aluminum alloys
- Windscreen/windows is acrylic plastics

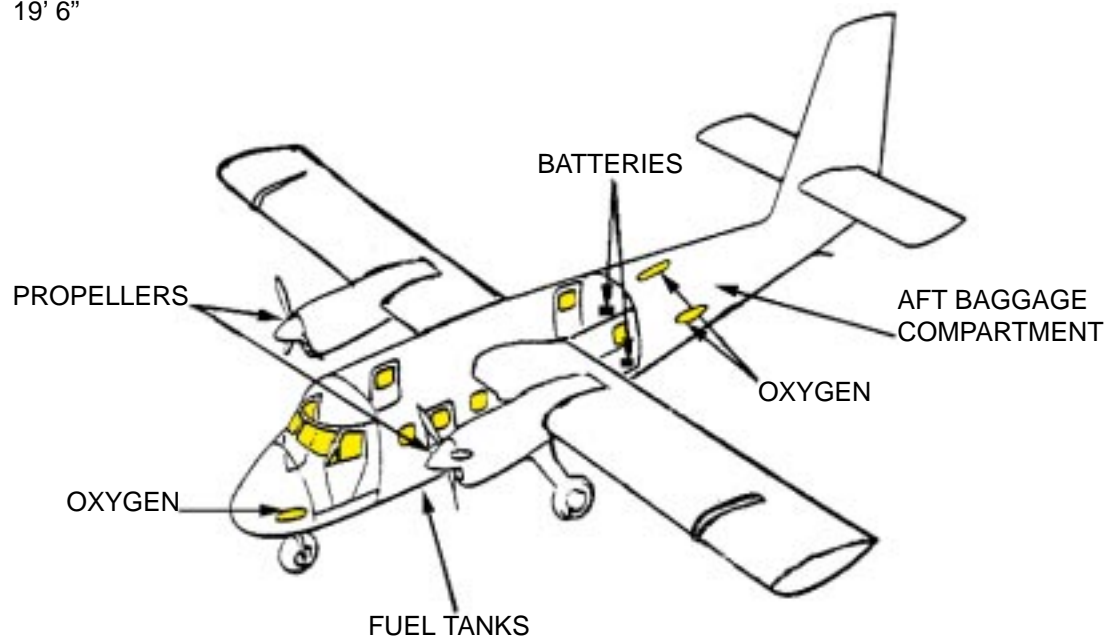
NOTE:

Aircraft is also used by the U.S. Army National Guard.

DIMENSIONS

WING SPAN 65' 0"
 LENGTH 51' 9"
 HEIGHT 19' 6"

UV-18B



SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw
Fire Drill II
25 Ft. Ladder

UV-18B**AIRCRAFT ENTRY****1. NORMAL ENTRY**

- a. The cabin can be entered through the main entry door, located on the right aft side of the fuselage, by rotating the unlock handle counterclockwise.
- b. The cabin can be entered through the paratroop door or airstair door or an optional double cargo door, located on the left aft side of the fuselage, by rotating the unlock handle clockwise.
- c. Crew entry can be entered through the cockpit doors, located on either side of the fuselage, by rotating the unlock handle clockwise for the left door and counter clockwise for the right.

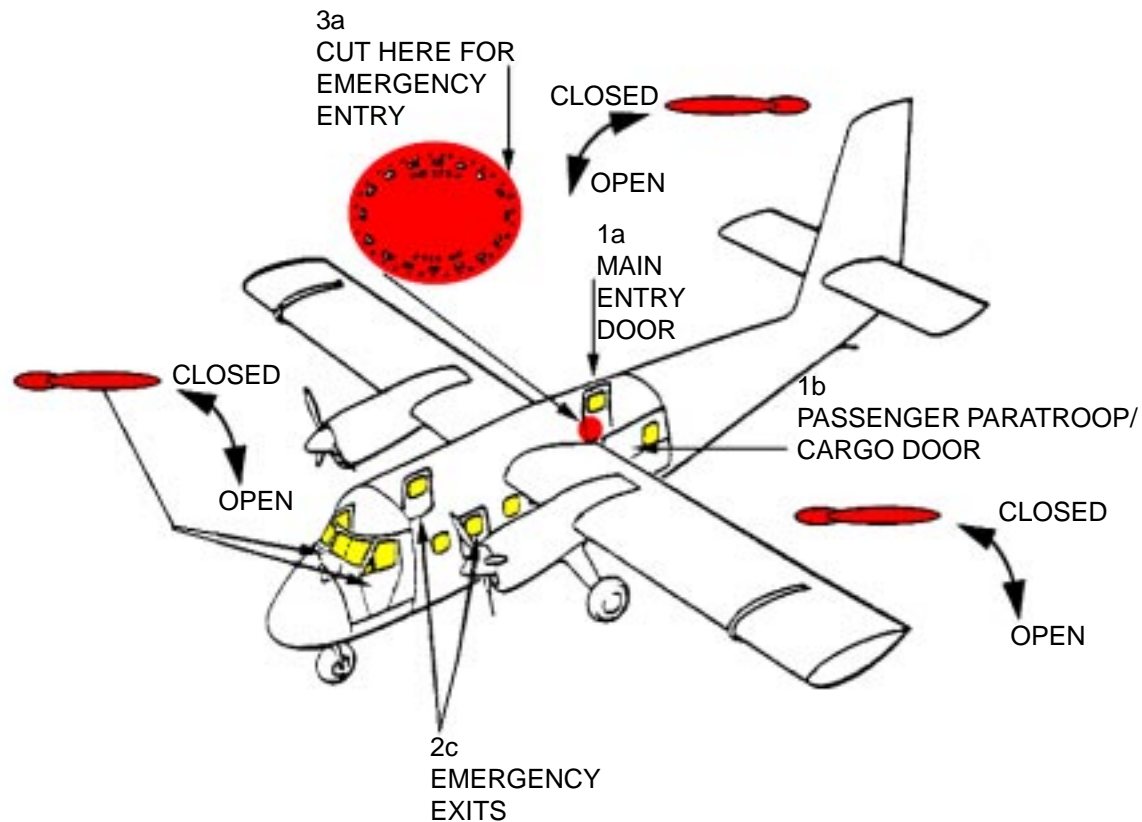
2. EMERGENCY ENTRY AND EXITS**WARNING**

Do not use cockpit doors or emergency exits if engines are operating. Rotating blades can injure or cause death if contact is made.

- a. Locate unlock handle on main entry door, or passenger/paratroop door, or cargo door.
- b. Rotate unlock handle in appropriate fashion and enter.
- c. Emergency exits are located just aft of cockpit doors.

3. CUT-IN

- a. By using a 25' ladder, access the top of the fuselage and cut a hole between the main entry and passenger/paratroop or cargo doors.



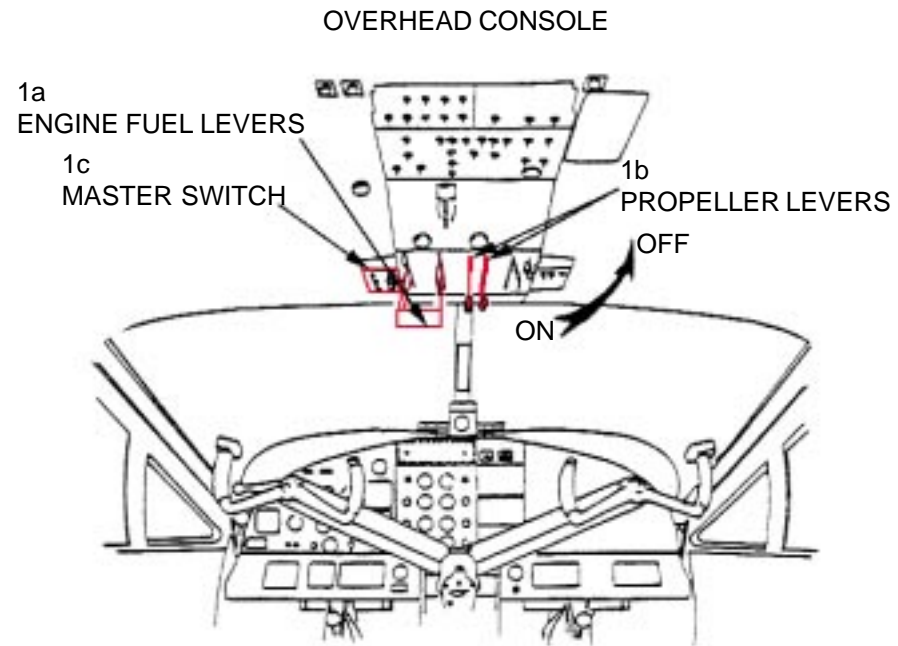
ENGINE SHUTDOWN AND AIRCREW EXTRACTION

1. ENGINE SHUTDOWN

- a. Retard engine fuel levers, located on right side of overhead console, AFT to full OFF position.
- b. Retard propeller levers, located forward center of overhead console, to CENTER position, push in to clear stop or detent, then to AFT to FEATHER position.
- c. Pull master switch, located on left forward corner of overhead console, OUT to OFF position.

2. AIRCREW EXTRACTION

- a. Unfasten seat belts from crew and passengers or paratroopers, and remove from aircraft.



AIRCRAFT HAZARDS

U-26A

AIRCRAFT HAZARDS

Fuel Capacity - 92 US gallons
Usable Fuel - 88 US gallons
Fuel Cells - One per wing - 46 US gallons each
Fuel Type - 100LL Grade Aviation

Oil Capacity - 13 US quarts
Oil Type - MIL-L- 6082 Grade Aviation

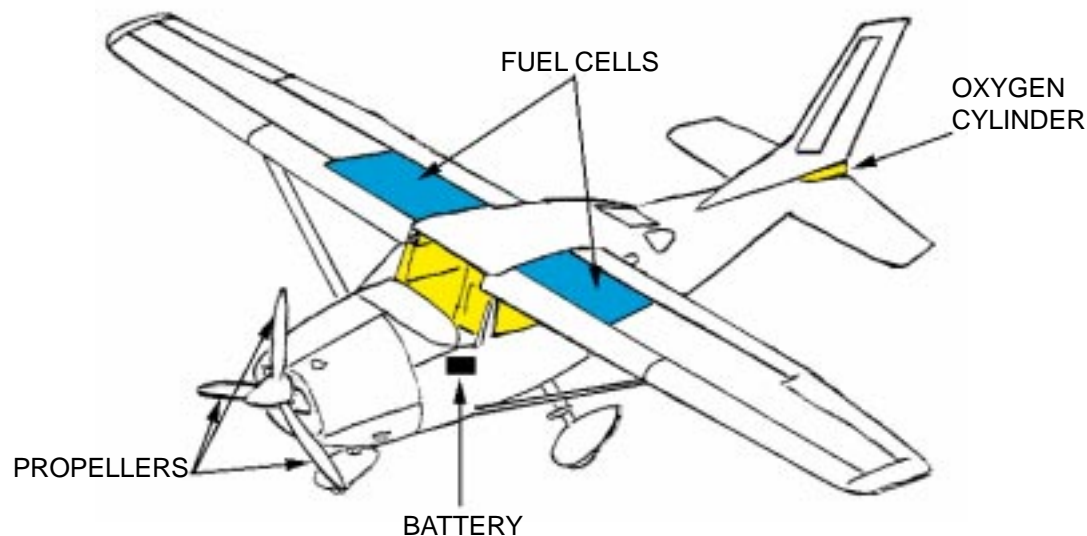
Propeller - 3 blades
Propeller Diameter - 80 inches

Optional Oxygen System
Capacity - 76 Cubic Feet
Oxygen Cylinder Location - Tailcone
Cylinder Pressure - 70 PSI
Shutoff Valve at Oxygen Regulator
Filler Valve - Left side of tailcone under a cover plate.
Six Outlets - 2 at Overhead Console and 4 in the cabin ceiling.

Battery - 24 or 28 Volts DC
Location - Upper left forward portion of the firewall.

Structure - Conventional all metal semi-mono coque (no composites).

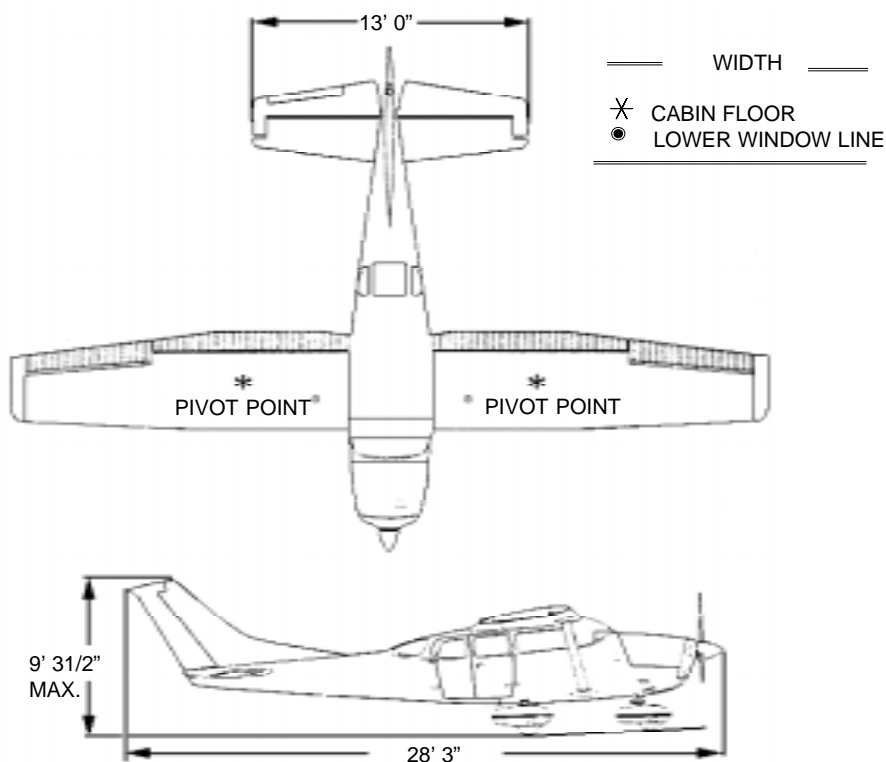
Weather Radar Antenna (All types) -
Located on a Wing Pod. Range of danger when system is operating is 15 feet for ground personnel and containers holding flammable or explosive material. System can generate microwave radiation and exposure may cause serious bodily injury.



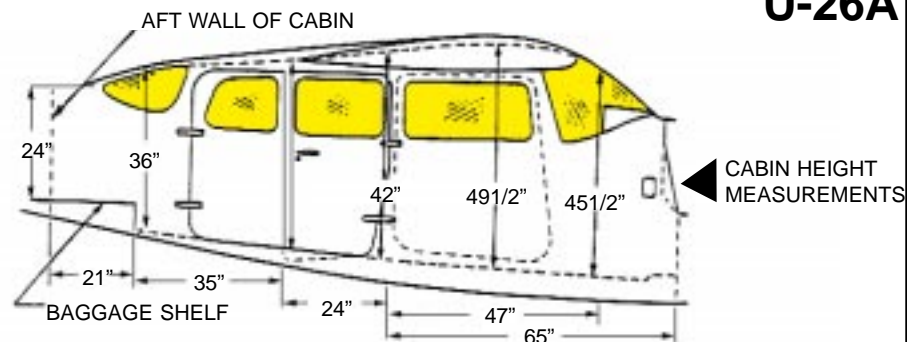
AIRCRAFT DIMENSIONS AND CABIN MEASUREMENTS

NOTES:

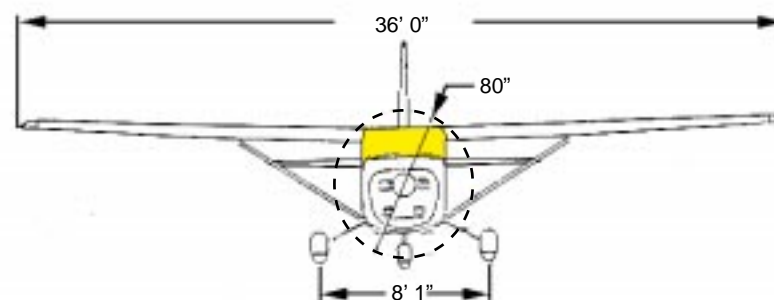
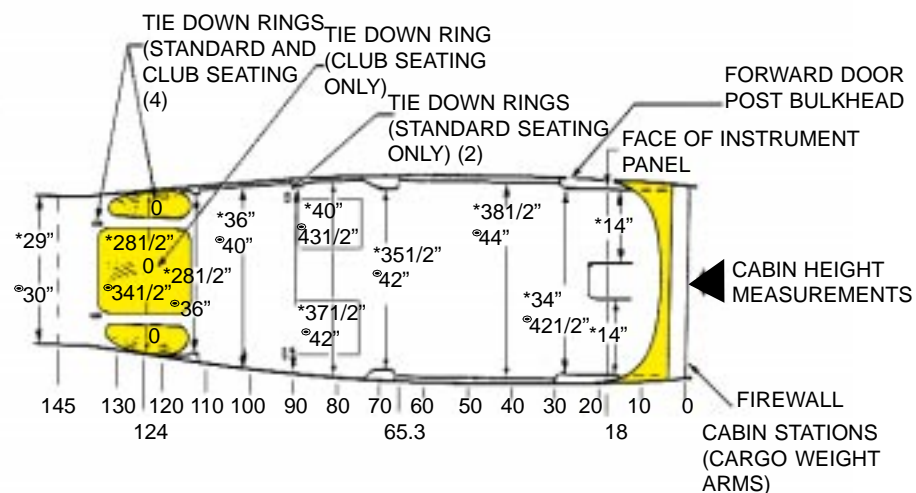
- Dimensions shown are based on standard empty weight and proper nose gear and tire inflation.
- Dimensions shown reflect standard nose and main gear tire installation.
- Wing span shown with strobe lights installed.
- Maximum height shown with nose gear depressed as far as possible.
- Wheel base length is 69 1/4".
- Propeller ground clearance is 11 3/4".
- Wing area is 174 square feet.
- Minimum turning radius (* pivot point to outboard wing tip) is 26' 3".



U-26A



DOOR OPENING DIMENSIONS			
	WIDTH (TOP)	WIDTH (BTM)	HEIGHT (FWD)
CABIN DOOR	32 1/2"	37"	41"
CARGO DOORS	43"	40"	39 1/4"
			HEIGHT (AFT)
			39"
			37 1/2"



SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw
Fire Drill II

U-26A

1. NORMAL ENTRY

- For front cabin entry, use the left side fuselage door.
- Rotate front cabin door by raising door handle up to open. This will access the pilot, co-pilot and the two forward passengers. (These two seats may face aft.)
- For aft cabin entry, use the right side fuselage cargo doors. Rotate forward cargo door handle up to open. Rotate aft cargo door handle down to open. This will access the two aft passengers and two forward seats if they are facing aft.

2. EMERGENCY EXIT

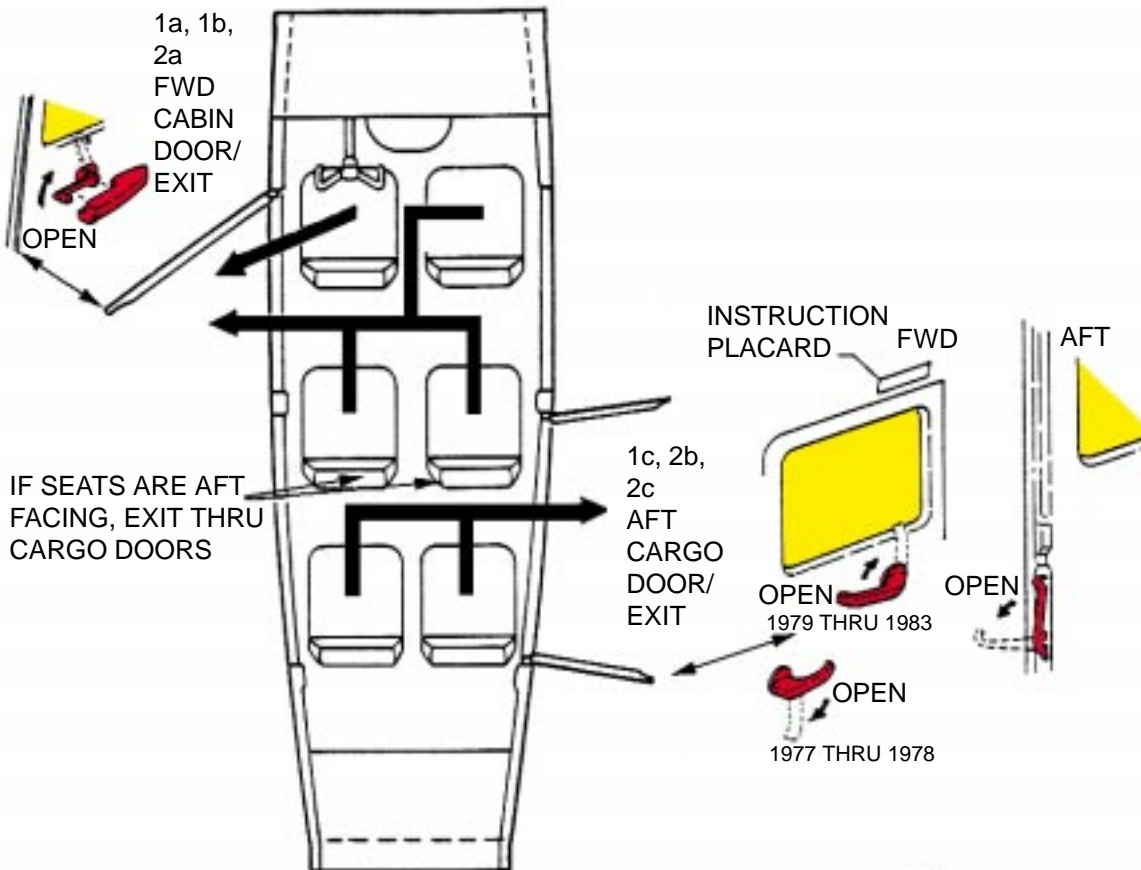
- Exit the front cabin through the left fuselage door.
- Exit the aft cabin through the right fuselage cargo door.
- Forward passenger seats may face in either direction. If facing forward, exit through front cabin door. If facing aft, exit through cargo door.

3. CUT-IN

- Cut-in around doors. Use caution and be aware of passenger positions.

NOTE:

Portable fire extinguishers may be located under the forward edge of the seats.

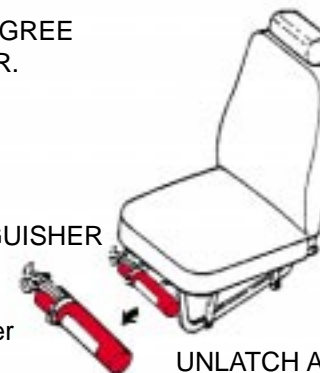


SEATING CONFIGURATION MAY NOT AGREE WITH ONE AIRCRAFT TO ANOTHER.

FIRE EXTINGUISHER

NOTE:

Location of fire extinguisher will be announced by flight crew.

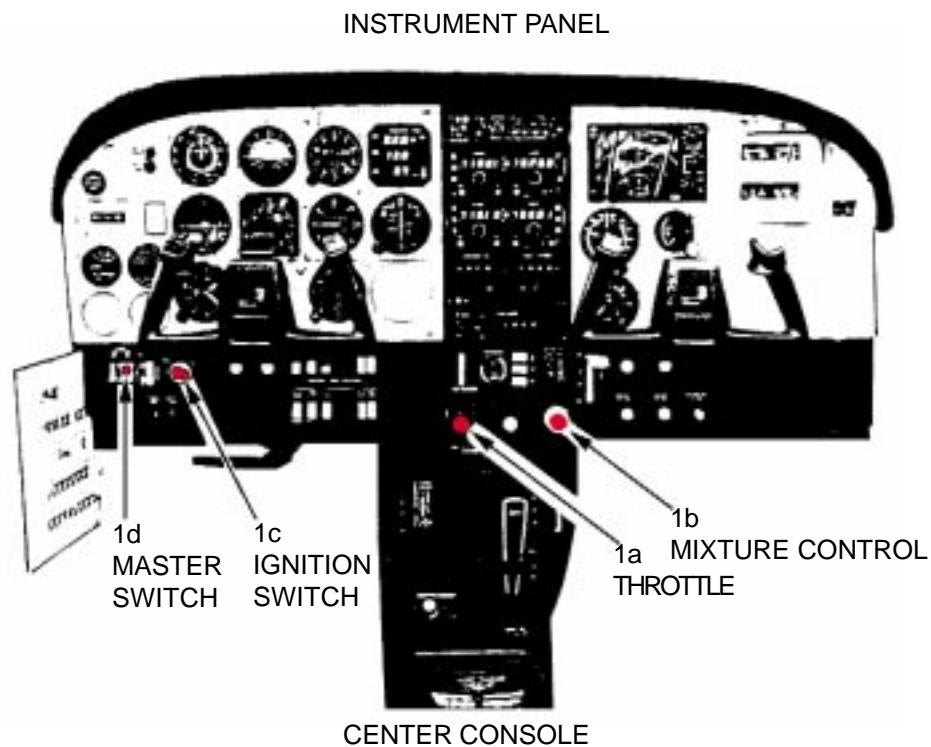


ENGINE SHUTDOWN

U-26A

1. ENGINE SHUTDOWN

- a. Place throttle, located on center console, to IDLE position.
- b. Place mixture control, located on right center console, to IDLE CUT-OFF position.
- c. Place ignition switch, located on left side of pilot's lower panel, to OFF.
- d. Place master switch, located on left side of pilot's lower panel, to OFF.



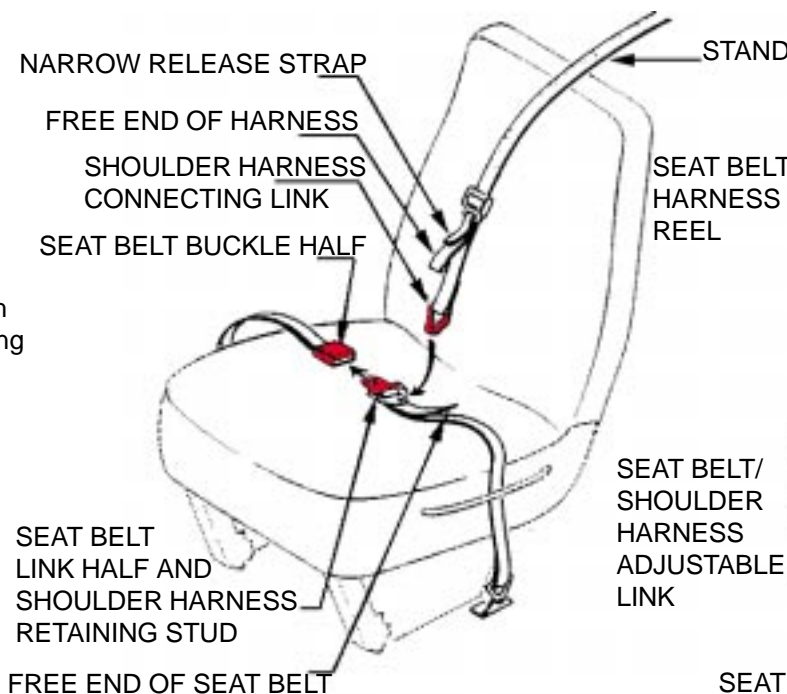
AIRCREW EXTRACTION

1. AIRCREW EXTRACTION

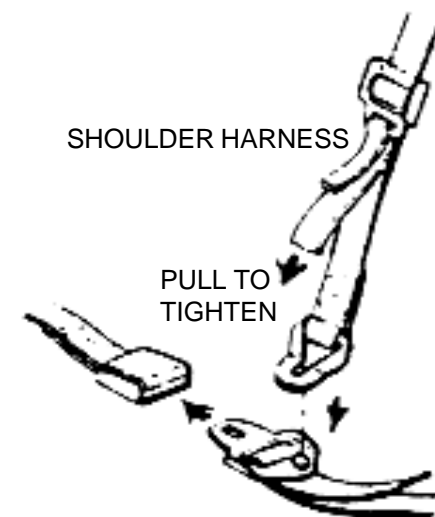
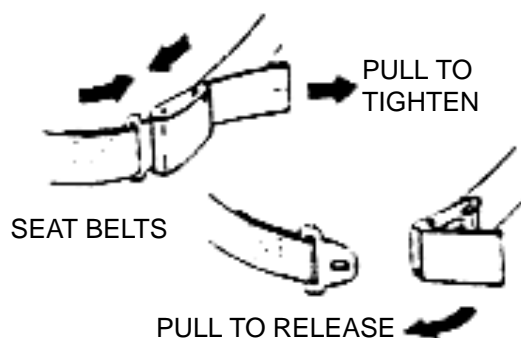
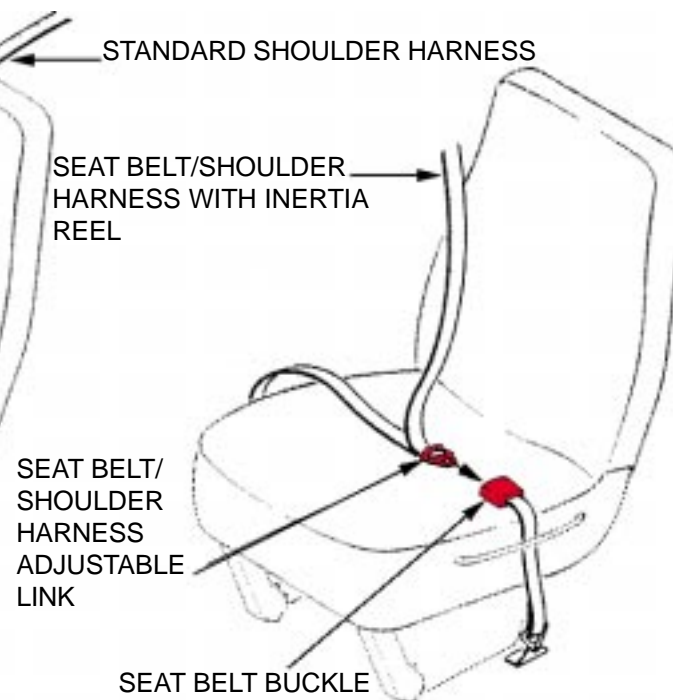
NOTES:

- See EMERGENCY EXIT on page U-26A.4 for doors and routes.
 - Restraint systems are connected by a single point release buckle. To release, grasp top of buckle and pull upward.
 - The four forward seats may be equipped with inertia reels. This will not hinder disconnecting the restraints.
- a. Locate aircrew and passengers. Determine correct door and seat arrangement for proper extraction methodology.
 - b. Using the front cabin door, located on the left fuselage, disconnect the lap belts and shoulder harnesses of the pilot, co-pilot and, if facing forward, two passenger seats.
 - c. Using the cargo door, located on the right fuselage, disconnect the lap belts and shoulder harnesses of the two rear seats.
 - d. If forward passenger seats are facing aft, they will not be equipped with shoulder harnesses.

PILOT SEAT



PASSENGER SEAT



U-26A