

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

THIS IS SEGMENT 24 COVERING CHAPTER 30.

TO NAVIGATE

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



CONTINUE

NOTICE

CONTACT

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

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



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

TECHNICAL ORDER 00-105E-9 TECHNICAL CONTENT MANAGER

WRITTEN CORRESPONDENCE:

HQ AFCESA/CEXF

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



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

PHONE: (850) 283-6150
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For technical order improvements, correcting procedures, and other inquiries, please use the above media most convenient.

SEGMENT 24 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 Retaining out of date rescue information can negatively affect the user's operability and outcome of emergencies.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>
30	AB-206	ALL	Updated file.
30	AS-532	ALL	Updated file.
30	AS-550C2	ALL	Updated file.
30	Scout AH-1	ALL	File deleted.
30	UH-60&S-70-28D	ALL	New file added.
<hr/>			
30	Danish Lynx	ALL	New data received and in development.
30	Ecureuil AS 355	ALL	New data received and in development and will replace existing file.
30	Fennec AS 555	ALL	New data received and in development.
30	Gazelle	ALL	New data received and in development.
30	Lynx Mk3	ALL	New data received and in development.
30	Lynx Mk7	ALL	New data received and in development.
30	Lynx Mk9	ALL	New data received and in development.
30	Merlin	ALL	New data received and in development.
30	Sea Harrier FA2	ALL	New data received and in development.
30	Sea King Mk4	ALL	New data received and in development.
30	Sea King Mk6	ALL	New data received and in development.
30	Sea King Mk7 AEW	ALL	New data received and in development.

NOTE

Chapter 30 contains emergency rescue and mishap response information for the following NATO aircraft:

ITA	A 109
ITA, TUR	AB 204
ITA, TUR	AB 204A/S
ITA, TUR	AB 206
TUR	AB 212
ITA, TUR, ESP	AB 212A/S
TUR, CAN	AB 412/CH146
USA, TUR	AH-1 P/W
USA, GBR	AH-64
TUR	AS-532
DNK	AS-550C2
DEU	BO-105CB
CAN, ITA, USA, GBR	CH-47/HC2/3
DEU, USA	CH-53/H-53D,E
FRA	ECUREUIL ALSTAR AS 355
FRA	ECUREUIL 2*
FRA	FENNEC AS 555AN*
GBR	GAZELLE AH1
GBR	GAZELLE HT2
GBR	GAZELLE HT3
ITA	HH-3F*
USA, TUR	H/M/S/UH-60A,G,H,J,L S-70-28D
USA, TUR	HUGHES 300/MH-6
DNK, USA	HUGHES 500/OH-6
GBR	LYNX HAS 3
PRT	LYNX LBH MK9
GBR, PRT	LYNX MK95
FRA	LYNX WG 13
GBR	MERLIN
TUR	OH-13S
USA, TUR	OH-58A/C/D
GBR, FRA, ESP, PRT, TUR	PUMA HC1/SA 330
BEL	SA 313/318
BEL, FRA, PRT, NLD	SA 316B/319B/SE 3160
FRA	SA 341/342
GBR	SEA KING AEW 2
GBR	SEA KING ASW 5
GBR, ITA, ESP	SEA KING HAR 3/SH 3D
GBR	SEA KING HAS/ASW/6
DEU, GBR, DNK, BEL, NOR	SEA KING MK-41/HC-4/S-61/WESTLAND SAR
DEU, DNK	SEA LYNX MK-88
USA, ESP	SH-60B
FRA	SUPER FRELON SA 321
FRA, ESP, NLD	SUPER PUMA & COUGAR/HD-21
USA, ITA, GRC, NLD	UH-1
USA, TUR, NOR	UH-1N
GBR	WESSEX HC2/HC5C

* Aircraft information pending

CHAPTER 30**NATO****HELICOPTER****AEROSPACE EMERGENCY RESCUE
AND MISHAP RESPONSE INFORMATION****30-1. INTRODUCTION AND USE.**

30-2. 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.

30-3. GENERAL ARRANGEMENT.

30-4. 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.

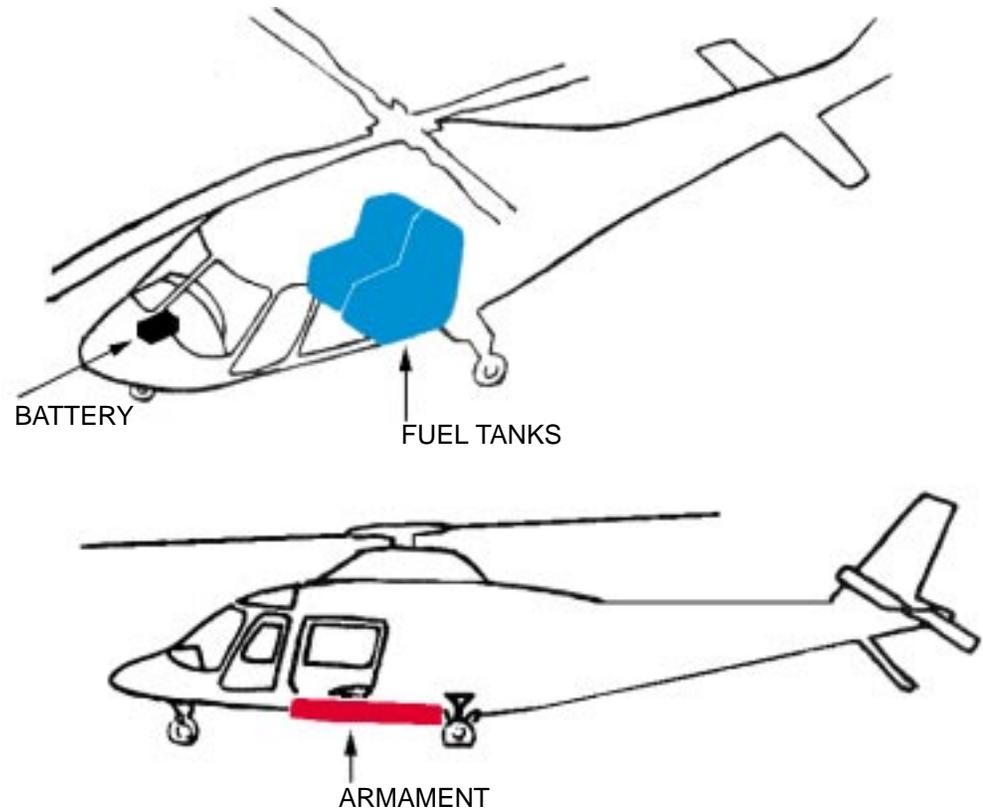
AIRCRAFT HAZARDS

OTHER HAZARDS:

Battery acid
 Bromochlorodifluoromethane (BCF Fire Extinguishant)
 Bromotrifluoromethane (BTM Fire Extinguishant)
 Cadium (Battery/Bolt protection/Steel protection)
 Cartridge operated equipment
 Composite Materials (Man-made mineral fibres)
 Fluorolastomers (Burnt seals)
 Freon
 Polytetrafluoroethylene
 Fuel: NATO F-34
 Hydraulic oil: H-515
 Engine oil: NATO 0-156
 Oxygen: Gaseous

NOTE:

Cargo cabin insulation blanket produces phosgene gas on burning.



SPECIAL TOOLS/EQUIPMENT
Power Rescue Saw
Crash Ax

AIRCRAFT ENTRY

1. NORMAL ENTRY

- a. Use external handles on crew and passenger doors.

2. EMERGENCY ENTRY

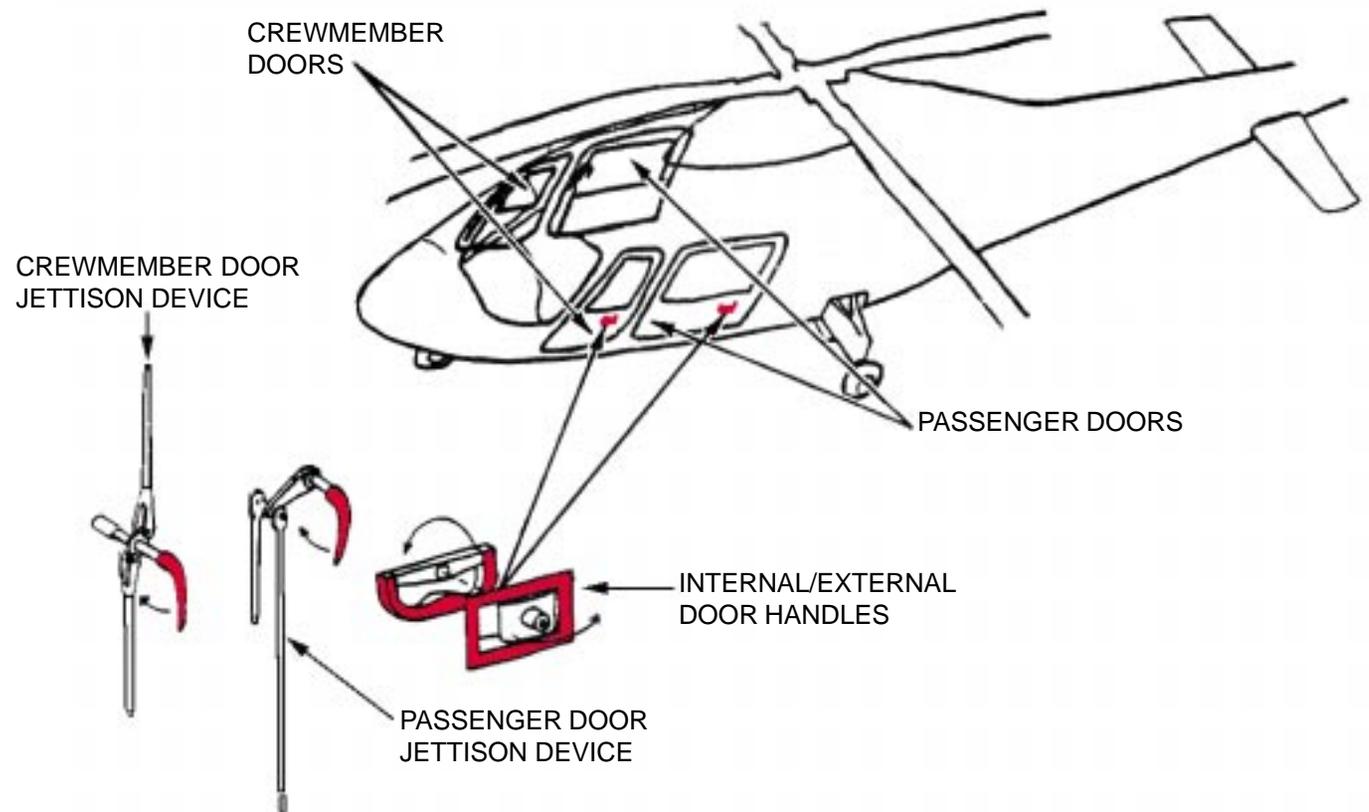
- a. Use crew and passenger door jettison device handles.

NOTE:

Jettison door device is a non-explosive, door separating mechanism.

3. CUT-IN

- a. Cut-in as required.



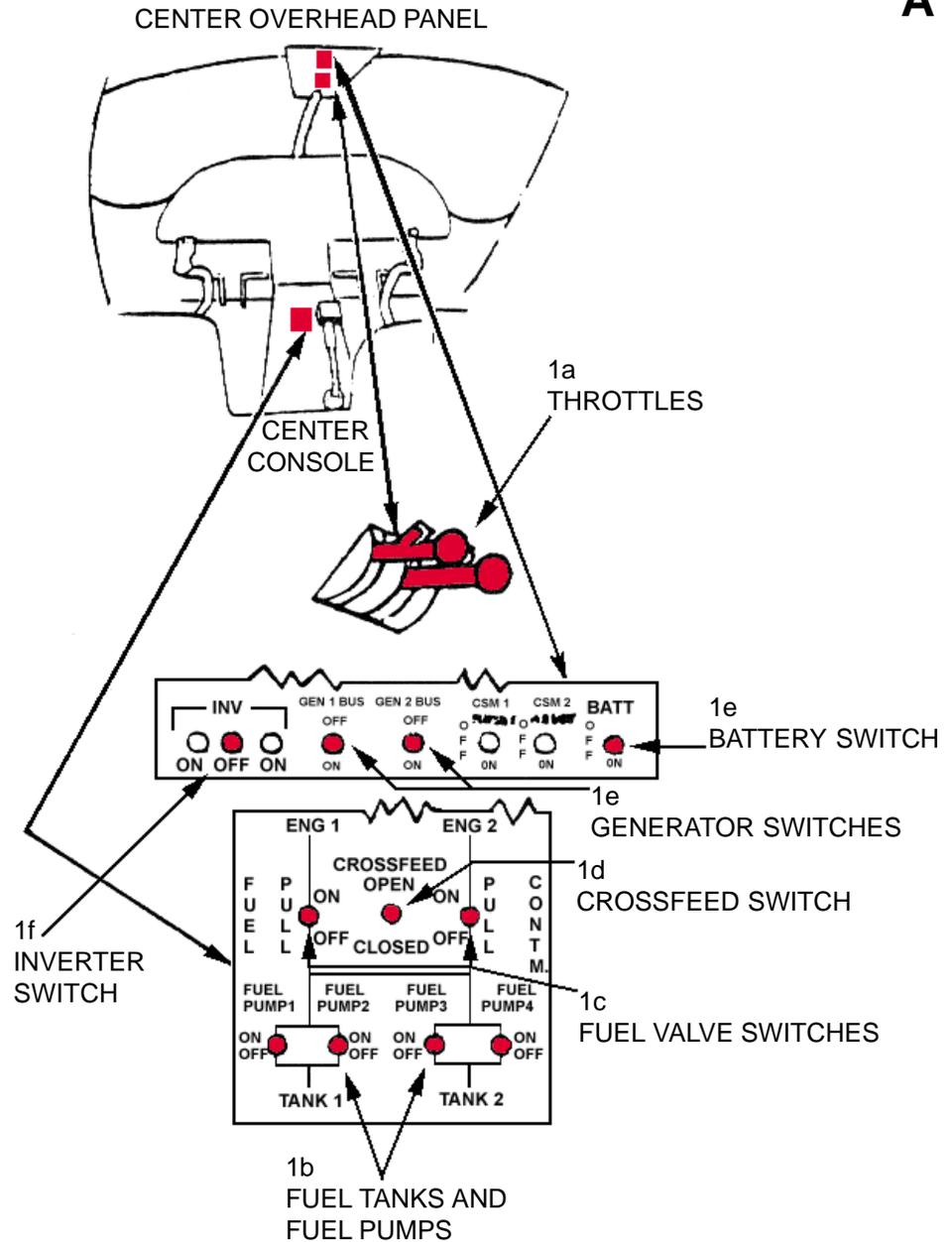
ENGINE SHUTDOWN AND AIRCREW EXTRACTION

1. ENGINE SHUTDOWN

- a. Place throttles, located on center overhead panel, to OFF position.
- b. Place fuel tanks and fuel pump switches, located on center overhead panel, to OFF position.
- c. Place fuel valve switches, located on center console, to OFF position.
- d. Place fuel crossfeed switches, located on center console, to CLOSED position.
- e. Place battery and generator switches, located on center overhead panel, to OFF position.
- f. Place inverter switch, located on center overhead panel, to OFF position.

2. AIRCREW EXTRACTION

- a. Unlatch lap belts and remove shoulder harnesses from crewmembers.
- b. Unlatch lap belts from passengers.



SPECIAL TOOLS/EQUIPMENT

None

AIRCRAFT ENTRY

1. NORMAL ENTRY

- a. Rotate locking handle, located on entry doors, clockwise to OPEN position.

2. EMERGENCY ENTRY

- a. Use crew and cargo door jettison device handles.

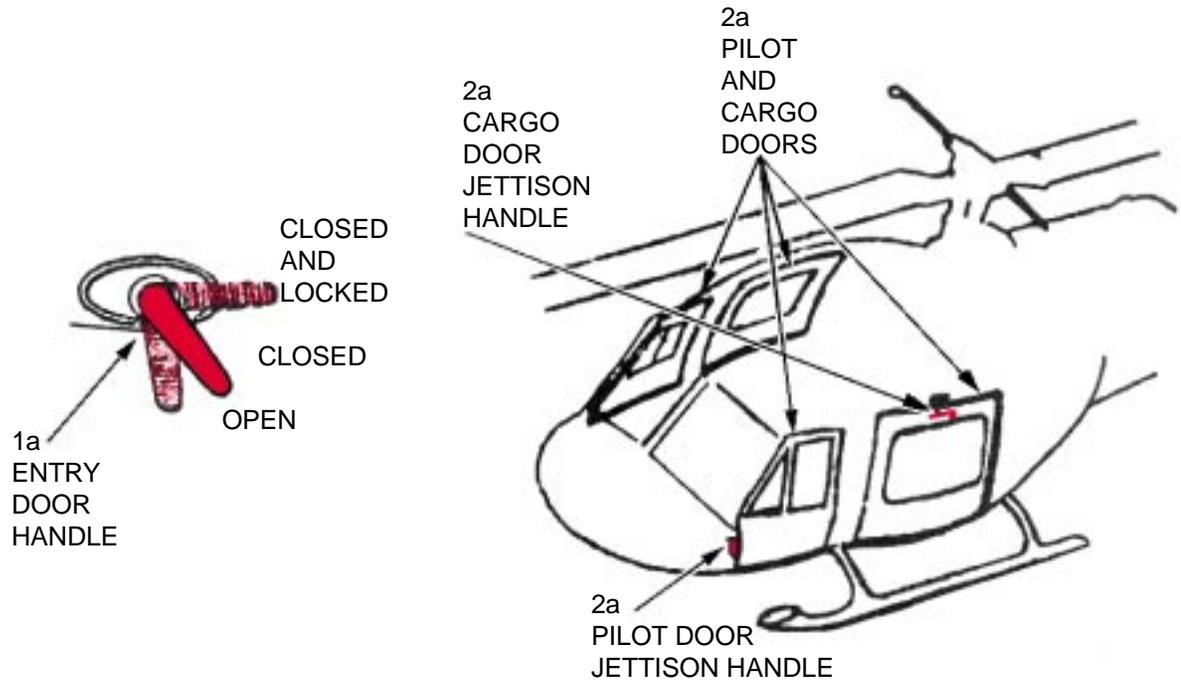
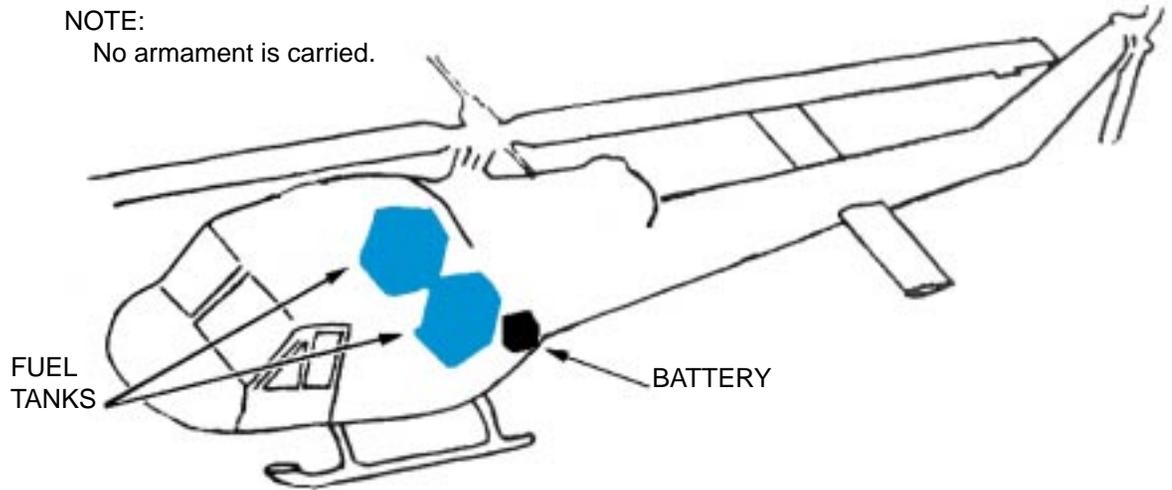
NOTE:

Jettison door device is a nonexplosive, door separating mechanism.

3. CUT-IN

- a. None.

NOTE:
No armament is carried.



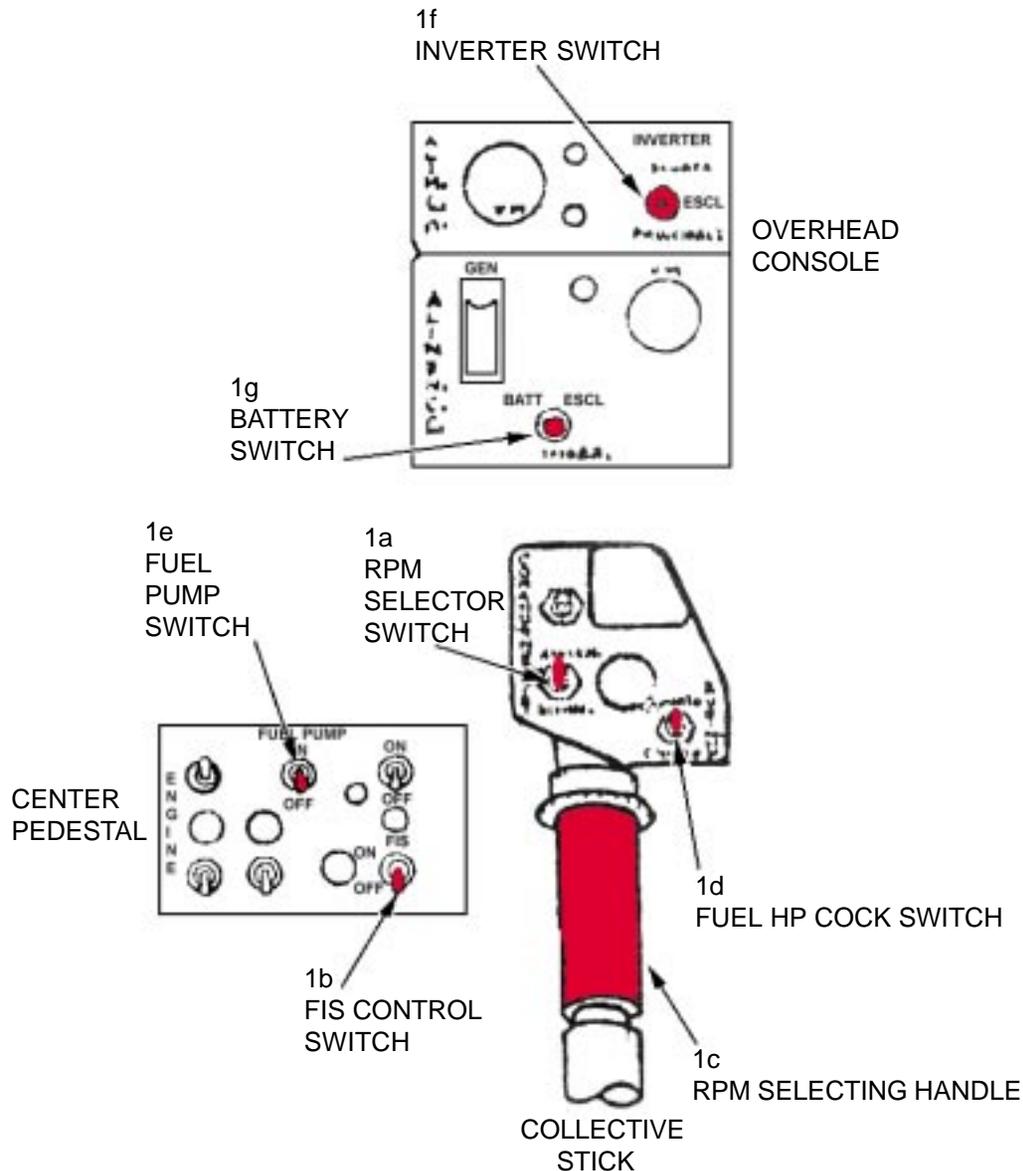
ENGINE SHUTDOWN AND AIRCREW EXTRACTION

1. ENGINE SHUTDOWN

- a. Decrease engine RPM by operating RPM selector switch, located on pilot's collective stick on left side of main console, until green light computer actuator is on.
- b. Place FIS control switch, located on center pedestal, to OFF position.
- c. Place RPM selecting handle, located on pilot's collective stick, to CLOSED position.
- d. Place fuel HP cock switch, located on pilot's collective stick, to OFF position.
- e. Place fuel pump switch, located on center pedestal, to OFF position.
- f. Place inverter switch, located on overhead console, to ESCL position.
- g. Place battery switch, located on overhead console, to ESCL position.

2. AIRCREW EXTRACTION

- a. Unlatch lap belts and remove shoulder harnesses from crewmembers.
- b. Unlatch lap belts from passengers.



SPECIAL TOOLS/EQUIPMENT

None

AIRCRAFT ENTRY

1. NORMAL ENTRY

- a. Rotate locking handle, located on entry doors, clockwise to OPEN position.

2. EMERGENCY ENTRY

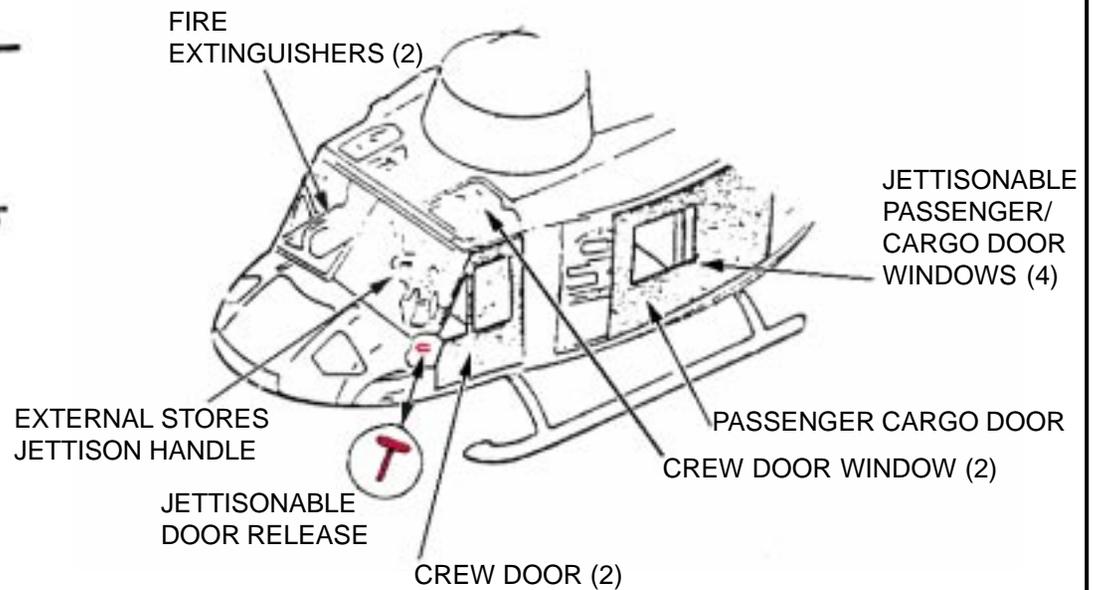
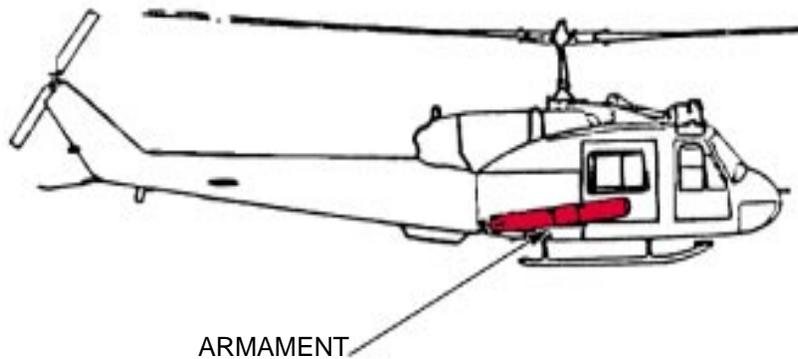
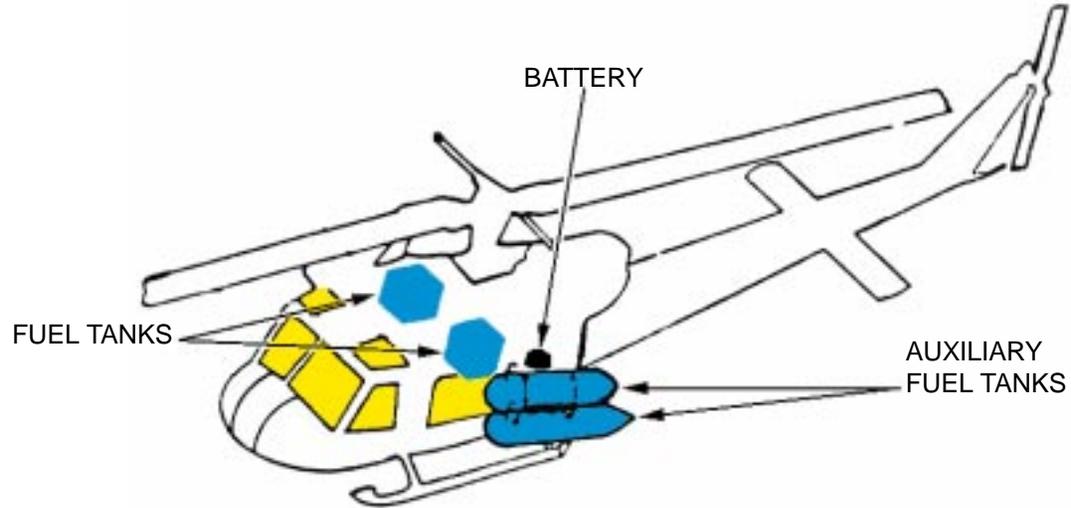
- a. Use crew and cargo door jettison device handles.

NOTE:

Jettison door device is a nonexplosive, door separating mechanism.

3. CUT-IN

- a. None.



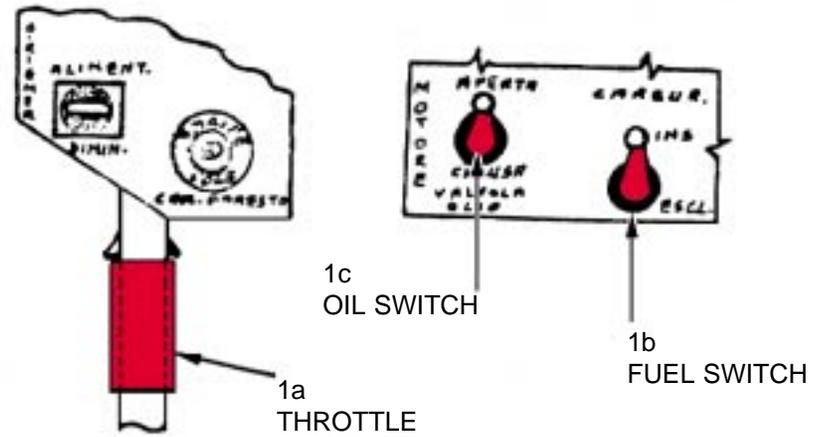
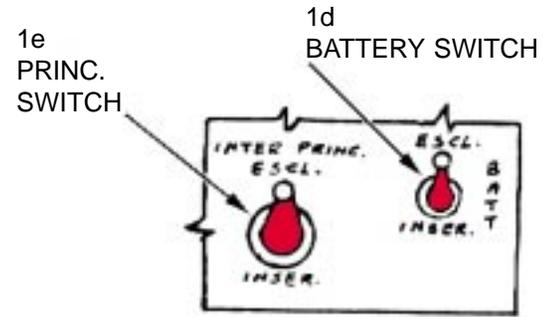
ENGINE SHUTDOWN AND AIRCREW EXTRACTION

1. ENGINE SHUTDOWN

- a. Place throttle, located in the completely CLOSED position.
- b. Place the fuel shutoff switch in the OFF position.
- c. Place the oil switch in the OFF position.
- d. Place the battery switch in the OFF position.
- e. Place the princ. switch in the OFF position.

2. AIRCREW EXTRACTION

- a. Unlatch lap belts and remove shoulder harnesses from crewmembers.
- b. Unlatch lap belts from passengers.



SPECIAL TOOLS/EQUIPMENT
None

AIRCRAFT ENTRY

1. NORMAL ENTRY

- a. Rotate locking handle, located on entry doors, clockwise to OPEN position.

2. EMERGENCY ENTRY

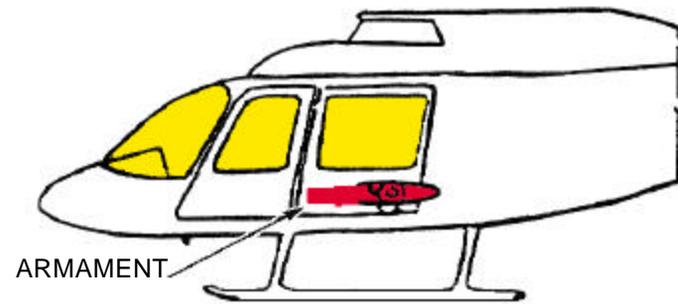
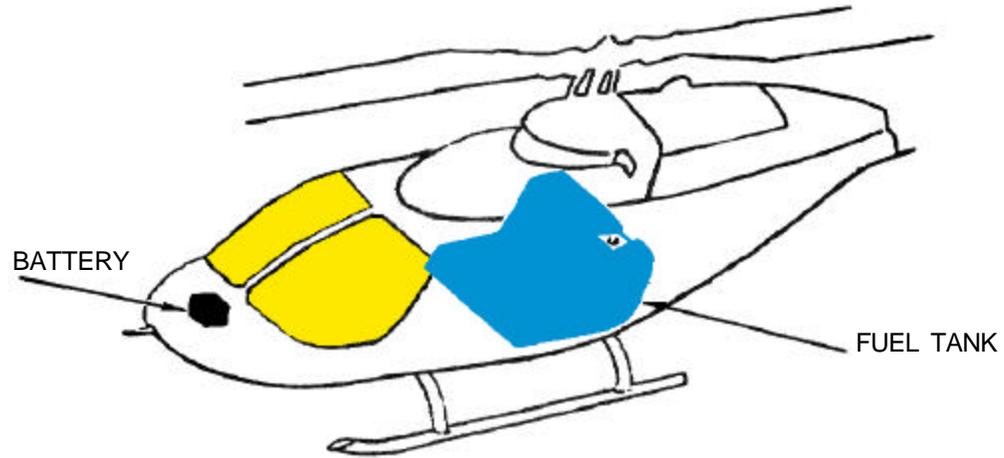
- a. Use crew and cargo door emergency jettison handles.

NOTE:

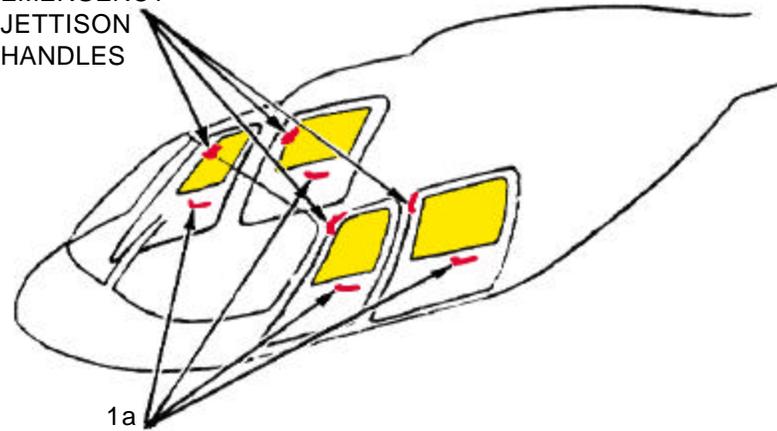
Jettison door devices are a nonexplosive, door separating mechanism.

3. CUT-IN

- a. None.



2a
EMERGENCY
JETTISON
HANDLES

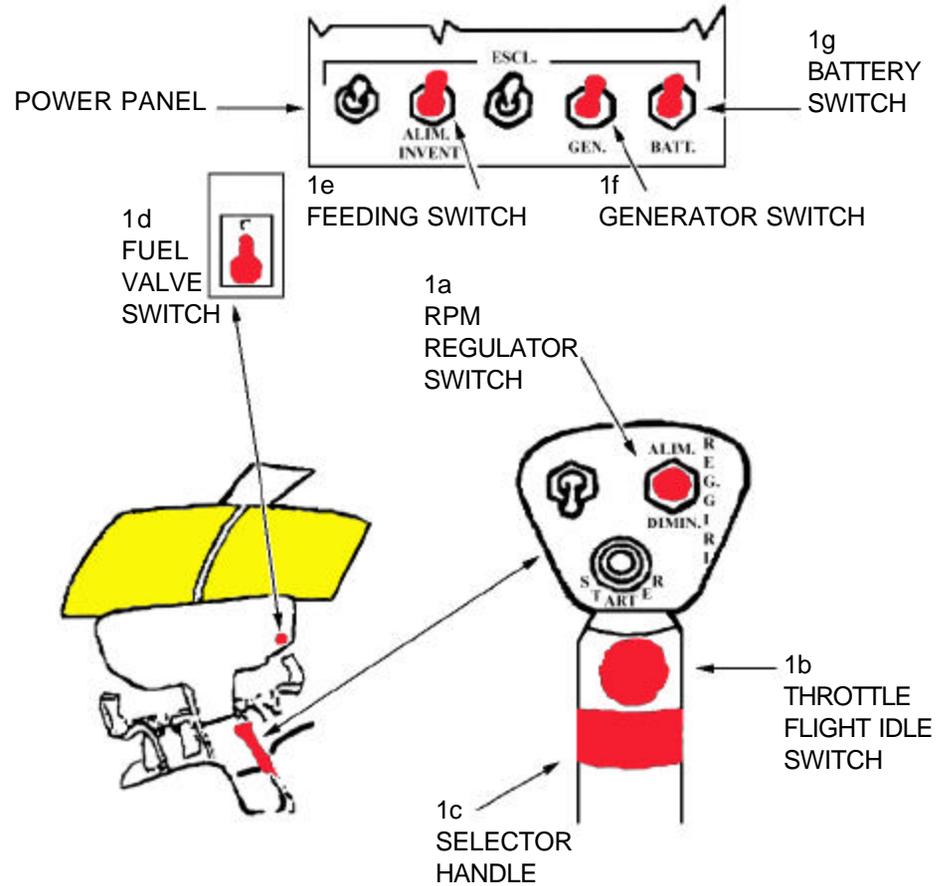


1a
NORMAL ENTRY HANDLES

ENGINE SHUTDOWN AND AIRCREW EXTRACTION

1. ENGINE SHUTDOWN

- a. Decrease (Dimin.) the RPM regulator (REG. GIRI) switch, located on the throttle control stick, to the IDLE position.
- b. Rotate the throttle against the flight idle (fermo di minimo) position.
- c. Push flight idle (fermo di minimo) switch and close selector handle, located on throttle control stick.
- d. Place the fuel valve switch, located on the forward overhead panel, to the OFF (escl.) position.
- e. Place the feeding (alim. invent.) switch, located on the power panel, up to the CUT OUT (escl.) position.
- f. Place the generator switch, located on the power panel, up to the CUT OUT (escl.) position.
- g. Place the battery switch, located on the power panel, up to the CUT OUT (escl.) position.



2. AIRCREW EXTRACTION

- a. Unlatch lap belts and remove shoulder harnesses from crewmembers.
- b. Unlatch lap belts for passengers.

SPECIAL TOOLS/EQUIPMENT

None

AIRCRAFT ENTRY

1. NORMAL ENTRY

- a. Rotate locking handle, located on entry doors, clockwise to OPEN position.

2. EMERGENCY ENTRY

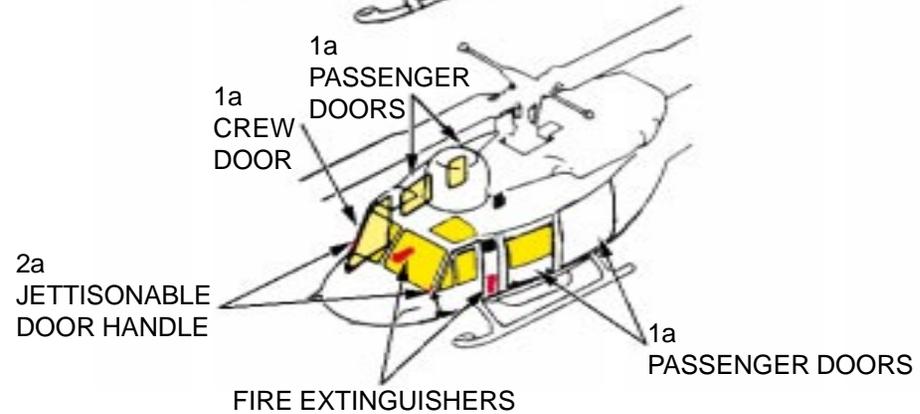
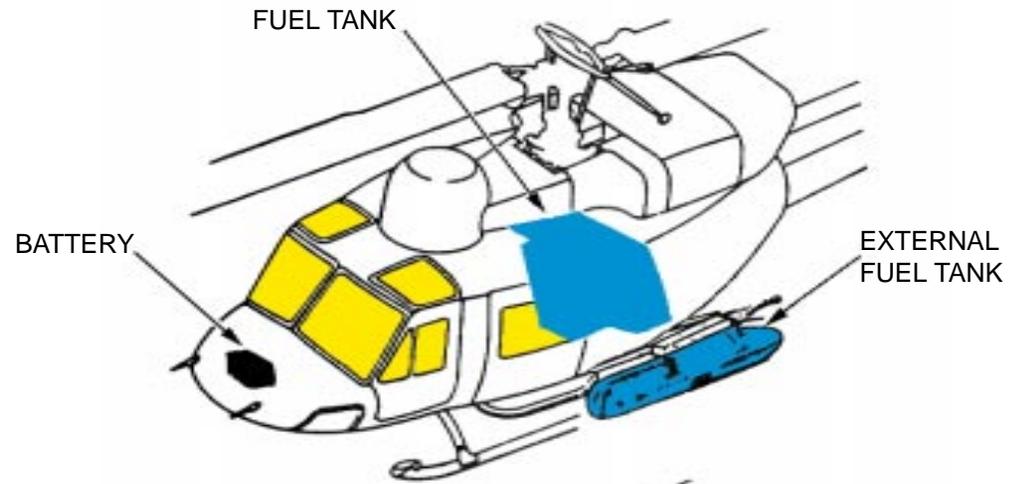
- a. Use crew door emergency jettison handles.

NOTE:

Jettison door devices are a nonexplosive, door separating mechanism.

3. CUT-IN

- a. None.



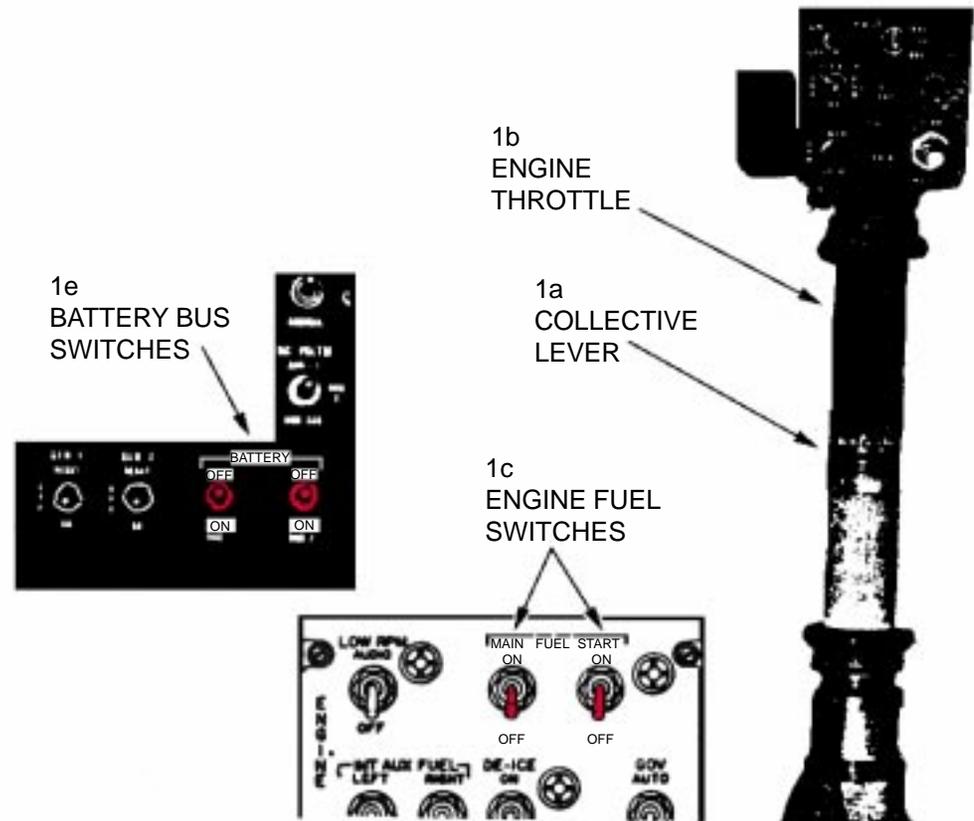
ENGINE SHUTDOWN AND AIRCREW EXTRACTION

1. ENGINE SHUTDOWN

- a. Place the collective lever, located on the throttle control stick, to the FULL DOWN and LOCKED position.
- b. Place both engine throttles, located on the control stick, to the completely CLOSED position.
- c. Place both engine fuel switches, located on the engine panel, to the OFF position.
- d. Place both engine boost pump switches to the OFF position.
- e. Place the battery bus switch, located on the power panel, to the OFF position.

2. AIRCREW EXTRACTION

- a. Unlatch lap belts and remove shoulder harnesses from crewmembers.
- b. Unlatch lap belts for passengers.



SPECIAL TOOLS/EQUIPMENT
None

AIRCRAFT ENTRY

1. NORMAL ENTRY

- a. Rotate locking handle, located on entry doors, clockwise to OPEN position.

2. EMERGENCY ENTRY

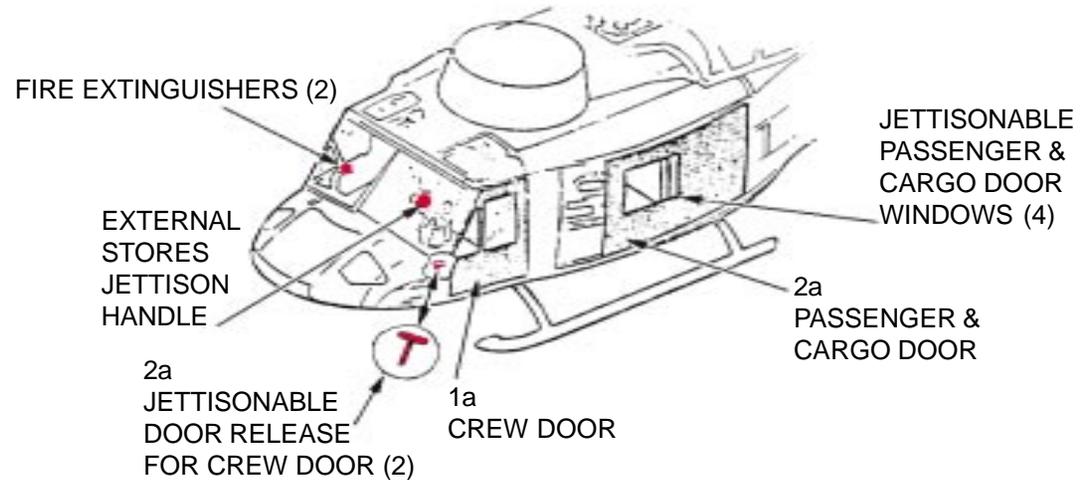
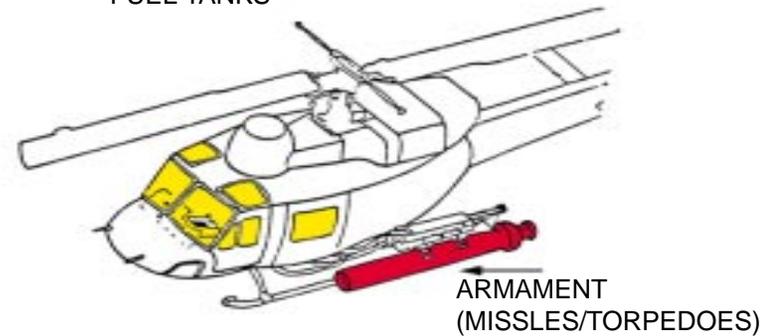
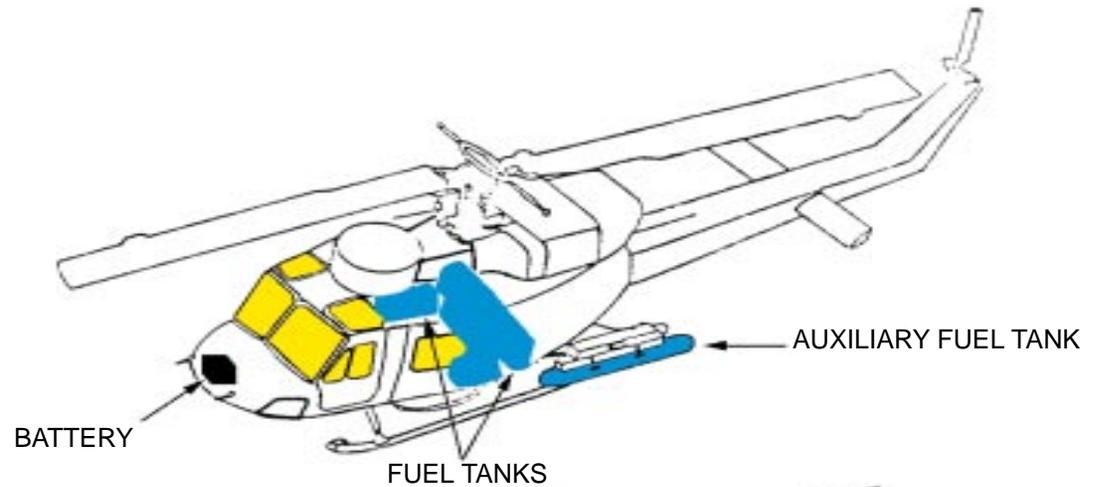
- a. Use crew and passenger/cargo door emergency jettison handles.

NOTE:

Jettison door devices are a nonexplosive, door separating mechanism.

3. CUT-IN

- a. None.

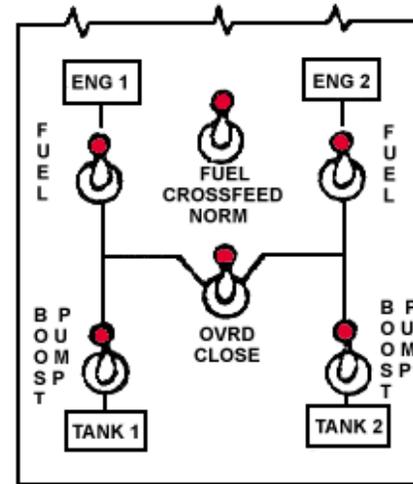


ENGINE SHUTDOWN AND AIRCREW EXTRACTION

1. ENGINE SHUTDOWN

- a. Place the throttle, located on the pilot collective stick, to the completely CLOSED position.
- b. Place the fire extinguisher selector switch to MAIN.
- c. Pull fire T-handle.
- d. Place fuel crossfeed switch, located on the engine and fuel control panel, to OVERRIDE CLOSE position.
- e. Place the fuel switches, located on the engine and fuel control panel, to the OFF position.
- f. Place boost pump switches, located on the engine and fuel control panel, to the OFF position.

1d, 1e, 1f →
ENGINE AND FUEL CONTROL PANEL

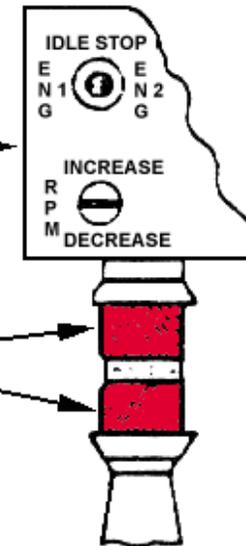


2. AIRCREW EXTRACTION

- a. Unlatch lap belts and remove shoulder harnesses from crewmembers.
- b. Unlatch lap belts for passengers.

1a
PILOT COLLECTIVE STICK →

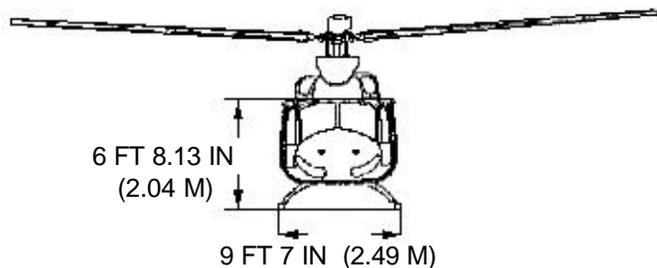
1a
THROTTLES →



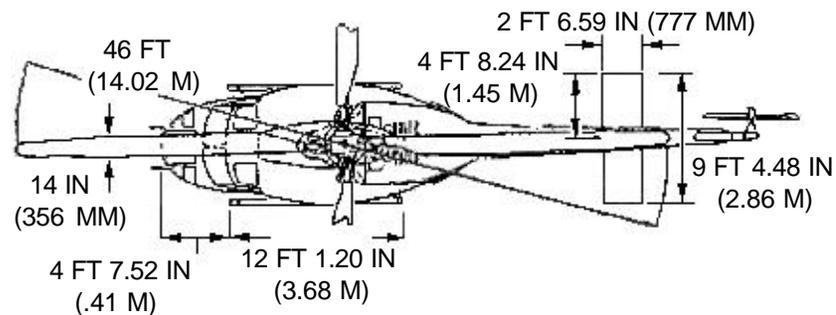


AIRFRAME DIMENSIONS

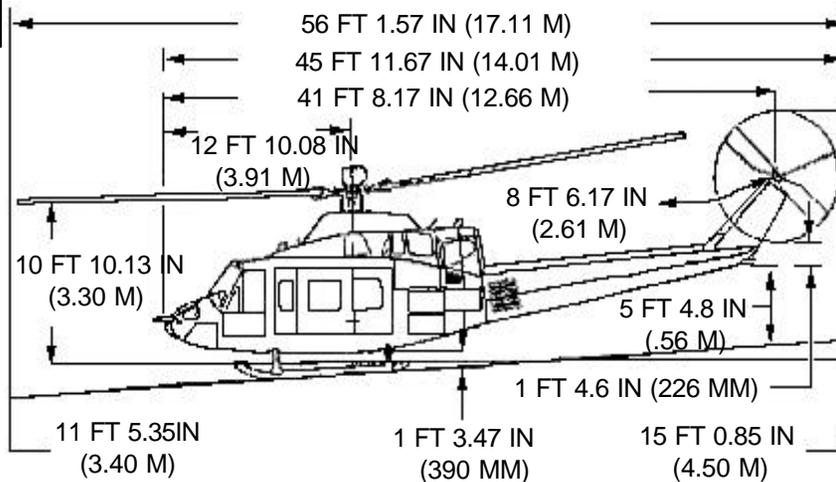
FRONT VIEW



TOP VIEW



SIDE VIEW



AIRCRAFT GENERAL INFORMATION

The Agusta Bell (AB) 412/CH 146 "Griffon" helicopter is a twin engine with a single four-blade main rotor system and a tail rotor to provide direction control. (CH = Canadian designation)

Crew: Three, two forward and one aft.

Maximum passenger load: 15, depending on aircraft configuration.

Fuel is carried in 10 interconnected fuel cells and one auxiliary tank. All fuel tanks are crash proof and have one way valves to prevent fuel spills in the event of a crash. The fuel tanks are located below cabin floor and four are located aft of the cabin and above level of underfloor cells. Capacity is 330 US gallons (1500 L) with auxiliary combined.

The Flight Data Recorder (Black Box) is located in the nose compartment left of the aircraft battery. (FDR is officially painted orange.)

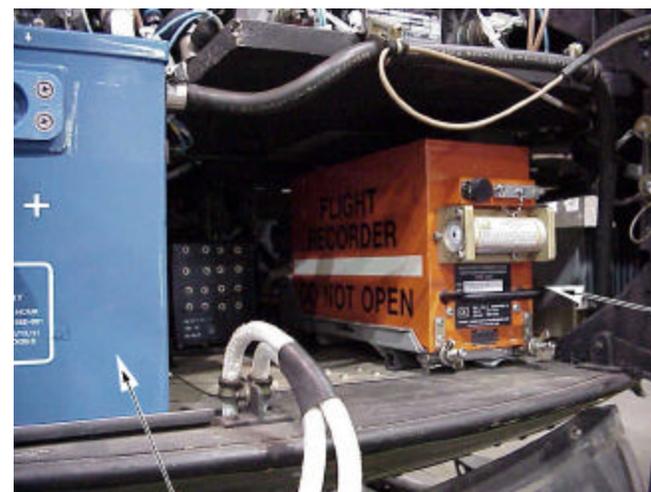


RIGHT SIDE FUSELAGE VIEW WITH NOSE COMPARTMENT OPEN



AFT CABIN AREA
FUEL TANKS

BELOW CABIN FLOOR
FUEL TANKS



BATTERY

FLIGHT DATA
RECORDER

AIRFRAME MATERIALS

NOTE:

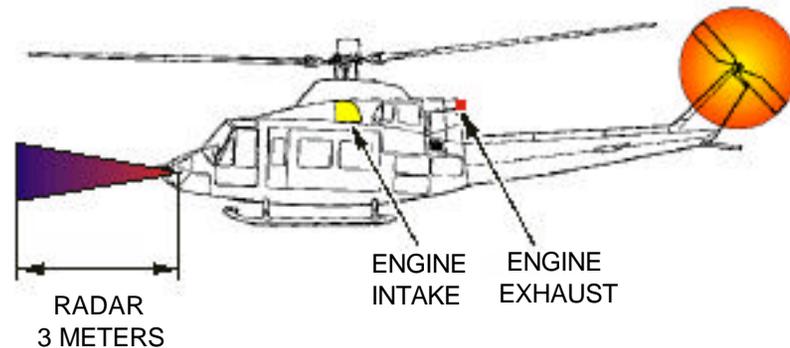
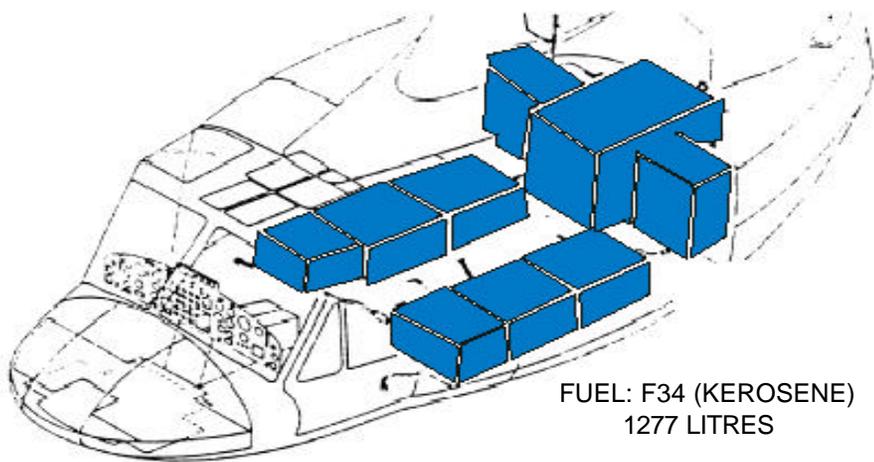
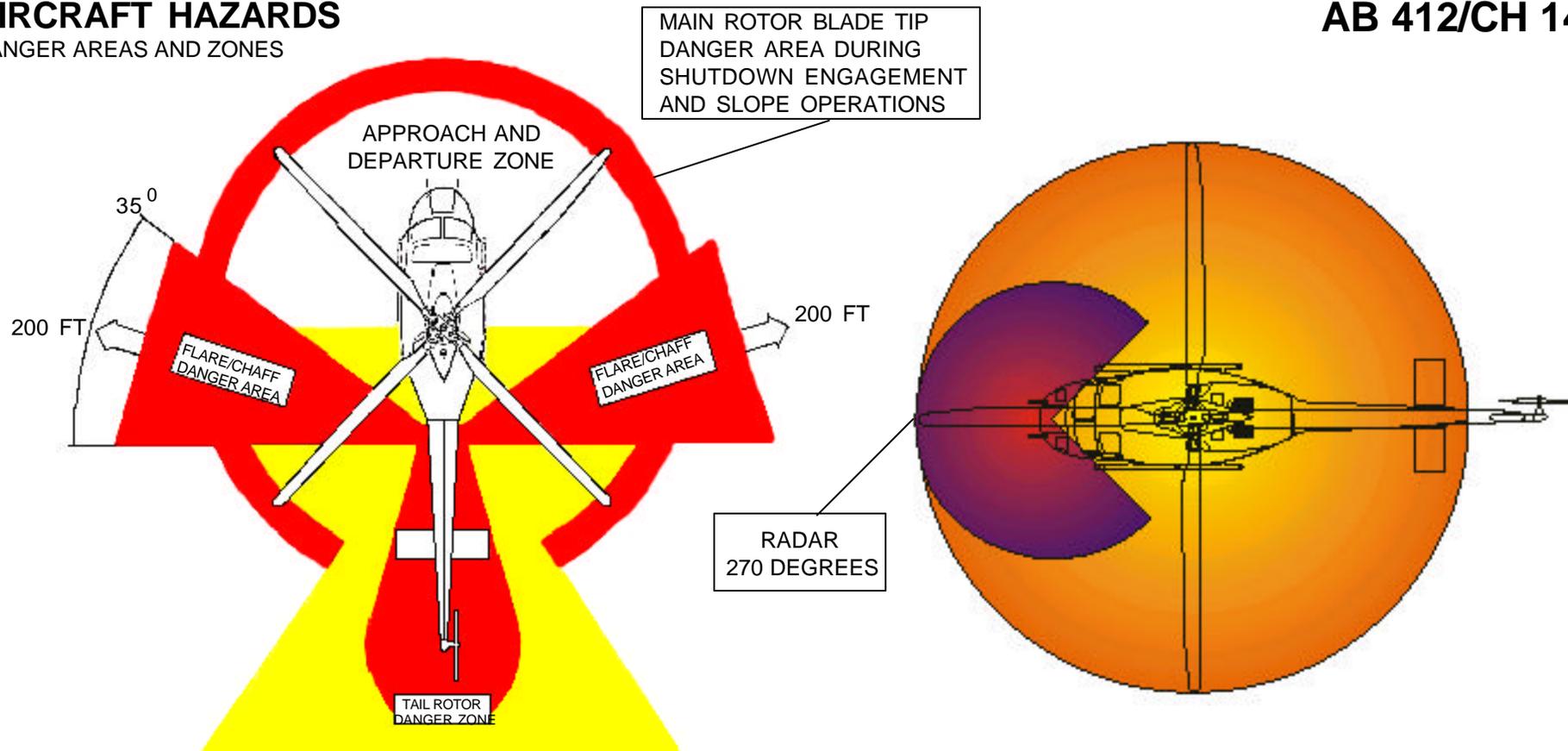
The airframe material is a semi-monocoque structure with metal and fiberglass covering.

-  ALUMINUM ALLOID
-  COMPOSITE MATERIAL
-  FIBERGLASS
-  HARDENED GLASS



AIRCRAFT HAZARDS

DANGER AREAS AND ZONES



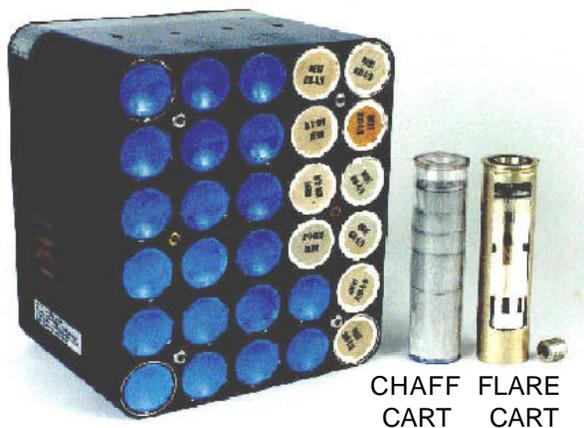
AIRCRAFT HAZARDS - Continued

CHAFF/FLARES AND GUN



LEFT SIDE
CHAFF AND FLARE
DISPENSER

ALE-29 CHAFF AND
FLARE DISPENSER
WITH CARTRIDGES



CHAFF FLARE
CART CART



RIGHT SIDE
CHAFF AND FLARE
DISPENSER



GUN STOWED

C6 DOOR GUN WITH
7.62 MM AMMO
(GUN MOUNTED ON LEFT
SIDE, AMMO STORED IN
CARGO COMPARTMENT)



GUN READY

AIRCRAFT HAZARDS-Continued

1. EXTERNAL AIRCRAFT BATTERY DISCONNECT

NOTE:

Aircraft uses a Nicad battery. Handle carefully.

- a. The battery is located in the nose compartment inside a blue box. Use a phillips screwdriver to open the panel.
- b. In case of an emergency: to disconnect the battery, turn the olive green knob counterclockwise.
- c. Pull the knob out from the battery connection to disconnect.

1a
OPEN NOSE
COMPARTMENT



1a
BATTERY



1b, 1c
BATTERY
KNOB



1c
DISCONNECTED BATTERY

SPECIAL TOOLS/EQUIPMENT	
Crash Ax	V-Knife
Power Kawck	Force Rescue Tool
Phillips Screwdriver	

AIRCRAFT ENTRY

NOTE:
Orientation: pilot - right side, co-pilot - left side.

WARNING

Responding vehicles must not approach within 50 feet of aircraft until the rotors are stopped. Always approach aircraft from the front at the pilot's 10 O'clock or 2 O'clock position. Stay out of danger areas to prevent injury or death. (See page AB 412/CH 146.5.)

NOTE:
Whether the rotors are rotating or not, insure pilot can see you at all times while approaching the aircraft.

1. NORMAL ENTRY

- a. Open pilot's or co-pilot's doors by rotating external door handle, located at the door's aft edge.
- b. Open cabin area, from right side of fuselage, by rotating external cabin door handle down. (This door may also be considered the cargo door, depending on aircraft configuration.)

2. EMERGENCY ENTRY

- a. Gain entry into cabin/cargo area by rotating external handle down, slide the door aft, or remove door by rotating the jettison handle (release up) at the forward edge of the door.
- b. Entry may be accomplished by removing the emergency exit windows. (See page AB 412/CH 146.9 step 1b.)

3. CUT-IN

- a. Cut-in windows and doors as required. (Cut-ins are enhanced in red. Actual aircraft color is subdued black.)



3a
CUT-IN INDICATIONS

1a, 1b
EXTERNAL DOOR HANDLE FOR CO-PILOT (OPPOSITE FOR PILOT)



2a, 2b
EXTERNAL JETTISON DOOR HANDLE FOR PILOT (OPPOSITE FOR CO-PILOT)

3a
CUT-IN INDICATIONS FOR CABIN/CARGO AREA



EMERGENCY EXITS

1. EMERGENCY EXITS

NOTE:

The main emergency exits are the cargo doors, located on either side; the Pilot and Co-pilot's doors and windows can also be used for emergency exits.

- a. To open the cargo doors, turn the internal handles down and slide the doors aft.
- b. In case of jammed cargo doors, open the emergency window exits by firmly pushing out on bottom corners by applying 50 pounds of pressure. Corners are marked by red dots. (This can be done internally or externally. Illustrated view is internal)
- c. To use the emergency exits for the pilot and co-pilot, pull the yellow and black T-handle (release up) just inside the door hinges (forward edge of door).

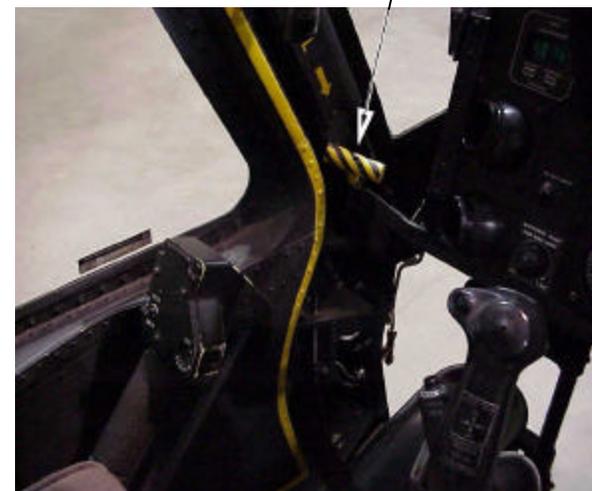


1a INTERNAL CARGO DOOR HANDLE
 1b WINDOW EXIT CORNERS

CARGO AREA WITH PAX SEATS REMOVED



1c CO-PILOT INTERNAL JETTISON HANDLE (OPPOSITE SIDE SAME)



ENGINE SHUTDOWN

1. ENGINE SHUTDOWN

- a. Shutdown the engines by pulling the two FIRE PULL T-handles, located at the center of the upper instrument panel.
- b. IN CASE OF FUEL LEAK: shutdown electrical power by selecting the two battery switches, located on the center of the upper right console, to the OFF position. The switches are marked BATTERY BUS 1 and BATTERY BUS 2.
- c. IN CASE OF ENGINE FIRE: activate the fire extinguishment system by pulling the FIRE PULL T-handles and pulling the station handle (#1 or #2 designated engine) to ignite the Halon bottles. Both handles are located on the pilot's instrument panel.

NOTE:

Two squib-activated Halon bottles are located in the aft compartment. When the squibs are ignited, they activate the main Halon bottle and the reserve Halon bottle, which then discharges the Halon to each corresponding selected engine. (See page AB 412/CH 146.13 4a.)

2. OTHER ITEMS FOR ENGINE SHUTDOWN

- a. The engine fuel cut off valves are located internally on both sides of aircraft.
- b. The engine throttle is located to the left side of the left pilot seat.
- c. The rotor brake handle is located on the overhead console.

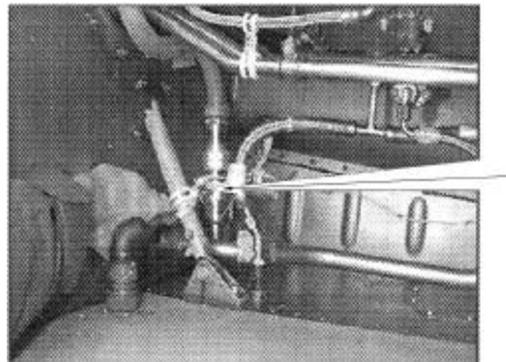
1a, 1c
FIRE T-HANDLES



AB 412/CH 146



2a
FUEL CUT OFF VALVE



1b
BATTERY SWITCHES



2c
ROTOR BRAKE HANDLE (STOWED)



2c
ROTOR BRAKE HANDLE (BRAKE ENGAGED)



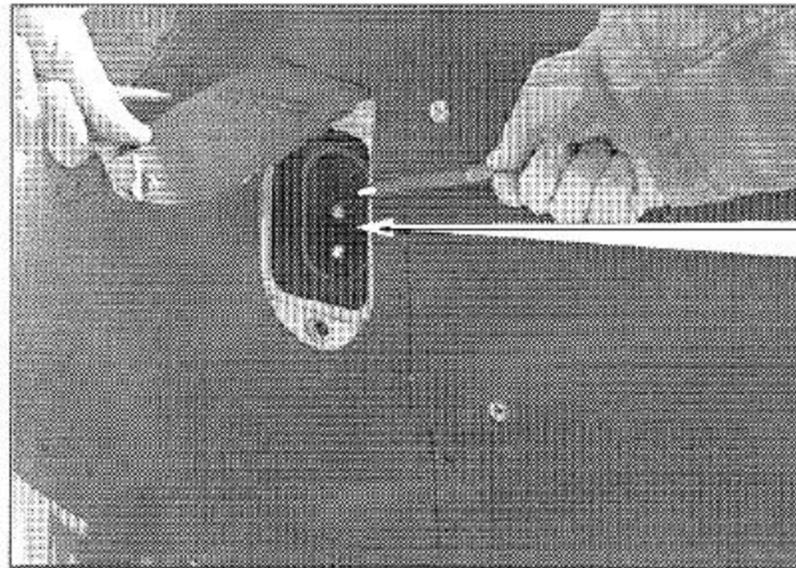
APU SHUTDOWN

1. APU SHUTDOWN
 - a. The APU cut-off switches are located on both sides forward of pilot and co-pilot doors.
 - b. Open APU cut-off switch panel by turning panel door lock, located at bottom of panel.
 - c. APU cut-off switch is located inside APU door panel. Place switch in OFF position to cut-off power to the APU.



RIGHT
CARGO
DOOR

1a
APU
CUT-OFF
SWITCH
PANEL



1c
APU
CUT OFF
SWITCH

AIRCREW EXTRACTION

1. AIRCREW EXTRACTION

NOTE:

Pilot and co-pilot seat adjustments may be necessary to properly position and make room for pilot(s) extraction. A third crewmember is situated behind pilots.

- a. The pilot and co-pilot seats can be moved up and down, by using the lower right lever controls.
- b. The pilot and co-pilot seats can be moved forward and backward, by using the large lever under the seat.
- c. Third crewmember and passenger seats are stationary.

NOTE:

Maximum passenger load is 15, depending on aircraft configuration. Passenger seats are arranged in a row of 4 seats facing aft, another row of 5 seats facing forward, and a pair of seats facing outboard from either side of pylon support structure.

- d. Disconnect lap belts and shoulder harnesses (as applicable) and place restraints to the side to prevent entanglements.



1c
CREW
SEATS

SURVIVAL KIT

1d
LOCKED
CREW
SEAT BELT

1d
UNLOCKED CREW
SEAT BELT



1d
LOCKED PAX
SEAT BELT

1d
PAX SEAT
BELT LINK

1d
UNLOCKED CREW
SEAT BELT



FIRE EXTINGUISHER, FIRE ACCESS AND FIRE BOTTLE LOCATIONS

1. AIRCREW AREA

a. The aircrew area 5 pound Halon fire extinguisher is located on the floor, right side, next to right pilot.



2. CABIN/CARGO AREA

a. The cabin area 5 pound Halon fire extinguisher is located on the wall, left side, behind left pilot.

3. FIRE ACCESS

a. The fire access panel for the engine is located on the upper right side of the fuselage. (Red border is used for orientation, not found on actual aircraft.)

4. FIRE BOTTLE

a. The fire bottle is located aft of fuselage on each side of aircraft. There are two cartridges installed on the bottle.

2a
CABIN EXTINGUISHER



1a
PILOT EXTINGUISHER

4a
FIRE BOTTLE

3a
FIRE ACCESS



4a
FIRE BOTTLE CARTRIDGES



EXTERNAL ACCESSORIES

1. AIRCRAFT RESCUE HOIST

- a. The aircraft hoist is located on the right side of the fuselage above the cargo door area.
- b. The hoist explosive cartridge is located on the underside of the hoist assembly.

1a
HOIST ASSEMBLY



1b
HOIST EXPLOSIVE
CARTRIDGE



2b UPPER CUTTER

2. AIRCRAFT WIRE CUTTERS

- a. The lower cutter is located under the fuselage forward of the support rails.
- b. The upper cutter is located on top of the fuselage above the windshield.

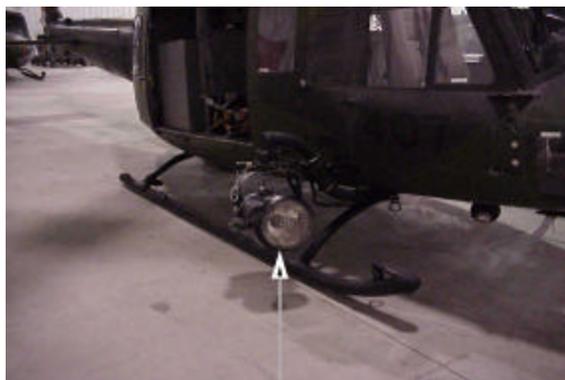


2a LOWER CUTTER



3. AIRCRAFT NIGHT SUN AND FLIR

- a. The night sun is located on the right support rail.
- b. The Forward Looking Infrared (FLIR) is located on the left support rail.



3a NIGHT SUN



3b FLIR

BAGGAGE COMPARTMENT

1. BAGGAGE COMPARTMENT
 - a. The baggage compartment door is located on the aft right side of the fuselage. The door can be unlocked by rotating the door handle.
 - b. Open baggage compartment door by opening door left to right at door hinges.
 - c. There is a baggage compartment smoke detector installed in the compartment ceiling.
 - d. There is a baggage compartment fire warning light on the forward instrument panel in the cockpit.

1a
BAGGAGE COMPARTMENT DOOR HANDLE



1b
BAGGAGE COMPARTMENT DOOR OPEN



1c
BAGGAGE COMPARTMENT SMOKE DETECTOR



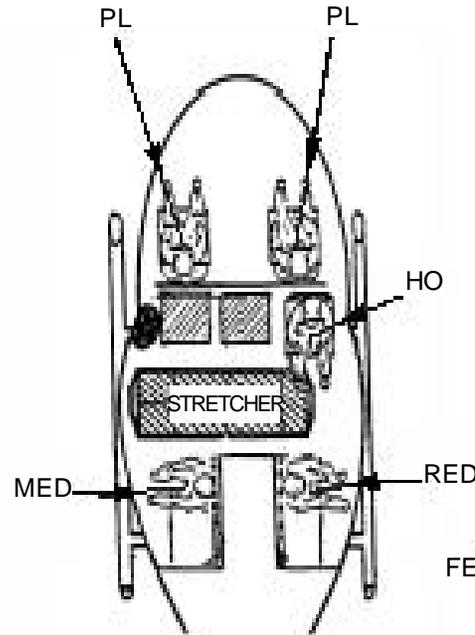
1d
BAGGAGE COMPARTMENT FIRE WARNING LIGHT



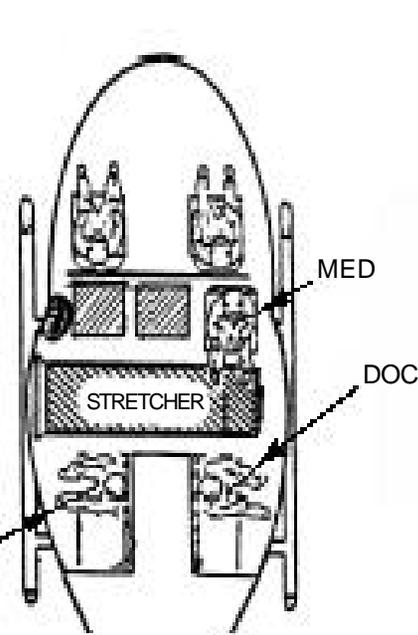
CABIN CONFIGURATIONS

NOTE:
At least two persons are on board. A maximum of 15 persons on board.

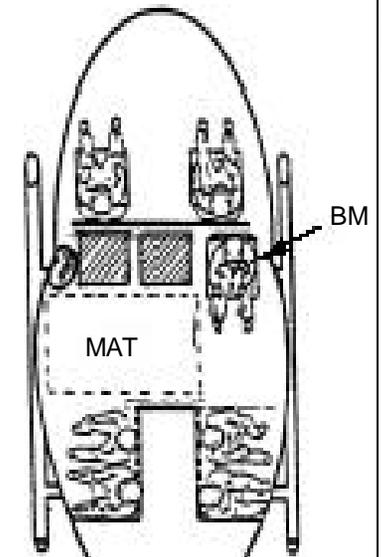
LEGEND	
PL	PILOT
HO	HOIST OPERATOR
RED	RESCUE DIVER
FE	FLIGHT ENGINEER
MED	MEDIC
DOC	DOCTOR
MAT	MATERIAL



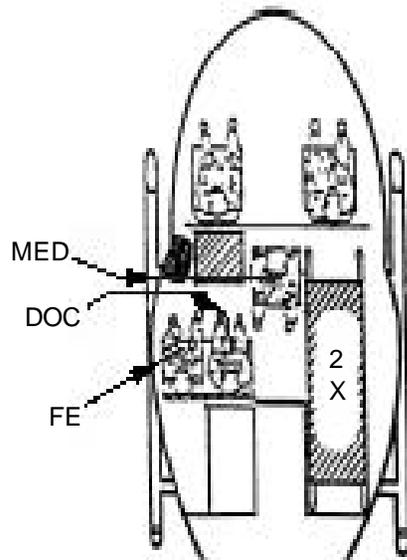
SEARCH AND RESCUE (SAR)



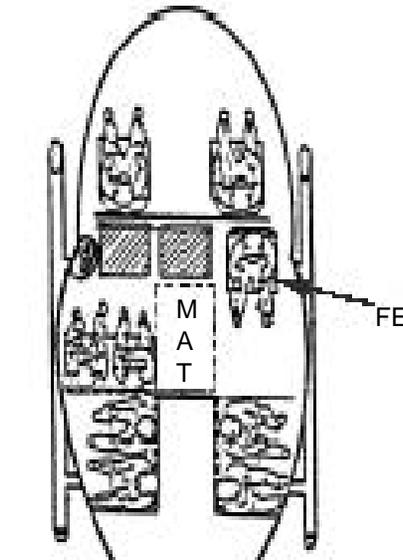
MEDEVAC



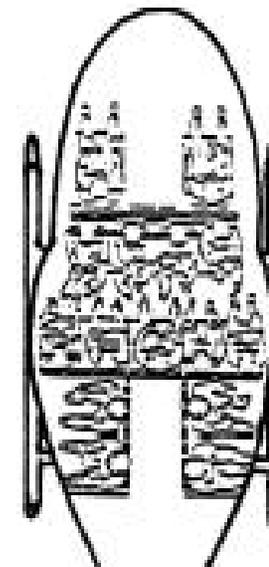
PERSONNEL/MAT TRANSPORT



TRAUMA



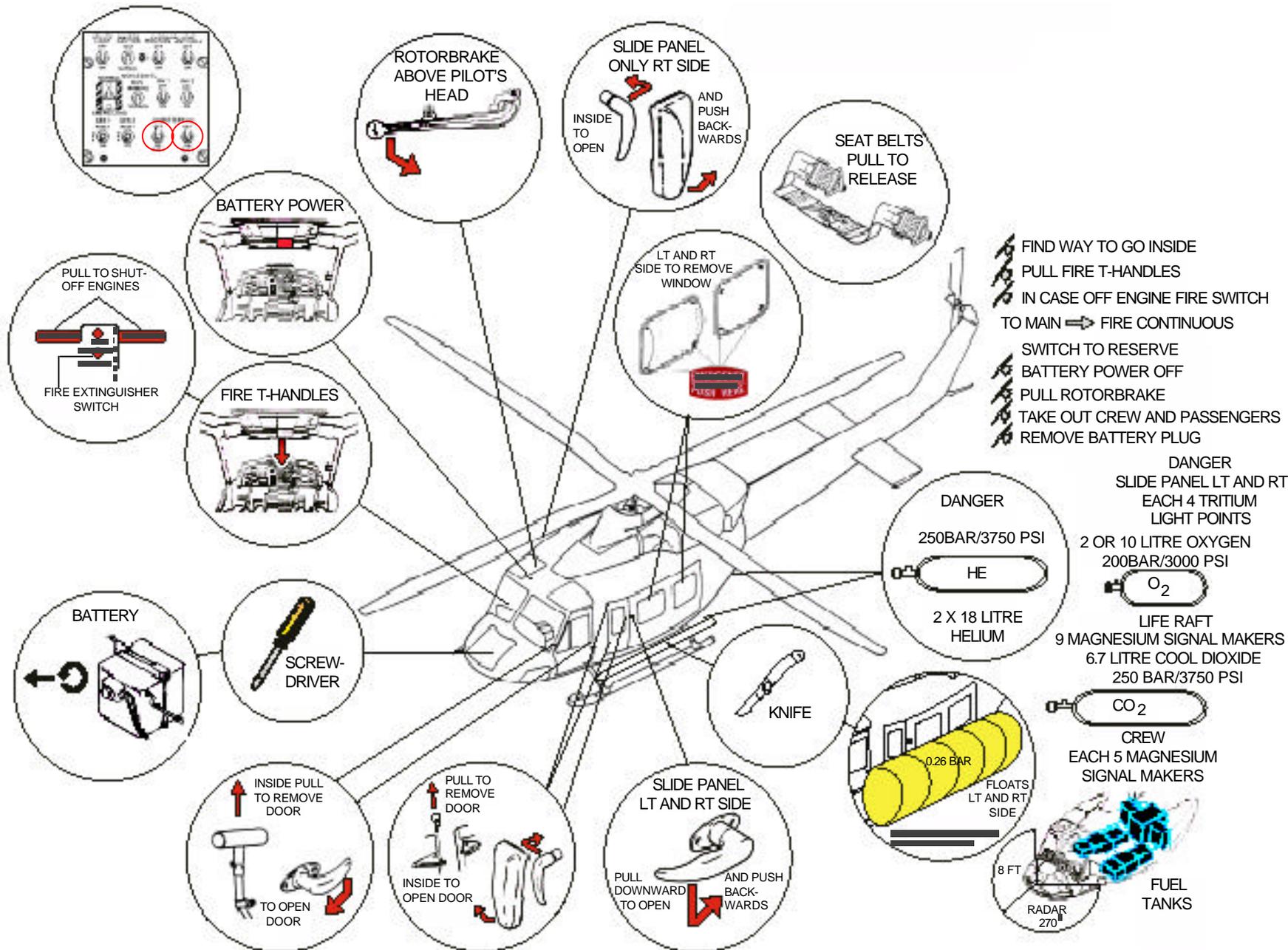
PERSONNEL/MAT TRANSPORT



PERSONNEL TRANSPORT

CRASH CHART - AB 412 (SAR)

NOTE:
Most items will also be applicable to the CH 146.



SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw
Crash Ax

AIRCRAFT ENTRY

NOTE:

More information about the AH-1 is located in Chapter 13.

1. NORMAL ENTRY

a. Main entrance and exits are located on the right side of the aircraft.

2. EMERGENCY ENTRY

a. Emergency exits are located on the left side of the aircraft.

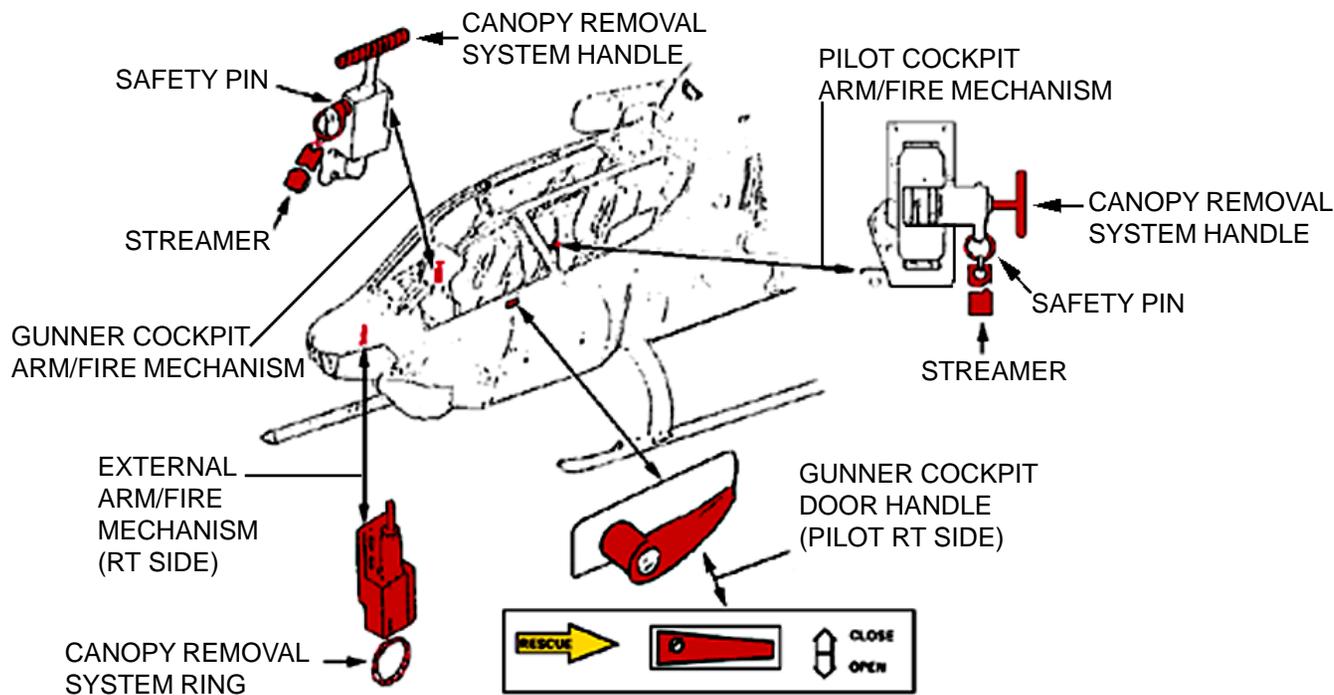
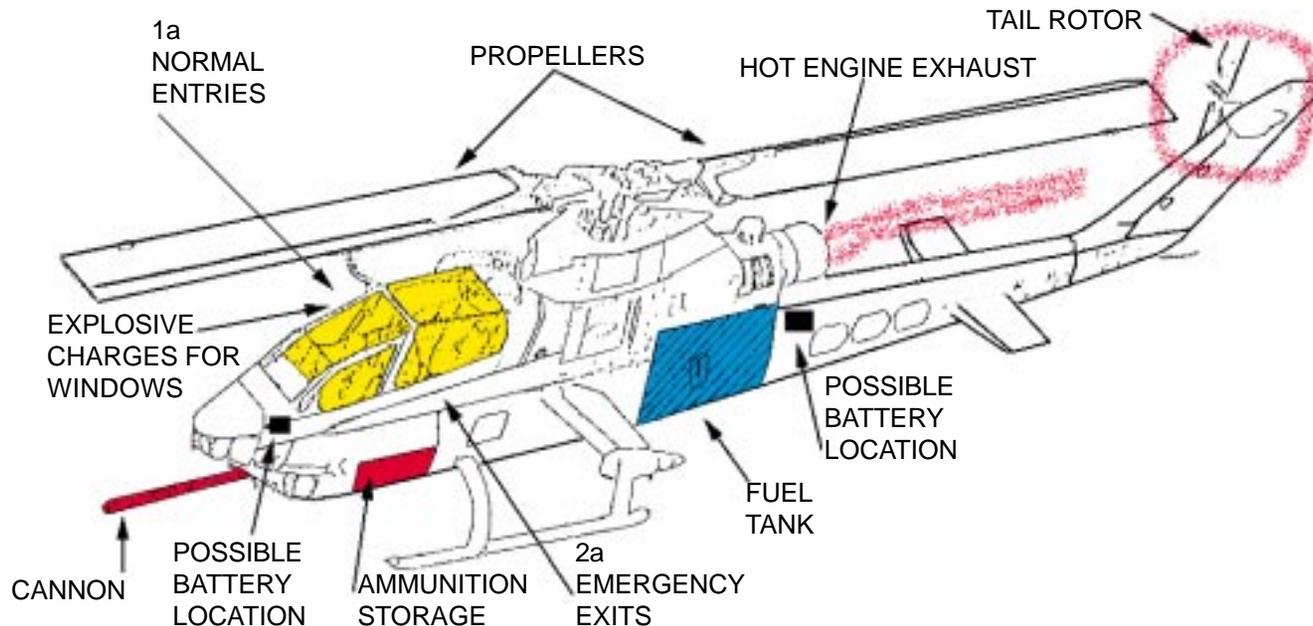
WARNING

Windows are equipped with explosive charges for both cockpit windows.

3. CUT-IN

a. Cut-in windows as required.

AH-1P/W



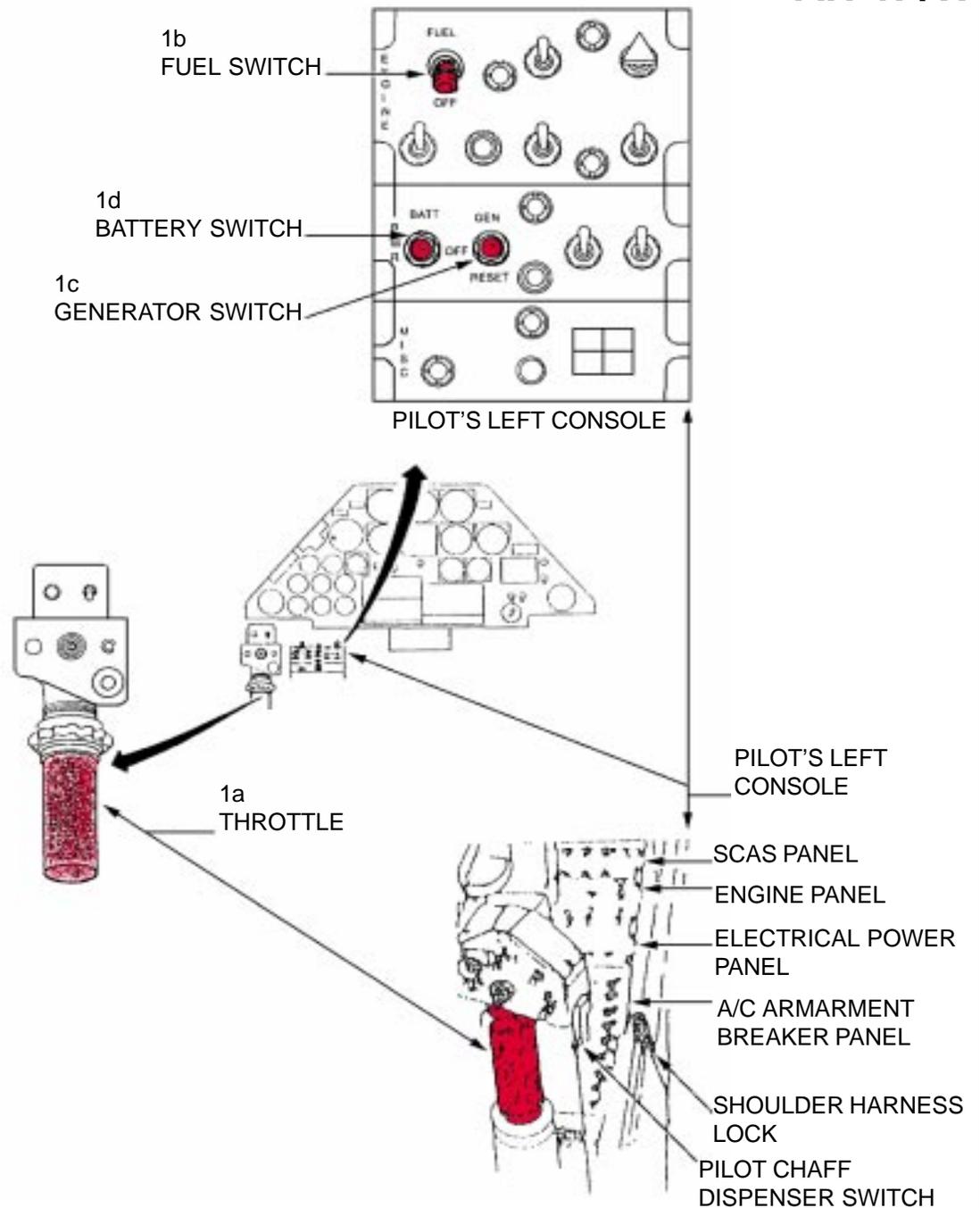
ENGINE SHUTDOWN AND AIRCREW EXTRACTION

1. ENGINE SHUTDOWN

- For AH-1P/W, rotate throttle, located pilot's left on console, to the OFF position.
- For AH-1W only, engage rotor brake.
- For AH-1P only, place fuel switch, located on the pilot's left console, to the OFF position.
- For AH-1P only, place generator switch, located on pilot's left console, to the OFF position, if applicable.
- Place the battery switch, located on pilot's left console, to the OFF position.

2. AIRCREW EXTRACTION

- Unlatch lap belts and remove shoulder harnesses from crewmembers.



The aircraft information is located in Chapter 13
containing US Army aircraft.

SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw
Crash Ax

AS-532

AIRCRAFT ENTRY

NOTE:

This aircraft can seat up to 12 occupants depending on the mission configuration. The civilian version can seat up to 20 occupants.

1. NORMAL ENTRY

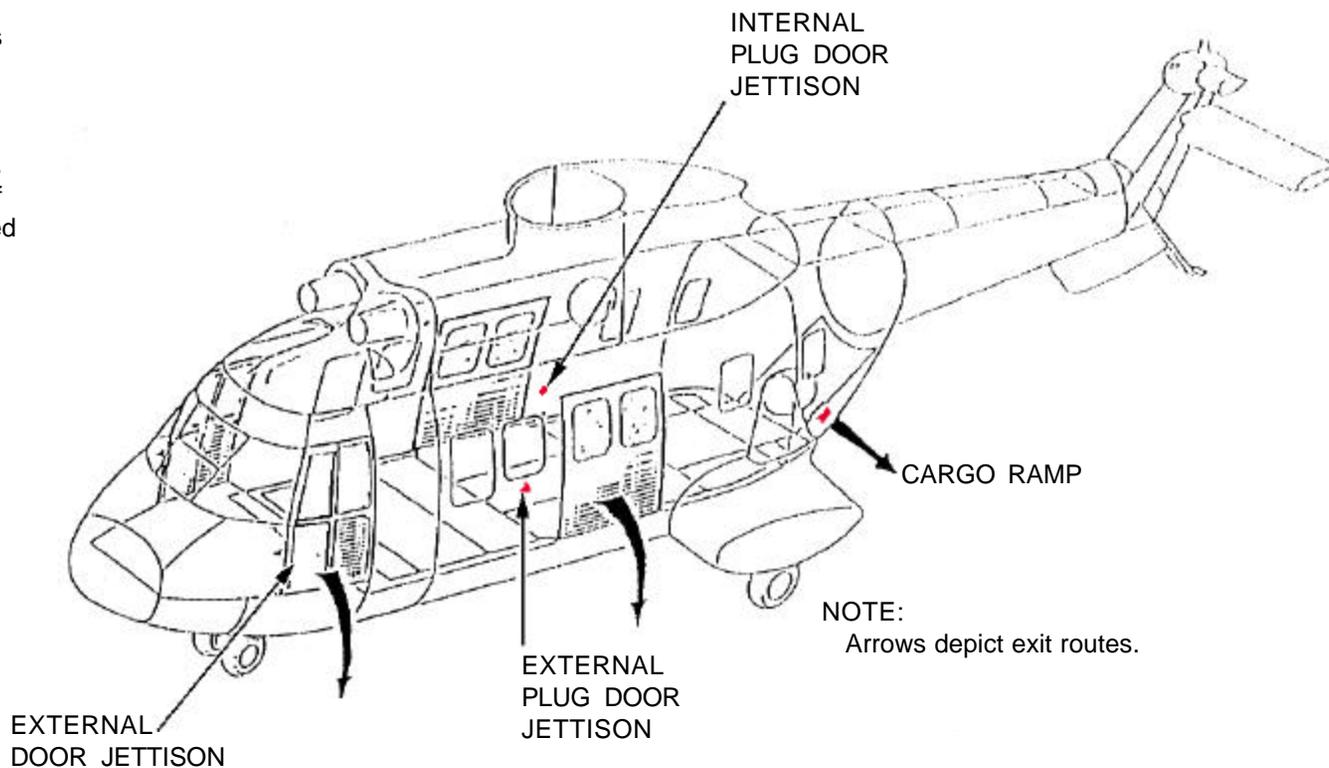
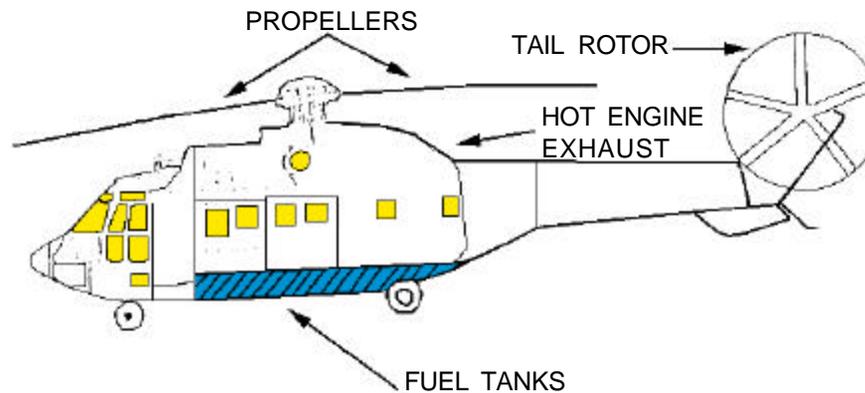
- a. Main entrance and exits are located on both sides of the aircraft, including the aft cargo ramp.

2. EMERGENCY ENTRY

- a. Emergency exits are located on both sides of the aircraft, including the aft cargo ramp if ramp is open.
- b. Cockpit and cargo doors can be jettisoned. External jettison handles are located left of doors. Internal jettison handles are located right of doors.

3. CUT-IN

- a. Cut-in windows as required.



ENGINE SHUTDOWN AND AIRCREW EXTRACTION

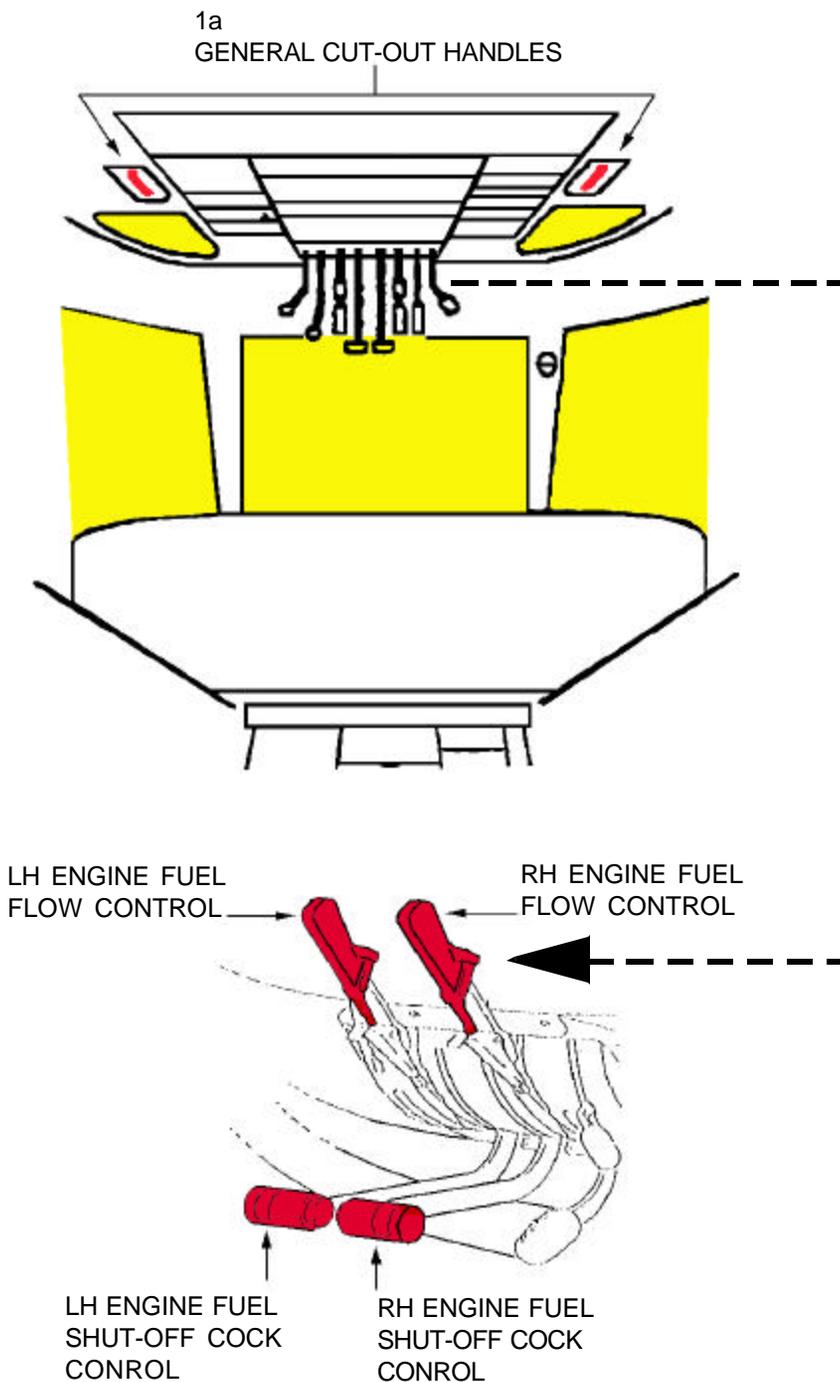
1. ENGINE SHUTDOWN

- a. Pull the general cut-out handles, located on the overhead control panel, to shutdown the engines.
- b. Engine controls on the overhead panel are illustrated only for location and identification. These controls are not used for emergency shutdown. They are used under normal conditions.

2. AIRCREW EXTRACTION

- a. Unlatch lap belts and remove shoulder harnesses from crewmembers and passengers.

AS-532





SPECIAL TOOLS/EQUIPMENT

- Power Rescue Saw
- Crash Ax

AS-550C2

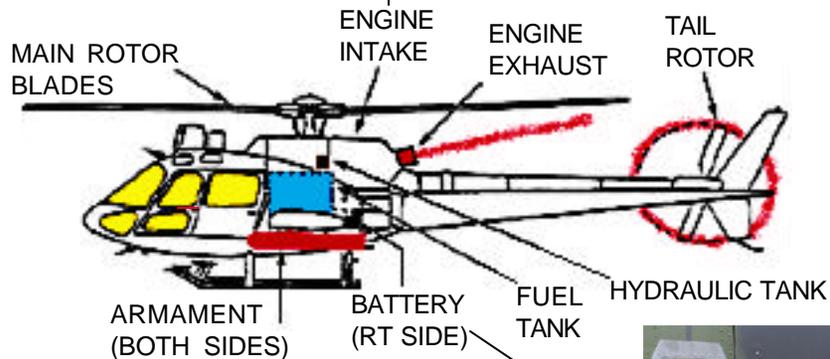
AIRCRAFT ENTRY

1. NORMAL AND EMERGENCY ENTRY

- a. Open pilot's door, located on both sides of fuselage, by turning door handles downward and pulling door outward.
- b. Open cabin door, located on both sides of fuselage, by turning door handles downward to release from door housing, then push door backward.

2. CUT-IN

- a. Cut-in fuselage as required.



1b CABIN DOOR WITH HANDLE

1b PILOT'S DOOR RELEASE



1a PILOT'S DOOR WITH HANDLE



AS-550C2.3 **ENGINE AND ELECTRICAL SHUTDOWN**

AS-550C2

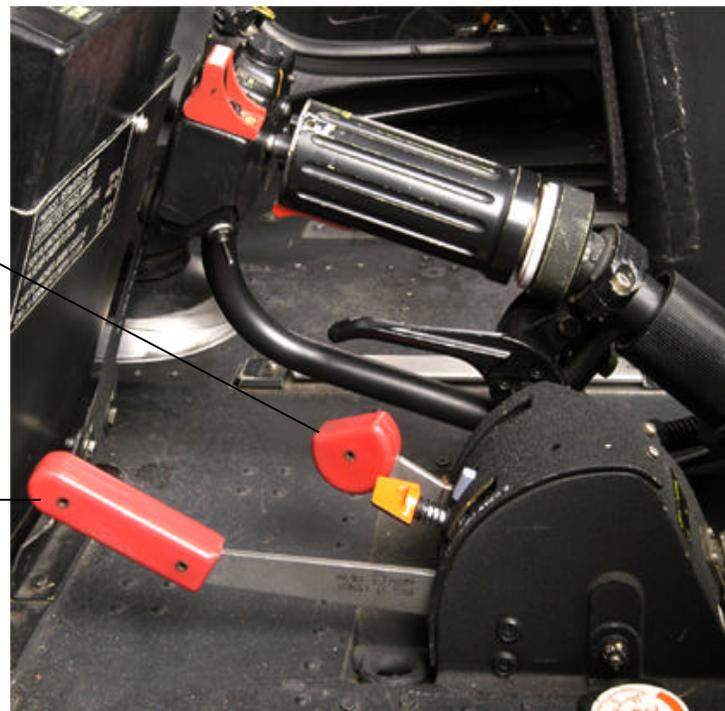
T.O. 00-105E-9

1. ENGINE SHUTDOWN

- a. Place fuel cut-off handle, located on the floor between pilot seats, in the UP position to lock.
- b. Place rotor brake handle, located on the floor between pilot seats, in the UP position to lock.
- c. Press cut-off button, located inside the cockpit, to turn off battery power.

2. ELECTRICAL SHUTDOWN

- a. If the battery cut-off button can not be reached, the battery can be accessed (see page AS-550C2.2) through the access panel. The power connection can be secured and safed by installing a safety pin in the below location above the missile launch pylon.



1a
FUEL CUT-OFF

1b
ROTOR BRAKE

2a
POWER SAFETY PIN



1c
BATTERY
CUT-OFF
BUTTON

AIRCREW EXTRACTION

1. AIRCREW EXTRACTION

NOTE:

All seat restraints are equipped with shoulder harness and lap belt central quick release point.

- Unlatch restraints at quick release point.
- Remove lap belts and shoulder harnesses from crewmember to prevent entanglement.
- Remove crewmember(s) from aircraft.

AS-550C2

2b
SHOULDER HARNESSSES

2a
QUICK RELEASE POINT

2b
LAP BELTS



2b
SHOULDER HARNESSSES

2a
QUICK RELEASE POINT

2b
LAP BELTS



AIRCREW EQUIPMENT

1. AIRCREW EQUIPMENT

- a. The Ekstra picture targeting device is located at eye level for aircrew use.

NOTE:

The helmet is connected to the aircraft radio by an electrical connection.

- b. The radio connection to the helmet may have to be disconnected prior to aircrew extraction or remove helmet from crewmember to avoid entanglement during extraction.

AS-550C2



1a
EKSTRA PICTURE TARGETING DEVICE



1a
EKSTRA PICTURE TARGETING DEVICE



1b
RADIO CONNECTION TO HELMET

SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw
Crash Ax

BO-105CB

AIRCRAFT ENTRY

1. NORMAL AND EMERGENCY ENTRY

NOTE:

Special double side doors are located both sides of fuselage. Each section can be opened separately.

- a. Press down exterior handle of cockpit door for release, turn door outwards.
- b. Press down exterior handle of cabin door for release, pull doors outwards and slide backwards.

WARNING

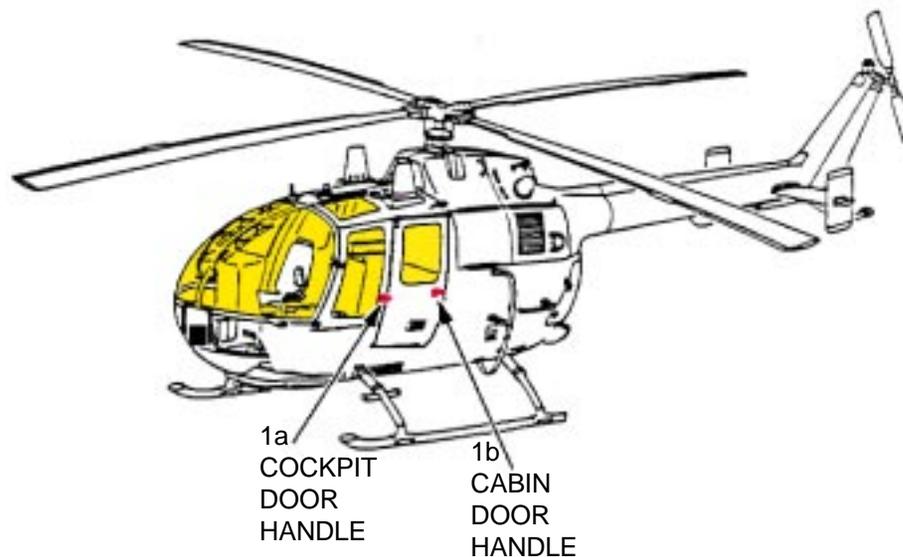
Beware of rotating main rotor blades and tail rotor blades.

NOTE:

Both front section doors are dropable.

2. CUT-IN

- a. Cut-in fuselage as required.



ENGINE SHUTDOWN AND AIRCREW EXTRACTION

1. ENGINE SHUTDOWN

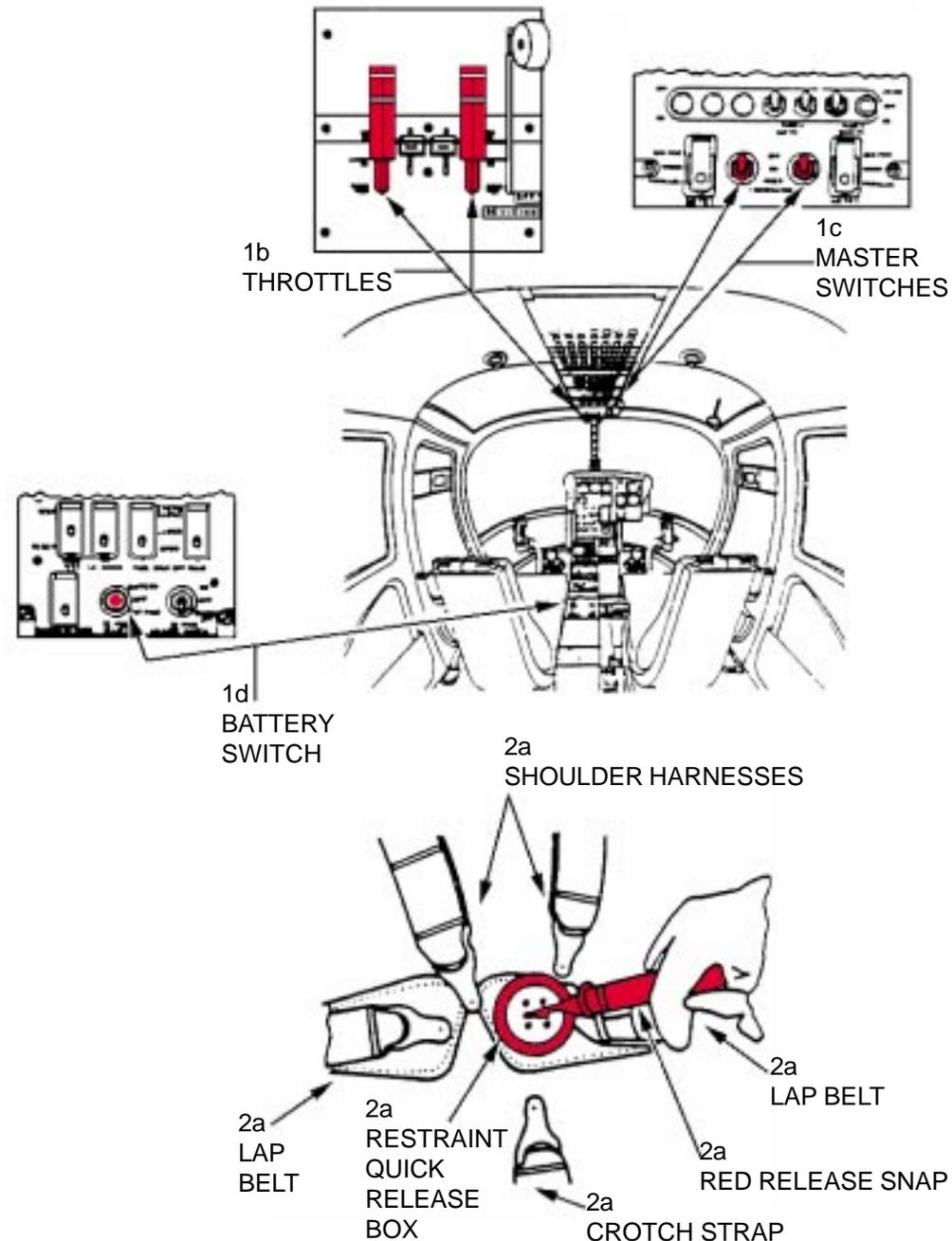
- Lift cover of fuel shutoff switches, located on pilot's center console, and place switches (not illustrated) in the EMERGENCY position.
- Press down spring loaded idle detent stop, located inside throttles on pilot's overhead panel, and move throttles to the OFF position.
- Lift master switches, located on pilot's center console, and move aft to the OFF position.
- Place battery switch, located on center console, to the OFF position.

2. AIRCREW EXTRACTION

NOTE:

Safety belts, shoulder harnesses, and crotch straps of crewmembers are equipped with a restraint quick release box.

- Pull red release snap from restraint quick release box until all restraint straps are released.
- Set all straps aside, to prevent entanglement, and remove crewmember.



The aircraft information is located in Chapter 13
containing US Army aircraft.
HC2,3 aircraft information is pending.

The aircraft information is located in Chapter 9
containing US Air Force aircraft.

SPECIAL TOOLS/EQUIPMENT

- Power Rescue Saw
- Crash Ax

ECUREUIL ALSTAR AS 355

AIRCRAFT ENTRY

1. NORMAL AND EMERGENCY ENTRY

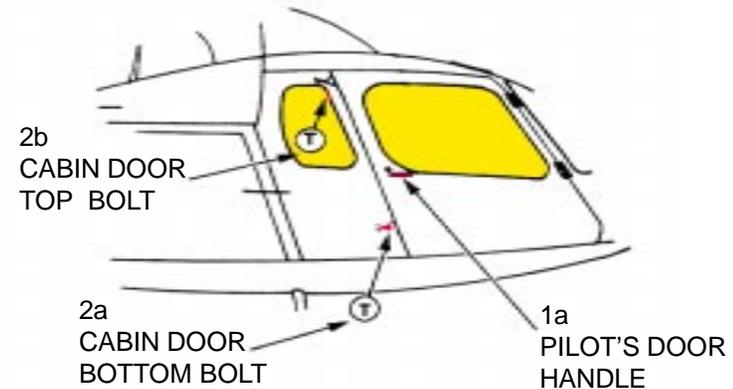
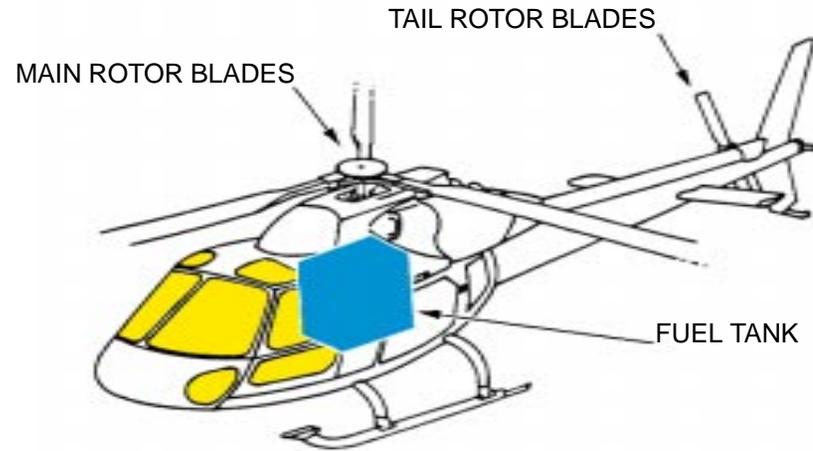
- a. To open pilot's door, turn door handle downward; door will open by itself.
- b. To open cabin door, turn door handle downward.
- c. Lightly pull door outward to release door from its housing, then push door backward.

2. INTERNAL EXITING

- a. To open cabin door internally, turn top door bolt ① 1/4 turn, then lower it.
- b. Turn bottom door bolt ① 1/4 turn, then lift it.

2. CUT-IN

- a. Cut-in fuselage as required.



ENGINE SHUTDOWN AND AIRCREW EXTRACTION

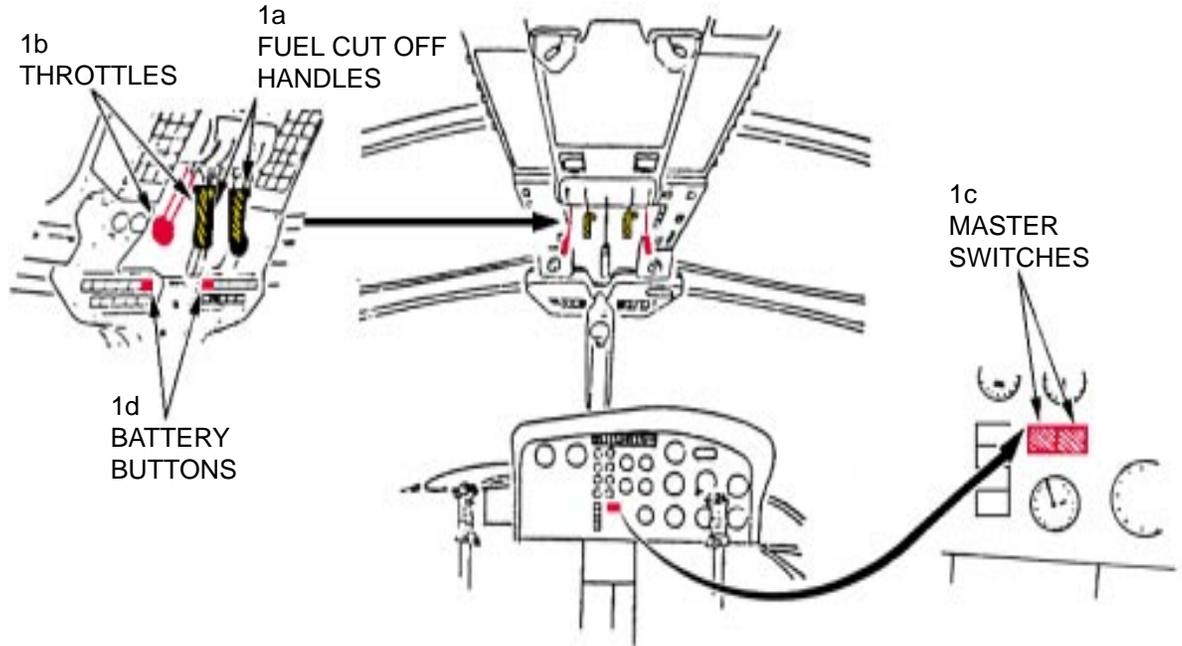
1. ENGINE SHUTDOWN

- a. Push two fuel cut off handles, located on overhead panel, sharply AFT.
- b. Gently move two throttle handles, located on overhead panel, to the right while moving handles DOWNWARD and AFT.
- c. Press two master switch buttons, located on forward instrument panel, to the OFF position.
- d. Press two battery buttons, located on overhead panel, to the OFF position.

2. AIRCREW EXTRACTION

- a. Release lap belt, shoulder harness, and any other restraints, then set restraint straps aside and remove crewmembers.

ECUREUIL ALSTAR AS 355



The aircraft information is pending release.

The aircraft information is pending release.

SPECIAL TOOLS/EQUIPMENT
 Power Rescue Saw
 Crash Ax

NOTE:
 Rubber covering on main rotor and tail rotor tie bar contain carbon fibre strands and may pose a carcinogenic hazard.

AIRCRAFT ENTRY

1. **NORMAL ENTRY**
 - a. To open forward main doors, push button, turn door handle, and pull out forwards.
 - b. To open rear doors, forward main doors must be accessed, operate interior door handle.

2. **EMERGENCY ENTRY**

NOTE:
 Doors are not equipped with pyrotechnics. Jettisoning doors means to separate doors from aircraft.

- a. To jettison forward door, lift door handle upwards.
- b. To jettison rear doors, forward main doors must be accessed, lift interior door handle upwards.

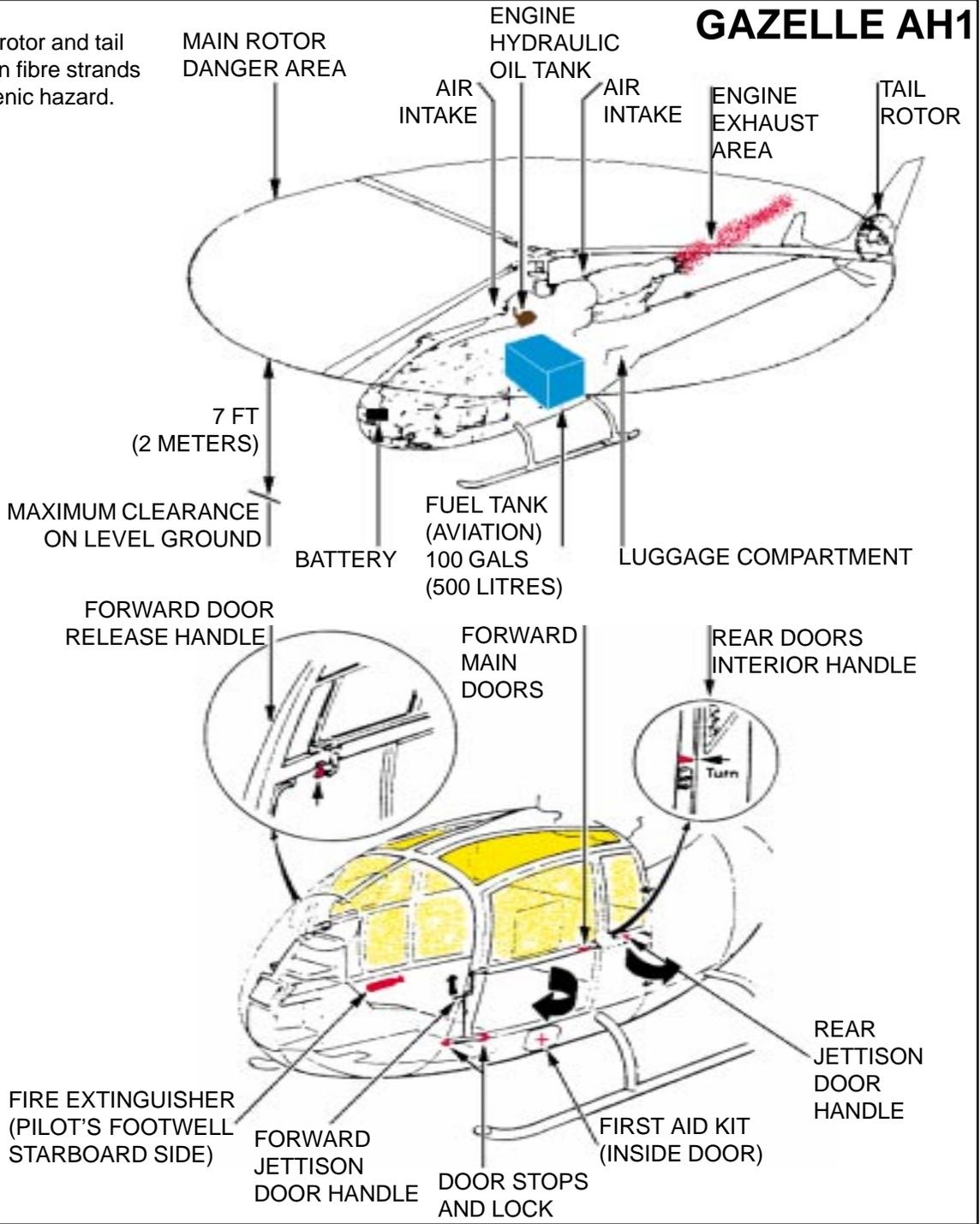
3. **CUT-IN**

- a. Cut-in fuselage as required.

OTHER HAZARDS:

Weapons may be carried in Light Fire Power, Support Role, eg: Machine Guns, Rockets, Missiles, Chaff Dispensers, etc.

- Acids - Batteries
- Bromochlorodifluoromethane - Fire Extinguishant
- Bromotrifluoromethane - Fire Extinguishant
- Composite Materials - Man Made Fibres
- Dimethylformamide - Strobe Power Pack
- Ground Illuminating Flare Dispenser
- Nitesun Light System
- Polytetrafluoroethylene - PTFE
- Sonar Locator Beacon(s) - Lithium Battery
- Very Flare
- Fuel: AVTUR
- Hydraulic Oil: OM-15
- HP Gases: Nitrogen
- Engine Oil: OX-38
- Oxygen: NIL

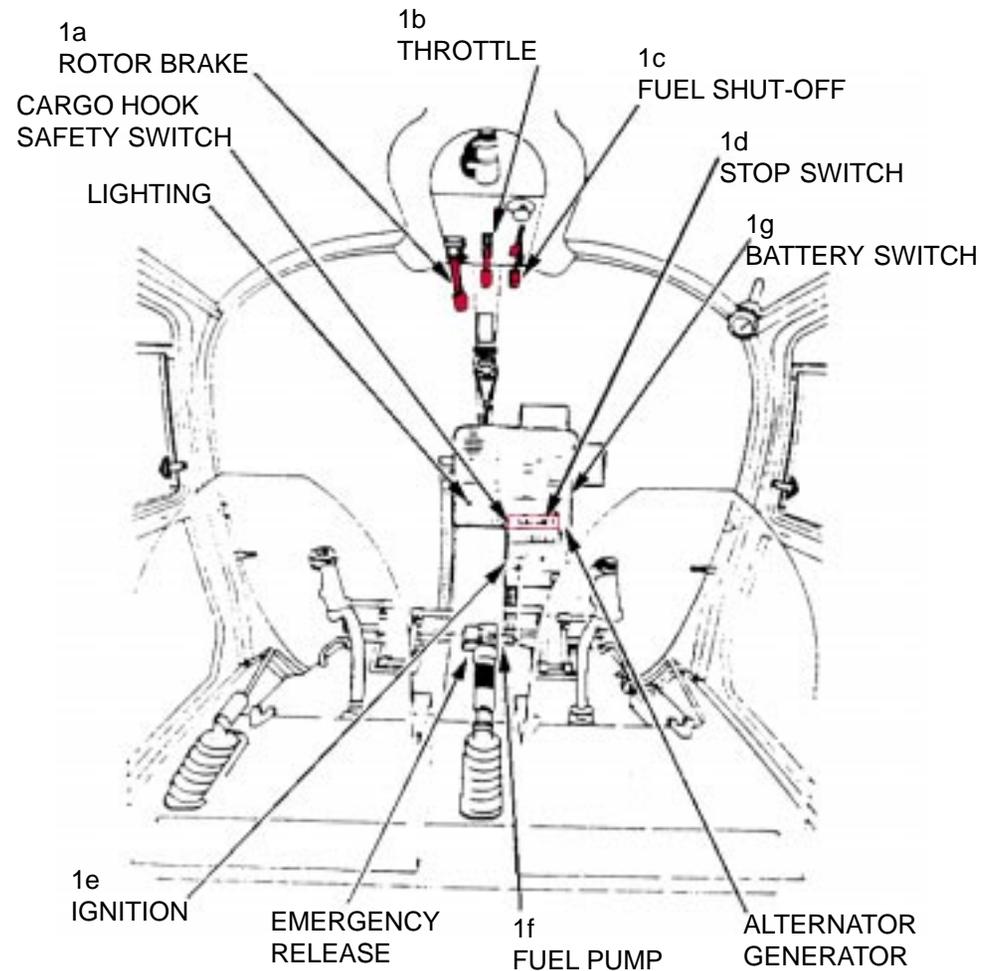


GAZELLE AH1

ENGINE SHUTDOWN

1. ENGINE SHUTDOWN

- a. Gently apply rotor brake, located on overhead control panel.
- b. Retard throttles, located on overhead control panel, to the OFF position.
- c. Pull the fuel shut-off switch, located on the forward center panel, to the AFT position.
- d. Place stop switch, located on the forward center panel, to the STOP position.
- e. Place Ignition switch, located on the forward center panel, to the OFF position.
- f. Place the fuel pump switch, located on the forward center panel, to the OFF position.
- g. Place the battery switch, located on the forward center panel, to the OFF position.



AIRCREW EXTRACTION AND EMERGENCY ACTIONS

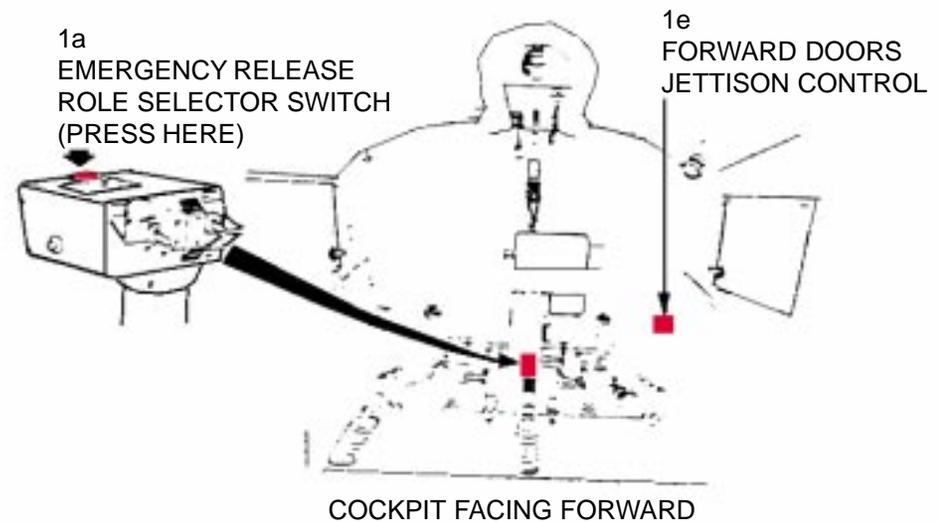
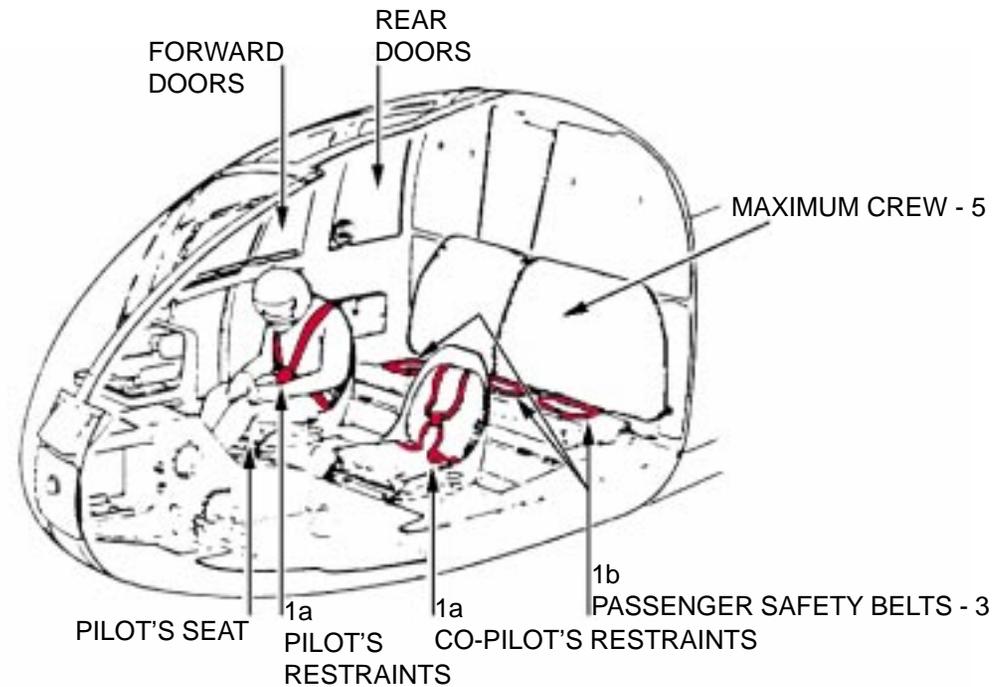
GAZELLE AH1

1. AIRCREW EXTRACTION

- a. Release crew from seats by disconnecting safety belts and harness restraint straps, setting straps aside, and removing crew.
- b. Release passengers from seats by disconnecting safety belts, setting belts aside, and removing passengers.

2. EMERGENCY ACTIONS

- a. Press the emergency release role selector switch, located on center control.
- b. For the winch, cut the cable.
- c. For the cargo door, jettison.
- d. For armament, jettison armament and set to OFF position.
- e. To internally jettison forward doors, press down on door handle and push out door.



The aircraft information is pending release.

SPECIAL TOOLS/EQUIPMENT

- Power Rescue Saw
- Crash Ax

AIRCRAFT ENTRY

1. NORMAL ENTRY

- a. To open forward main doors, push button, turn door handle, and pull out forwards.
- b. To open rear doors, forward main doors must be accessed, operate interior door handle.

2. EMERGENCY ENTRY

NOTE:

Doors are not equipped with pyrotechnics. Jettisoning doors means to separate doors from aircraft.

- a. To jettison forward door, lift door handle upwards.
- b. To jettison rear doors, forward main doors must be accessed, lift interior door handle upwards.

3. CUT-IN

- a. Cut-in fuselage as required.

OTHER HAZARDS:

Weapons may be carried in Light Fire Power, Support Role, eg: Machine Guns, Rockets, Missiles, Chaff Dispensers, etc.

Acids - Batteries

Bromochlorodifluoromethane - Fire Extinguishant

Bromotrifluoromethane - Fire Extinguishant

Composite Materials - Man Made Fibres

Dimethylformamide - Strobe Power Pack

Ground Illuminating Flare Dispenser

Nitesun Light System

Polytetrafluoroethylene - PTFE

Sonar Locator Beacon(s) - Lithium Battery

Very Flare

Fuel: AVTUR

Hydraulic Oil: OM-15

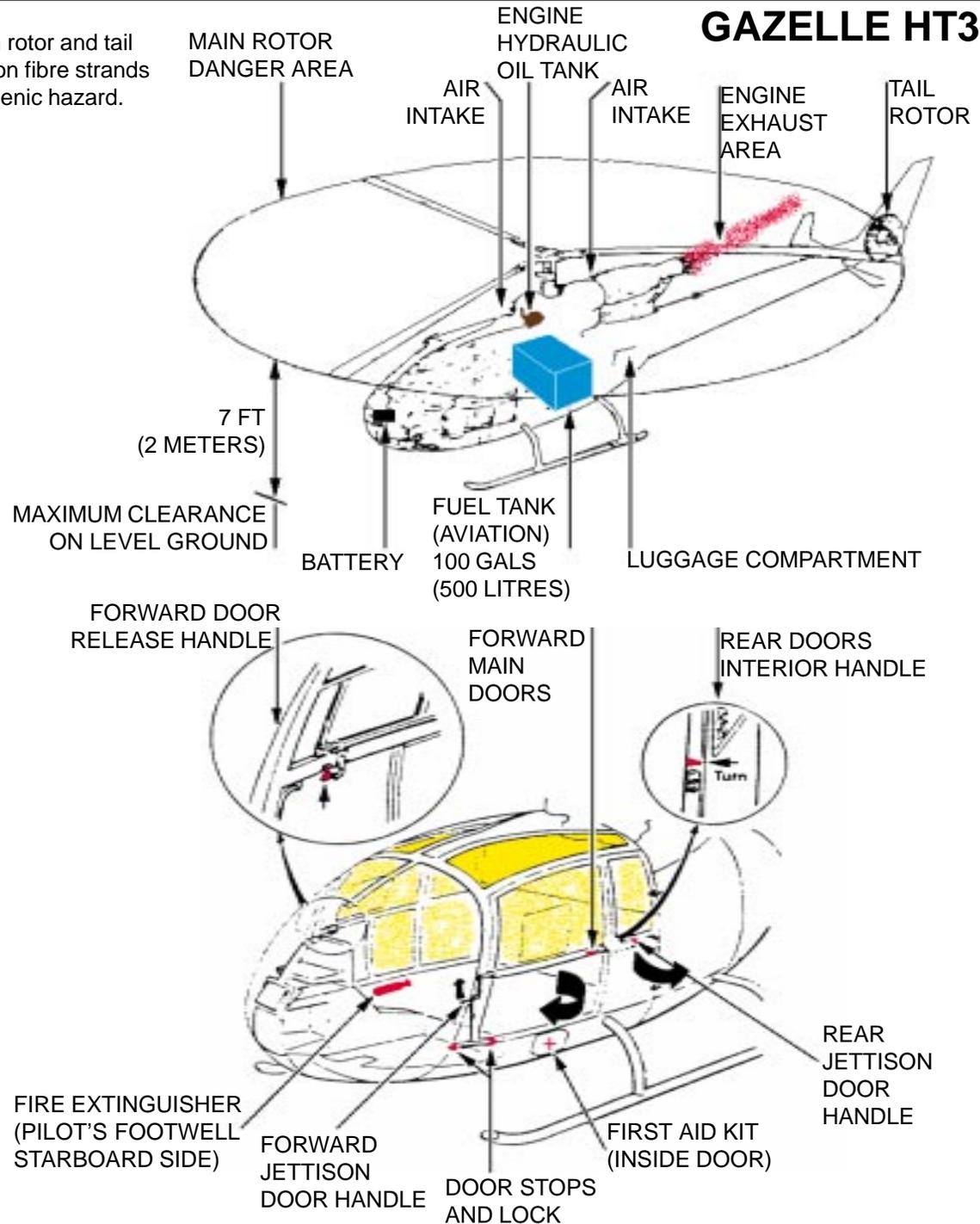
HP Gases: Nitrogen

Engine Oil: OX-38

Oxygen: NIL

NOTE:

Rubber covering on main rotor and tail rotor tie bar contain carbon fibre strands and may pose a carcinogenic hazard.

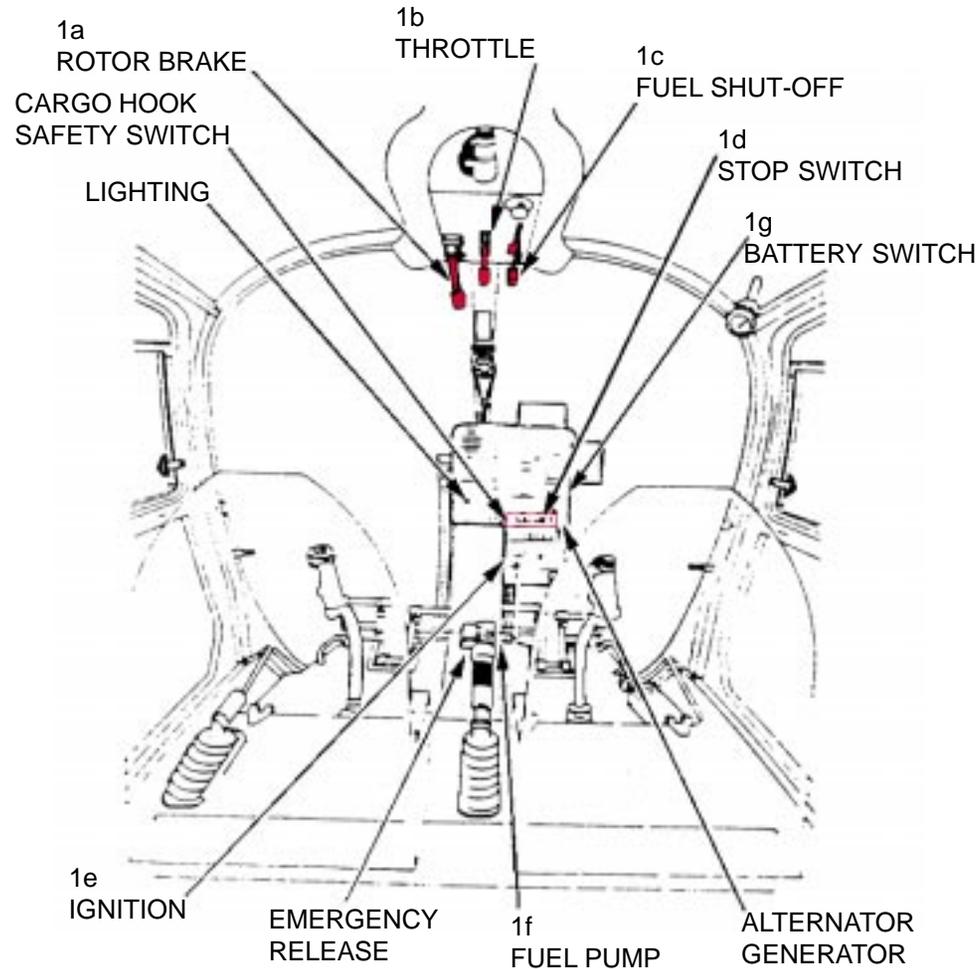


GAZELLE HT3

ENGINE SHUTDOWN

1. ENGINE SHUTDOWN

- a. Gently apply rotor brake, located on overhead control panel.
- b. Retard throttles, located on overhead control panel, to the OFF position.
- c. Pull the fuel shut-off switch, located on the forward center panel, to the AFT position.
- d. Place stop switch, located on the forward center panel, to the STOP position.
- e. Place Ignition switch, located on the forward center panel, to the OFF position.
- f. Place the fuel pump switch, located on the forward center panel, to the OFF position.
- g. Place the battery switch, located on the forward center panel, to the OFF position.



NOTE:

Flare safety pin is removed for flight.
Insert to make firing button inoperative.

AIRCREW EXTRACTION AND EMERGENCY ACTIONS

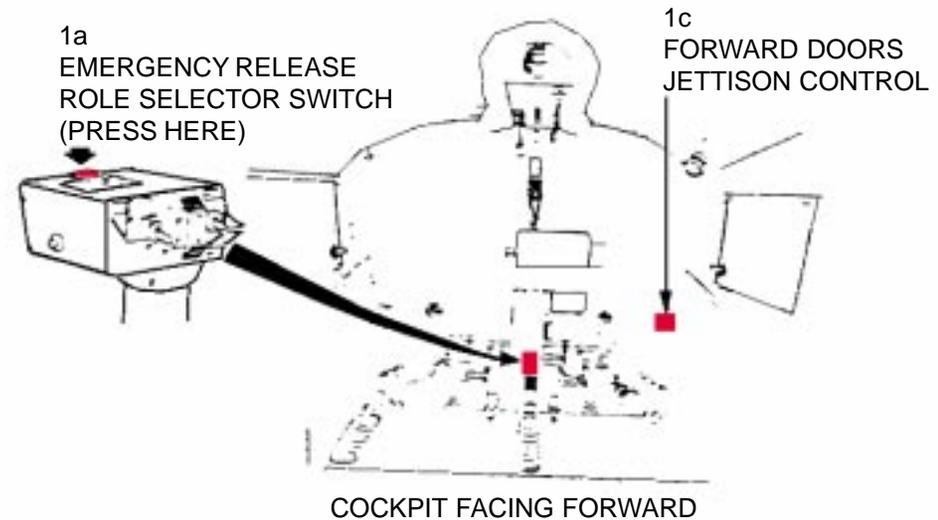
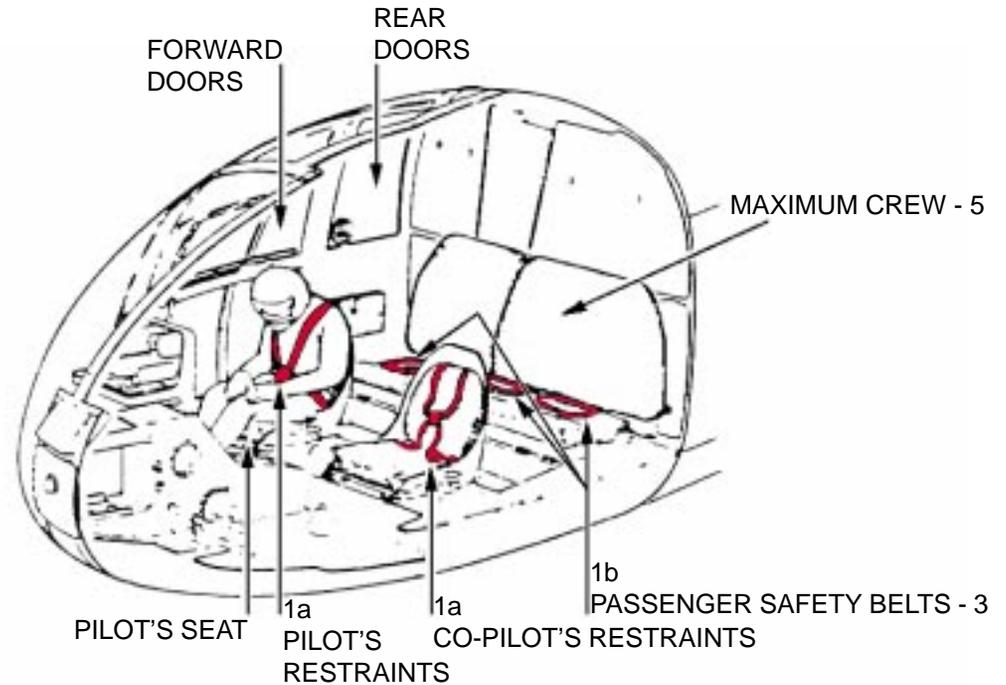
GAZELLE HT3

1. AIRCREW EXTRACTION

- a. Release crew from seats by disconnecting five point system for safety belts and harness restraint straps, setting straps aside, and removing crew.
- b. Release passengers from seats by disconnecting safety belts, setting belts aside, and removing passengers.

2. EMERGENCY ACTIONS

- a. Press the emergency release role selector switch, located on center control.
- b. For armament, jettison armament and set to OFF position.
- c. To internally jettison forward doors, press down on door handle and push out door.



The aircraft information is pending release.

SPECIAL TOOLS/EQUIPMENT

- Power Rescue Saw
- Crash Ax
- Fire Drill II

H/M/S/UH-60A,G,H,J,L & S-70-28D

AIRCRAFT ENTRY

NOTE:

The aircraft information is located in Chapter 9 containing US Air Force and Chapter 13 containing US Army aircraft.

1. NORMAL ENTRY

- a. Turn cockpit door handle counterclockwise to the open position to open door.
- b. Turn cabin door handle counterclockwise to the open position and slide door aft.

2. EMERGENCY ENTRY

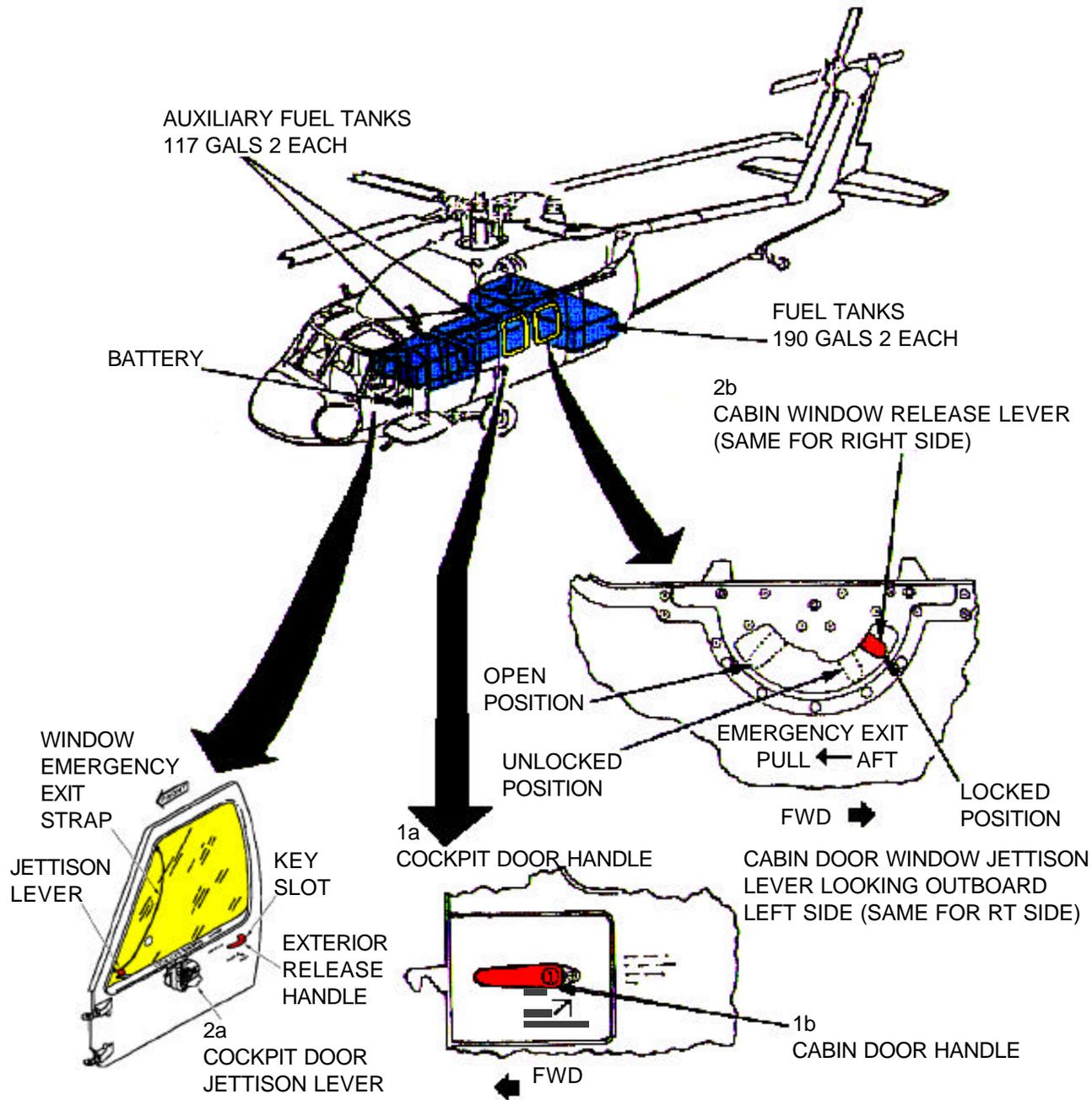
NOTE:

Doors are not pyrotechnically equipped.

- a. Break window in cockpit door and pull jettison lever aft to release door hinges.
- b. Break window in cabin door and rotate emergency handle, located below forward window, to the aft open position. Push bottom of window out to remove window. Both cabin windows on side operate this way.

3. CUT-IN

- a. Break window or windshield as required.



ENGINE SHUTDOWN AND AIRCREW EXTRACTION

1. ENGINE SHUTDOWN

NOTE:

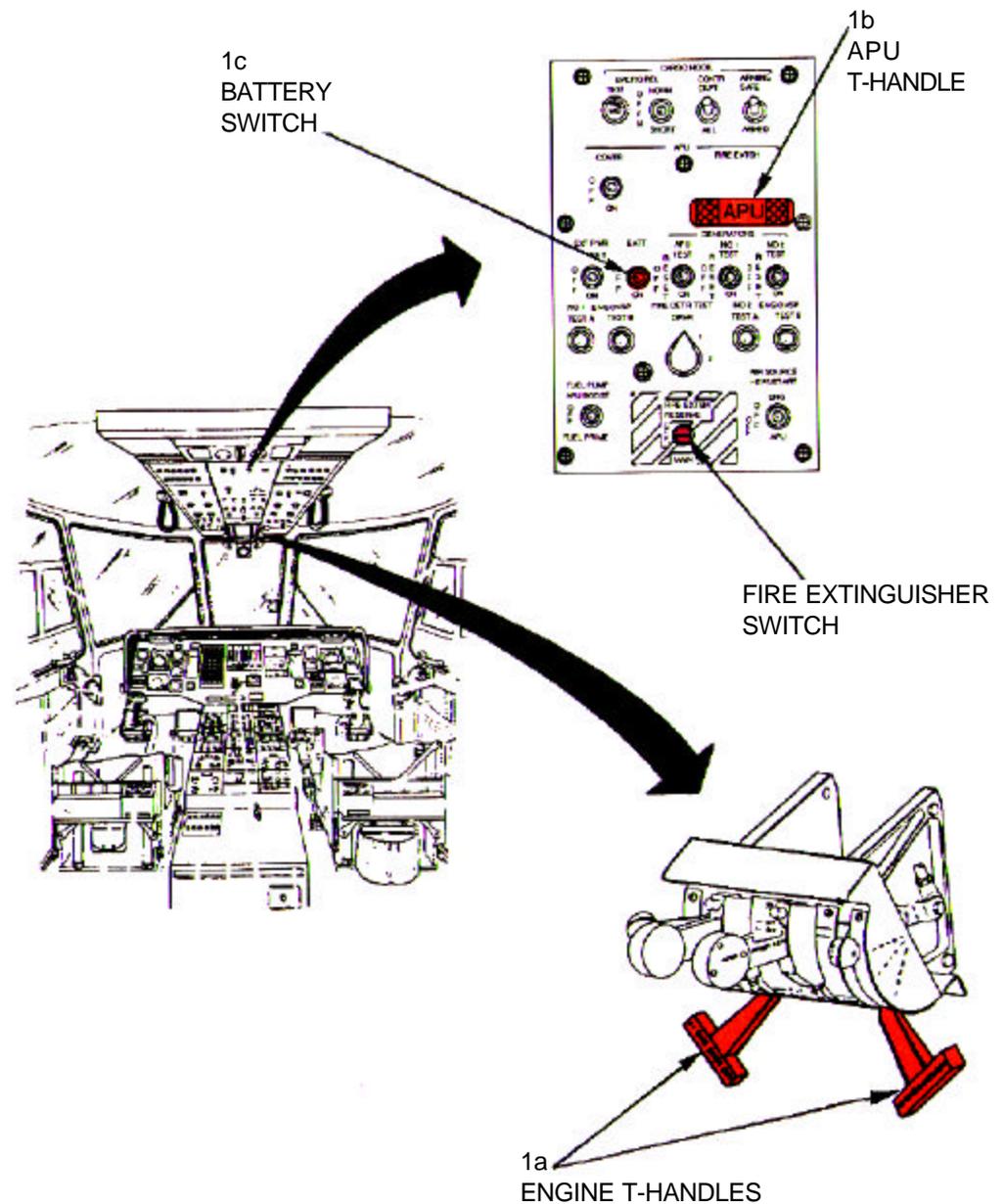
Battery switch must be in the ON position. To activate the installed fire extinguishing system, one T-handle must be pulled (agent is discharged to last T-handle pulled). Then, reposition the fire extinguisher switch from OFF to MAIN or RESERVE.

- Pull engine emergency T-handles, located on control quadrant, FULL AFT, to cut off fuel flow.
- Pull APU T-handle, located on overhead console, DOWN.
- Place battery switch, located on overhead console, to the OFF position.

2. AIRCREW EXTRACTION

- Release all lap belts and shoulder harnesses from aircrew. All aircrew seats have a complete lap belt and dual torso restraint shoulder harness centrally attached to a rotary release buckle or a pull-up release lever.
- Disconnect personnel leads from aircrew.
- Release all lap belt and shoulder harnesses from troop seats occupants. All troop seats have a lap belt and shoulder harness centrally attached to a rotary release buckle.

H/M/S/UH-60A,G,H,J,L & S-70-28D



SPECIAL TOOLS/EQUIPMENT

Rescue Saw
Crash Ax

NOTE:

Additional information for this aircraft is located in Chapter 13 for the MH-6.

HUGHES 300/MH-6

AIRCRAFT ENTRY

1. NORMAL AND EMERGENCY ENTRY

a. Open main entry doors and right and left sides of fuselage.

2. CUT-IN

a. Cut-in fuselage/windows as required.

3. ENGINE SHUTDOWN

a. Close throttle to idle engine speed of 1400 RPMs.

NOTE:

The following items are located on the center console.

b. Shut down engine after clutch is released. (Rotor will be nearly stopped.)

c. Place mixture control in IDLE CUTOFF position.

d. Place ignition switch in OFF position.

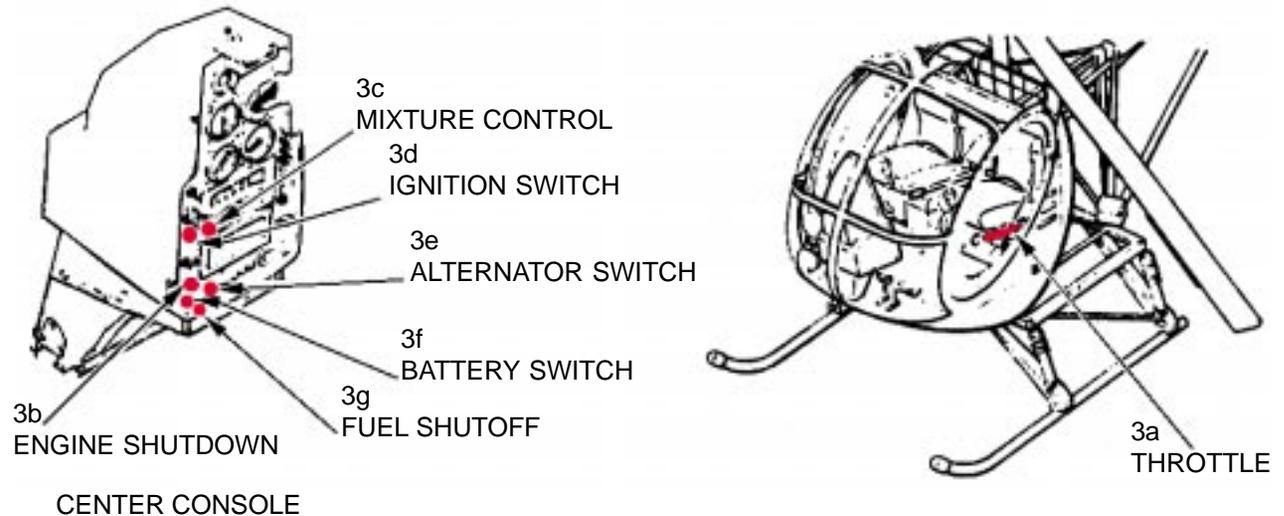
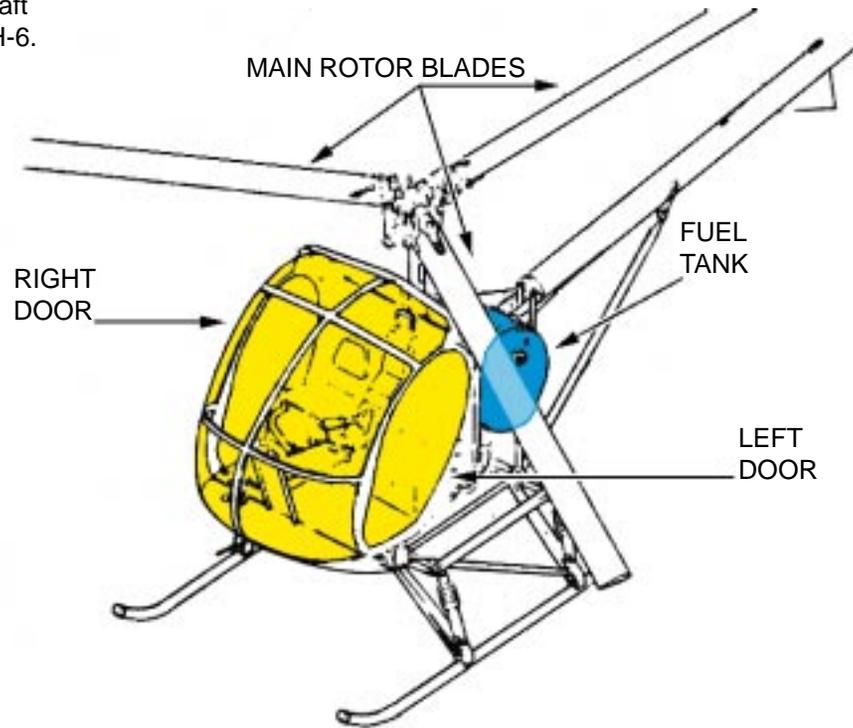
e. Place alternator switch in OFF position.

f. Place battery switch in OFF position and all remaining switches in OFF position.

g. Place fuel shutoff valve in CLOSED position.

4. AIRCREW EXTRACTION

a. Release restraints from crew, set aside restraint straps and remove crew.



The aircraft information is located in Chapter 13
containing US Army aircraft.

AIRCRAFT HAZARDS

NOTE:

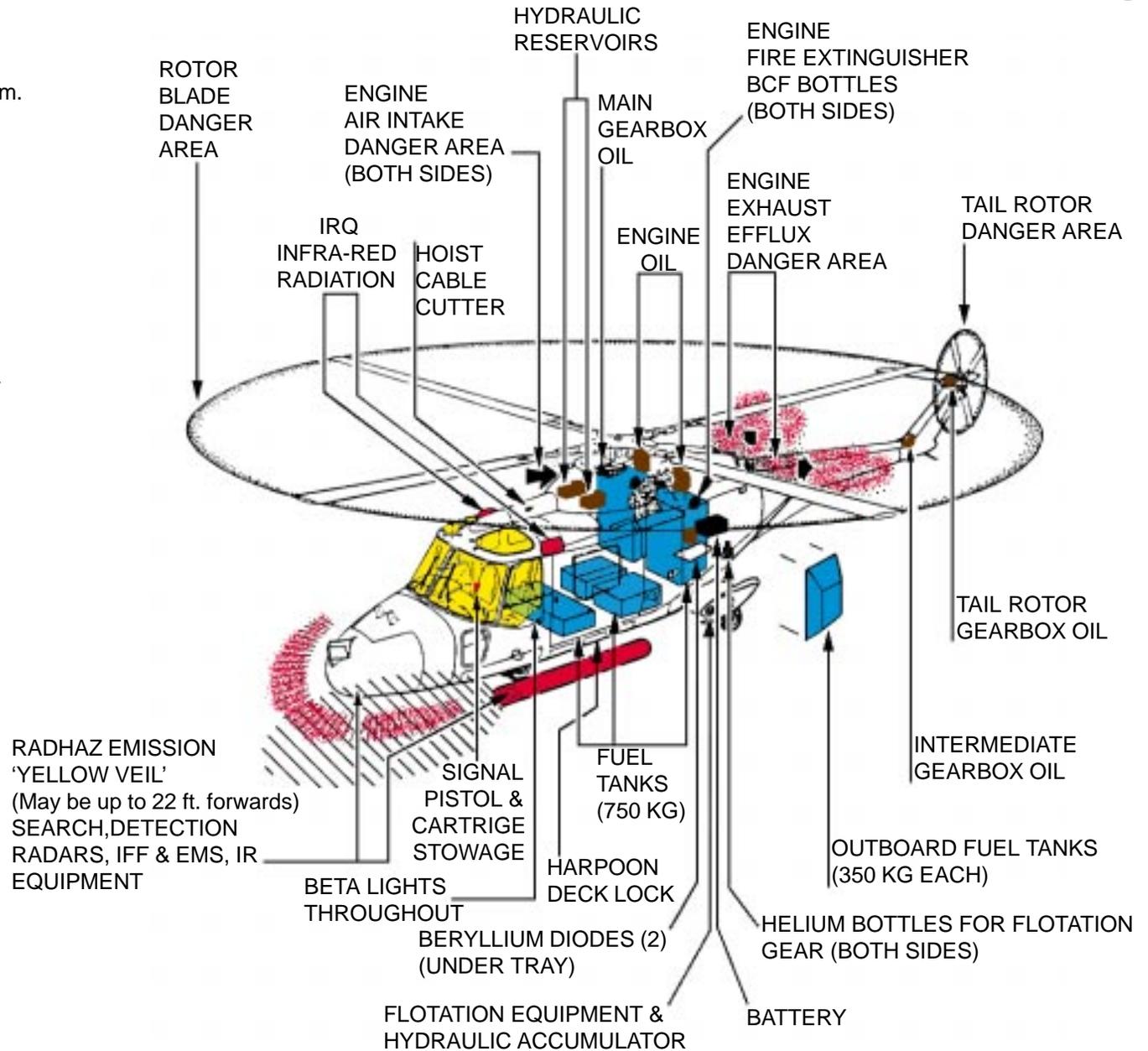
Hazardous cargo may be carried in cabin, or slung externally - glass fibre panels, asbestos, strobe lights, beryllium.

OTHER HAZARDS:

- Acids - Batteries
- Asbestos
- Beryllium + Beryllium Oxides
- Bromochlorodifluoromethane - Fire Extinguishant
- Dimethylformamide - Strobe Power Pack
- Fluorolastomers - Burnt Seals
- Lithium - Batteries
- Sonar Locator Beacon(s) - Lithium Battery
- Tritium Light Sources - Beta Lights
- Weapon Load
- Windscreen Wash Fluid AL-36
- Zinc Selenide

- Fuel: AVTUR
- Hydraulic Oil: OM-15
- HP Gases: Nitrogen
- Engine Oil: OX-38/OEP-70/OEP-215
- Oxygen: NIL

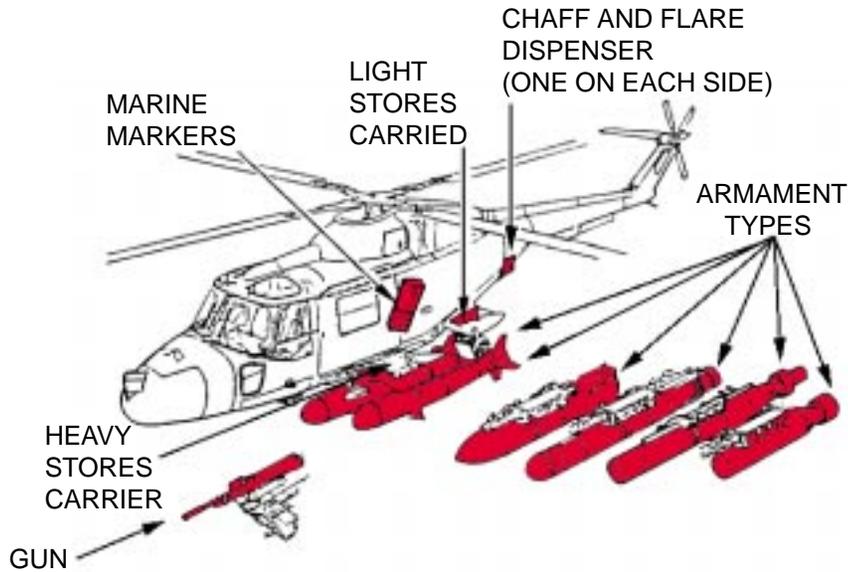
LYNX HAS 3



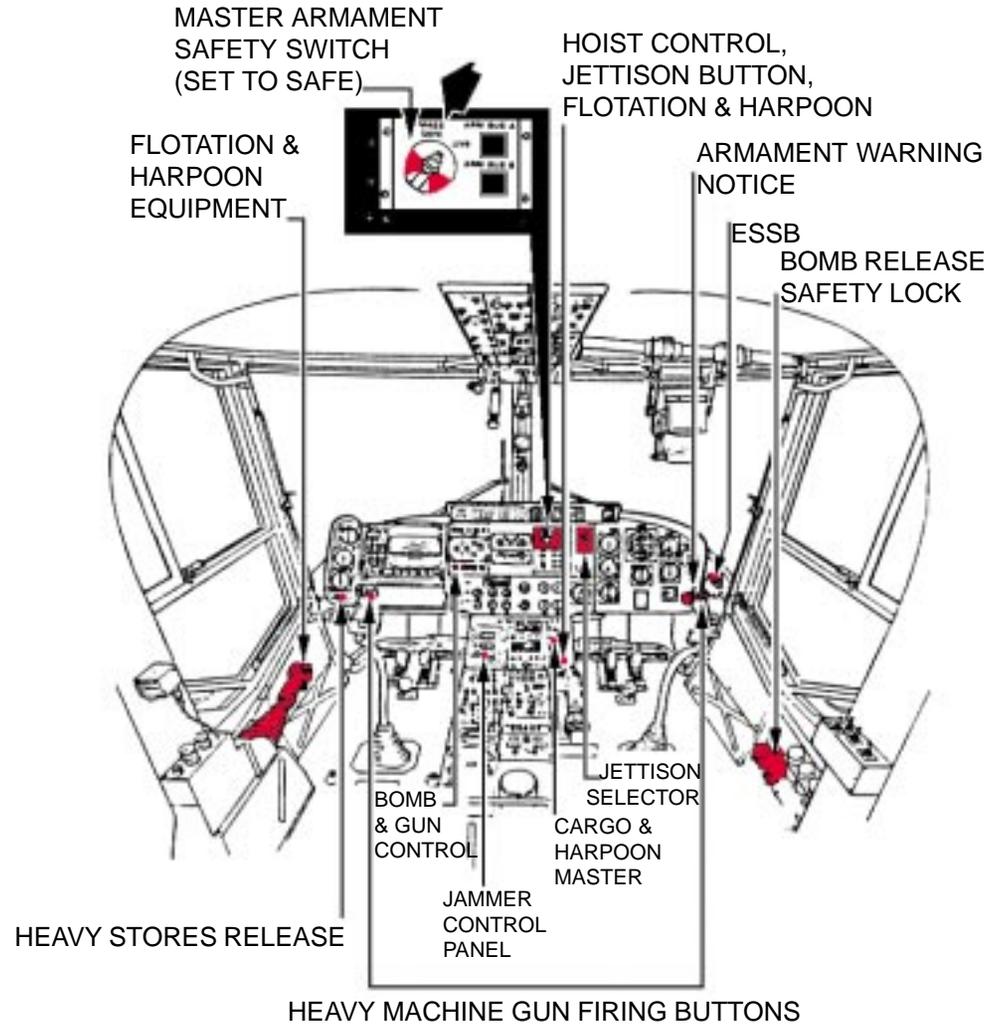
AIRCRAFT ARMAMENT

NOTE:

Armament may include bombs, missiles, torpedos, depth charges, and heavy machine guns - also flares, marine markers, and smoke (light stores).



LYNX HAS 3



SPECIAL TOOLS/EQUIPMENT
 Power Rescue Saw
 Crash Ax

LYNX HAS 3

AIRCRAFT ENTRY

1. NORMAL ENTRY

- a. Turn external entry door handles up, pull forward door out and forwards. Slide rear door aft.
- b. To open windows in rear doors, pull down release handle, pull windows outwards. (A blade may have to be inserted between frame and door.)

2. EMERGENCY ENTRY

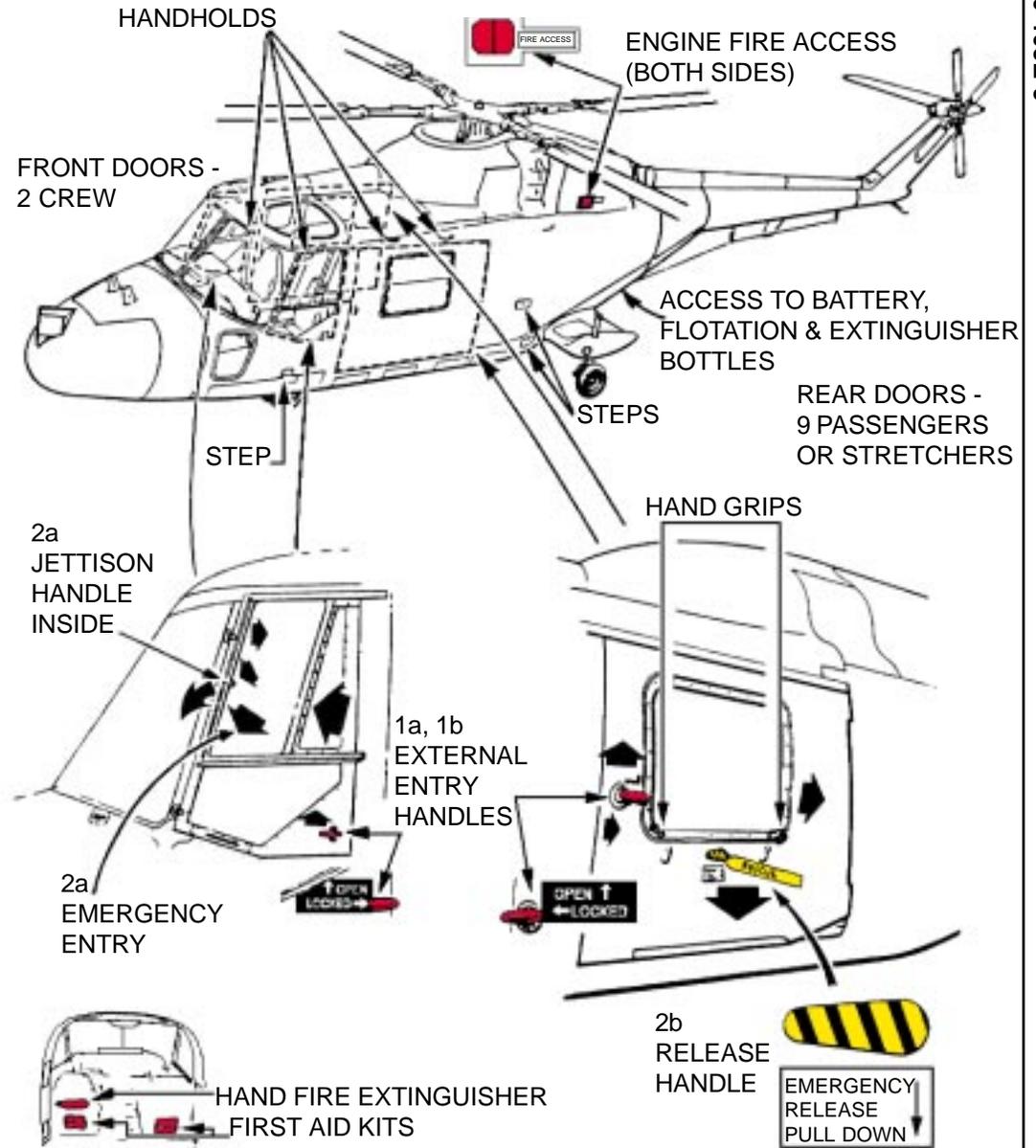
- a. For forward door, slide window aft, push jettison forward and down. Pull outwards.

3. CUT-IN

- a. Cut-in fuselage as required.

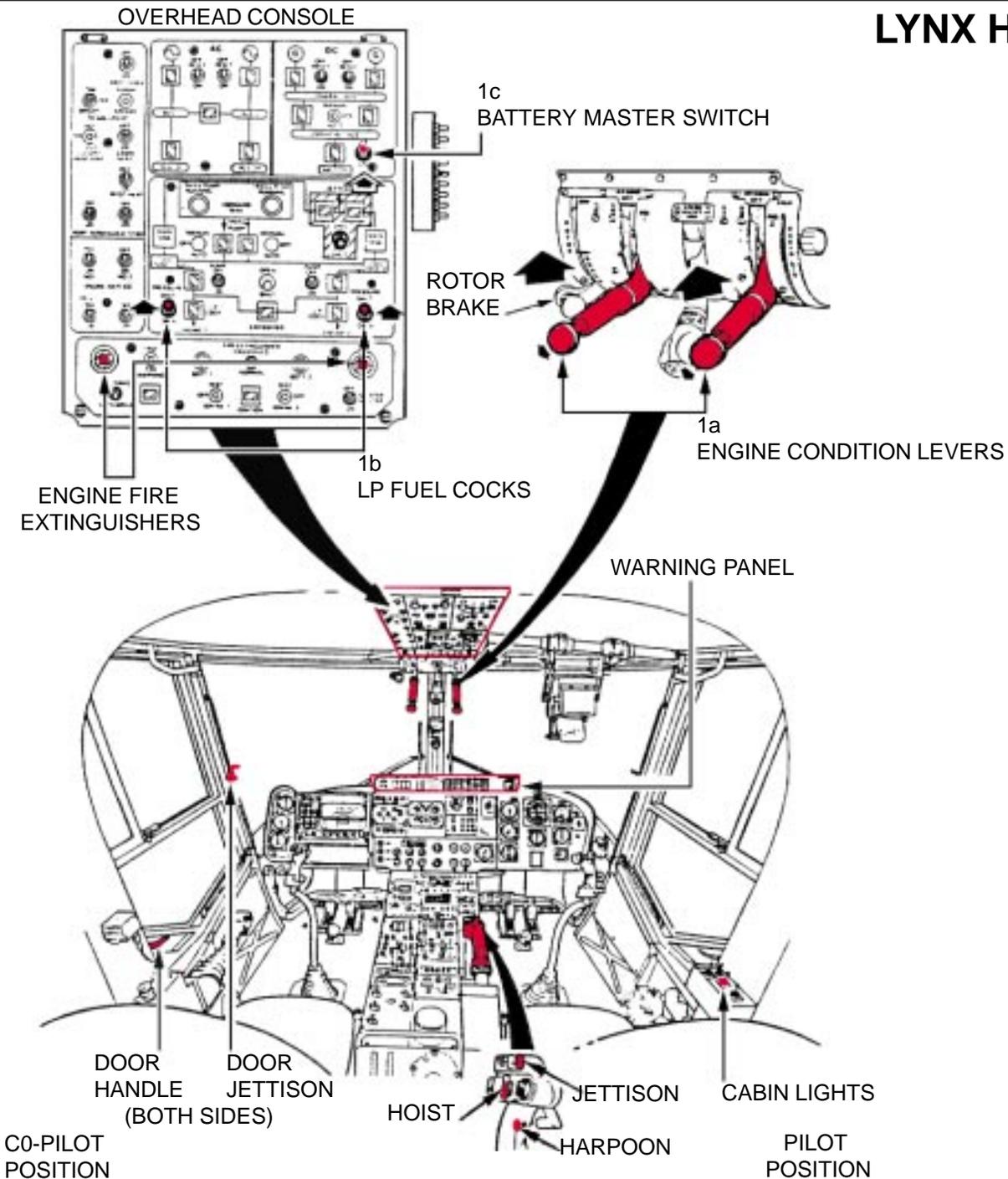
NOTE:

Winch in main cabin may be swung out of way by pulling down cord on starboard side.



ENGINE SHUTDOWN

1. ENGINE SHUTDOWN
 - a. Raise engine condition levers, located on overhead control console, UP (aft) to HP COCK OFF position.
 - b. Place LP fuel cocks, located on overhead control console, aft to SHUT position.
 - c. Place battery master switch, located on the overhead control console, to OFF position.



AIRCREW EXTRACTION AND EMERGENCY EXIT DOORS

LYNX HAS 3

1. AIRCREW EXTRACTION

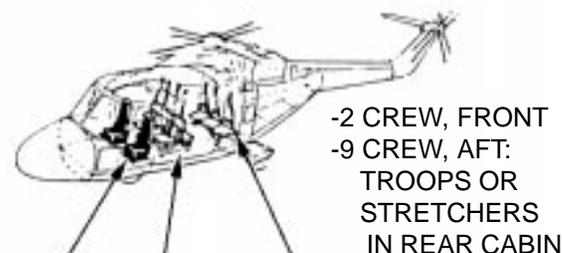
- a. Release crew in forward seats by releasing the QRF harness connection and other associated connections.
- b. Release crew in mid cabin seats by releasing restraint harnesses and other associated connections.
- c. Release crew in rear seats by releasing restraint harnesses and other associated connections.

2. EMERGENCY EXIT DOORS

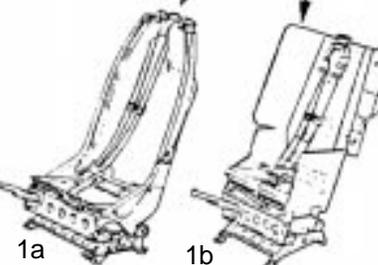
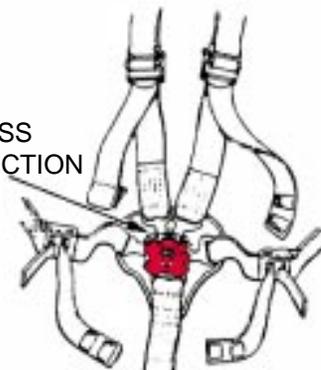
NOTE:

Exit doors can be jettisoned to make extraction of crewmembers faster.

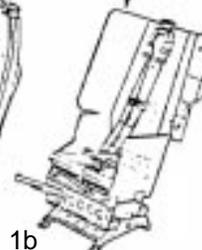
- a. For front doors, push jettison forward and down, then push door out.
- b. For rear cabin doors, push jettison lever, located at bottom center of window, aft, then push window out.



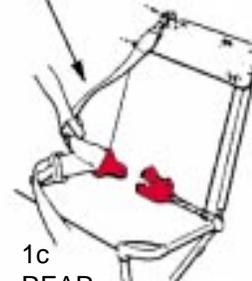
1a
QRF
HARNESS
CONNECTION



1a
FRONT
SEAT



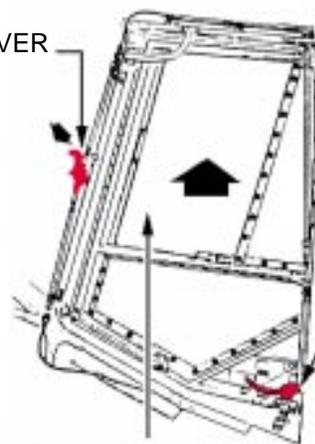
1b
MID CABIN
SEAT



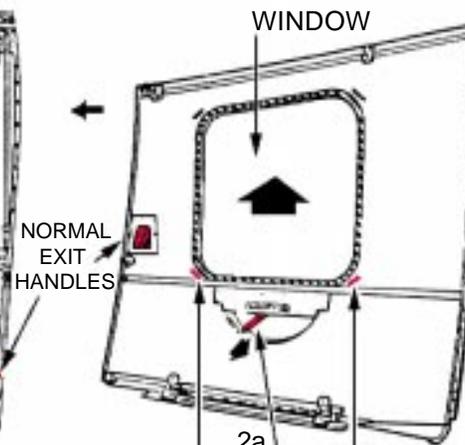
1c
REAR
SEAT

EMERGENCY EXITS

2a
JETTISON LEVER



SLIDING WINDOW



BETA LIGHTS
(RADIO ACTIVE)

2a
REAR
CABIN
DOOR
LEVER

BETA LIGHTS
(RADIO ACTIVE)

NORMAL
EXIT
HANDLES

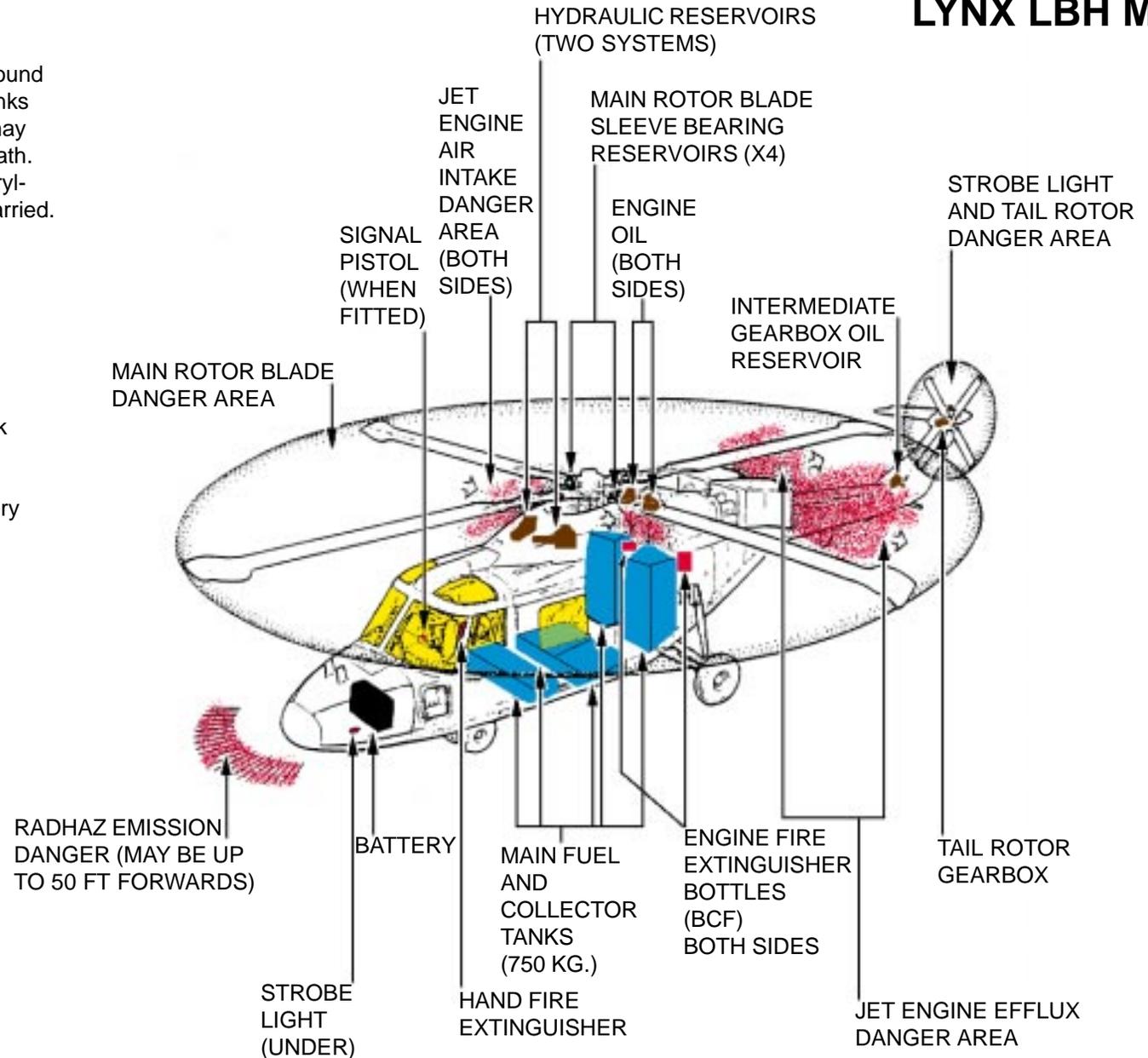
WINDOW

AIRCRAFT HAZARDS

NOTE:
 Beta lights (radio active beryllium) around doors and windows. Auxiliary fuel tanks may be in cabin. Hazardous cargo may be carried in cabin, or slung underneath. Glass fibre panels, asbestos, and beryllium components. No armament is carried.

- OTHER HAZARDS:**
- Acids - Batteries
 - Asbestos
 - Beryllium + Beryllium Oxides
 - Bromochlorodifluoromethane - Fire Extinguishant
 - Dimethylformamide - Strobe Power Pack
 - Fluorolastomers - Burnt Seals
 - Lithium - Batteries
 - Sonar Locator Beacon(s) - Lithium Battery
 - Tritium Light Sources - Beta Lights
 - Weapon Load
 - Windscreen Wash Fluid AL-36
 - Zinc Selenide
 - Fuel: AVTUR
 - Hydraulic Oil: OM-15
 - HP Gases: Nitrogen
 - Engine Oil: OX-38/OEP-70/OEP-215
 - Oxygen: NIL

LYNX LBH MK9



SPECIAL TOOLS/EQUIPMENT
 Power Rescue Saw
 Crash Ax

LYNX LBH MK9

AIRCRAFT ENTRY

1. NORMAL ENTRY

- a. Turn external entry door handles up, pull forward door out and forwards. Slide rear door aft.
- b. To open windows in rear doors, pull down release handle, pull windows outwards. (A blade may have to be inserted between frame and door.)

2. EMERGENCY ENTRY

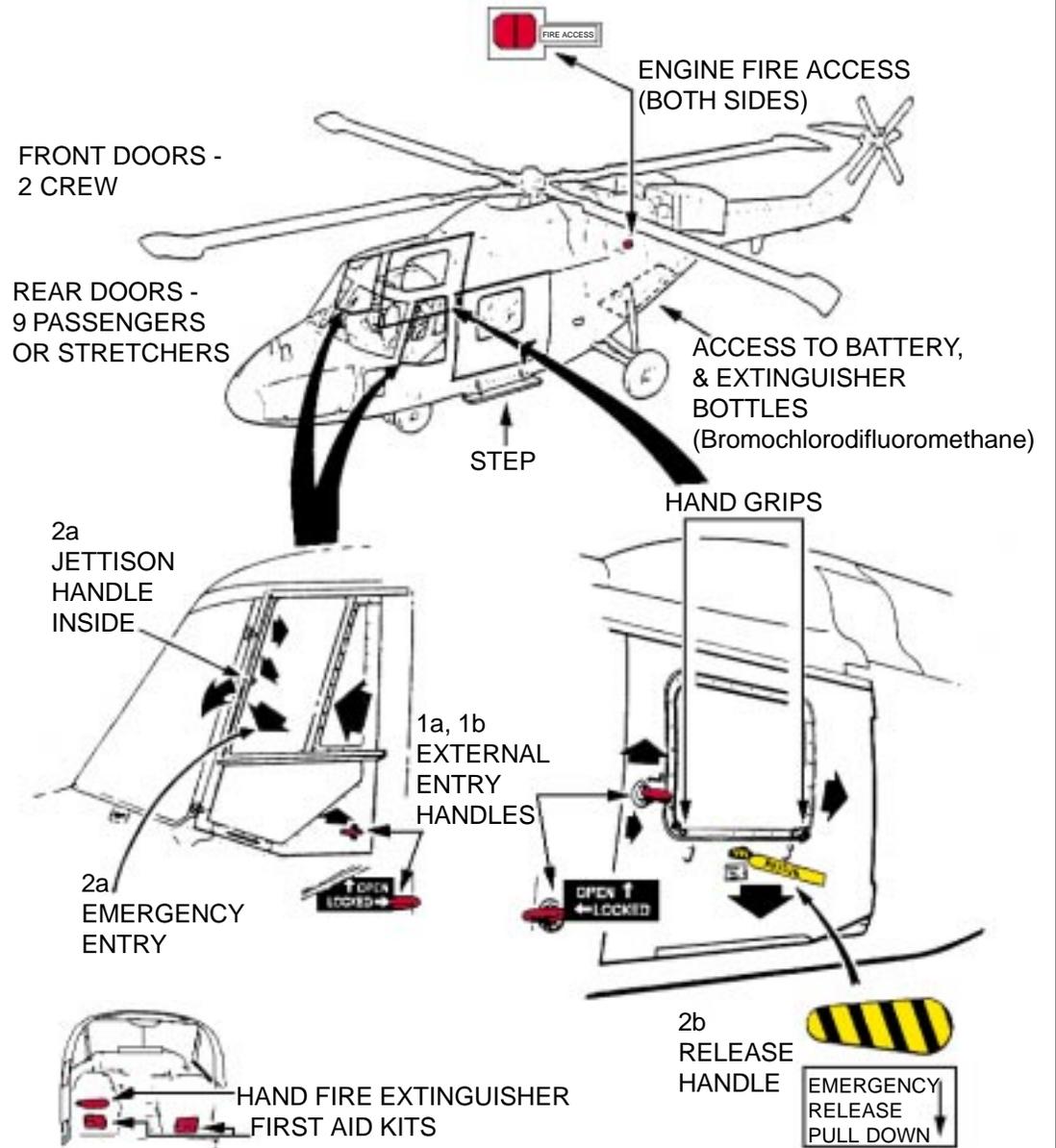
- a. For forward door, slide window aft, push jettison forward and down. Pull outwards.

3. CUT-IN

- a. Cut-in fuselage as required.

NOTE:

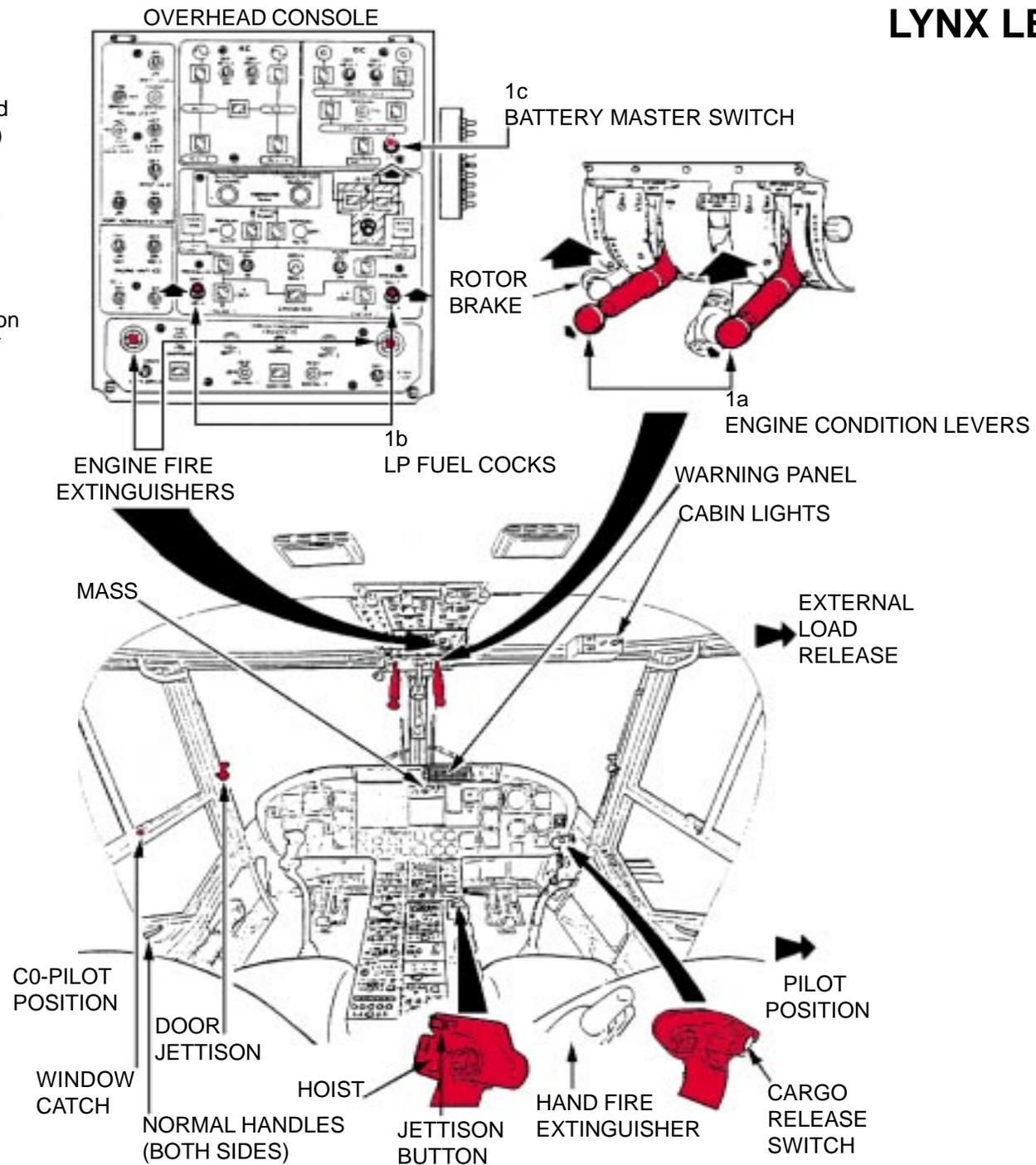
Winch in main cabin may be swung out of way by pulling down cord on starboard side.



ENGINE SHUTDOWN

1. ENGINE SHUTDOWN
 - a. Raise engine condition levers, located on overhead control console, UP (aft) to HP COCK OFF position.
 - b. Place LP fuel cocks, located on overhead control console, aft to SHUT position.
 - c. Place battery master switch, located on the overhead control console, to OFF position.

LYNX LBH MK9



AIRCREW EXTRACTION AND EMERGENCY EXIT DOORS

1. AIRCREW EXTRACTION

- a. Release crew in forward seats by releasing the QRF harness connection and other associated connections.
- b. Release crew in mid cabin seats by releasing restraint harnesses and other associated connections.
- c. Release crew in rear seats by releasing restraint harnesses and other associated connections.

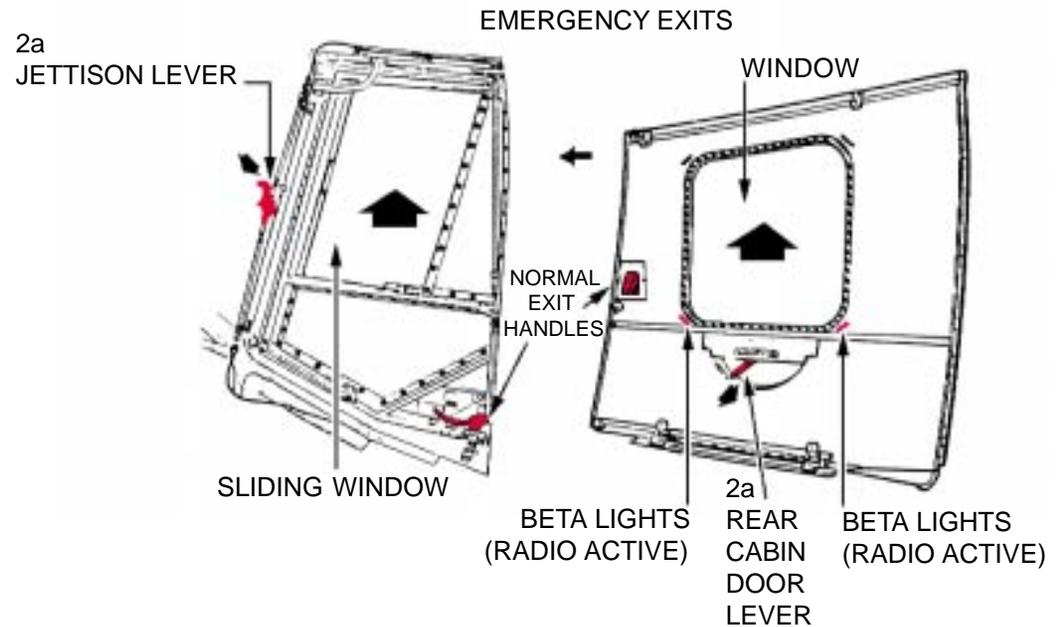
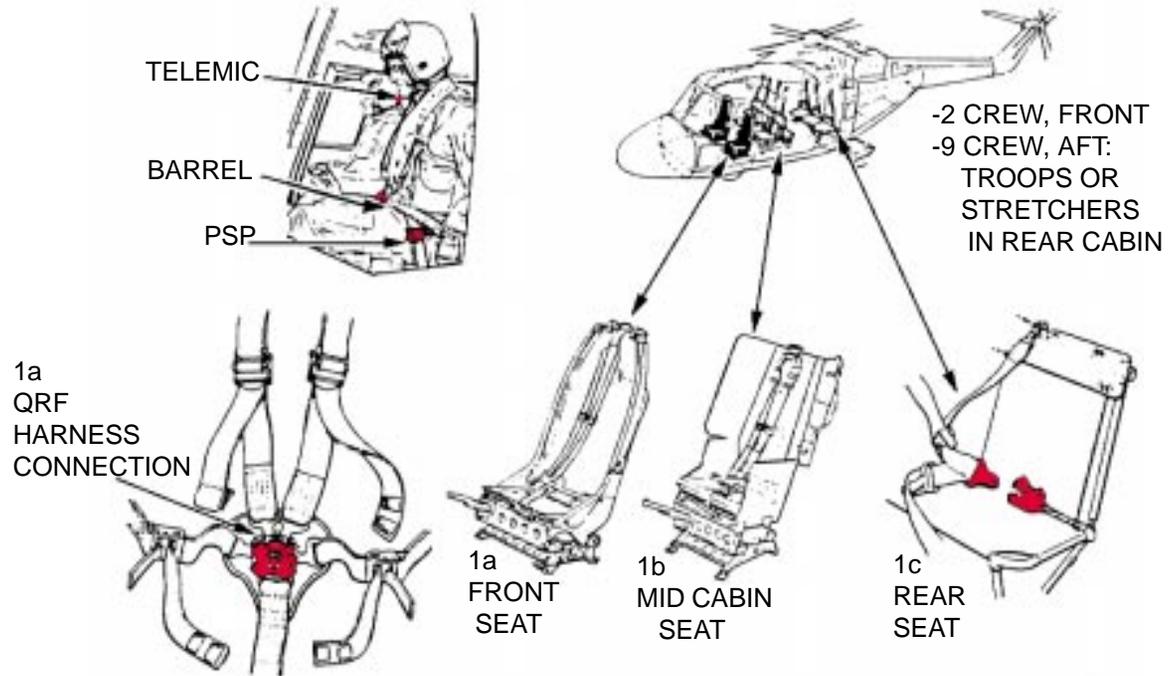
2. EMERGENCY EXIT DOORS

NOTE:

Exit doors can be jettisoned to make extraction of crewmembers faster.

- a. For front doors, push jettison forward and down, then push door out.
- b. For rear cabin doors, push jettison lever, located at bottom center of window, aft, then push window out.

LYNX LBH MK9

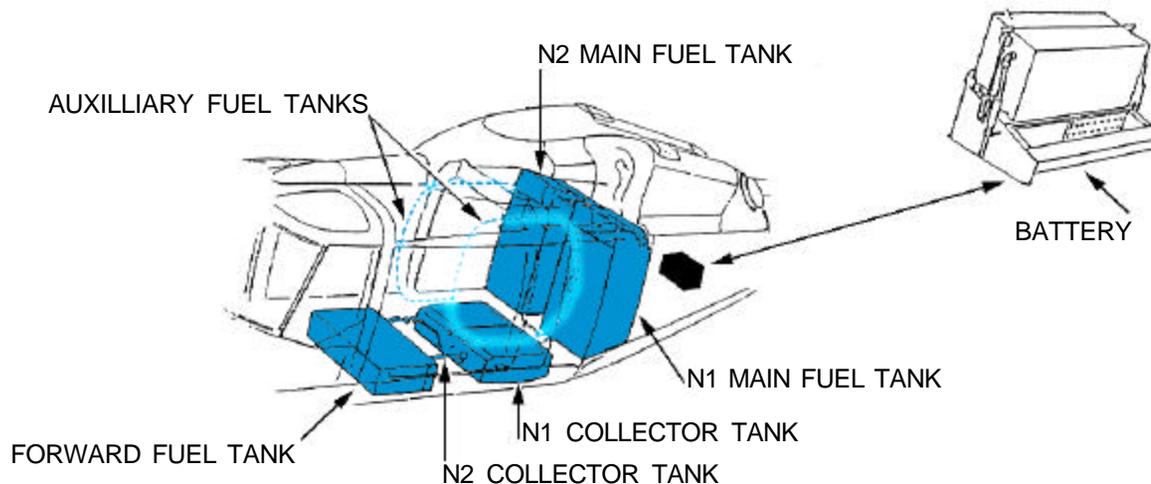
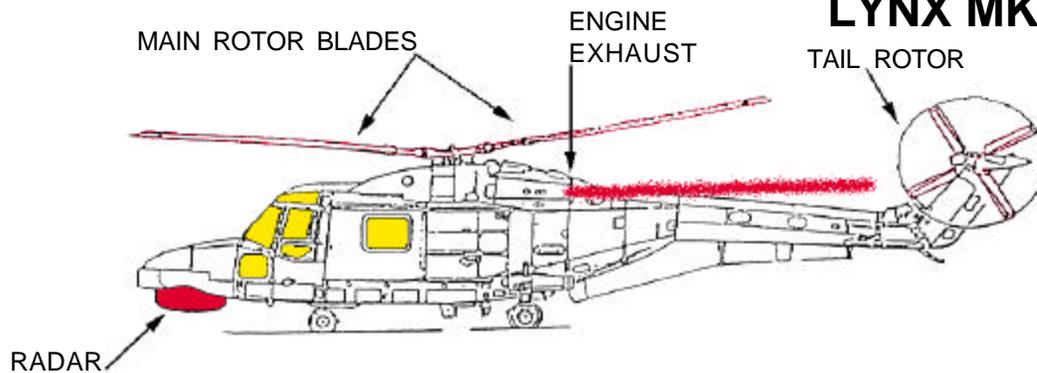


AIRCRAFT HAZARDS

OTHER HAZARDS:

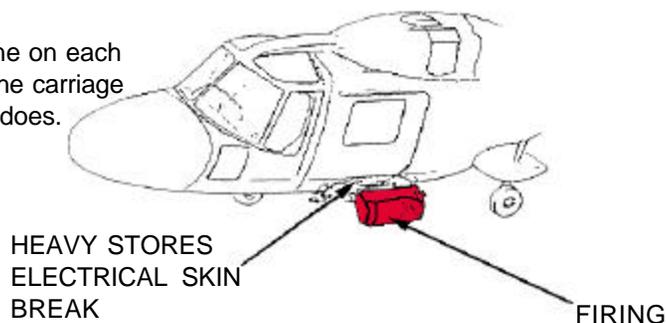
- Acids - Batteries
- Asbestos
- Beryllium + Beryllium Oxides
- Bromochlorodifluoromethane - Fire Extinguishant
- Dimethylformamide - Strobe Power Pack
- Fluorolastomers - Burnt Seals
- Lithium - Batteries
- Sonar Locator Beacon(s) - Lithium Battery (Does not apply to PO Navy aircraft)
- Tritium Light Sources - Beta Lights
- Weapon Load
- Windscreen Wash Fluid AL-36
- Zinc Selenide
- Fuel: AVTUR
- Hydraulic Oil: OM-15
- HP Gases: Nitrogen
- Engine Oil: OX-38/OEP-70/OEP-215
- Oxygen: NIL

LYNX MK95



NOTE:

Simple beam carriers, one on each side of the fuselage for the carriage of MK 44 or MK 46 torpedoes.



AIRCRAFT HAZARDS-Continued

NOTE:

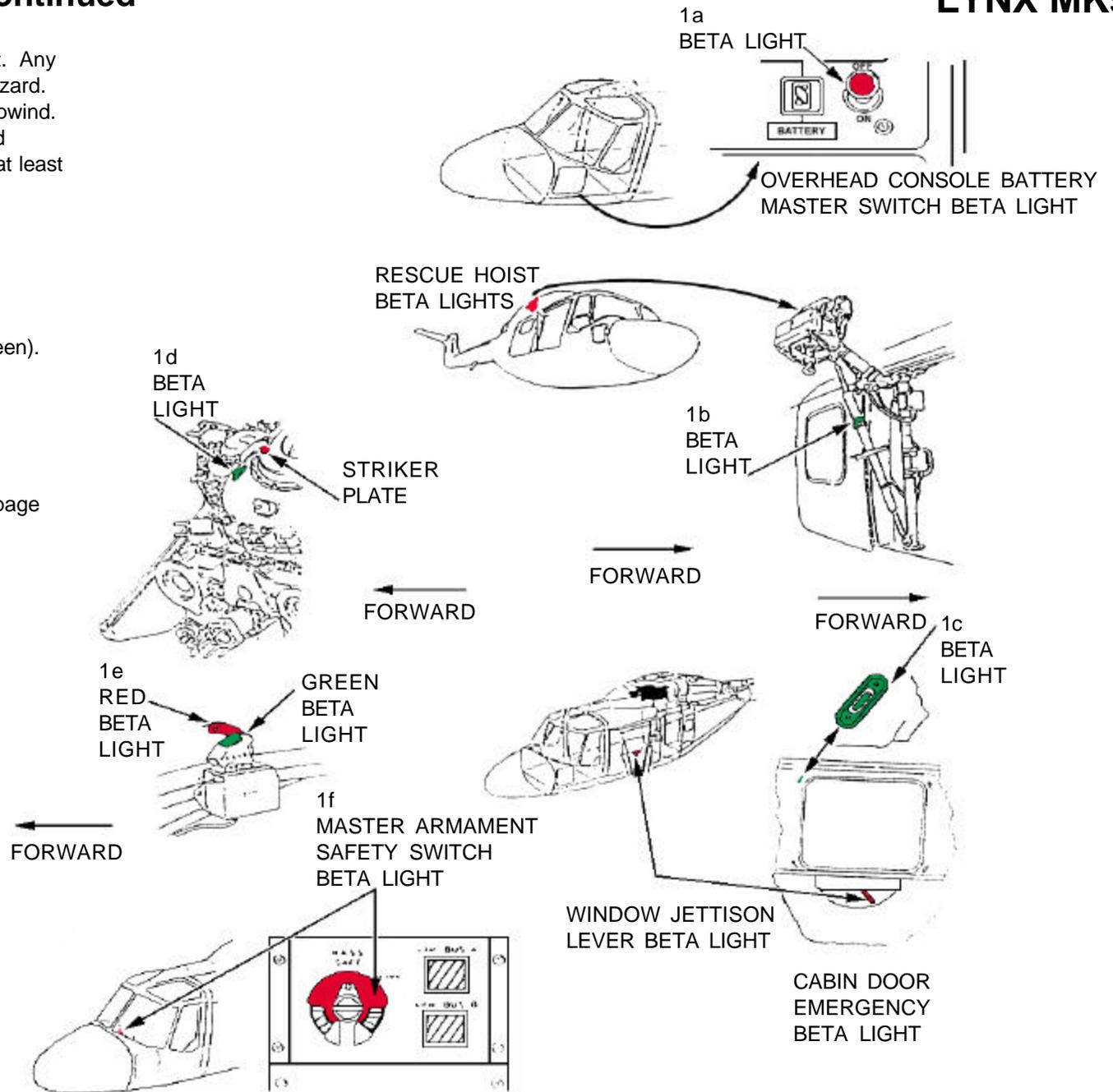
Beta lights are installed on the aircraft. Any broken light constitutes a radiation hazard. Persons in vicinity should evacuate upwind. In an enclosed space, persons should evacuate and then ventilate area for at least thirty minutes.

1. BETA LIGHT LOCATIONS

- a. Battery master switch (green).
- b. Hoist column lock (2 green, 1 red).
- c. Cabin door emergency hatches (10 green).
- d. Blade fold position marker (1 green).
- e. Emergency services safety break.
- f. Master armament safety switch.

NOTE:

More beta light information located on page Lynx MK95.5.



SPECIAL TOOLS/EQUIPMENT

- Power Rescue Saw
- Crash Ax

AIRCRAFT ENTRY

1. NORMAL ENTRY

NOTE:

The cockpit and cabin doors are not droppable. They are located on both sides of the fuselage.

- a. To open both cockpit doors: turn exterior handle of door, located bottom right or left (depending on which side of approach) UPWARDS.
- b. To open both cabin doors: turn the external door handle, located forward of window, backwards, pull door out and forwards and slide door aft.

2. EMERGENCY ENTRY

CAUTION

Both cockpit doors and cabin windows are jettisonable externally or internally.

NOTE:

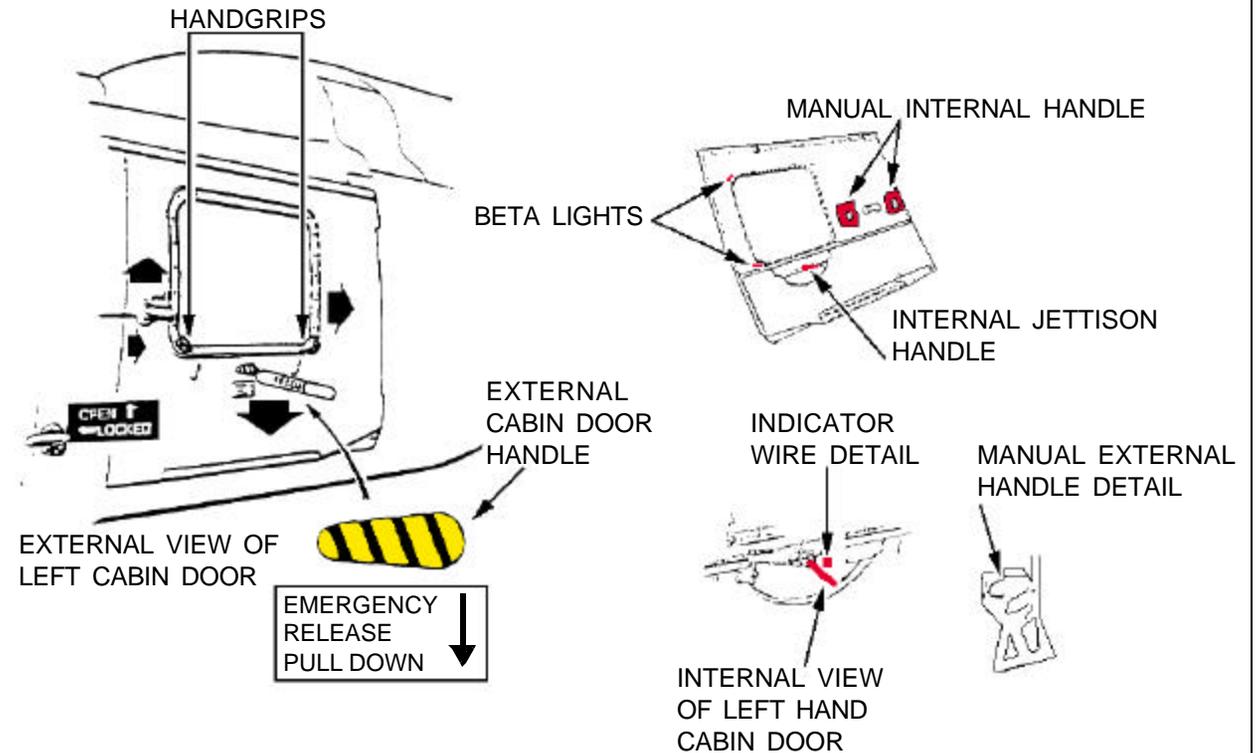
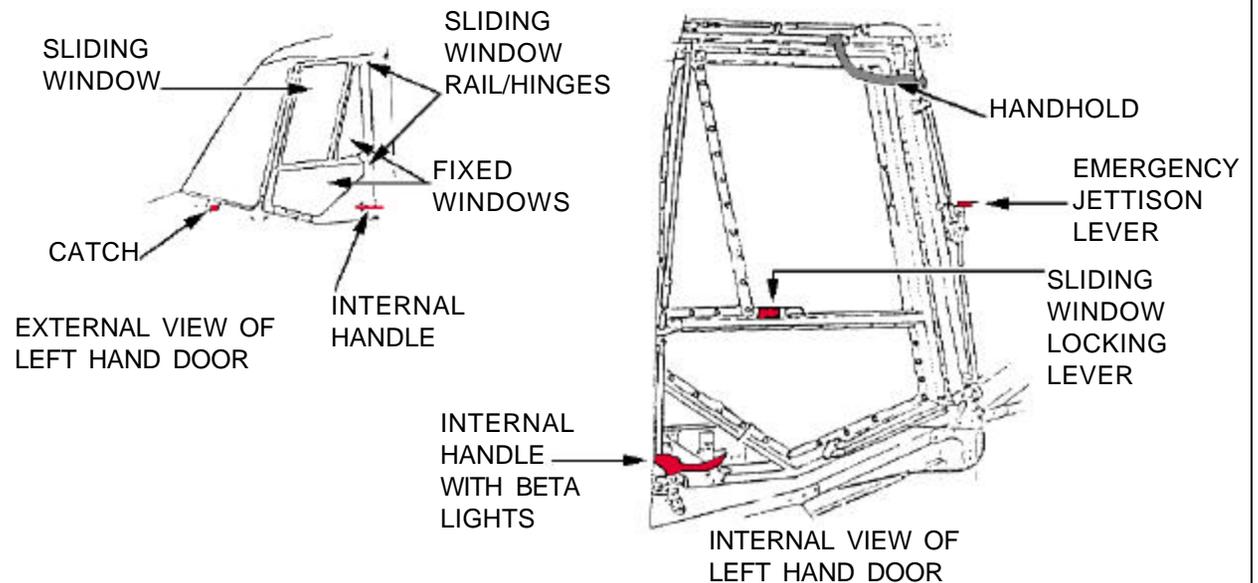
A blade may have to be inserted between frame and door to gain forced entrance.

- a. To jettison external cockpit doors: slide sliding window aft, push the internal jettison lever, located forward of sliding window, forwards and down, then pull outwards.
- b. To jettison internal cockpit doors: push the internal jettison lever, located forward of sliding window, forwards and down, then pull outwards.
- c. To jettison both external single in each cabin door: (see rescue arrow) pull the emergency release pull down lever, located externally below window frame, down, then pull window outwards using handgrips at lower corners of window.
- d. To jettison both internal single cabin windows: pull the internal jettison handle below the window, down, then push window outwards.

3. CUT-IN

- a. Cut-in fuselage or windows as required.

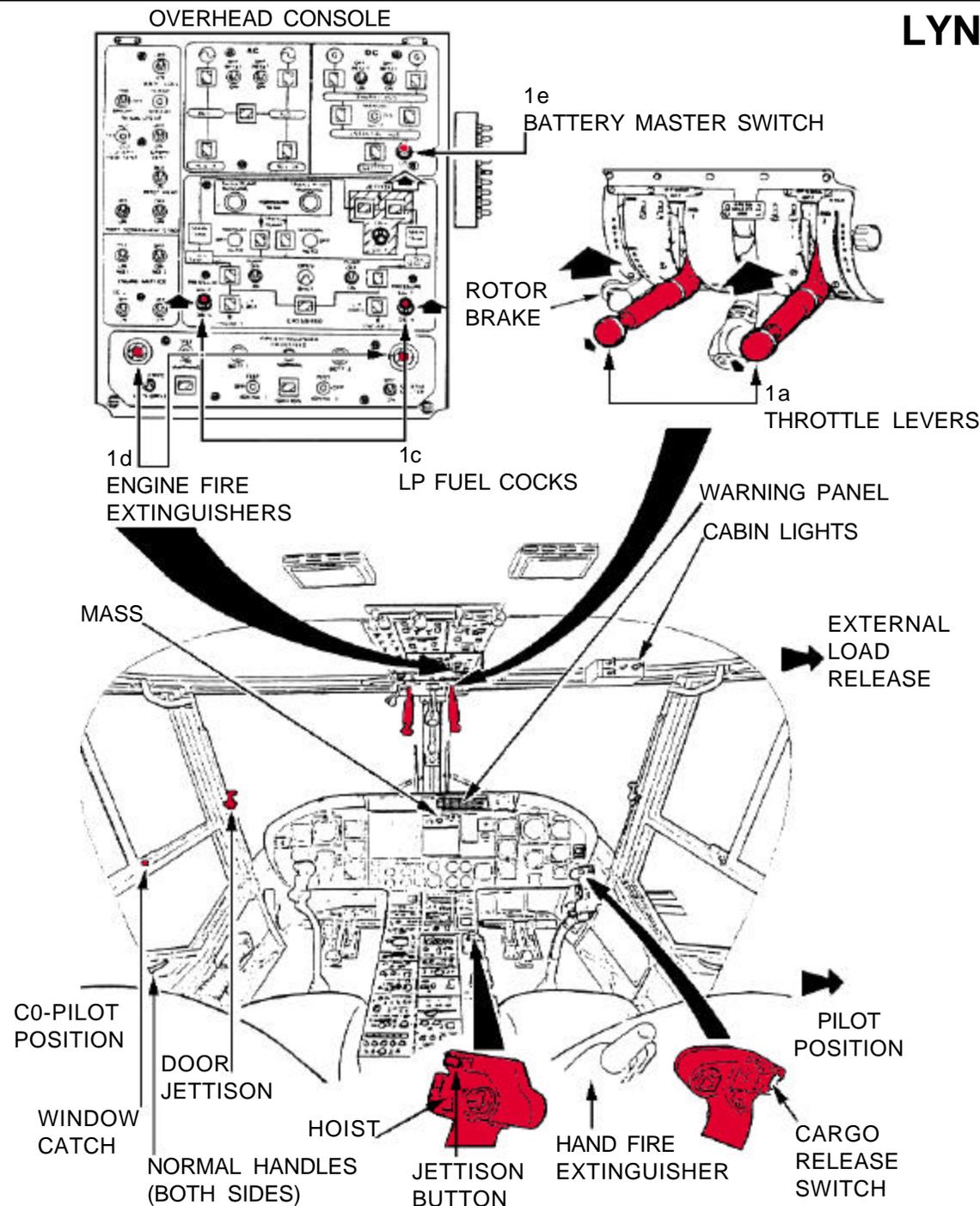
LYNX MK95



ENGINE SHUTDOWN

1. ENGINE SHUTDOWN
 - a. Move both throttle levers, located on the overhead console, up to HP cock OFF position, or fully backwards.
 - b. Place booster pump switches, located on fuel management section of the overhead console, to OFF position.
 - c. Place LP cocks, located on fuel management panel, to the SHUT position.
 - d. In case of engine fire, activate the engine fire extinguisher switches, located on the overhead console.
 - e. Move battery master switch, located on the overhead console, up to the OFF position.

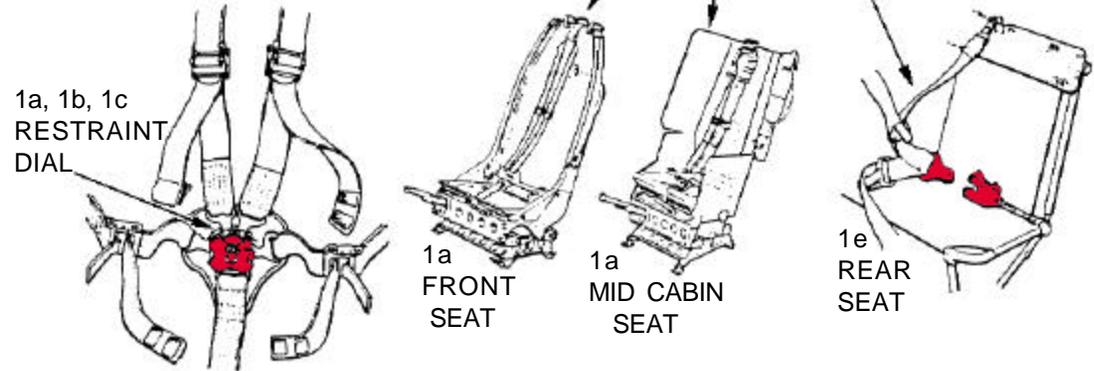
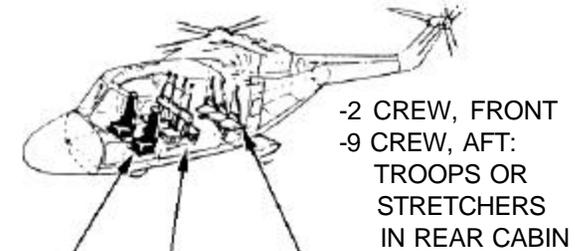
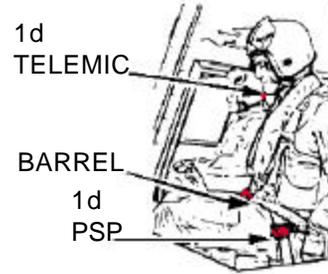
LYNX MK95



AIRCREW EXTRACTION AND EMERGENCY EXIT DOORS

1. AIRCREW EXTRACTION

- a. To release personnel restraints: press center top of restraint dial and rotate dial 1/4 of a turn to either right or left. Front and mid cabin seats only.
- b. Pull up on dial until the restraint straps are released.
- c. Place all restraints out of the way to prevent entanglement during extraction.
- d. Disconnect telmic and PSP, and any other disconnect(s), if applicable, that will prevent extraction.
- e. Disconnect restraints from rear seats.

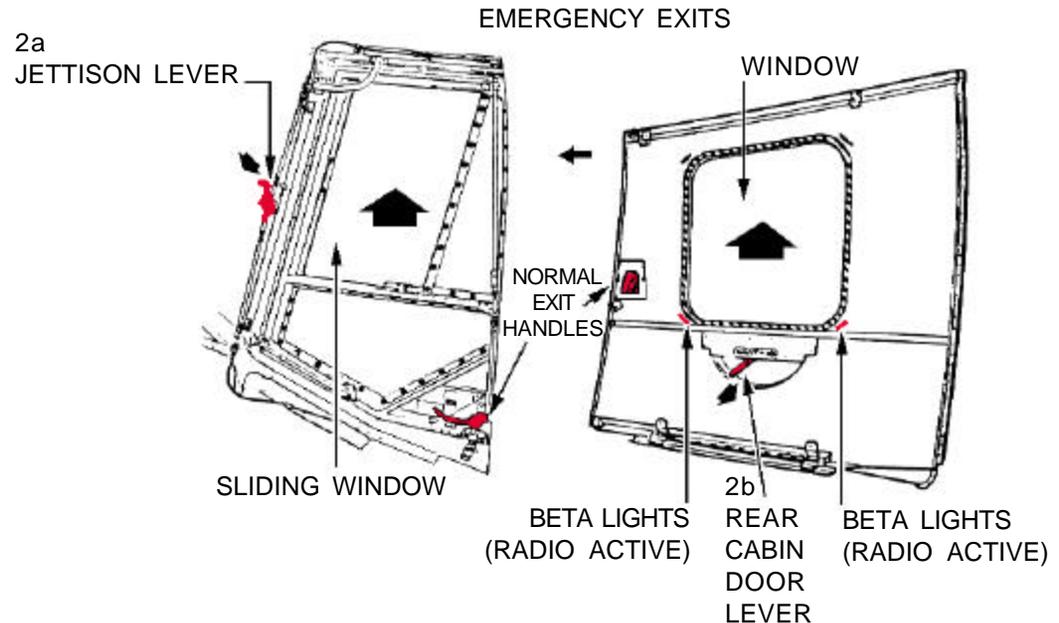


2. EMERGENCY EXIT DOORS

NOTE:

Exit doors can be jettisoned to make extraction of crewmembers faster.

- a. For front doors, push jettison lever forward and down, then push door out.
- b. For rear cabin doors, push jettison lever, located at bottom center of window, aft, then push window out.



SPECIAL TOOLS/EQUIPMENT
 Power Rescue Saw
 Crash Ax

LYNX WG13

AIRCRAFT ENTRY

1. NORMAL ENTRY

- a. Pull door handle on passenger door, located on left side of fuselage, counter-clockwise to open door.
- b. Rotate crew door handle, located on left side of fuselage, clockwise to open door.

2. EMERGENCY ENTRY

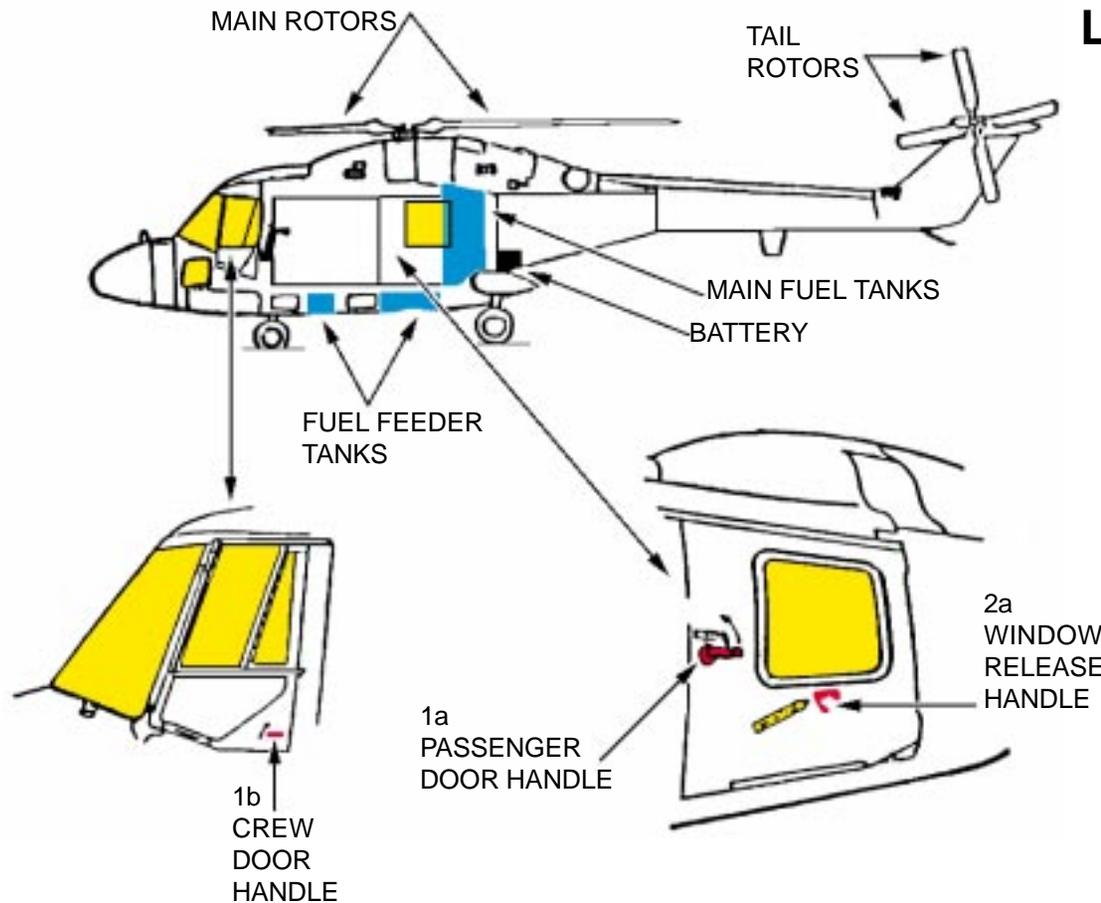
- a. Rotate handle, located on left side of fuselage, to release window on passenger door.

3. CUT-IN

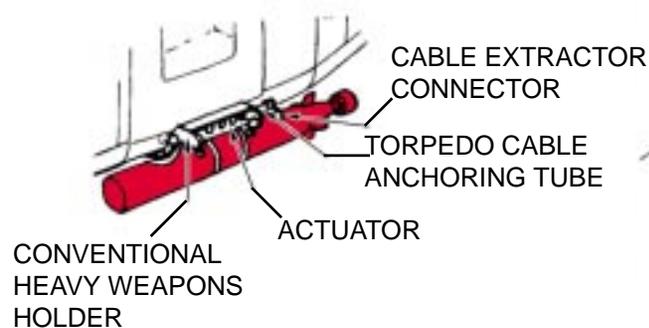
- a. Cut-in windows or fuselage as required.

OTHER HAZARDS

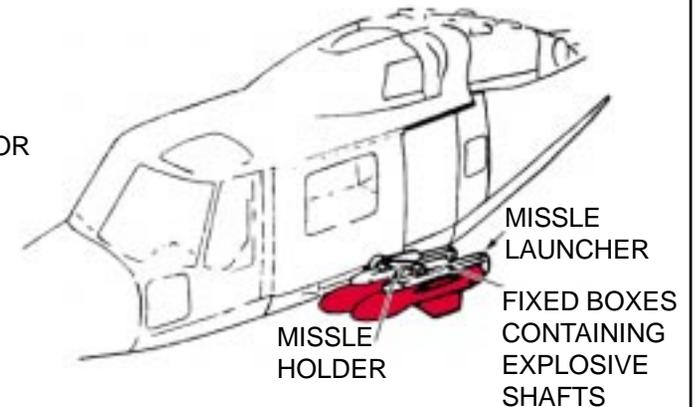
- Acids - Batteries
- Asbestos
- Beryllium + Beryllium Oxides
- Bromochlorodifluoromethane - Fire Extinguishant
- Dimethylformamide - Strobe Power Pack
- Fluorolastomers - Burnt Seals
- Lithium - Batteries
- Sonar Locator Beacon(s) - Lithium Battery
- Tritium Light Sources - Beta Lights
- Weapon Load
- Windscreen Wash Fluid AL-36
- Zinc Selenide
- Fuel: AVTUR
- Hydraulic Oil: OM-15
- HP Gases: Nitrogen
- Engine Oil: OX-38/OEP-70/OEP-215
- Oxygen: NIL



TORPEDO INSTALLATION



MISSILE INSTALLATION



ENGINE SHUTDOWN AND AIRCREW EXTRACTIONS

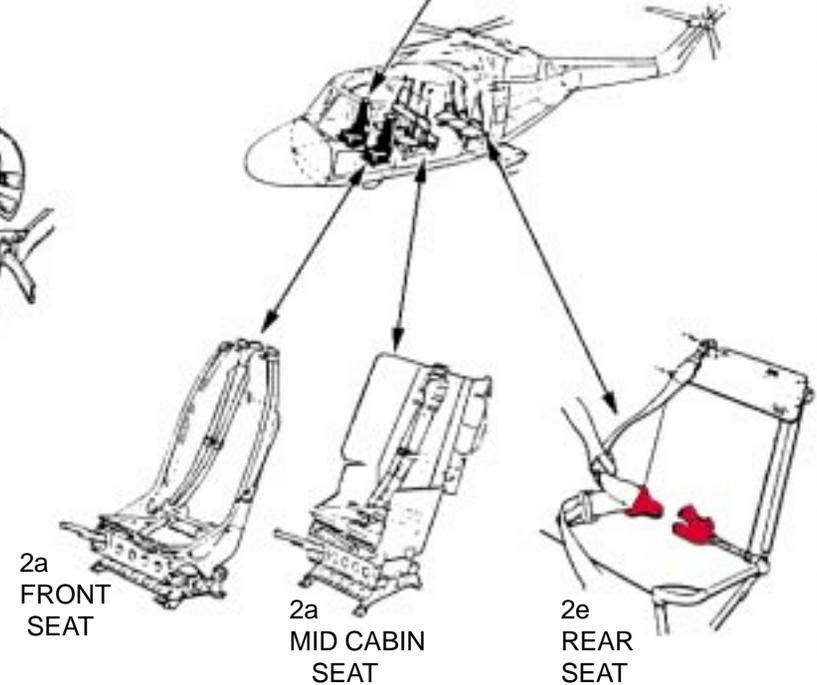
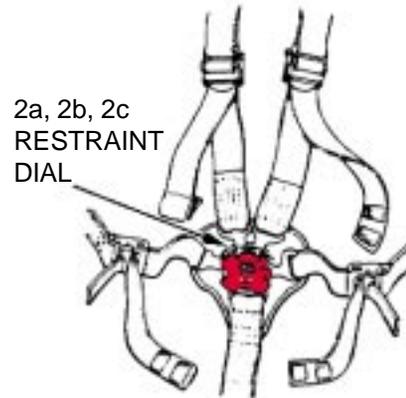
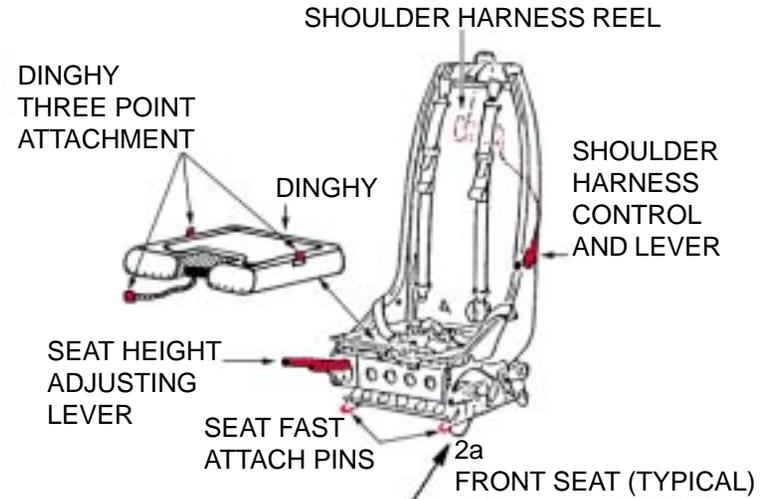
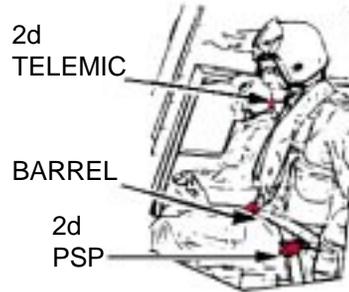
1. ENGINE SHUTDOWN

NOTE:
 Engine shutdown procedures pending, however other Lynx models, in this manual may be applicable if cockpit layout is similar.

2. AIRCREW EXTRACTIONS

NOTE:
 Before extracting aircrew members, release the three point attachment of the dinghy package.

- a. To release personnel restraints: press center top of restraint dial and rotate dial 1/4 of a turn to either right or left. Front and mid cabin seats only.
- b. Pull up on dial until the restraint straps are released.
- c. Place all restraints out of the way to prevent entanglement during extraction.
- d. Disconnect telmic and PSP, and any other disconnect(s), if applicable, that will prevent extraction.



The aircraft information is pending release.

SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw
Crash Ax

AIRCRAFT ENTRY

1. NORMAL ENTRY

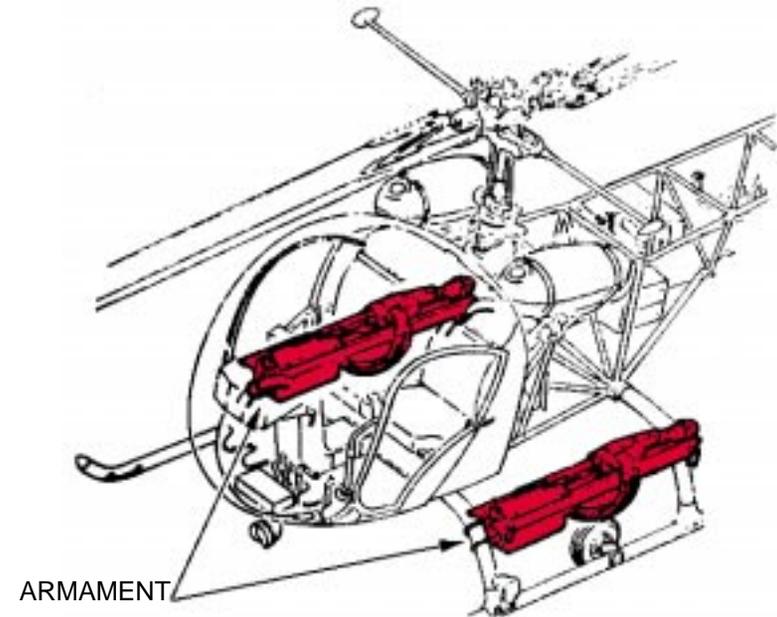
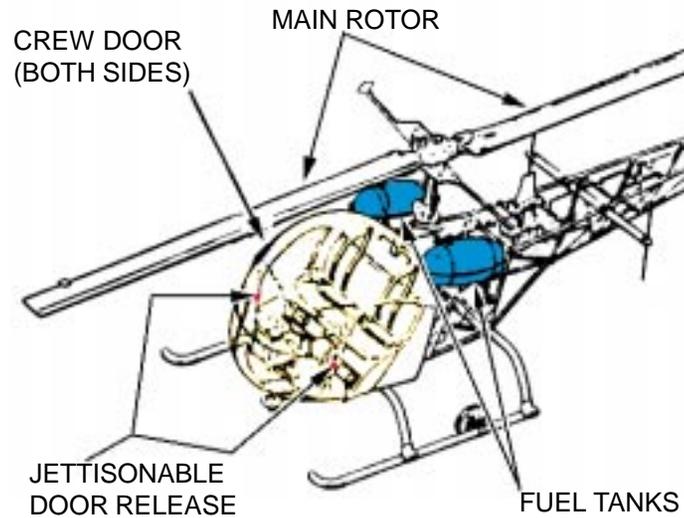
- a. Open crew doors located on both sides of aircraft.

2. EMERGENCY ENTRY

- a. Use the jettison door release handles located on each crew door.

3. CUT-IN

- a. Cut-in to cockpit windows as required.



OH-13S

ENGINE SHUTDOWN AND AIRCREW EXTRACTION

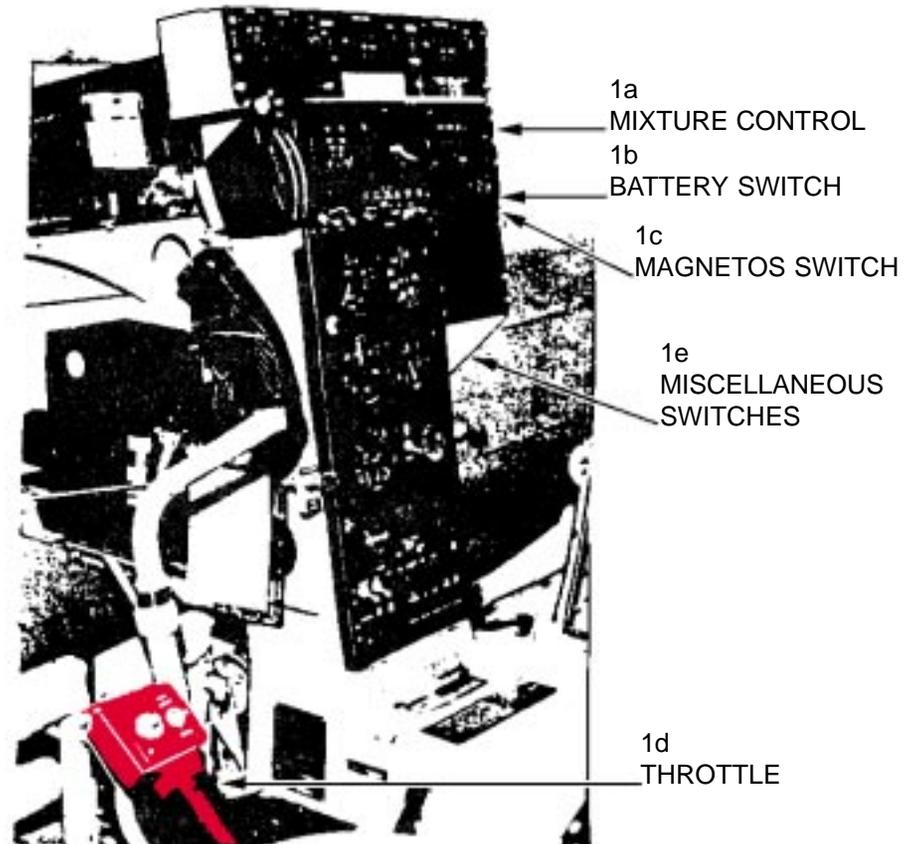
1. ENGINE SHUTDOWN

- a. Place the mixture control, located on the forward control panel, to IDLE CUT OFF position.
- b. Place the battery switch, located on the forward control panel, to the OFF position.
- c. Place the magnetos switch, located on the forward control panel, to the OFF position.
- d. Place the throttle, located to the left of the forward control panel, to the OFF position.
- e. Place all remaining switches to OFF.

2. AIRCREW EXTRACTION

- a. Release crew from all restraint straps.
- b. Place restraints to the side to avoid entanglement.

FORWARD CONTROL PANEL



The aircraft information is located in Chapter 13
containing US Army aircraft.

AIRCRAFT HAZARDS

OTHER HAZARDS:

- Acids - Batteries
- Beryllium + Beryllium Oxides
- Bromochlorodifluoromethane - Fire Extinguishant
- Bromotrifluoromethane - Fire Extinguishant
- Cadium - Batteries
- Chlorobromoethane - Fire Extinguishant
- Composite Materials - Man made mineral fibres
- Dimethylformamide - Strobe Power Pack
- Nightsun Light System
- Polytetrafluoroethylene - PTFE
- Sonar Locator Beacon(s) - Lithium Battery
- Tritium Light Sources - Beta Light
- Very Flare

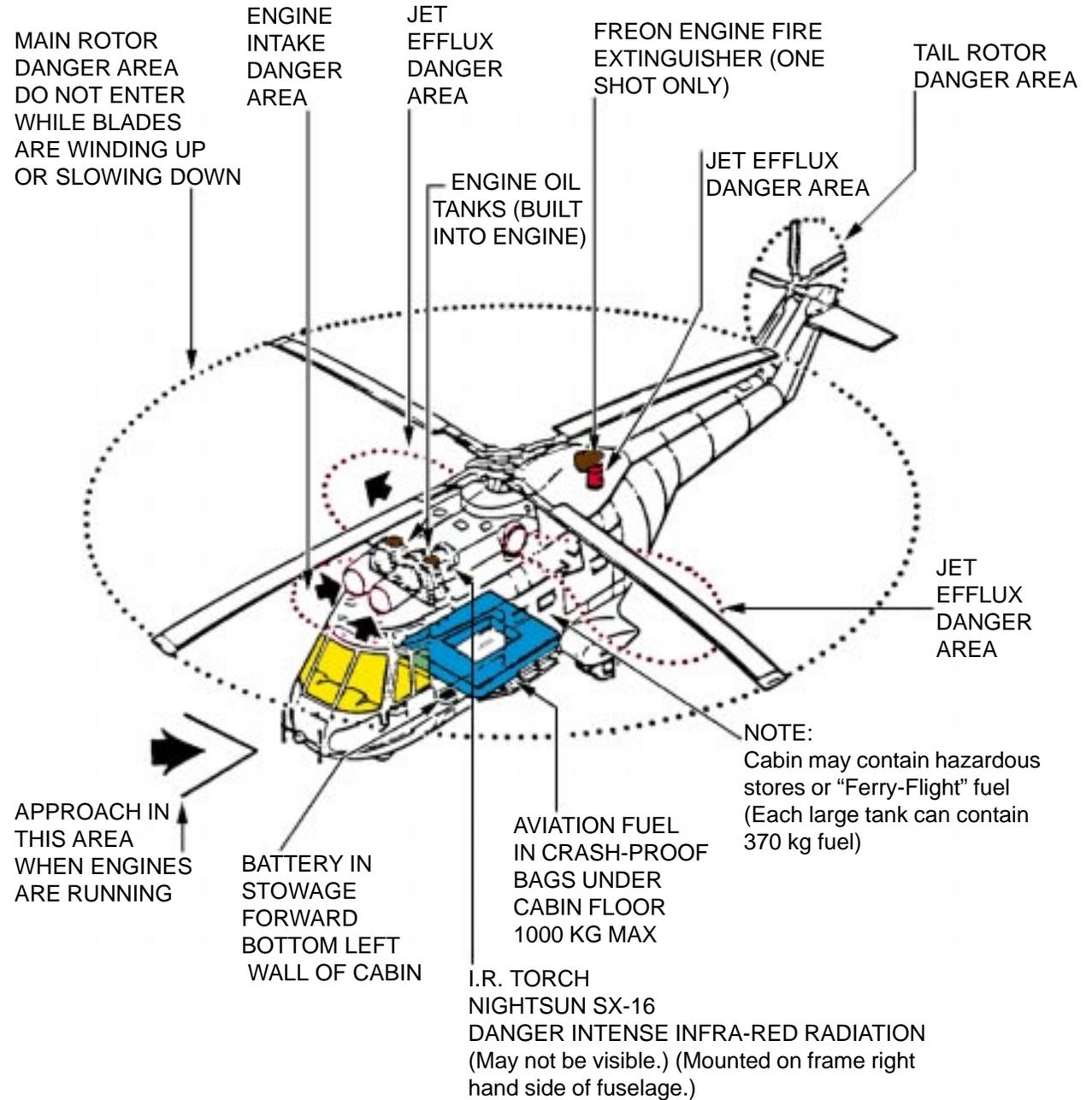
- Fuel: AVTUR
- Hydraulic Oil: OM-15
- HP Gases: Nitrogen/Air/Entinox
- Engine Oil: OX-36
- Oxygen: Gaseous

AIRCRAFT ARMAMENT

NOTE:

Machine guns may be fitted in cabin doorways. Light weapons and explosives may be carried internally.

PUMA HC1/SA 330



SPECIAL TOOLS/EQUIPMENT

- Power Rescue Saw
- Crash Ax

PUMA HC1/SA 330

AIRCRAFT ENTRY

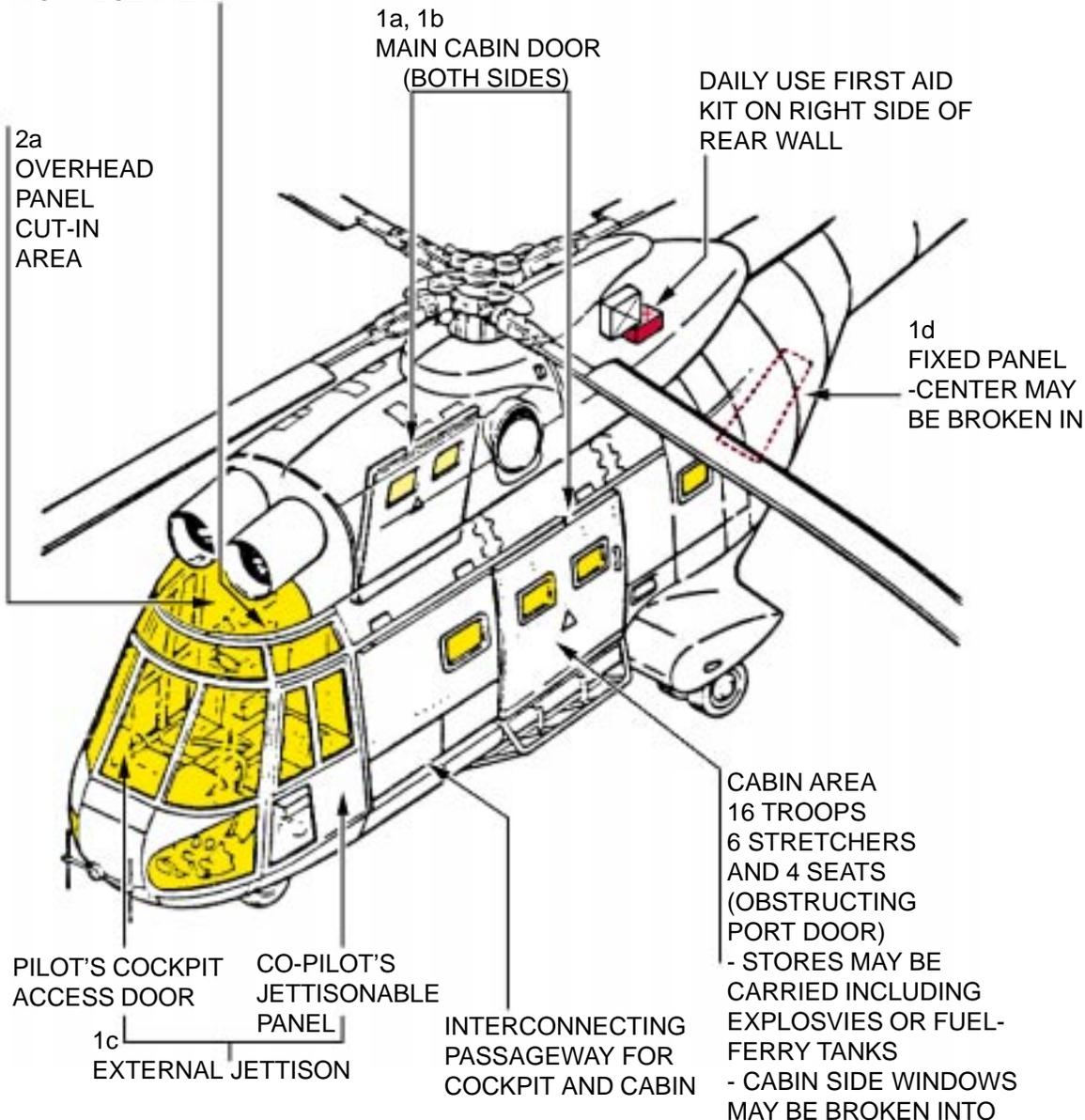
1. NORMAL AND EMERGENCY ENTRY

- a. Open main cabin doors, located both sides of fuselage for normal entry.
- b. Emergency entry for main cabin doors can be jettisoned externally by removing breakable plastic cover, lifting handle, and pulling down on red or yellow/black striped triangular handles in center of door. Pull down and push out. Door window panel can be broken.
- c. Emergency entry for cockpit access, use the external pilot's or co-pilot's jettisonable panel, by operating the red or yellow/black striped handles, on each lower door frame, by turning the handle and pushing upwards.
- d. Emergency entry through cargo ramp, the center of a fixed panel may be broken in.

2. CUT-IN

- a. Cut-in area is on the overhead panel above the cockpit area.

PORTABLE FIRE EXTINGUISHER
AND FIRE AX IN CABIN FORWARD
RIGHT BULKHEAD



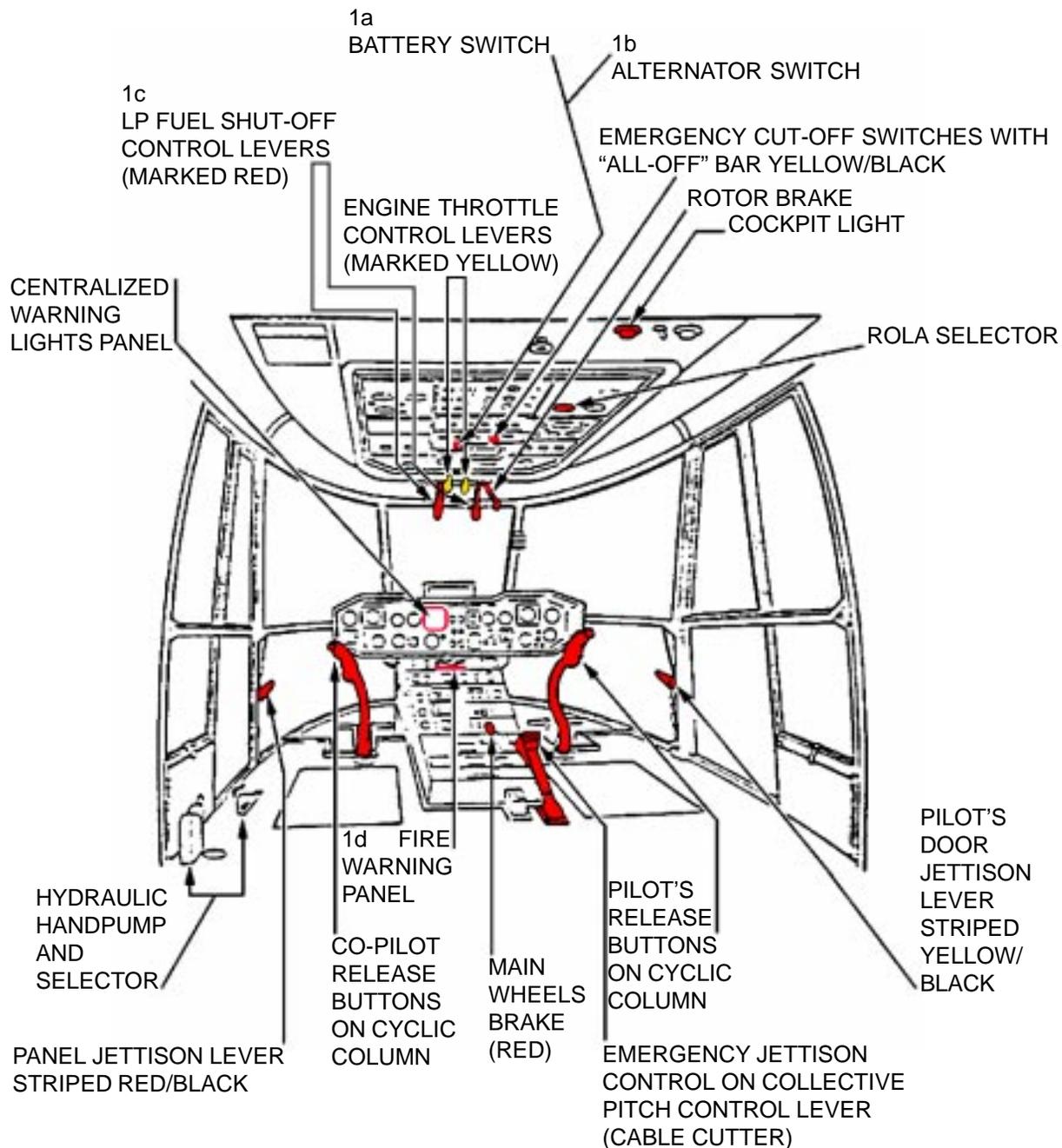
CABIN AREA
16 TROOPS
6 STRETCHERS
AND 4 SEATS
(OBSTRUCTING
PORT DOOR)
- STORES MAY BE
CARRIED INCLUDING
EXPLOSIVES OR FUEL-
FERRY TANKS
- CABIN SIDE WINDOWS
MAY BE BROKEN INTO

ENGINE SHUTDOWN

1. ENGINE SHUTDOWN

- a. Pull aft on battery switch, located on the overhead control console, to OFF position.
- b. Pull aft on alternator switches, located on the overhead control console, to OFF position.
- c. Pull aft on the fuel shut-off levers, (marked red) located on the overhead control console, to OFF position.
- d. In case of engine fire, on the fire control warning panel, push buttons for 1 or 2 engines extinguishers. Extinguishers are single shot type.

PUMA HC1/SA 330



AIRCREW EXTRACTION

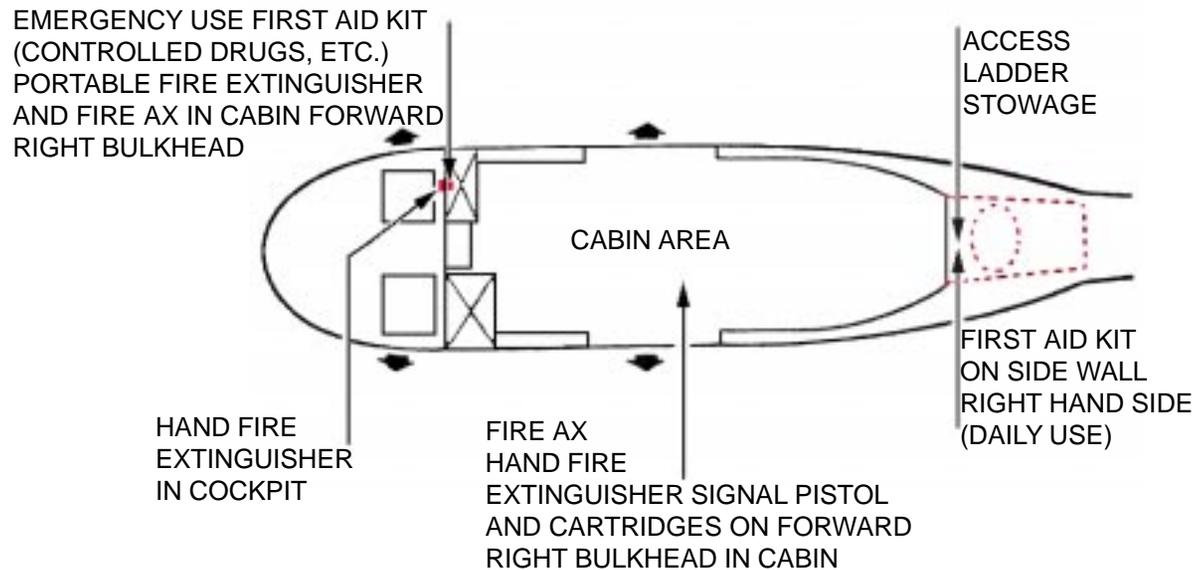
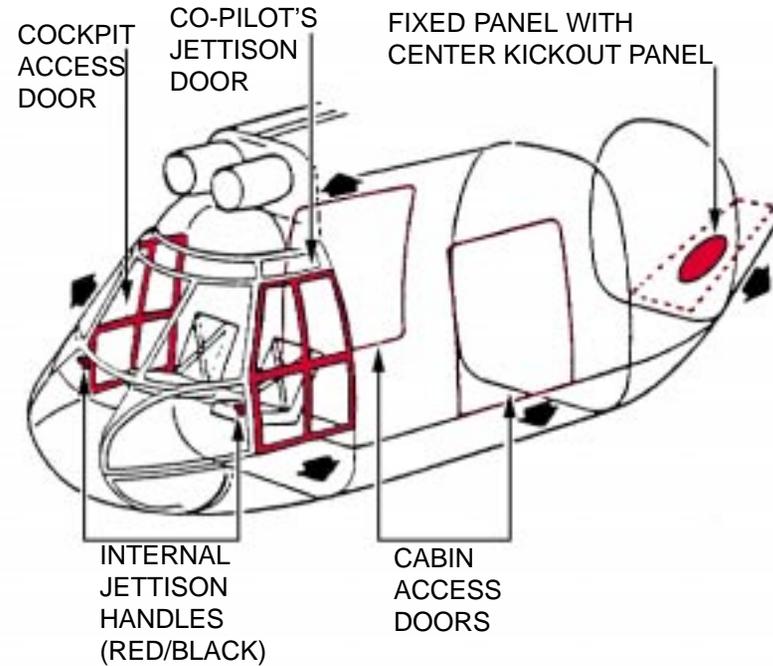
PUMA HC1/SA 330

1. AIRCREW EXTRACTION

NOTE:

Jettison doors, if necessary, and use all doors and entry ways including ramp kickout panel for extraction process. An access ladder may be mounted over fixed panel. Window panel can be broken.

- a. Release restraint straps from crew.
- b. Release lap belts from 16 troops or 6 stretchers and 4 seats. Medivac configuration will obstruct port door.



SPECIAL TOOLS/EQUIPMENT
Power Rescue Saw
Crash Ax

SA 313/318

AIRCRAFT ENTRY

1. NORMAL ENTRY

- a. Main entry doors are located on the right and left sides of the airframe. Open doors for entry or exit.

2. EMERGENCY ENTRY

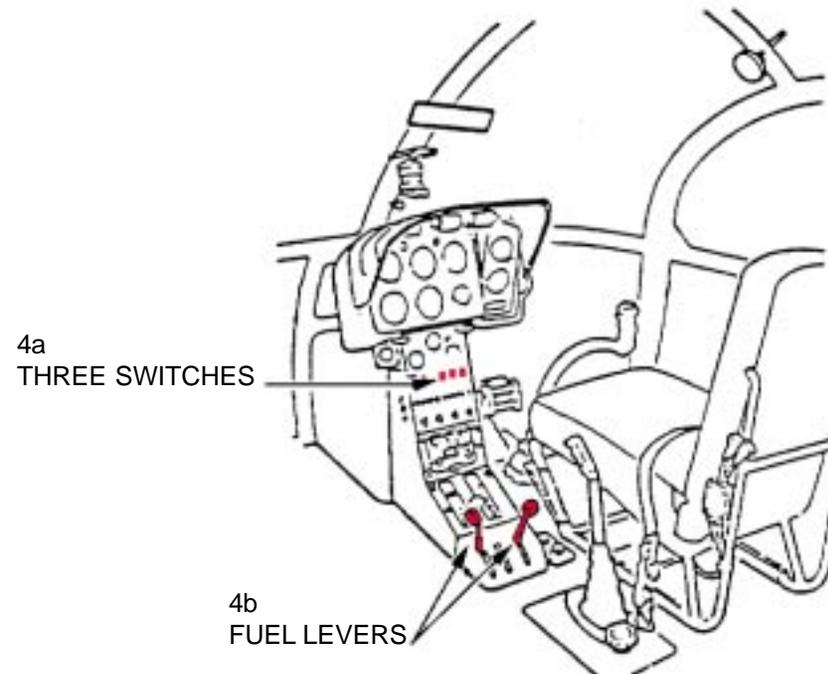
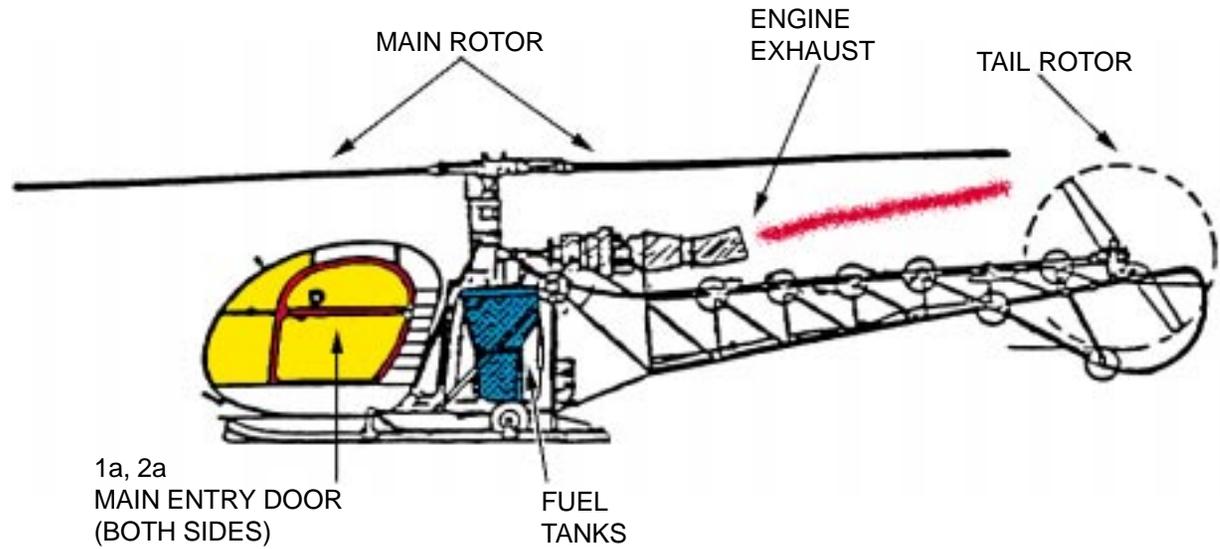
- a. Use main entry doors for emergency entry.

3. CUT-IN

- a. Cut-in windows or doors as required.

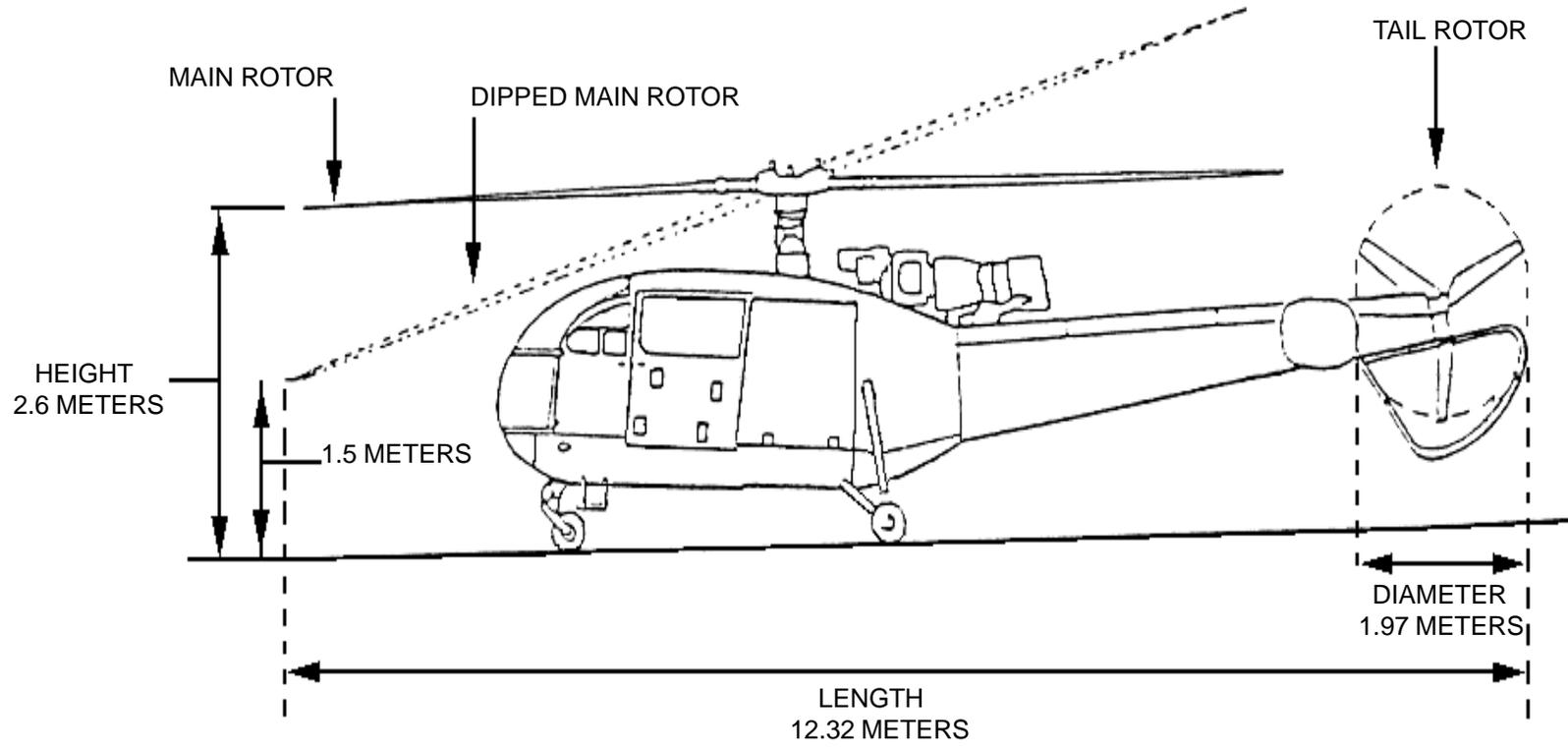
4. ENGINE SHUTDOWN

- a. Place three switches, located on the center control console, to the DOWN position.
- b. Pull two fuel levers, located on the forward portion of the center control console, to the AFT position.



AIRCRAFT DIMENSIONS

SA 316B/SA 319B/
SE 3160



SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw
Crash Ax

SA 316B/SA 319B/ SE 3160

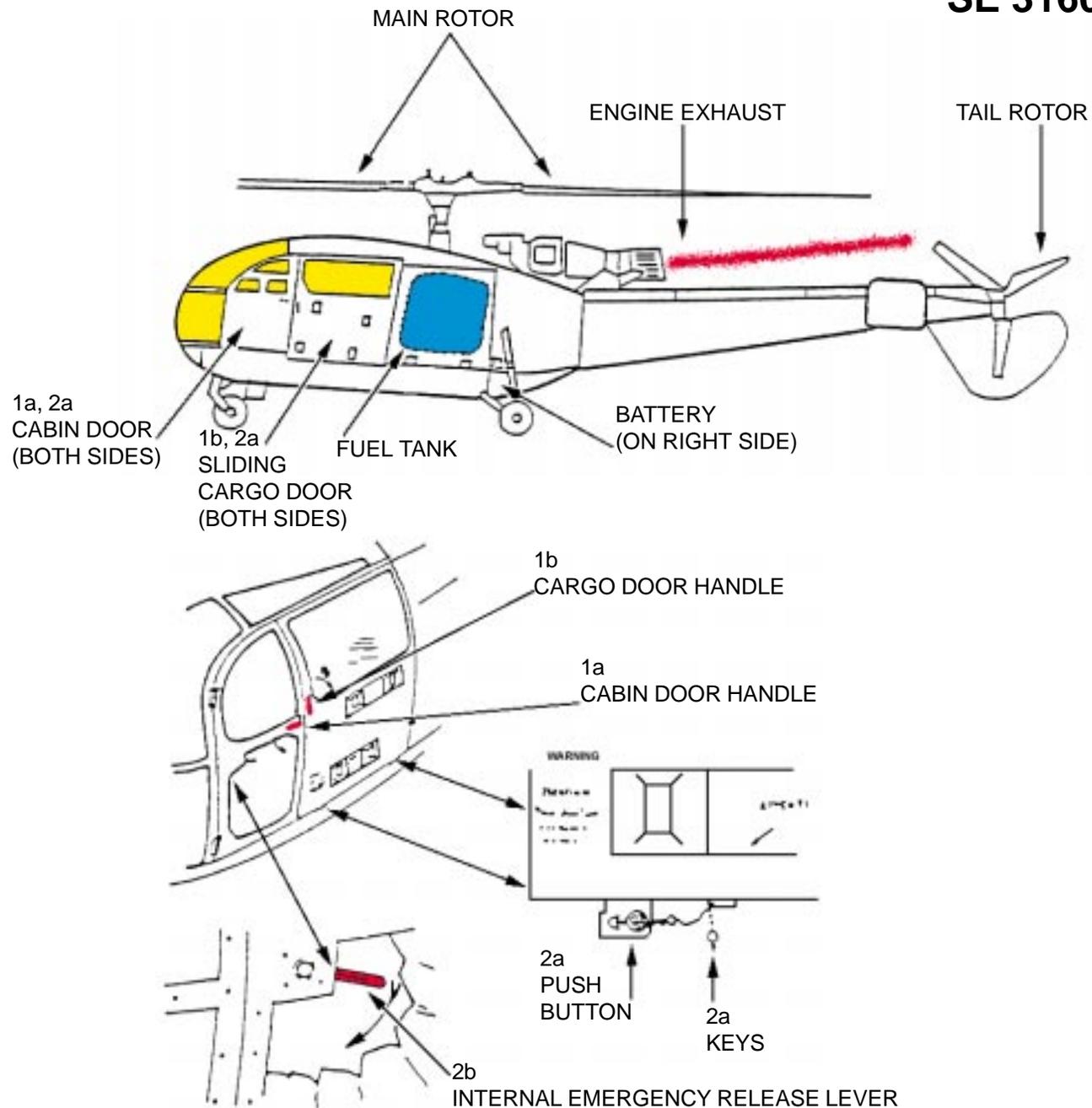
AIRCRAFT ENTRY

1. NORMAL ENTRY

- Enter through cabin doors by turning door handle downwards. Door opens forward.
- Enter through sliding cargo doors by turning door handle to rear. Slide door aft to open.

2. EMERGENCY ENTRY

- To remove cargo doors, turn two keys to inside. Push two push buttons in, then turn them to inside.
 - For emergency release, break plexiglass at lever (located internally) and move this lever to bottom to unlock release lug, then pull door toward you.
3. CUT-IN
- Cut-in to doors or windows as required.



ENGINE SHUTDOWN

1. ENGINE SHUTDOWN - SA 316B

- Pull both fuel levers, located on forward portion of center control console, to the AFT position.
- Place the battery switch, located on the overhead panel, to the AFT position.

2. ENGINE SHUTDOWN - SA 319B

- Move flow lever, located on forward portion of center console right side, to the AFT position.
- Move the fuel cutoff (flame arrester), located on the forward portion of the center console left side, to the AFT position.
- Place the power switch, located on the upper portion of the center console, to STOP position.
- Place the battery switch, located on the overhead control panel, to the STOP position.

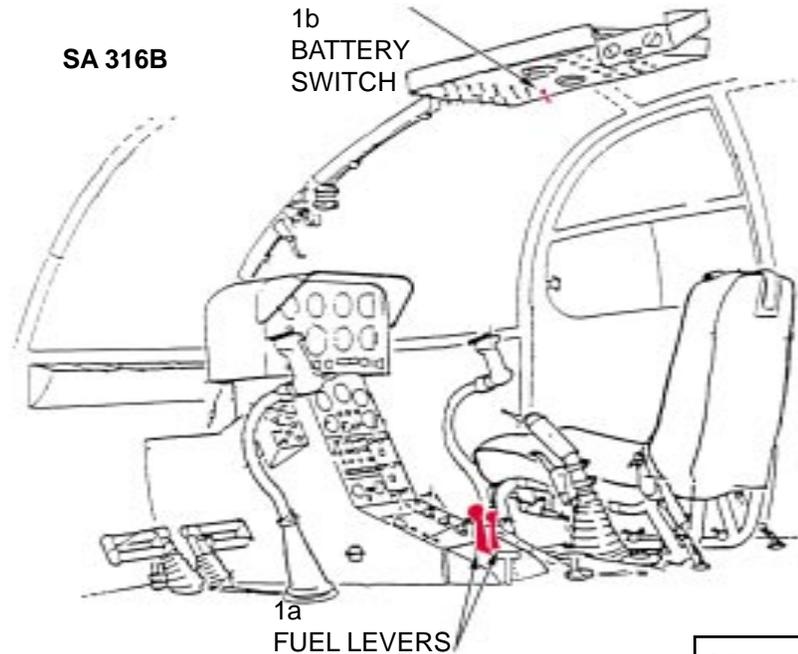
3. ENGINE SHUTDOWN - SE 3160

- Place fuel cutoff and fuel flow control levers, located on the center control console, to AFT position.
- Place generator and battery switches, located on the upper center control console, to the OFF position.
- Pull out main rotor brake control handle at 175 rpm (inner ring of dual tachometer).

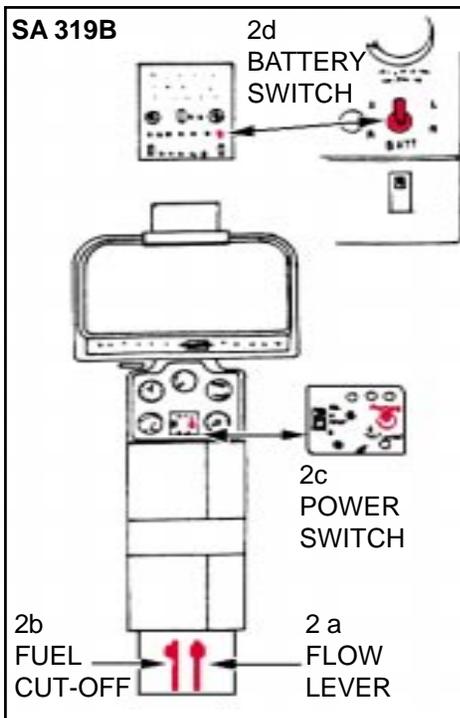
4. EMERGENCY ENGINE SHUTDOWN

- Follow steps 3a thru 3c.
- Disconnect battery by pulling out the hearpin turn round nut to the left and pull the battery out of the aircraft.

SA 316B

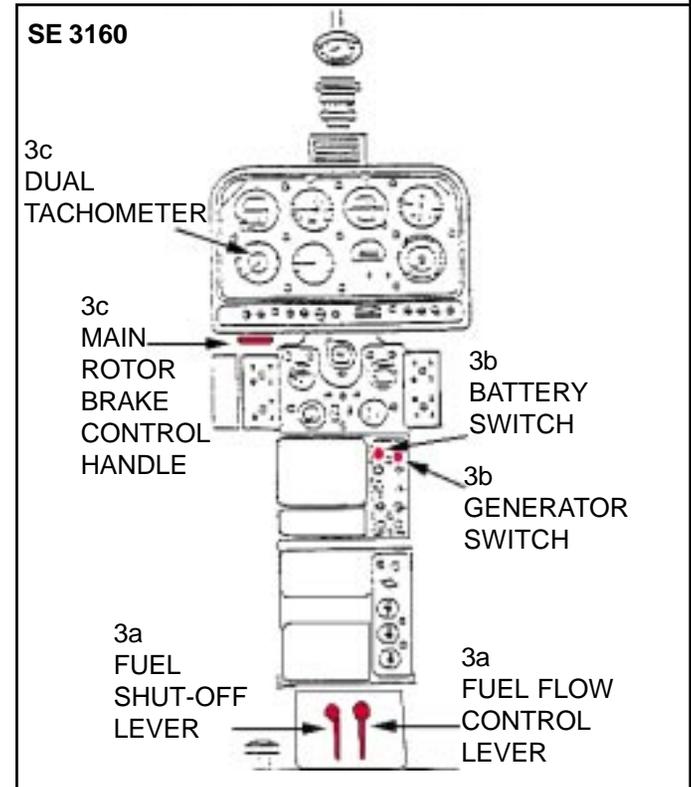


SA 319B



SA 316B/SA 319B/ SE 3160

SE 3160



SPECIAL TOOLS/EQUIPMENT
Power Rescue Saw
Crash Ax

SA 341/342

AIRCRAFT ENTRY

1. NORMAL AND EMERGENCY ENTRY

- a. Pilot and copilot doors are opened by pressing button on door handle and turning handle.
- b. To open passenger door, pilot or copilot doors must be opened first, then lower handle on passenger door and pull out.

2. CUT-IN

- a. Cut-in windows and doors as required.

3. ENGINE SHUTDOWN

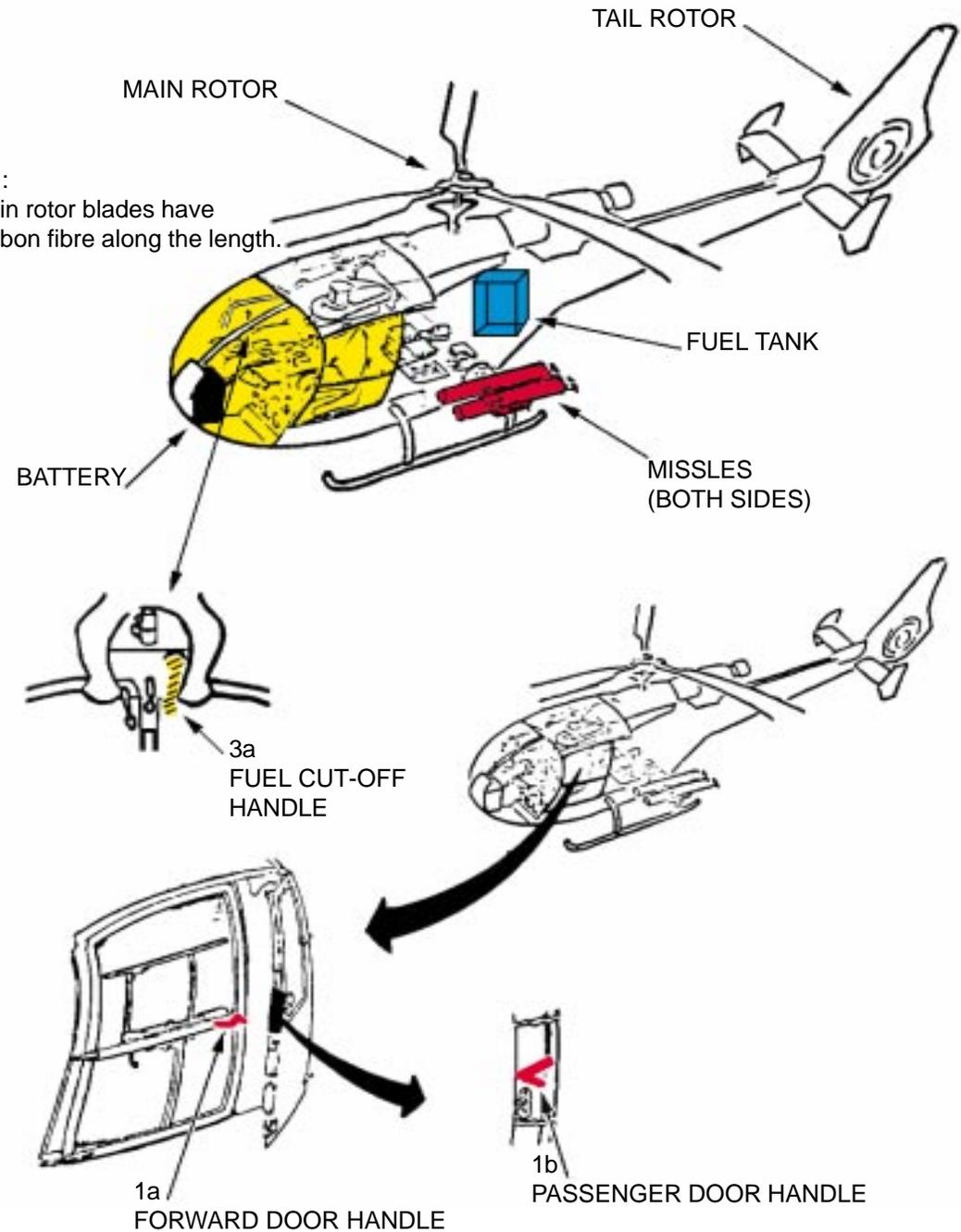
- a. Pull aft on fuel cut-off handle, marked yellow and black striped secured by safety wire, located on overhead panel.

4. AIRCREW EXTRACTION

- a. Aircrew seats are equipped with shoulder harness and lap belts. Disconnect aircrew restraints and remove.

NOTE:

Main rotor blades have carbon fibre along the length.



AIRCRAFT HAZARDS

AIRCRAFT ARMAMENT - None is normally carried.

OTHER HAZARDS:

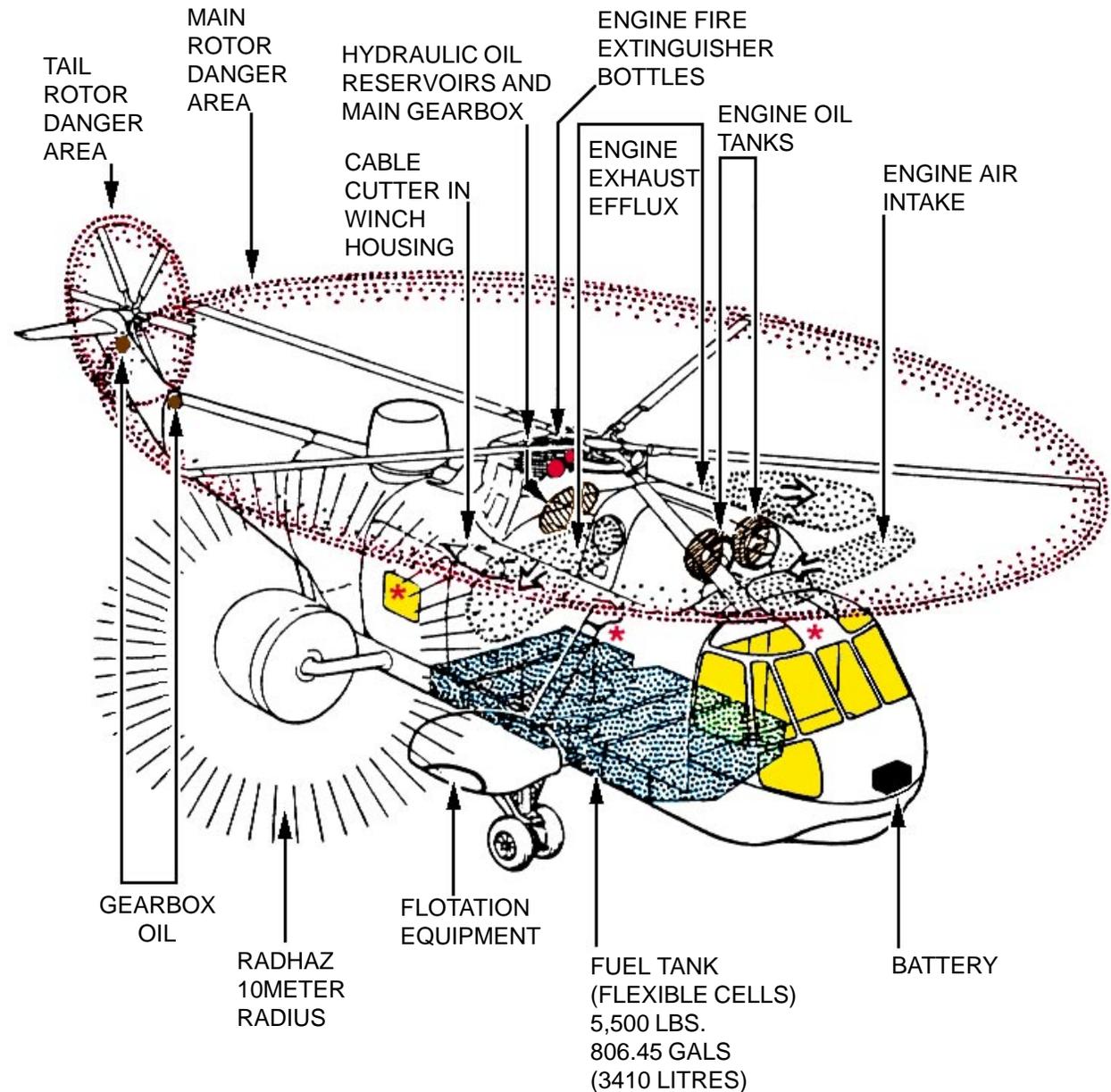
Pyrotechnics: Signal pistol and cartridges, marine markers, smoke/flame floats, and underwater sound signals.

* Beryllium: Hazardous material in Beta lights around exits.

- Lethal if fumes or dust absorbed by the body.

- Acids - Batteries
- Bromochlorodifluoromethane - Fire Extinguishant
- Bromotrifluoromethane - Fire Extinguishant
- Cartridge Operated Equipment
- Chlorobromoethane - Fire Extinguishant
- Composite Materials - Man Made Mineral Fibres
- Dimethylformamide - Strobe Power Pack
- Lithium - Batteries
- Methyl Bromide - Fire Extinguishant
- Polytetrafluoroethylene - PTFE
- Sonar Locator Beacon(s) - Lithium Battery
- Tritium Light Sources - Beta Lights
- Very Flare
- Fuel: AVTUR
- Hydraulic Oil: OM-15
- HP Gases: Nitrogen/Air
- Engine Oil: OX-38
- Oxygen: NIL

SEA KING AEW 2



SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw
Crash Ax

AIRCRAFT ENTRY

1. NORMAL ENTRY

NOTE:

Self-illuminated Beta lights mark location of doors, hatches and window.

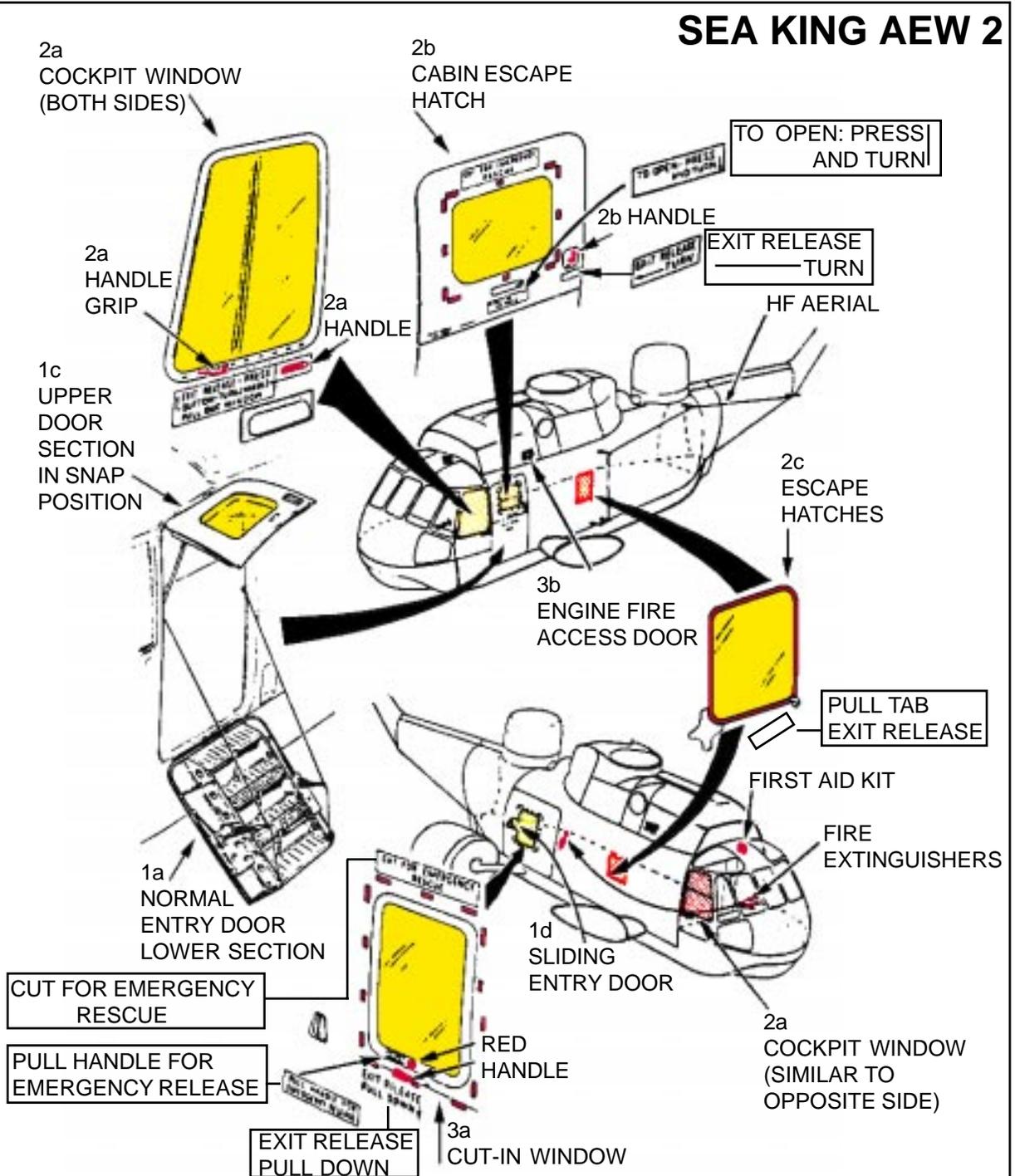
- On entry door, located on forward left side of fuselage, press button, rotate handle clockwise to DOWN position.
- Pull lower entry door section outwards and expose boarding steps.
- Lift upper door section to snap position allowing upper door to stay open.
- On sliding entry door, located on aft right side of fuselage, slide handle to right and push sliding door to the right.

2. EMERGENCY ENTRY

- Cockpit windows can be externally removed by turning door handle clockwise and pulling window out by handle grip on window.
- Cabin escape hatch can be externally removed by pressing button on handle, turning handle and pulling window outwards.
- Escape hatches can be externally removed by pulling tab for exit release and then pulling hatch outward.

3. CUT-IN

- Cut-in around windows and doors as required. Designated windows are marked for cut-in.
- Use the engine fire access door for fire access.

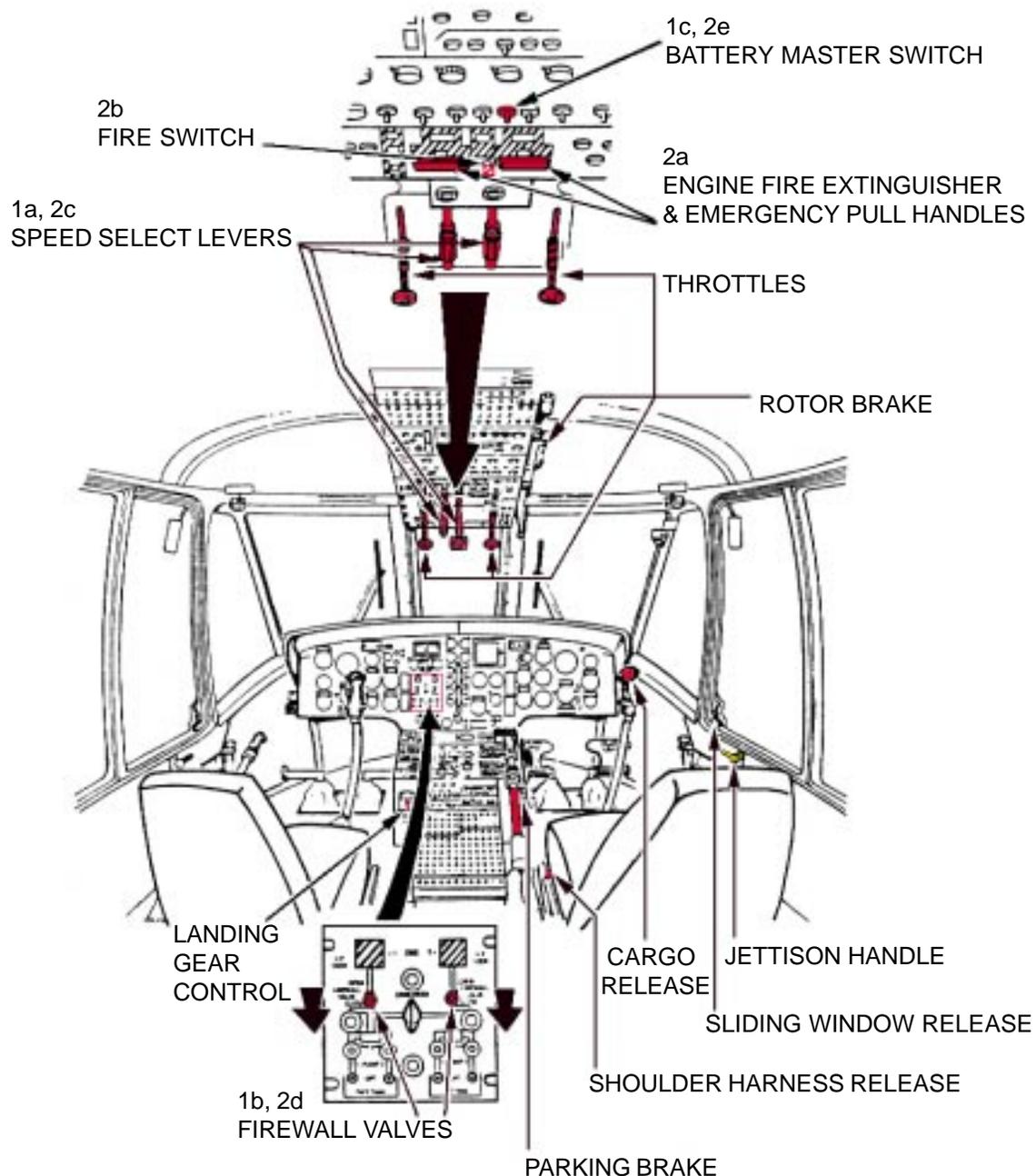


ENGINE SHUTDOWN**1. ENGINE SHUTDOWN**

- a. Pull and lift speed select levers, located on overhead panel, to SHUT-OFF position.
- b. Switch firewall valves, located on forward instrument panel, down to CLOSE position.
- c. Turn battery master switch, located on overhead panel, to OFF position.

2. ENGINE FIRE SHUTDOWN

- a. Pull engine fire handles, located on overhead panel.
- b. Set fire switch, located on overhead panel, to MAIN.
- c. Pull and lift speed select levers to SHUT-OFF position.
- d. Switch down firewall valves to CLOSE position.
- e. Turn battery master switch to OFF position.

SEA KING AEW 2

AIRCREW EXTRACTION

1. AIRCREW EXTRACTION

- a. For upper personnel door, emergency release at aft end, and push upper door out.
- b. For cabin window escape hatches, pull tag, remove seal, and push out.
- c. For cargo door escape hatch, pull handle aft, and push out.
- d. For cockpit windows, jettison can be actuated from internally.
- e. All crew seats are fitted with a quick-release harness. Push center and turn.

SEA KING AEW 2

BETA LIGHTS ARE FIXED AROUND ESCAPE HATCHES AND DOORS



1a
UPPER
PERSONNEL
DOOR



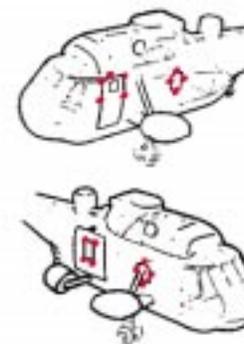
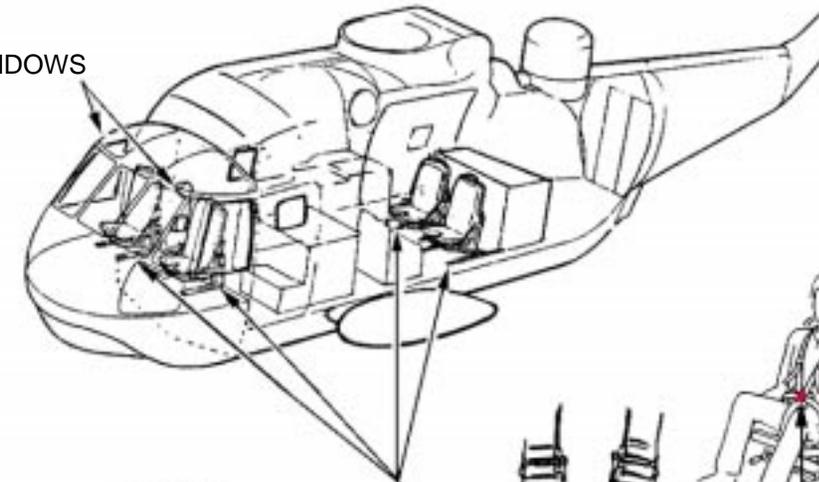
1b
CABIN
WINDOW
ESCAPE
HATCH



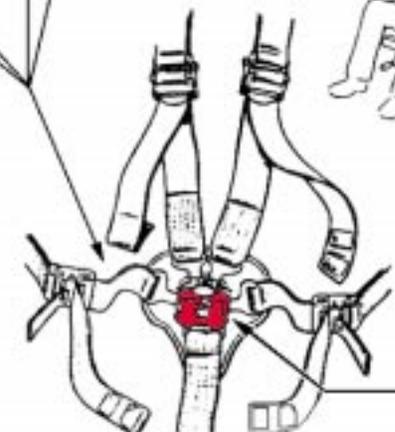
1c
CARGO
DOOR
ESCAPE
HATCH



1d
COCKPIT WINDOWS



LOCATION OF
BETA LIGHTS



1e
QUICK-
RELEASE
HARNESS

AIRCRAFT HAZARDS

AIRCRAFT ARMAMENT - None is normally carried.

OTHER HAZARDS:

Pyrotechnics: Signal pistol and cartridges, marine markers, smoke/flame floats, practice depth charges, and underwater sound signals.

* Beryllium: Hazardous material in Beta lights around exits.

- Lethal if fumes or dust absorbed by the body.

Acids - Batteries

Bromochlorodifluoromethane - Fire Extinguishant

Bromotrifluoromethane - Fire Extinguishant

Cartridge Operated Equipment

Chlorobromoethane - Fire Extinguishant

Composite Materials - Man Made Mineral Fibres

Dimethylformamide - Strobe Power Pack

Lithium - Batteries

Methyl Bromide - Fire Extinguishant

Polytetrafluoroethylene - PTFE

Sonar Locator Beacon(s) - Lithium Battery

Tritium Light Sources - Beta Lights

Very Flare

Fuel: AVTUR

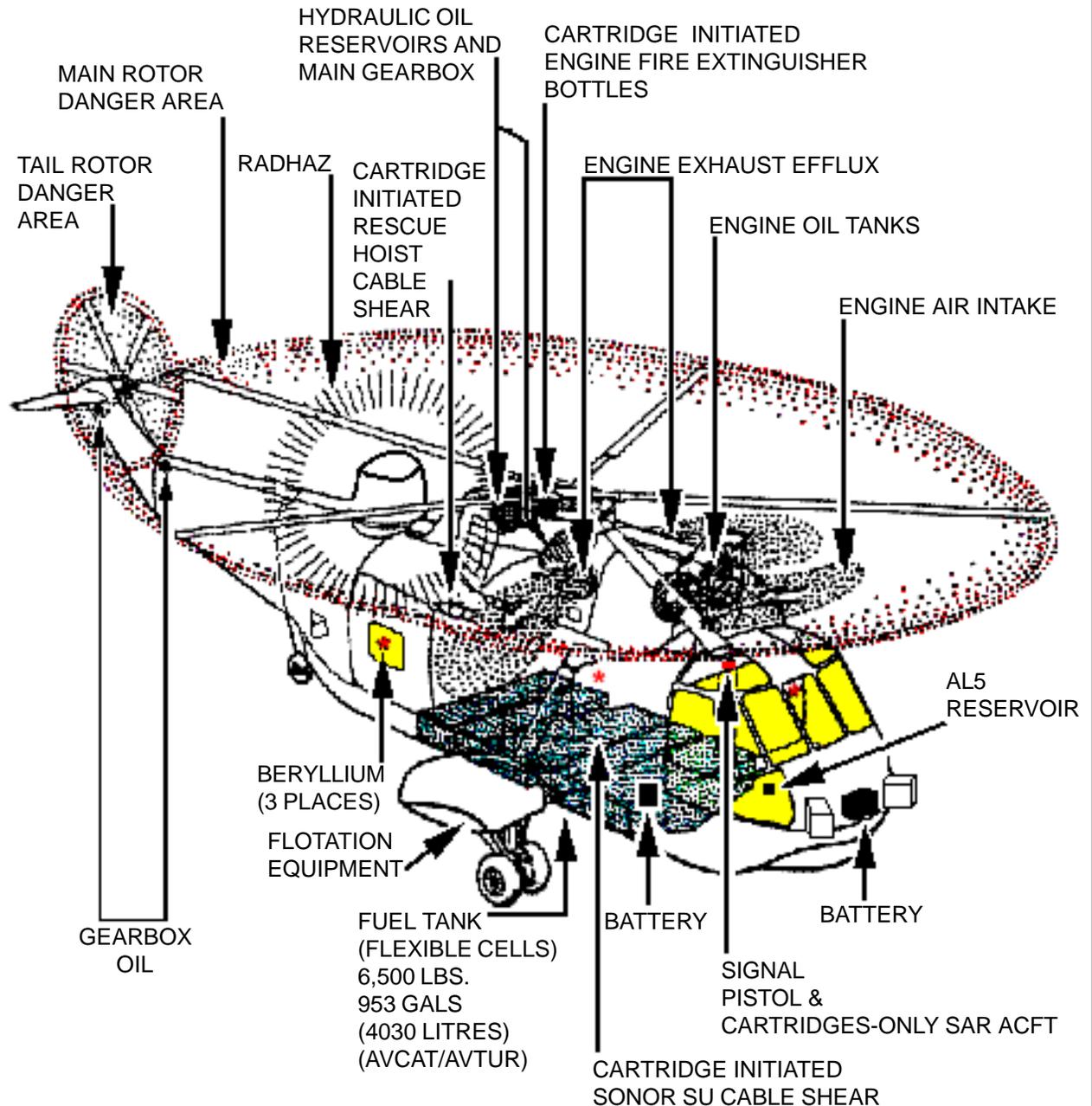
Hydraulic Oil: OM-15

HP Gases: Nitrogen/Air

Engine Oil: OX-38

Oxygen: NIL

SEA KING ASW 5



AIRCRAFT HAZARDS-Continued

AIRCRAFT ARMAMENT

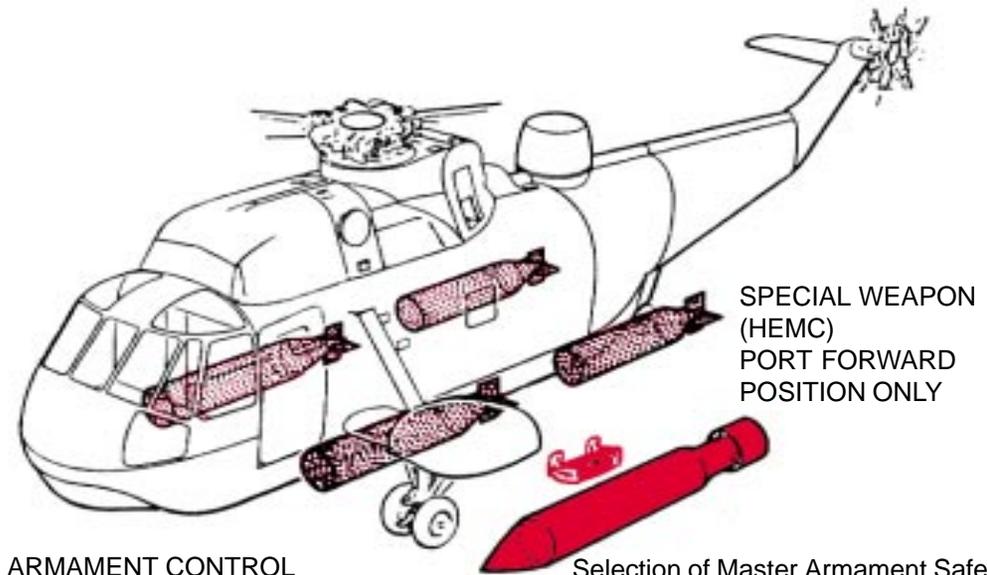
Weapon load may include:

- Torpedos
- Depth Charges
- Special Weapon
- 600 lb MC Bomb

Also:

- Sonobuoys
- Bathothermal Buoys
- Marine Sound Signals
- Marine Markers
- Smoke and Flame Floats

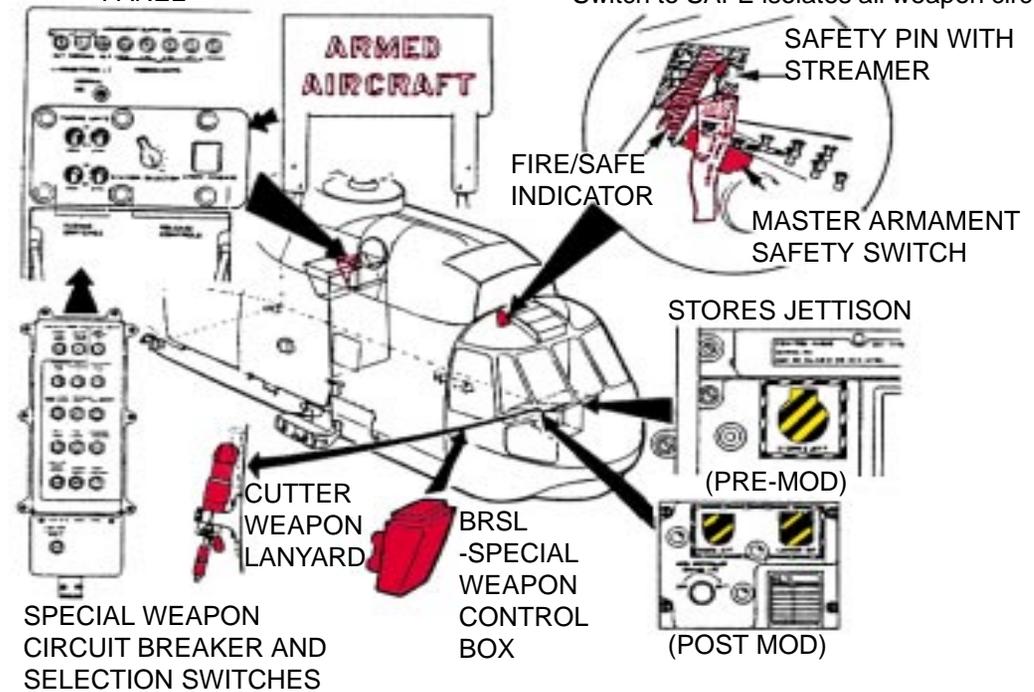
SEA KING ASW 5



SPECIAL WEAPON (HEMC) PORT FORWARD POSITION ONLY

ARMAMENT CONTROL PANEL

Selection of Master Armament Safety Switch to SAFE isolates all weapon circuits



SPECIAL WEAPON CIRCUIT BREAKER AND SELECTION SWITCHES

CUTTER WEAPON LANYARD

BRSL -SPECIAL WEAPON CONTROL BOX

STORES JETTISON (PRE-MOD) (POST MOD)

FIRE/SAFE INDICATOR

SAFETY PIN WITH STREAMER

MASTER ARMAMENT SAFETY SWITCH

SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw
Crash Ax

AIRCRAFT ENTRY
1. NORMAL ENTRY

NOTE:

Self-illuminated Beta lights mark location of doors, hatches and window.

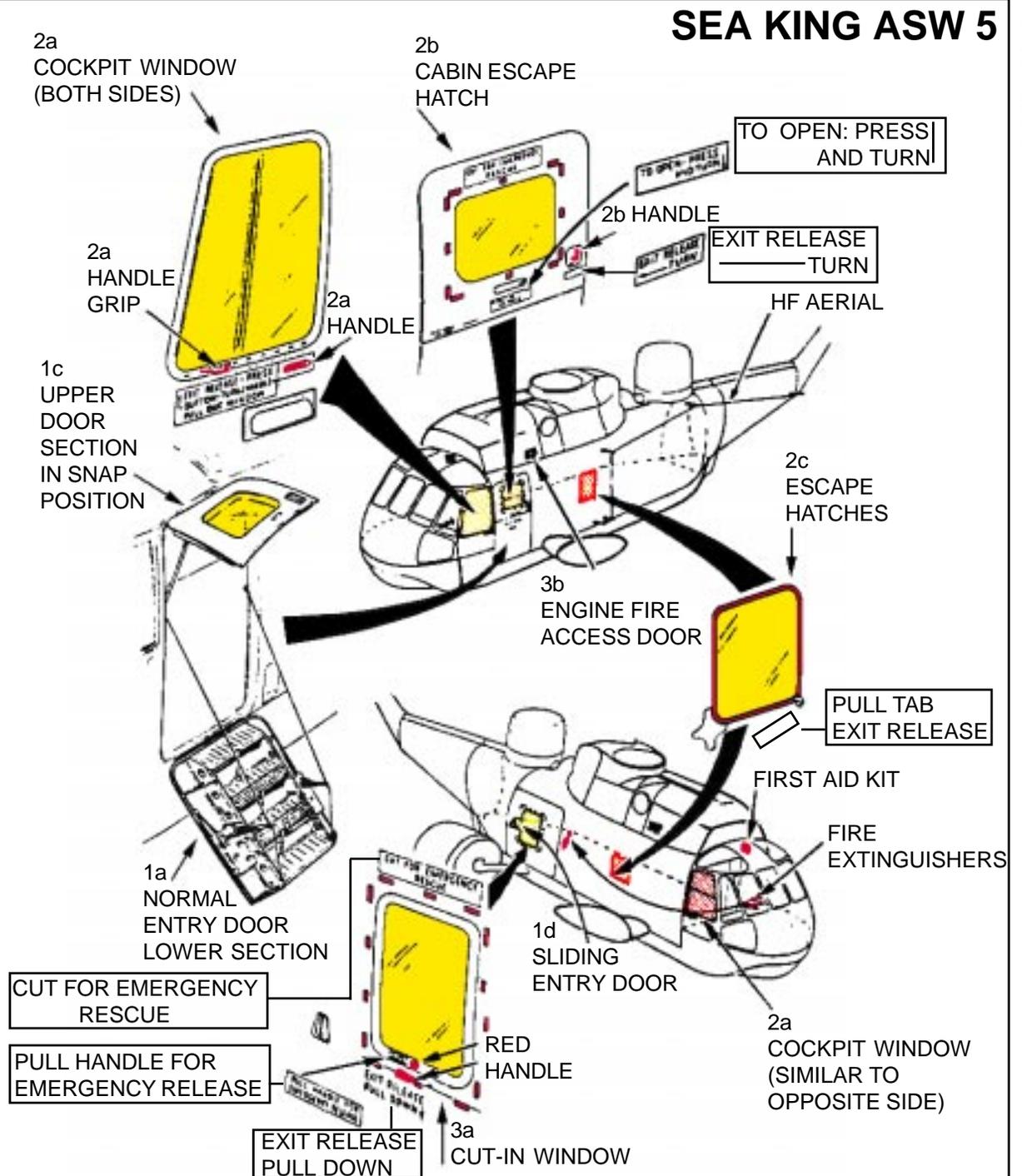
- On entry door, located on forward left side of fuselage, press button, rotate handle clockwise to DOWN position.
- Pull lower entry door section outwards and expose boarding steps.
- Lift upper door section to snap position allowing upper door to stay open.
- On sliding entry door, located on aft right side of fuselage, slide handle to right and push sliding door to the right.

2. EMERGENCY ENTRY

- Cockpit windows can be externally removed by turning door handle clockwise and pulling window out by handle grip on window.
- Cabin escape hatch can be externally removed by pressing button on handle, turning handle and pulling window outwards.
- Escape hatches can be externally removed by pulling tab for exit release and then pulling hatch outward.

3. CUT-IN

- Cut-in around windows and doors as required. Designated windows are marked for cut-in.
- Use the engine fire access door for fire access.

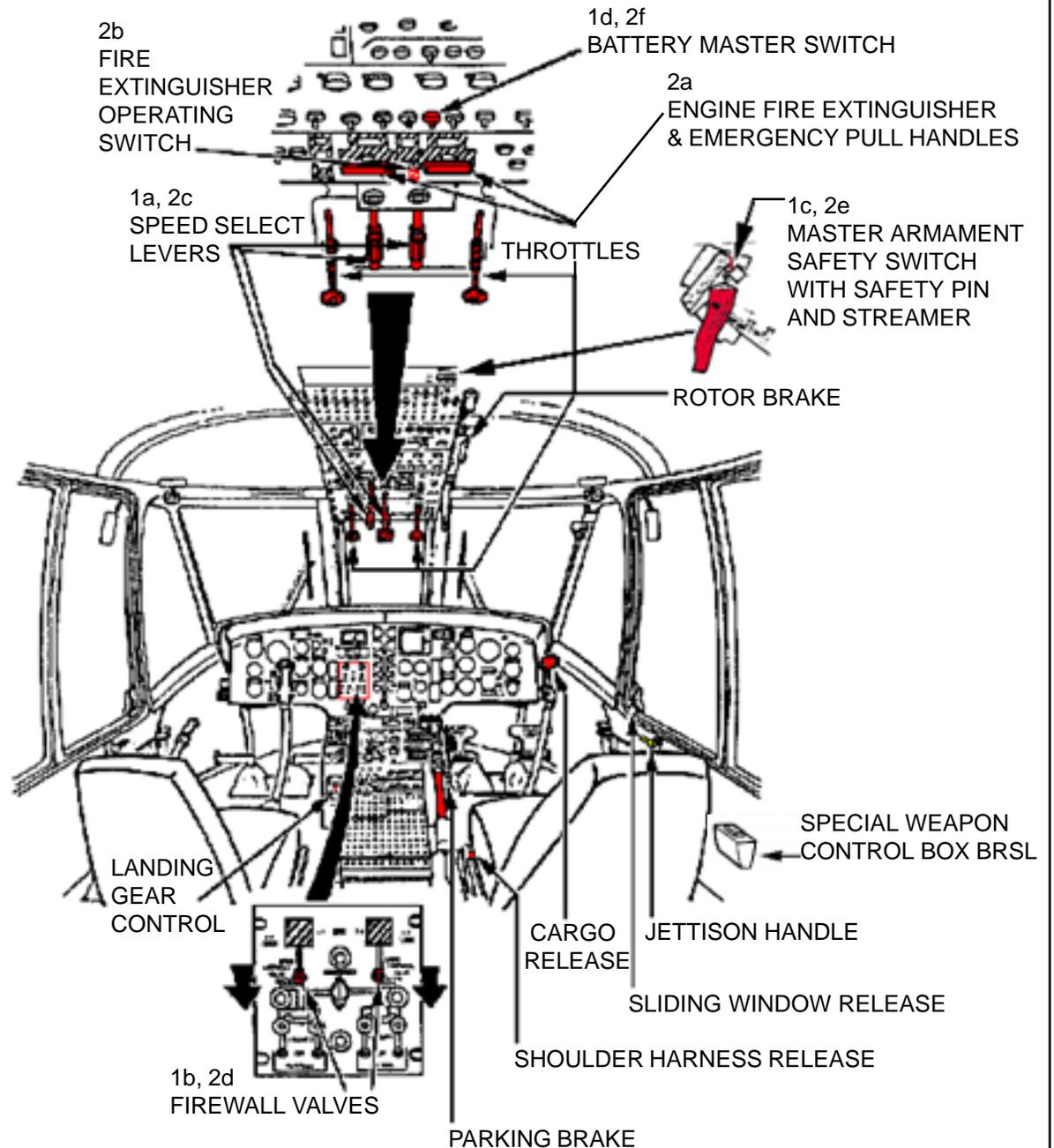


ENGINE SHUTDOWN**1. ENGINE SHUTDOWN**

- a. Pull and lift speed select levers, located on overhead panel, to SHUT-OFF position.
- b. Switch firewall valves, located on forward instrument panel, down to CLOSE position.
- c. Turn master armament safety switch, located on the overhead panel, to SAFE position.
- d. Turn battery master switch, located on overhead panel, to OFF position.

2. ENGINE FIRE SHUTDOWN

- a. Pull engine fire handles, located on overhead panel.
- b. Set fire extinguisher operating switch, located on overhead panel, to MAIN.
- c. Pull and lift speed select levers to SHUT-OFF position.
- d. Switch down firewall valves to CLOSE position.
- e. Turn master armament safety switch to SAFE position.
- f. Turn battery master switch to OFF position.



AIRCREW EXTRACTION

1. AIRCREW EXTRACTION

- For upper personnel door, emergency release at aft end, and push upper door out.
- For cabin window escape hatches, pull tag, remove seal, and push out.
- For cargo door escape hatch, pull handle aft, and push out.
- For cockpit windows, jettison can be actuated from internally.
- Crew seats are fitted with a 5 point quick-release harness. Push center and turn.
- Troop seats, (roles dictate configuration) may be 8, 4, or 2 seats and a desk, are fitted with a 2 point lap straps. Turn knob to release.

AS ROLE:
8 TROOP SEATS

1d
COCKPIT SIDE
WINDOWS

JUMP
SEAT

AR &
TROOP
ROLE:

1f
TROOP
SEATS

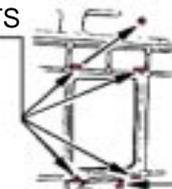
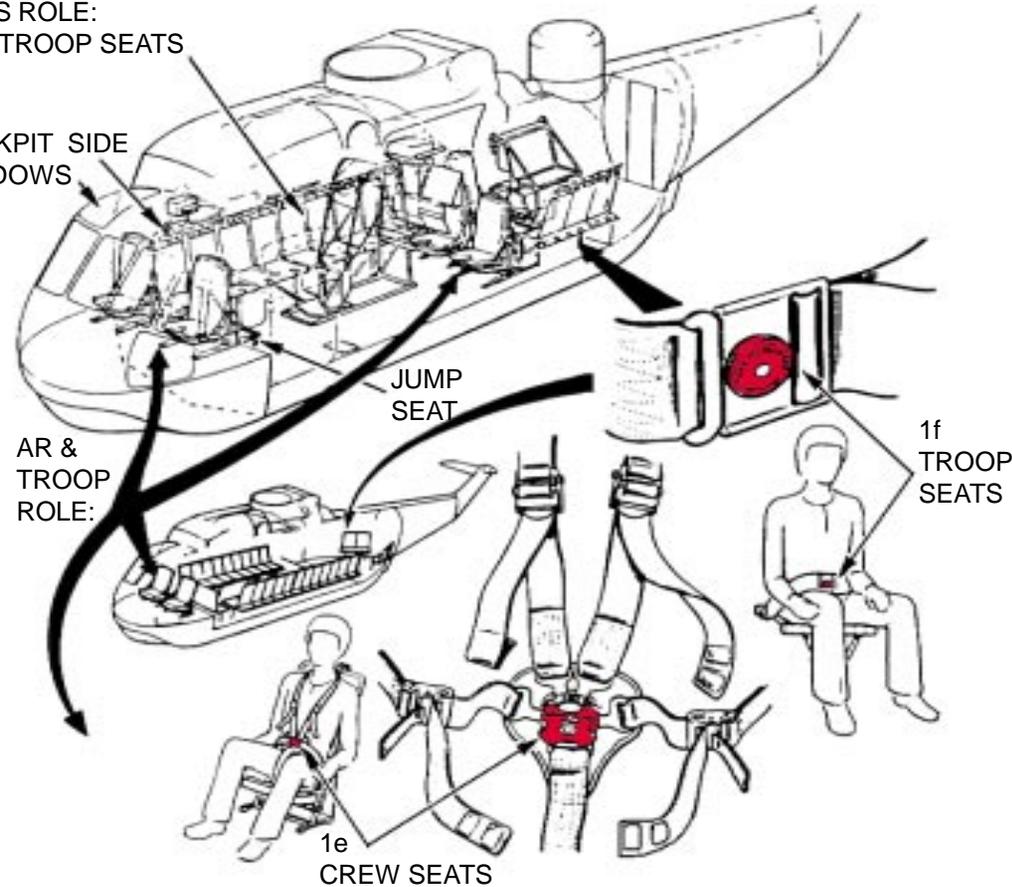
1e
CREW SEATS

BETA LIGHTS ARE FIXED AROUND ESCAPE EXITS

1a
UPPER
PERSONNEL
DOOR

1b
CABIN
WINDOW
ESCAPE
HATCH

1c
CARGO
DOOR
ESCAPE
HATCH



SEA KING ASW 5

AIRCRAFT HAZARDS

AIRCRAFT ARMAMENT - None is normally carried.

OTHER HAZARDS:

Pyrotechnics: Signal pistol and cartridges

* Beryllium: Hazardous material in Beta lights around exits.

- Lethal if fumes or dust absorbed by the body.

Acids - Batteries

Bromochlorodifluoromethane - Fire Extinguishant

Bromotrifluoromethane - Fire Extinguishant

Cartridge Operated Equipment

Chlorobromoethane - Fire Extinguishant

Composite Materials - Man Made Mineral Fibres

Dimethylformamide - Strobe Power Pack

Lithium - Batteries

Methyl Bromide - Fire Extinguishant

Polytetrafluoroethylene - PTFE

Sonar Locator Beacon(s) - Lithium Battery

Tritium Light Sources - Beta Lights

Very Flare

Fuel: AVTUR

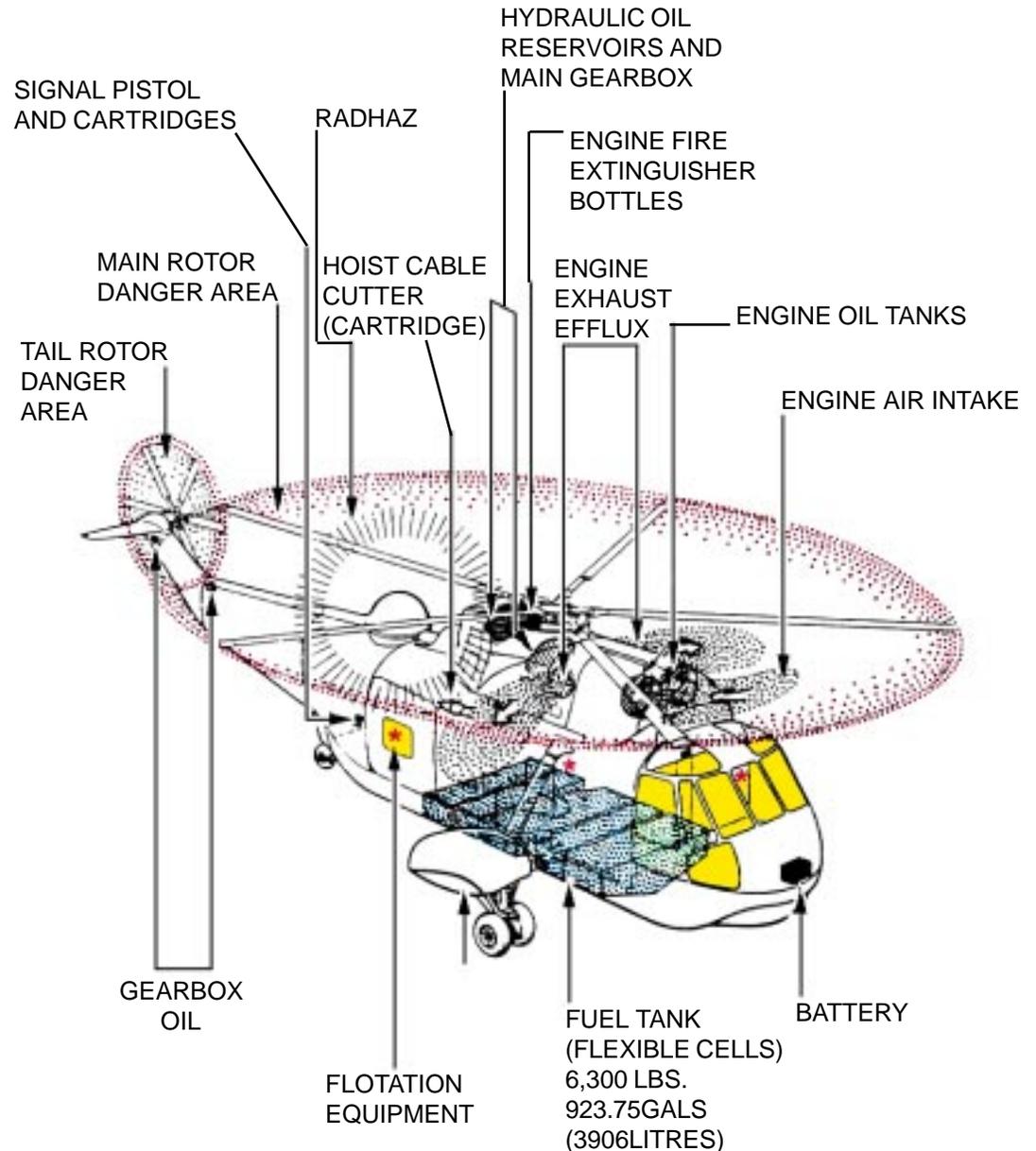
Hydraulic Oil: OM-15

HP Gases: Nitrogen/Air

Engine Oil: OX-38

Oxygen: NIL

SEA KING HAR 3/SH 3D



SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw
Crash Ax

AIRCRAFT ENTRY

1. NORMAL ENTRY

NOTE:

Self-illuminated Beta lights mark location of doors, hatches and window.

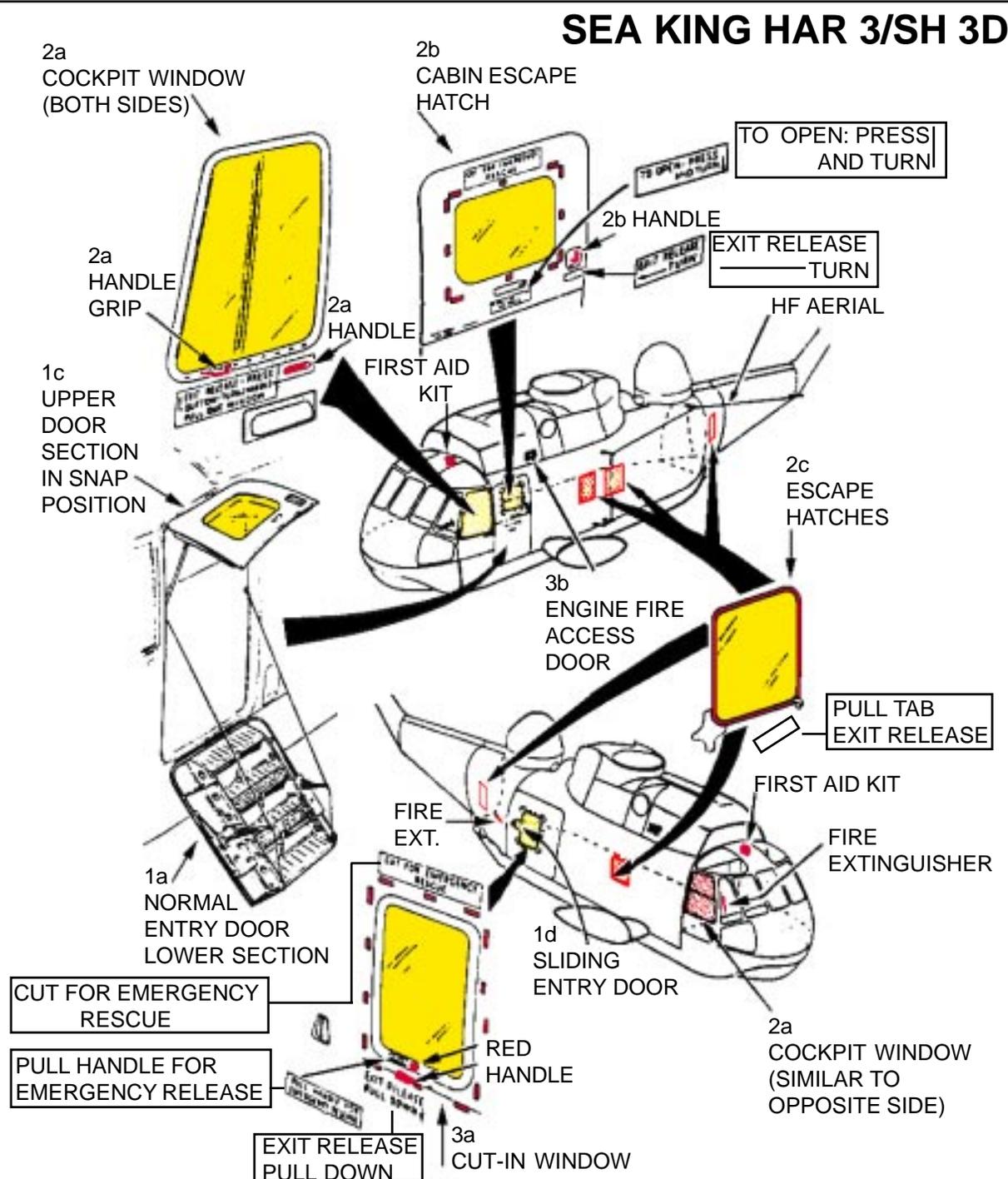
- On entry door, located on forward left side of fuselage, press button, rotate handle clockwise to DOWN position.
- Pull lower entry door section outwards and expose boarding steps.
- Lift upper door section to snap position allowing upper door to stay open.
- On sliding entry door, located on aft right side of fuselage, slide handle to right and push sliding door to the right.

2. EMERGENCY ENTRY

- Cockpit windows can be externally removed by turning door handle clockwise and pulling window out by handle grip on window.
- Cabin escape hatch can be externally removed by pressing button on handle, turning handle and pulling window outwards.
- Escape hatches can be externally removed by pulling tab for exit release and then pulling hatch outward.

3. CUT-IN

- Cut-in around windows and doors as required. Designated windows are marked for cut-in.
- Use the engine fire access door for fire access.

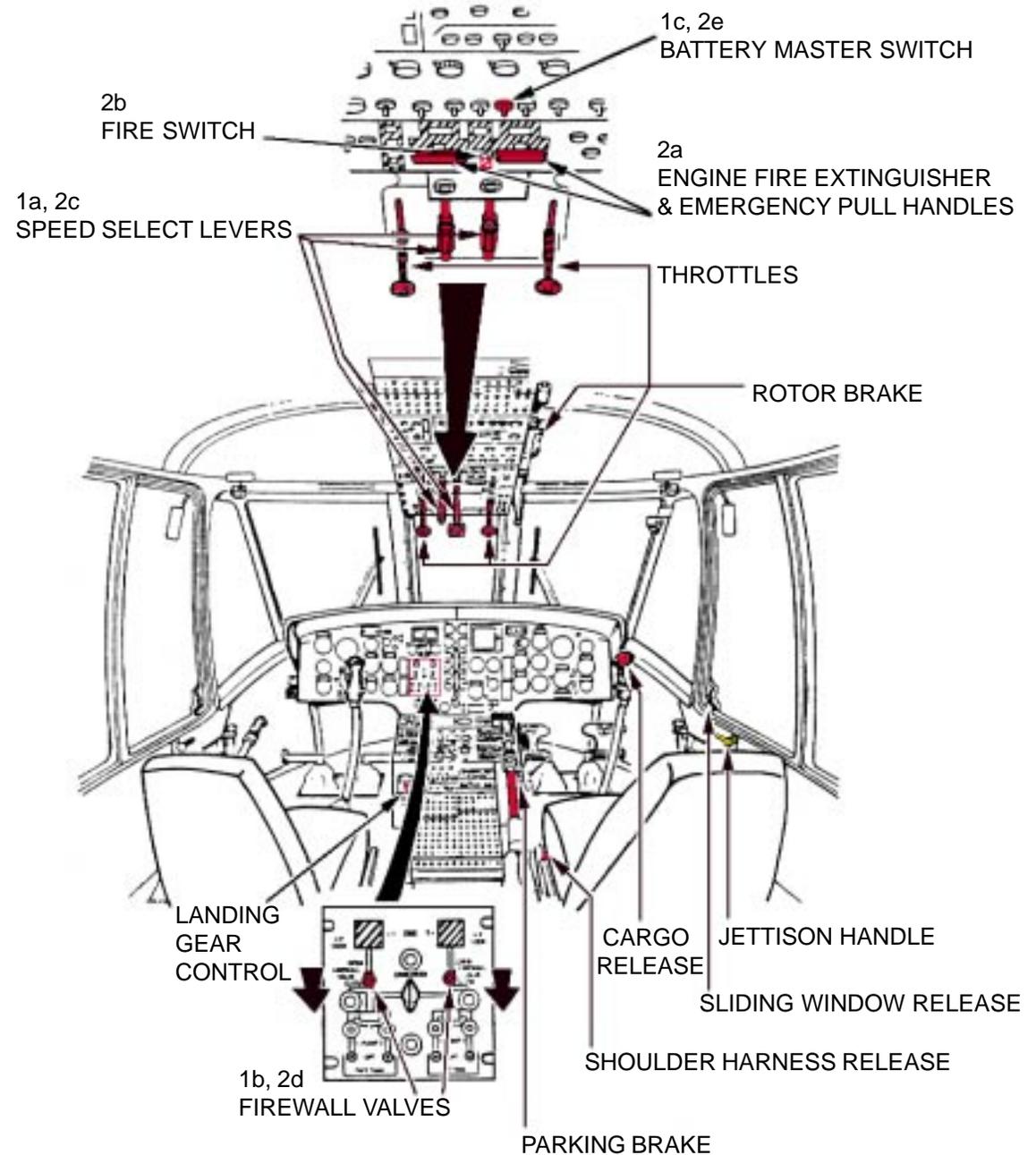


ENGINE SHUTDOWN**1. ENGINE SHUTDOWN**

- a. Pull and lift speed select levers, located on overhead panel, to SHUT-OFF position.
- b. Switch firewall valves, located on forward instrument panel, down to CLOSE position.
- c. Turn battery master switch, located on overhead panel, to OFF position.

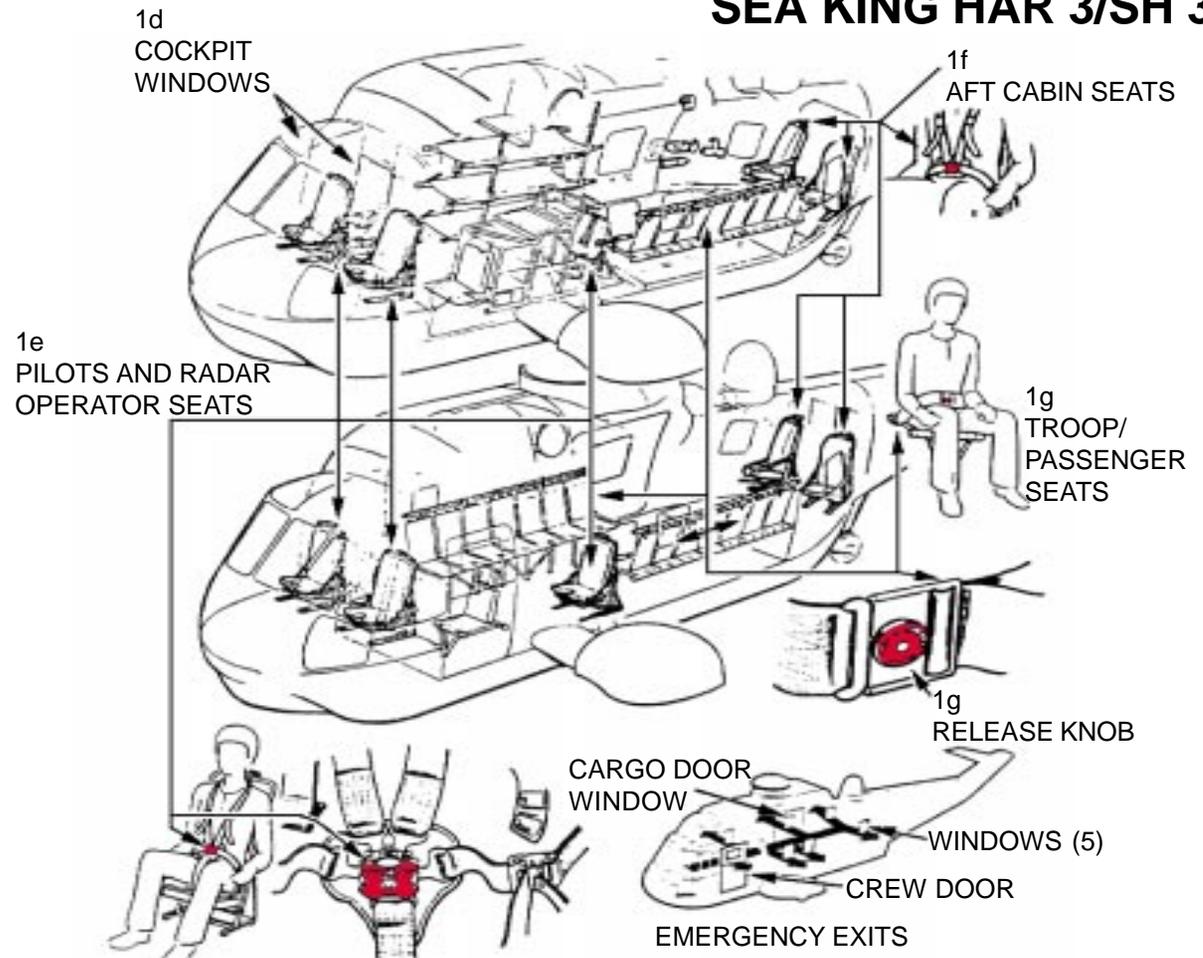
2. ENGINE FIRE SHUTDOWN

- a. Pull engine fire handles, located on overhead panel.
- b. Set fire switch, located on overhead panel, to MAIN.
- c. Pull and lift speed select levers to SHUT-OFF position.
- d. Switch down firewall valves to CLOSE position.
- e. Turn battery master switch to OFF position.

SEA KING HAR 3/SH 3D

AIRCREW EXTRACTION**1. AIRCREW EXTRACTION**

- a. For upper personnel door, emergency release at aft end, and push upper door out.
- b. For cabin window escape hatches, pull tag, remove seal, and push out.
- c. For cargo door escape hatch, pull handle aft, and push out.
- d. For cockpit windows, jettison can be actuated from internally.
- e. Pilot and radar operator seats are fitted with a 5 point quick-release harness. Push center and turn.
- f. Aft cabin seats are fitted with a 4 point quick-release harness. Push center and turn.
- g. Troop/passenger seats are fitted a 2 point lap straps. Turn knob to release.

SEA KING HAR 3/SH 3D

BETA LIGHTS ARE FIXED AROUND ESCAPE EXITS

1a
UPPER
PERSONNEL
DOOR



1b
CABIN
WINDOW
ESCAPE
HATCH



1c
CARGO
DOOR
ESCAPE
HATCH



AIRCRAFT HAZARDS

AIRCRAFT ARMAMENT - None is normally carried.

OTHER HAZARDS:

Pyrotechnics: Signal pistol and cartridges, marine markers, smoke/flame floats, practice depth charges, and underwater sound signals.

* Beryllium: Hazardous material in Beta lights around exits.

- Lethal if fumes or dust absorbed by the body.

Acids - Batteries

Bromochlorodifluoromethane - Fire Extinguishant

Bromotrifluoromethane - Fire Extinguishant

Cartridge Operated Equipment

Chlorobromoethane - Fire Extinguishant

Composite Materials - Man Made Mineral Fibres

Dimethylformamide - Strobe Power Pack

Lithium - Batteries

Methyl Bromide - Fire Extinguishant

Polytetrafluoroethylene - PTFE

Sonar Locator Beacon(s) - Lithium Battery

Tritium Light Sources - Beta Lights

Very Flare

Fuel: AVTUR

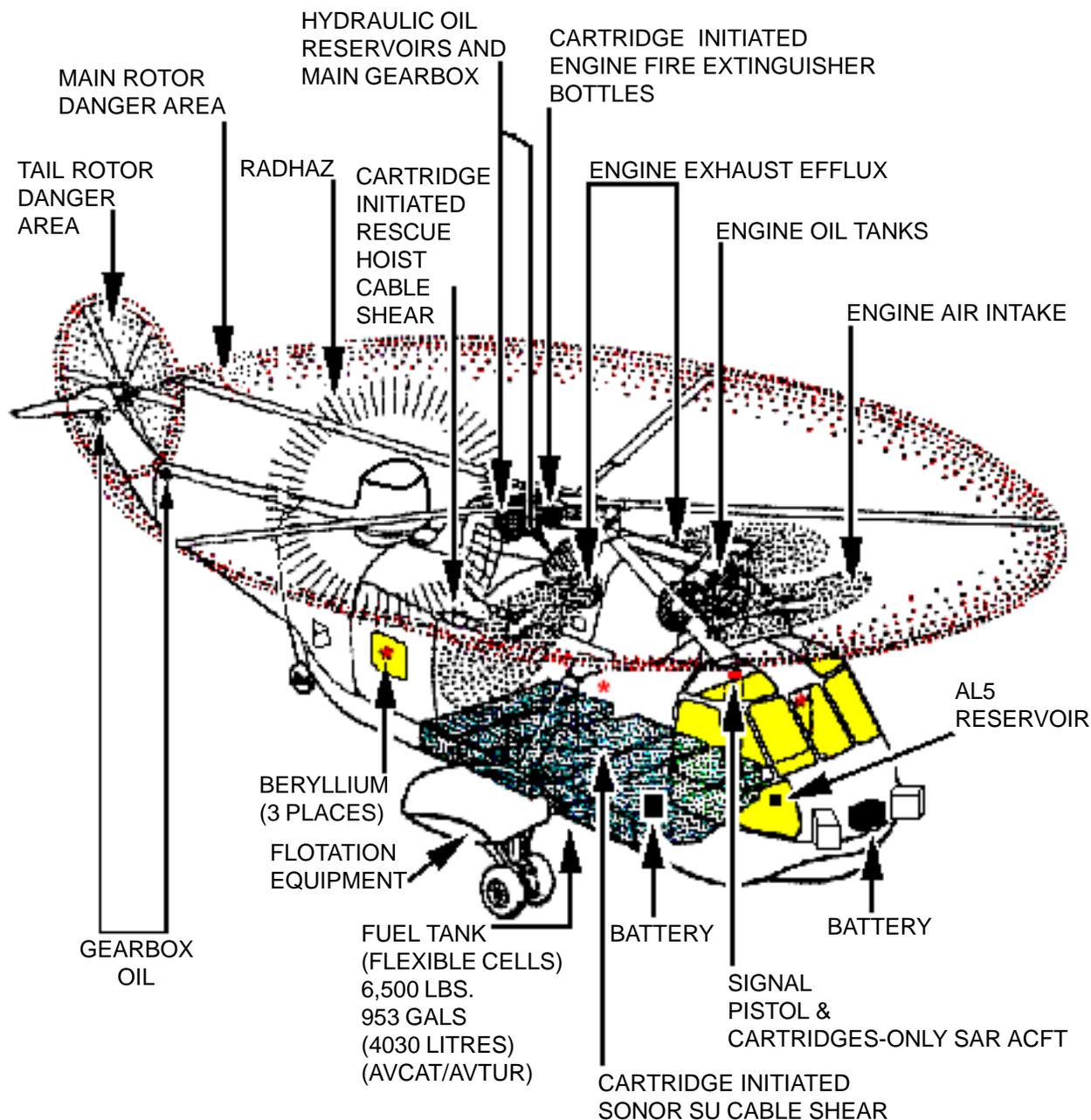
Hydraulic Oil: OM-15

HP Gases: Nitrogen/Air

Engine Oil: OX-38

Oxygen: NIL

SEA KING HAS/ASW 6



AIRCRAFT HAZARDS-Continued

AIRCRAFT ARMAMENT

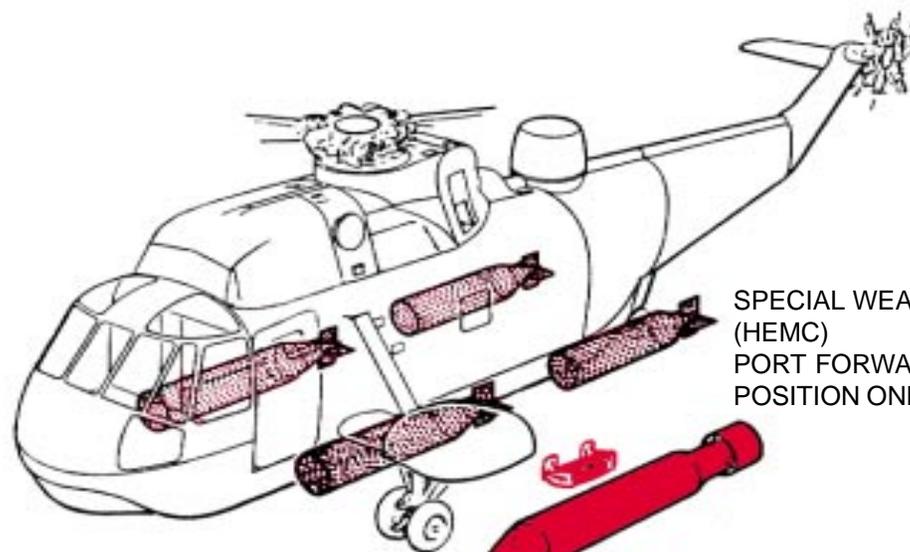
Weapon load may include:

- Torpedos
- Depth Charges
- Special Weapon
- 600 lb MC Bomb

Also:

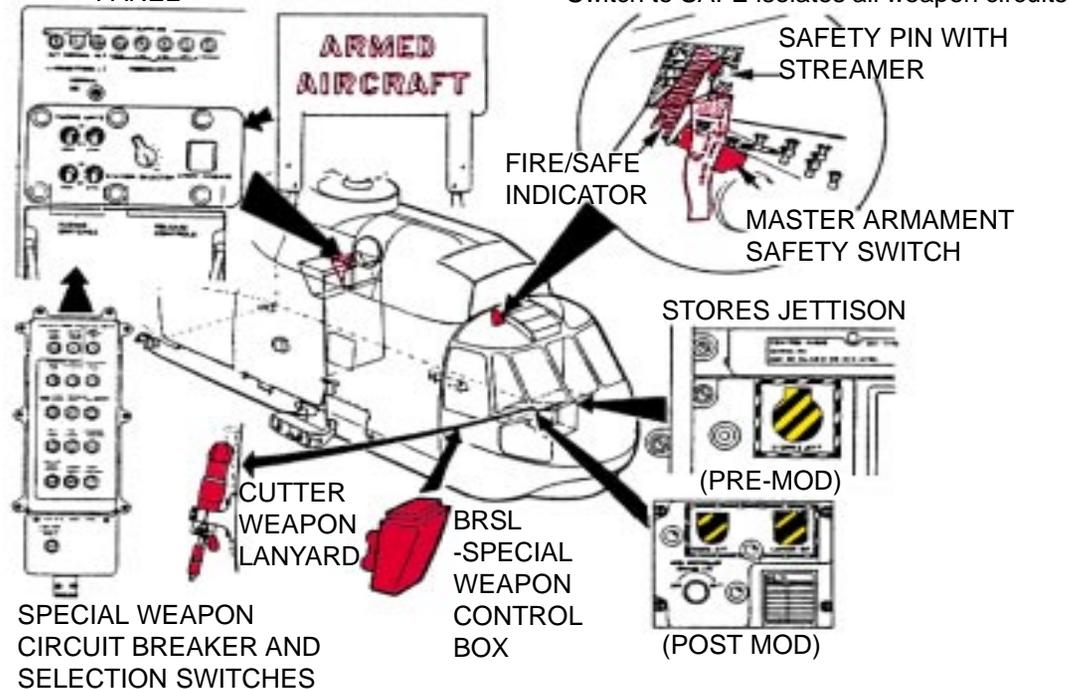
- Sonobuoys
- Bathothermal Buoys
- Marine Sound Signals
- Marine Markers
- Smoke and Flame Floats

SEA KING HAS/ASW 6



SPECIAL WEAPON (HEMC)
PORT FORWARD POSITION ONLY

ARMAMENT CONTROL PANEL



SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw
Crash Ax

AIRCRAFT ENTRY

1. NORMAL ENTRY

NOTE:

Self-illuminated Beta lights mark location of doors, hatches and window.

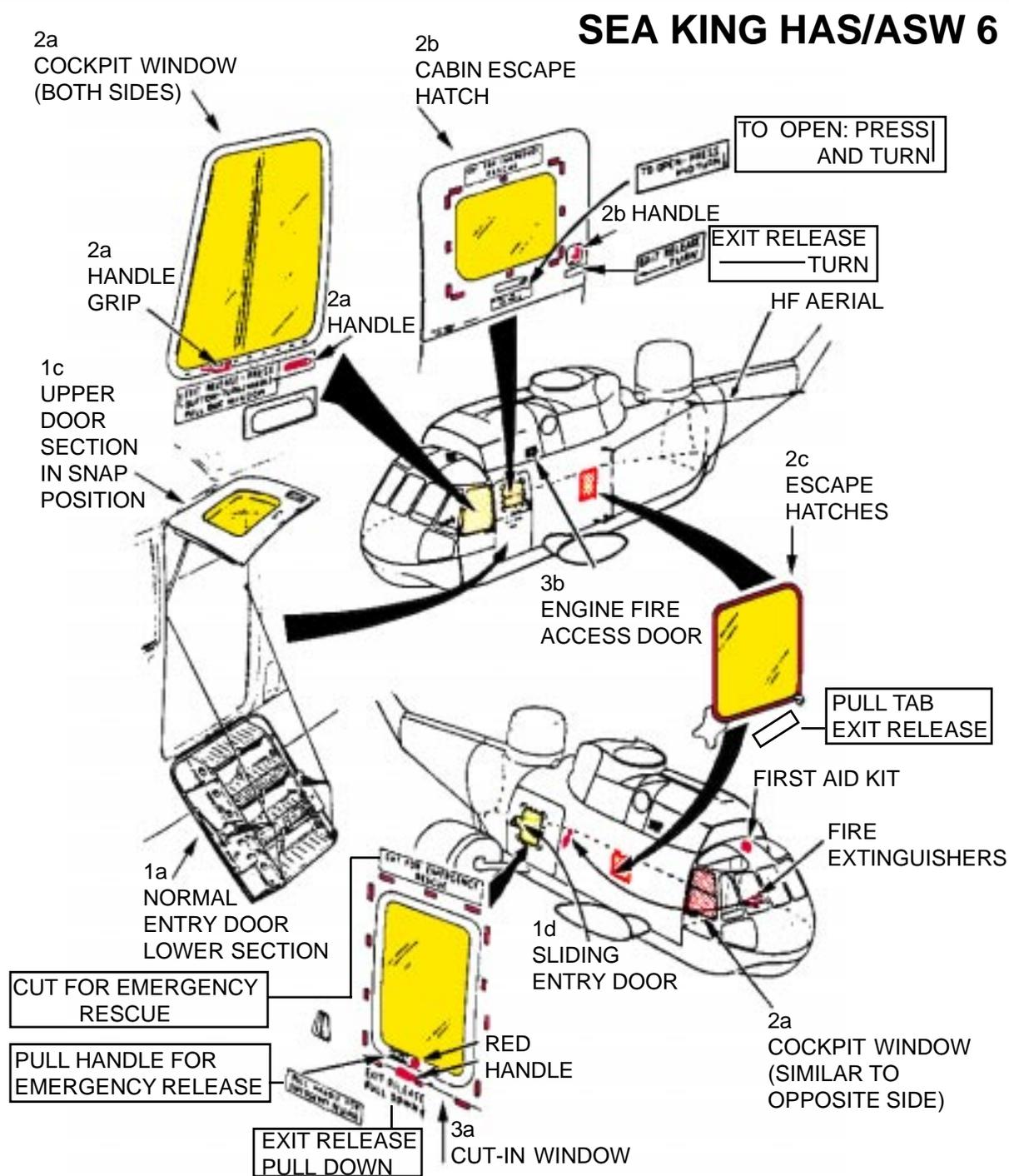
- On entry door, located on forward left side of fuselage, press button, rotate handle clockwise to DOWN position.
- Pull lower entry door section outwards and expose boarding steps.
- Lift upper door section to snap position allowing upper door to stay open.
- On sliding entry door, located on aft right side of fuselage, slide handle to right and push sliding door to the right.

2. EMERGENCY ENTRY

- Cockpit windows can be externally removed by turning door handle clockwise and pulling window out by handle grip on window.
- Cabin escape hatch can be externally removed by pressing button on handle, turning handle and pulling window outwards.
- Escape hatches can be externally removed by pulling tab for exit release and then pulling hatch outward.

3. CUT-IN

- Cut-in around windows and doors as required. Designated windows are marked for cut-in.
- Use the engine fire access door for fire access.

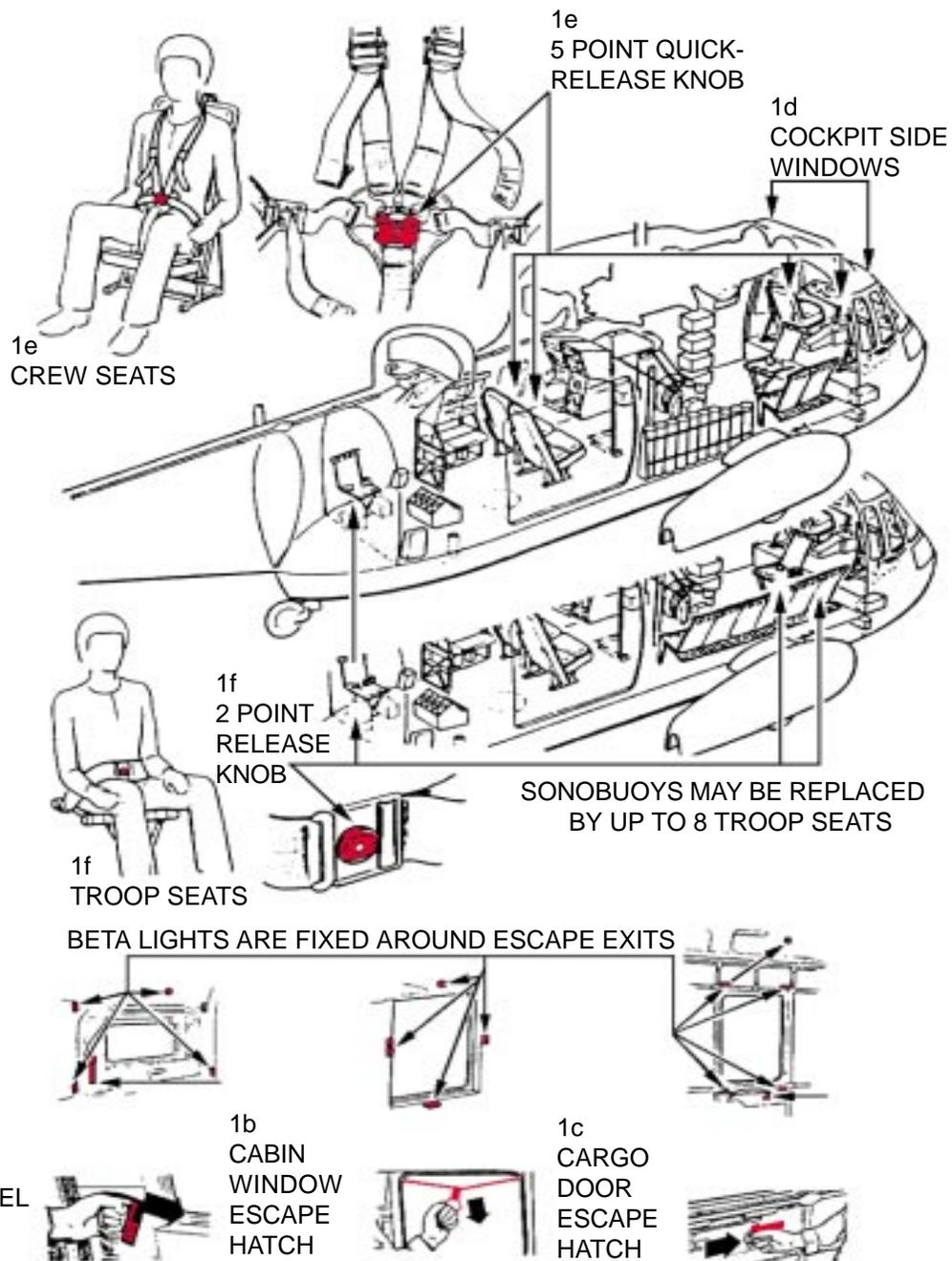


AIRCREW EXTRACTION

1. AIRCREW EXTRACTION

- a. For upper personnel door, emergency release at aft end, and push upper door out.
- b. For cabin window escape hatches, pull tag, remove seal, and push out.
- c. For cargo door escape hatch, pull handle aft, and push out.
- d. For cockpit windows, jettison can be actuated from internally.
- e. Crew seats are fitted with a 5 point quick-release harness. Push center and turn.
- f. Troop/passenger seats are fitted a 2 point lap straps. Turn knob to release.

SEA KING HAS/ASW 6



AIRCRAFT HAZARDS

OTHER HAZARDS:

- Acids - Batteries
- Bromochlorodifluoromethane - Fire Extinguishant
- Bromotrifluoromethane - Fire Extinguishant
- Cartridge Operated Equipment
- Chlorobromoethane - Fire Extinguishant
- Composite Materials - Man Made Mineral Fibres
- Dimethylformamide - Strobe Power Pack
- Lithium - Batteries
- Methyl Bromide - Fire Extinguishant
- Polytetrafluoroethylene - PTFE
- Sonar Locator Beacon(s) - Lithium Battery
- Tritium Light Sources - Beta Lights
- Very Flare
- Fuel: AVTUR
- Hydraulic Oil: OM-15
- HP Gases: Nitrogen/Air
- Engine Oil: OX-38
- Oxygen: NIL

Armament for the HC4:

1- 7.62 MM general purpose machine gun may be fitted in cab in doorway.

Pyrotechnics:

Signal pistol and cartridges, marine markers, smoke/flame floats, and underwater sound signals.

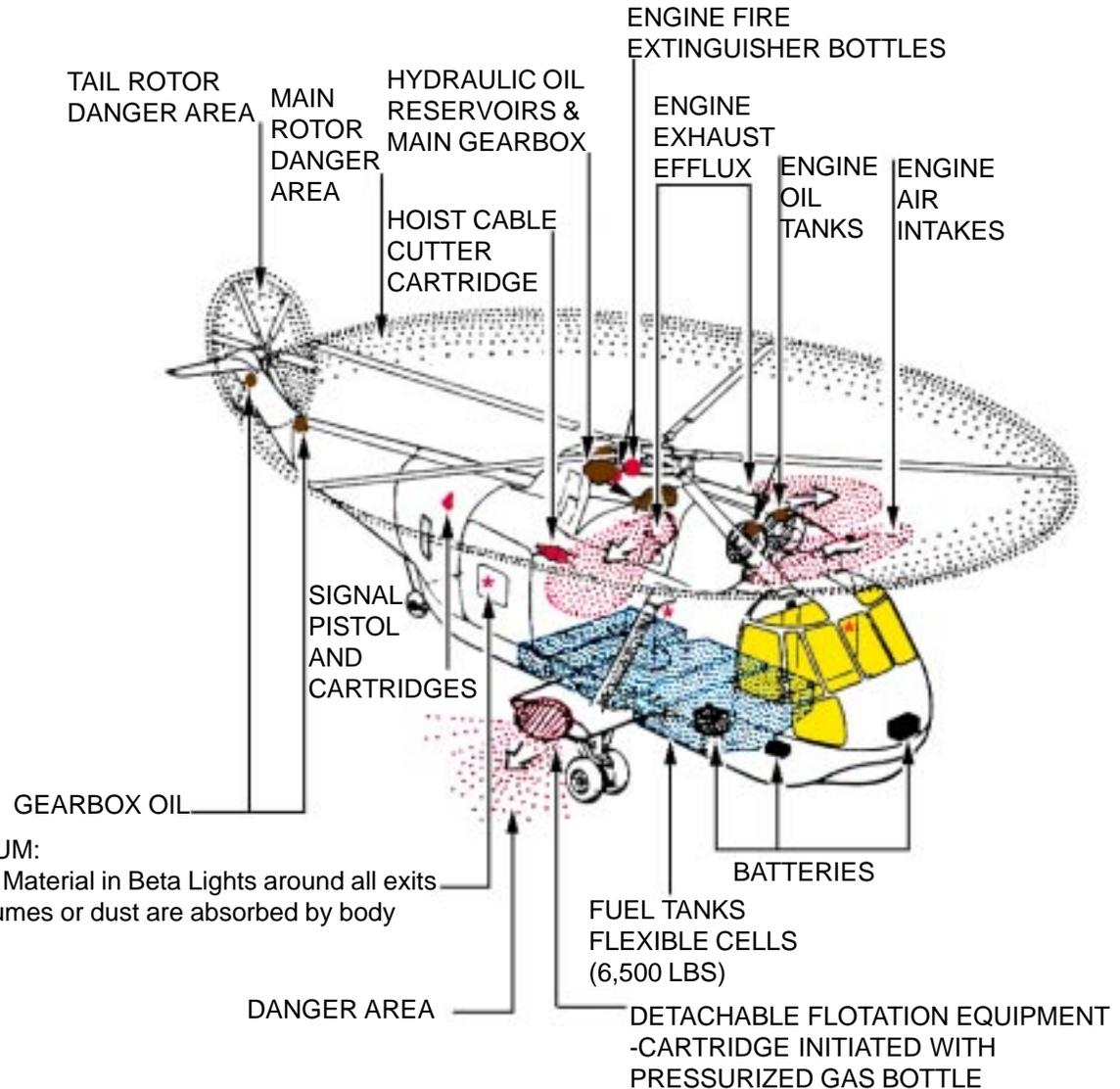
Armament for the MK-41:

No armament is carried.

Armament for the S-61:

No armament is carried.

SEA KING HC4/MK-41/S-61/ WESTLAND SAR



* BERYLLIUM:
Hazardous Material in Beta Lights around all exits
- Lethal if fumes or dust are absorbed by body

SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw
Crash Ax

AIRCRAFT ENTRY

1. NORMAL AND EMERGENCY ENTRY

WARNING

Beware of rotating blades. Injury to personnel can result.

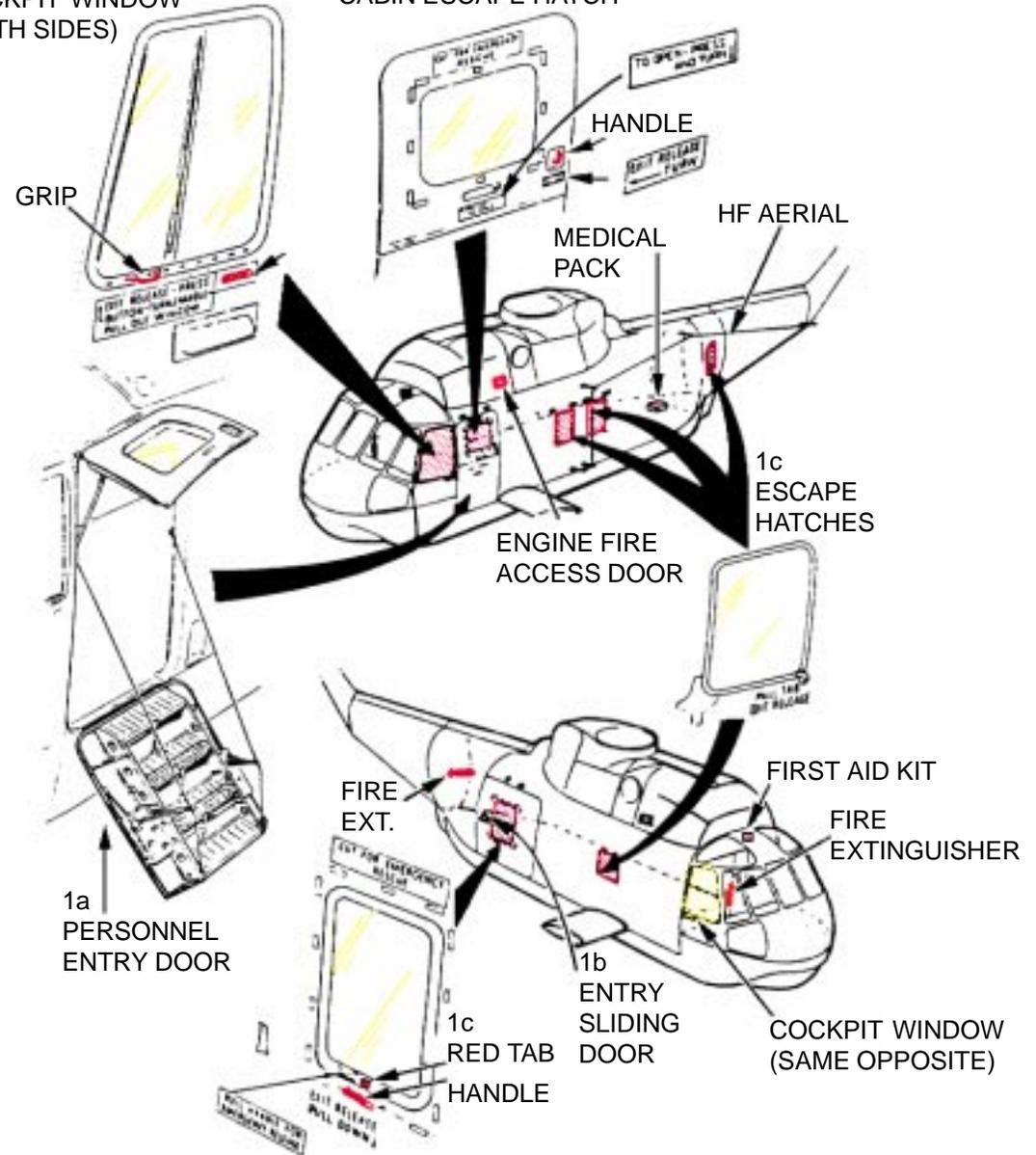
- a. Use left side behind cockpit. Press marked button of personnel door. Release lower section of door by rotating emergency handle clockwise to top position. Pull lower section of door outwards. Lift upper section of door to snap position.
- b. Marked cockpit sliding windows, located on both sides of cockpit. Press marked button of exit release, turn handle clockwise to top position. Pull window outwards.
- c. Escape hatches located on both sides of fuselage, one on right and two on left side of forward. Pull red tab, marked exit release, completely. Pull window out of frame.

2. CUT-IN

- a. Cut-in along window frame above emergency release handle of personnel door and escape hatch, located on left side of fuselage.

NOTE:

Self-illuminating beta lights mark locations of doors, hatches and windows.

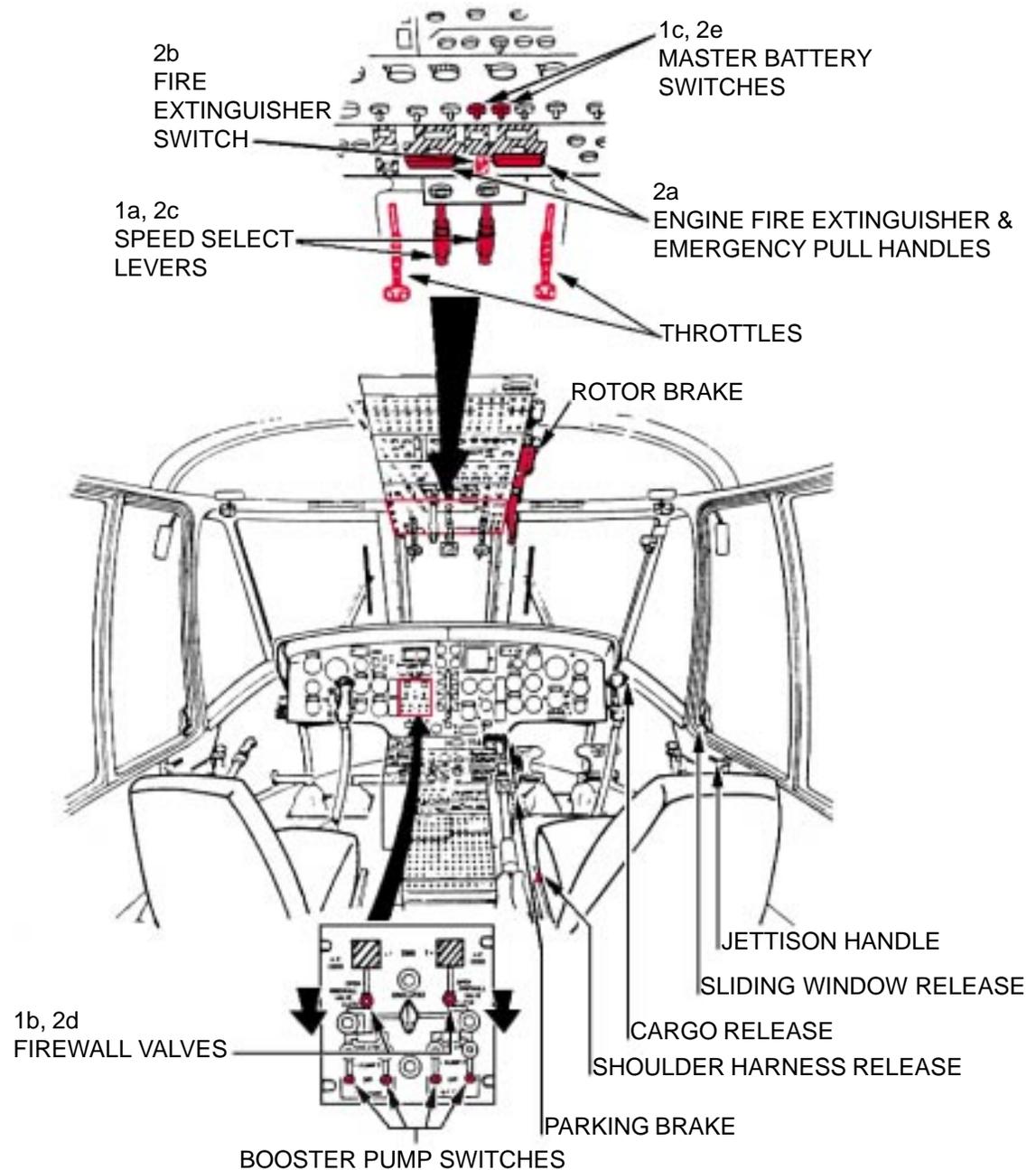
SEA KING HC4/MK-41/S-61/
WESTLAND SARCOCKPIT WINDOW
(BOTH SIDES)1b
CABIN ESCAPE HATCH

ENGINE SHUTDOWN**1. NORMAL ENGINE SHUTDOWN**

- a. Pull and lift speed select levers to SHUT-OFF position.
- b. Switch firewall valves down to CLOSE position.
- c. Turn battery master switches to OFF position.

2. ENGINE FIRE SHUTDOWN

- a. Pull engine fire extinguisher and emergency handles.
- b. Set fire extinguisher operating switch to MAIN.
- c. Pull and lift speed select levers to SHUT-OFF position.
- d. Switch down firewall valves to CLOSE position.
- e. Turn battery master switches to OFF position.

**SEA KING HC4/MK-41/S-61/
WESTLAND SAR**

AIRCREW EXTRACTION

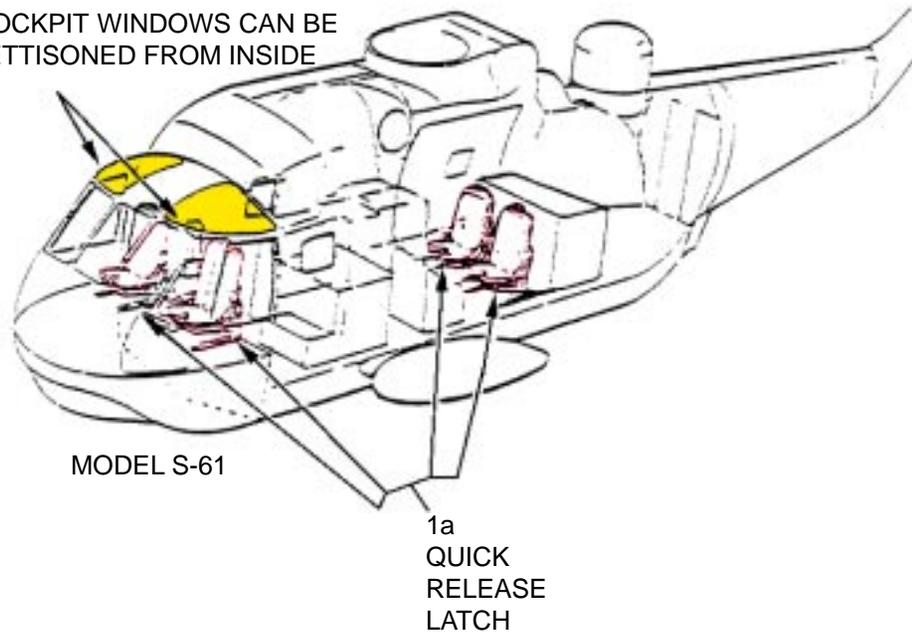
1. AIRCREW EXTRACTION

NOTE:

All seats are equipped with uniform safety lap belts. A quick release latch is used by pressing the center and then turning. This applies to the crew seats of the HC-4, MK-41 and all seats for the S-61.

- a. Press and turn the quick release latch to release restraints.
- b. Set aside the lap belts and shoulder harnesses from crewmembers to prevent entanglement.
- c. Release left or right survival kit buckles by squeezing release bar simultaneously (pilot seats only).
- d. Passenger seats are equipped with a safety belt released by turning a central knob.

COCKPIT WINDOWS CAN BE JETTISONED FROM INSIDE

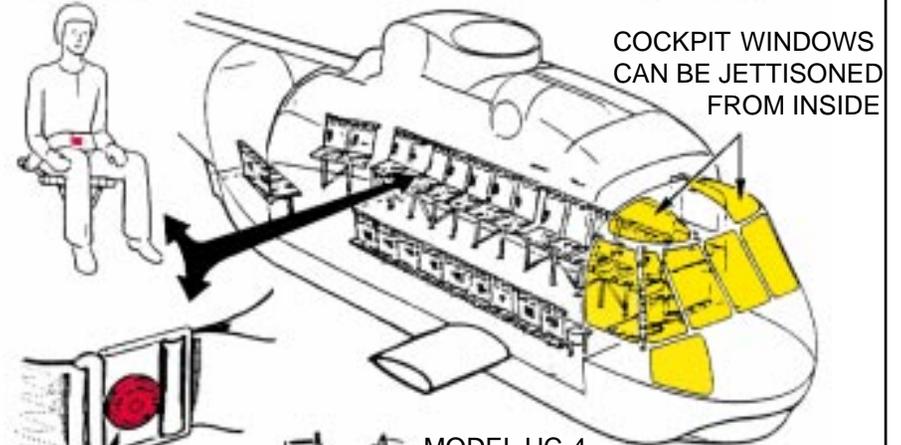
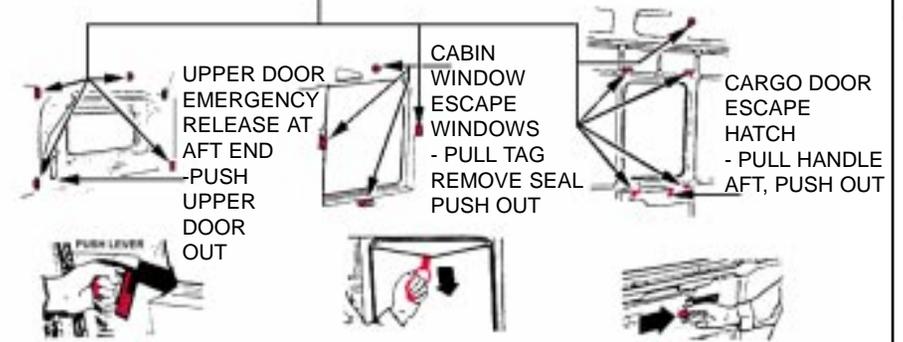


MODEL S-61

1a
QUICK
RELEASE
LATCH

SEA KING HC4/MK-41/S-61/ WESTLAND SAR

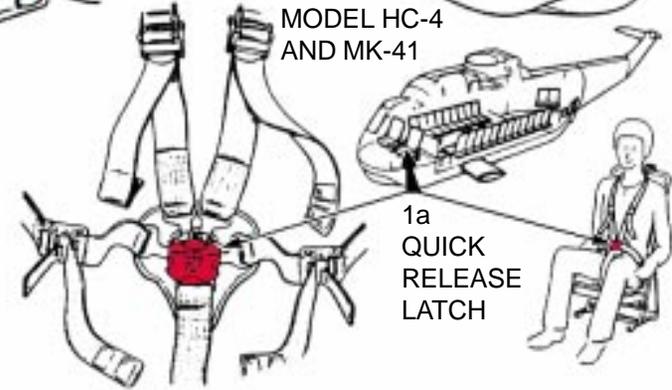
BETA LIGHTS ARE FIXED AROUND ESCAPE HATCHES AND DOORS



COCKPIT WINDOWS CAN BE JETTISONED FROM INSIDE

1d
QUICK
RELEASE
KNOB

MODEL HC-4
AND MK-41



1a
QUICK
RELEASE
LATCH

SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw
Crash Ax

SEA LYNX MK-88

AIRCRAFT ENTRY

1. NORMAL ENTRY

NOTE:

The cockpit and cabin doors, located both sides of fuselage, are not droppable.

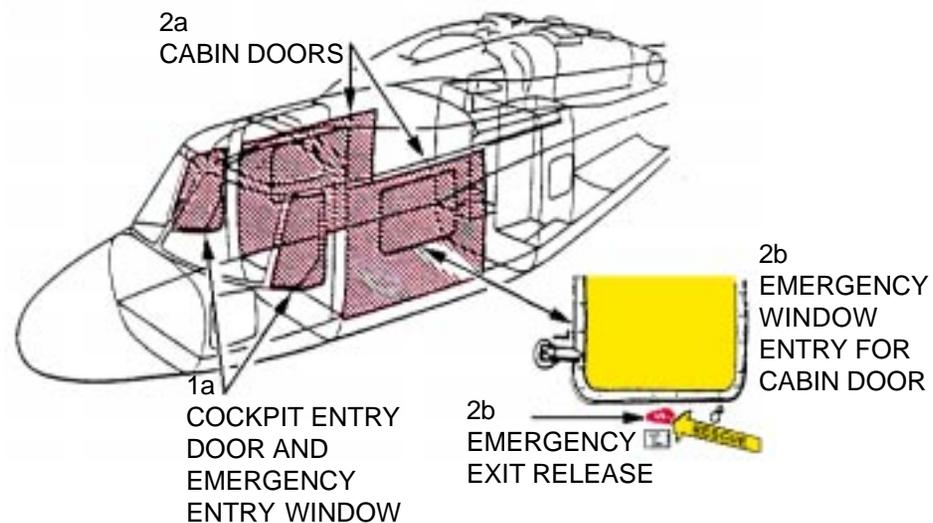
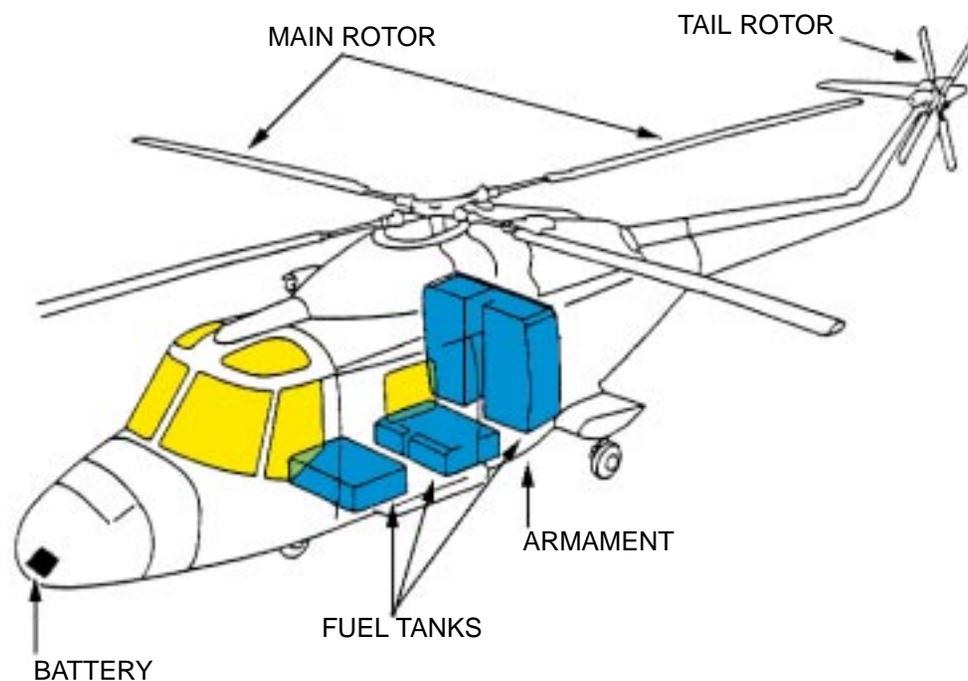
- a. Turn exterior handle of cockpit door clockwise and open the door.
- b. Turn exterior handle of cabin door clockwise, pull door outwards and slide aft or to the right.

2. EMERGENCY ENTRY

- a. Press the marked button of the exit release on the sliding windows, located on both cabin doors, on either side of the fuselage.
- b. Rotate handle clockwise to top position and pull the window outwards.

3. CUT-IN

- a. Cut-in to windows or fuselage as required.



ENGINE SHUTDOWN AND AIRCREW EXTRACTION

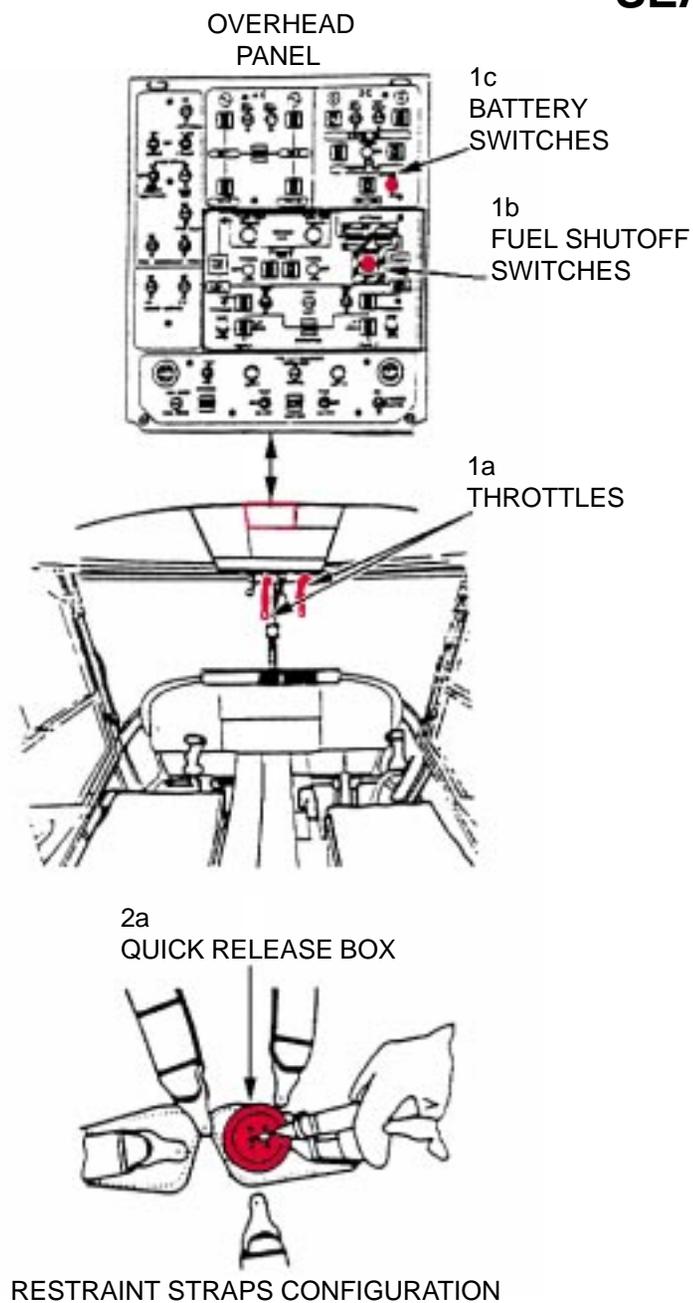
1. ENGINE SHUTDOWN

- a. Raise finger lift stop and move throttles, located on pilot's overhead panel, down to the OFF position.
- b. Lift fuel shutoff switches, located on pilot's overhead panel, and place to OFF position.
- c. Place the battery switches, located on the overhead panel, to the OFF position.

2. AIRCREW EXTRACTION

- a. Pull red release snap from harness quick release box until straps are released.

SEA LYNX MK-88



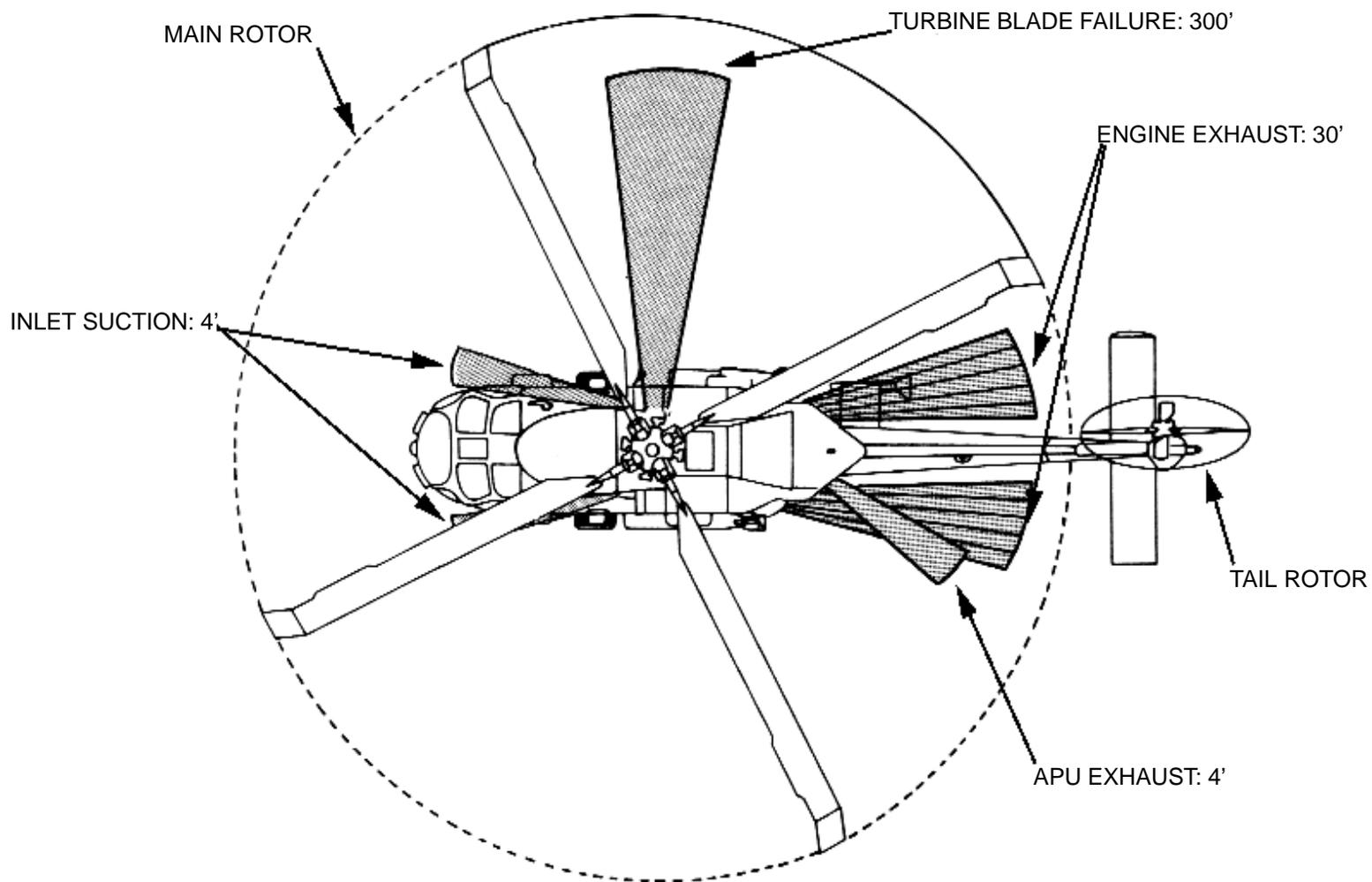
AIRCRAFT HAZARDS

WARNING

Tip of rotor blade may drop as low as 4 feet from ground when turning.

ROTOR MINIMUM	MAIN	7' 6"
GROUND CLEARANCE	TAIL	6' 8"
ROTOR DISC	MAIN	53' 8"
DIAMETER	TAIL	11'

SH-60B



AIRCRAFT HAZARDS-Continued

SH-60B

ARMAMENT:

TORPEDOES (N/A FOR HH-60H/J)

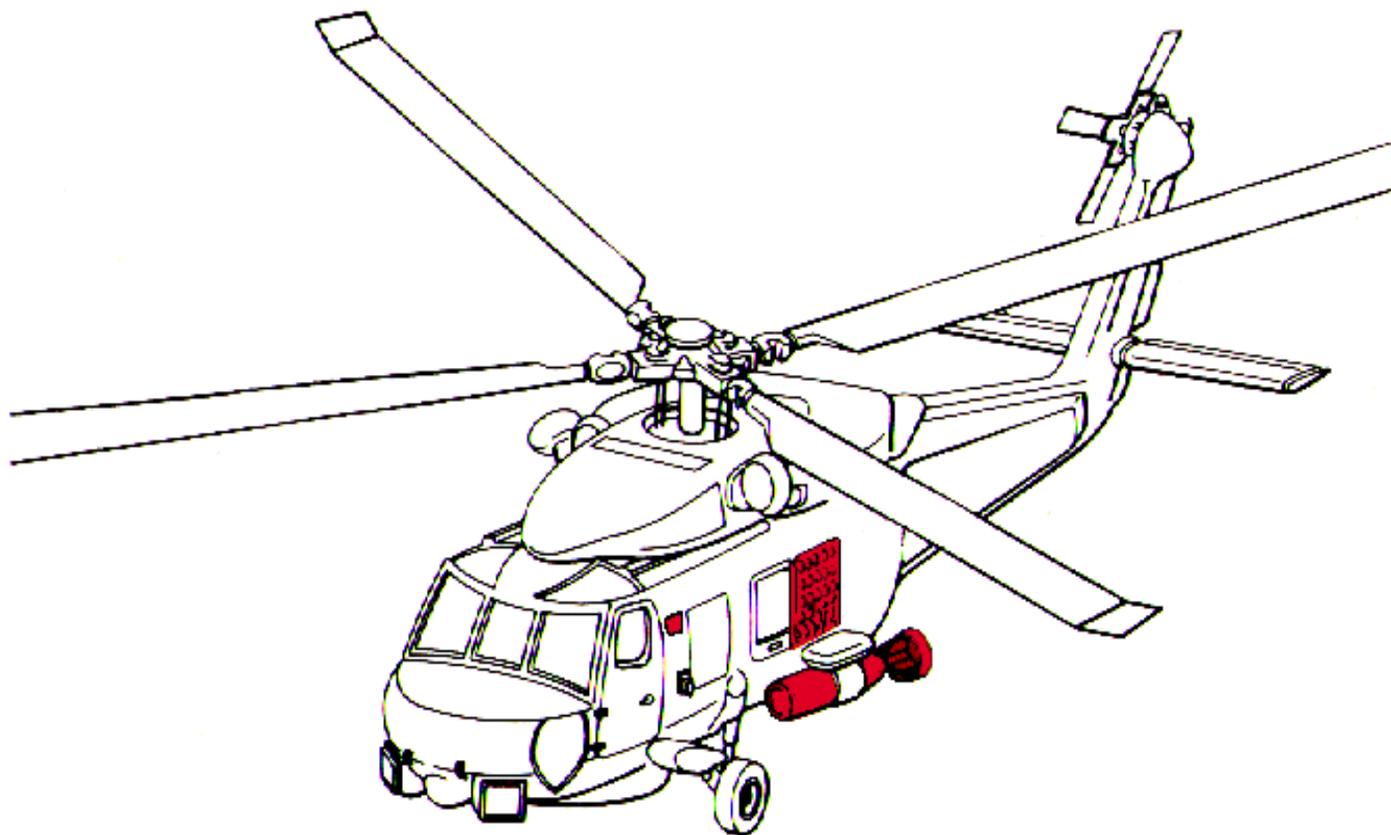
SONOBUOY LAUNCHER

SMOKE MARKERS (PYROTECHNICS)

MK-25 MLM

MK-58 MLM

MK-84 SUS



AIRFRAME MATERIALS

LEGEND

-  ALUMINUM
-  STEEL
-  TITANIUM
-  GRAPHITE EPOXY
-  OTHER
FIBERGLASS/MAGNESIUM/KEVLAR



SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw
Crash Ax

AIRCRAFT ENTRY

1. NORMAL ENTRY

- a. Enter the pilot/ATO area through hinged door on each side of cockpit. Pull handle down to open.
- b. A sliding door on right side of fuselage provides access to the cabin. Push to release handle and turn down to open.

2. EMERGENCY ENTRY

- a. The pilot and ATO windows, cabin door window and cabin window may be jettisoned by operating the emergency release handle and pulling window out.

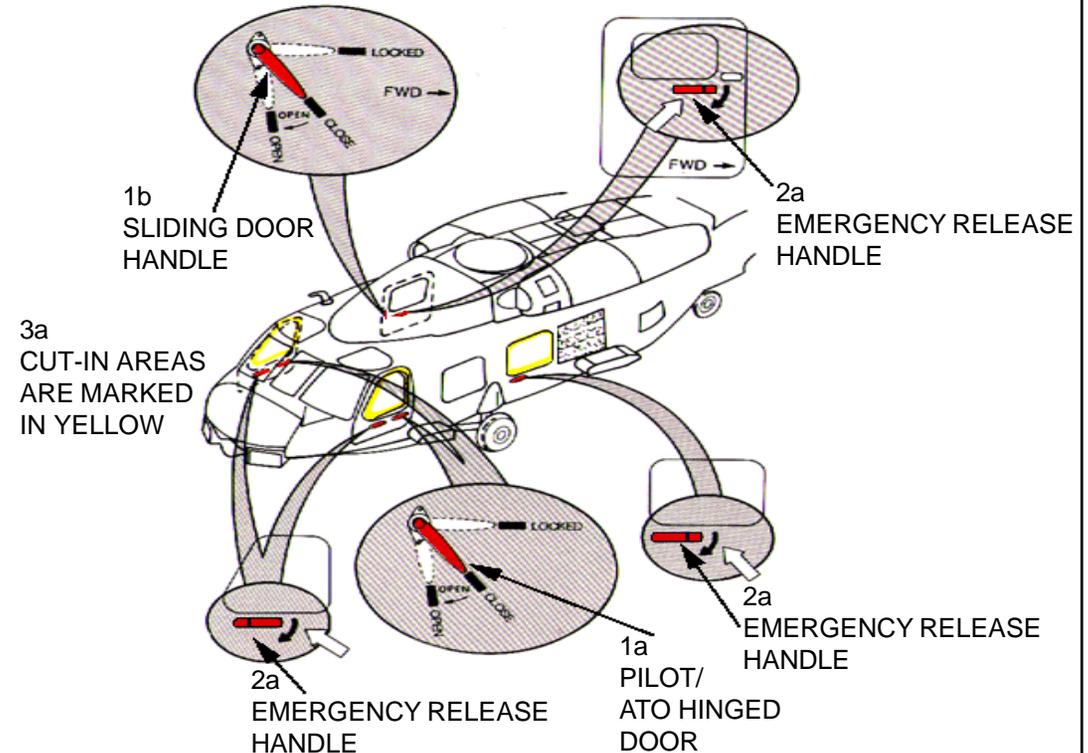
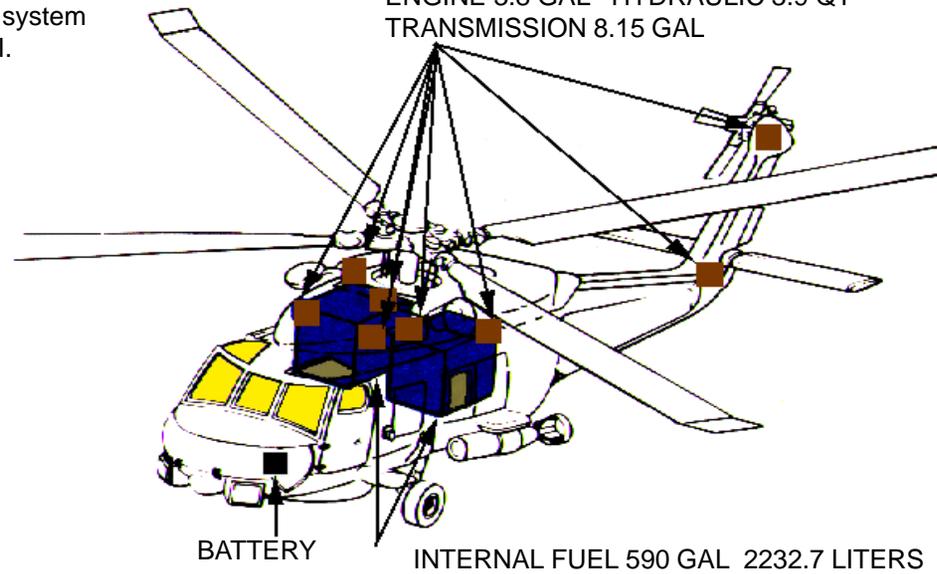
3. CUT-IN/FORCED ENTRY

- a. If main entrances are jammed or inoperable, cut around pilot, ATO, and SO windows with power rescue saw or crash ax.

NOTE:
Pneumatic system
is 3000 PSI.

OIL:
ENGINE 3.8 GAL HYDRAULIC 3.9 QT
TRANSMISSION 8.15 GAL

SH-60B



ENGINE, APU SHUTDOWN AND BATTERY DISCONNECT

1. ENGINE SHUTDOWN

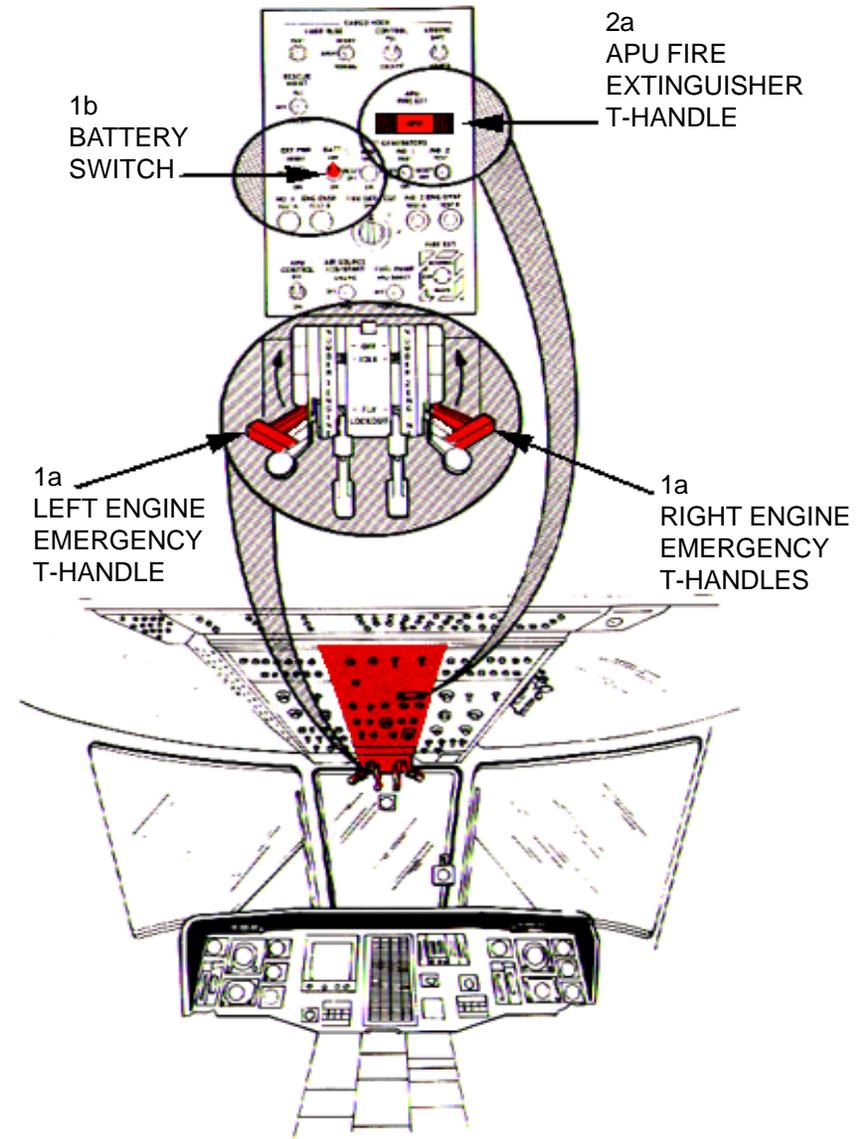
- a. Pull both engine emergency T-handles, located on overhead panel, aft to OFF position.
- b. Place battery switch, located on overhead panel, in OFF position.

2. APU SHUTDOWN

- a. Pull APU fire extinguisher T-handle, located on overhead panel. (Required if APU is operating.)

3. BATTERY DISCONNECT

- a. To further deactivate the electrical system, disconnect battery quick disconnect fitting. Battery is located in ATO seat well.



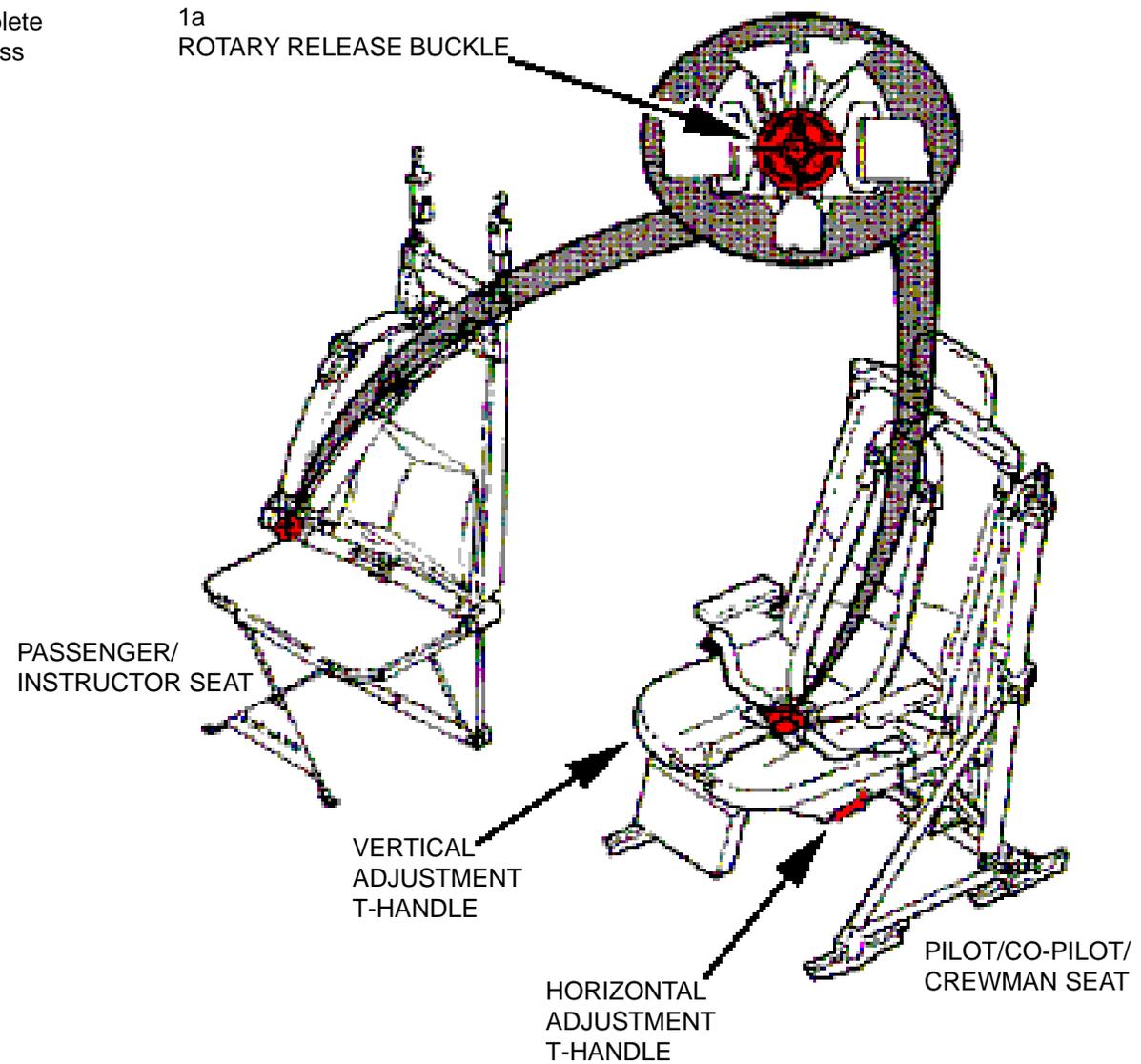
AIRCREW EXTRACTION

1. AIRCREW EXTRACTION

NOTE:

The pilot, co-pilot, crewman, and instructor/passenger are attached to the seats by a complete lap belt and dual torso-restraint shoulder harness attached to a rotary release buckle.

- a. Rotate rotary release buckle in either direction, to release shoulder harnesses and lap belt.



EMERGENCY ESCAPE ROUTES AND CABIN CONFIGURATION

1. EMERGENCY ESCAPE ROUTES

NOTE:

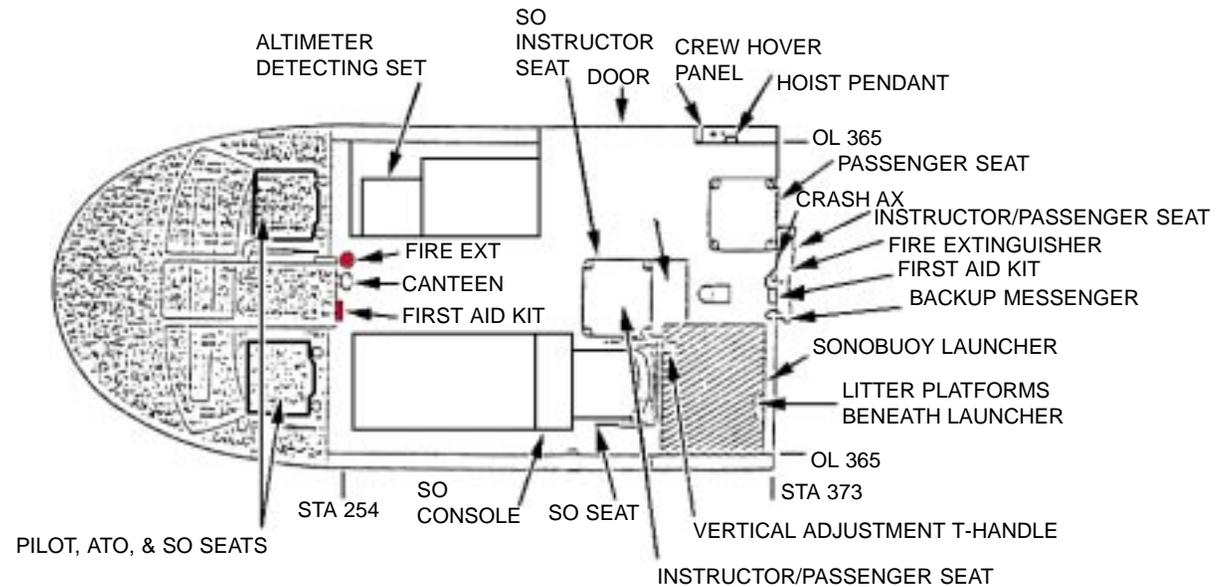
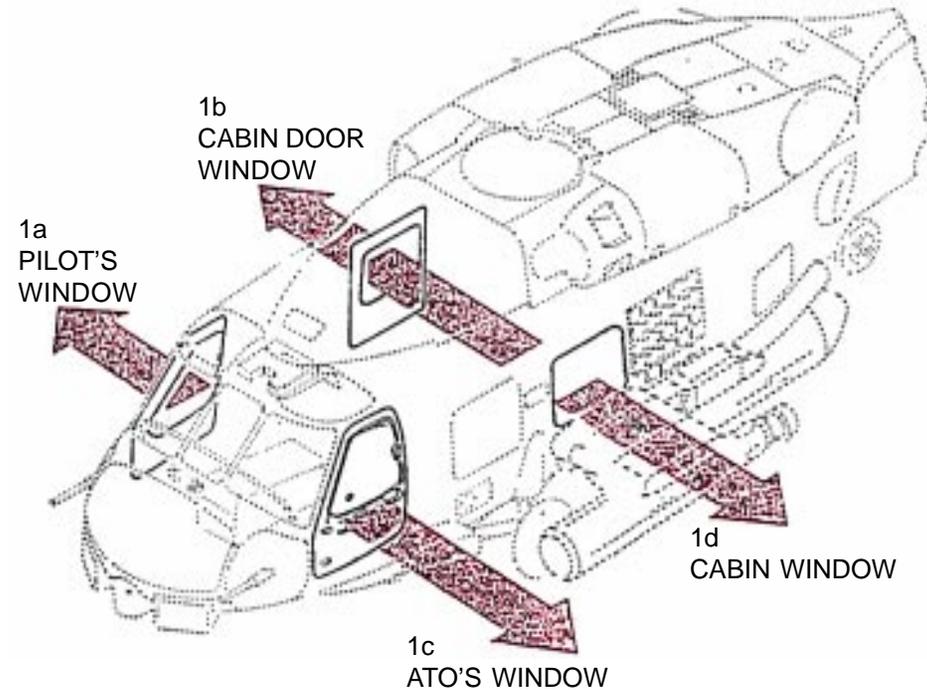
Refer to page SH-60B.4 for door operations.
Additional weapon pylon and external fuel tanks
effective on Buno 162348 and subsequent.

- Use pilot's (right side) jettisonable window.
- Use ATO (left side) jettisonable window.
- Use cabin door (right side) jettisonable window.
- Use cabin jettisonable window (left side) window.

2. CABIN CONFIGURATION

NOTE:

All aircrew seats have a complete lap belt and dual
torso restraint shoulder harness attached to a rotary
release buckle. All troop seats have a lap belt and
shoulder harness attached to a rotary release buckle.



SPECIAL TOOLS/EQUIPMENT
 Power Rescue Saw
 Crash Ax

SUPER FRELON SA 321

AIRCRAFT ENTRY

1. NORMAL ENTRY

- a. Turn door handle to enter flightdeck for both sides of aircraft.
- b. Turn door handle to enter cabin using side access door.

2. EMERGENCY ENTRY

- a. The side access and cargo doors are flight and ground jettisonable doors used as emergency exits. The jettisonable door, located on the left back side of the cargo compartment is only an emergency exit. All port holes are jettisonable.
- b. Flightdeck doors have an external jettison handle.

3. CUT-IN/FORCED ENTRY

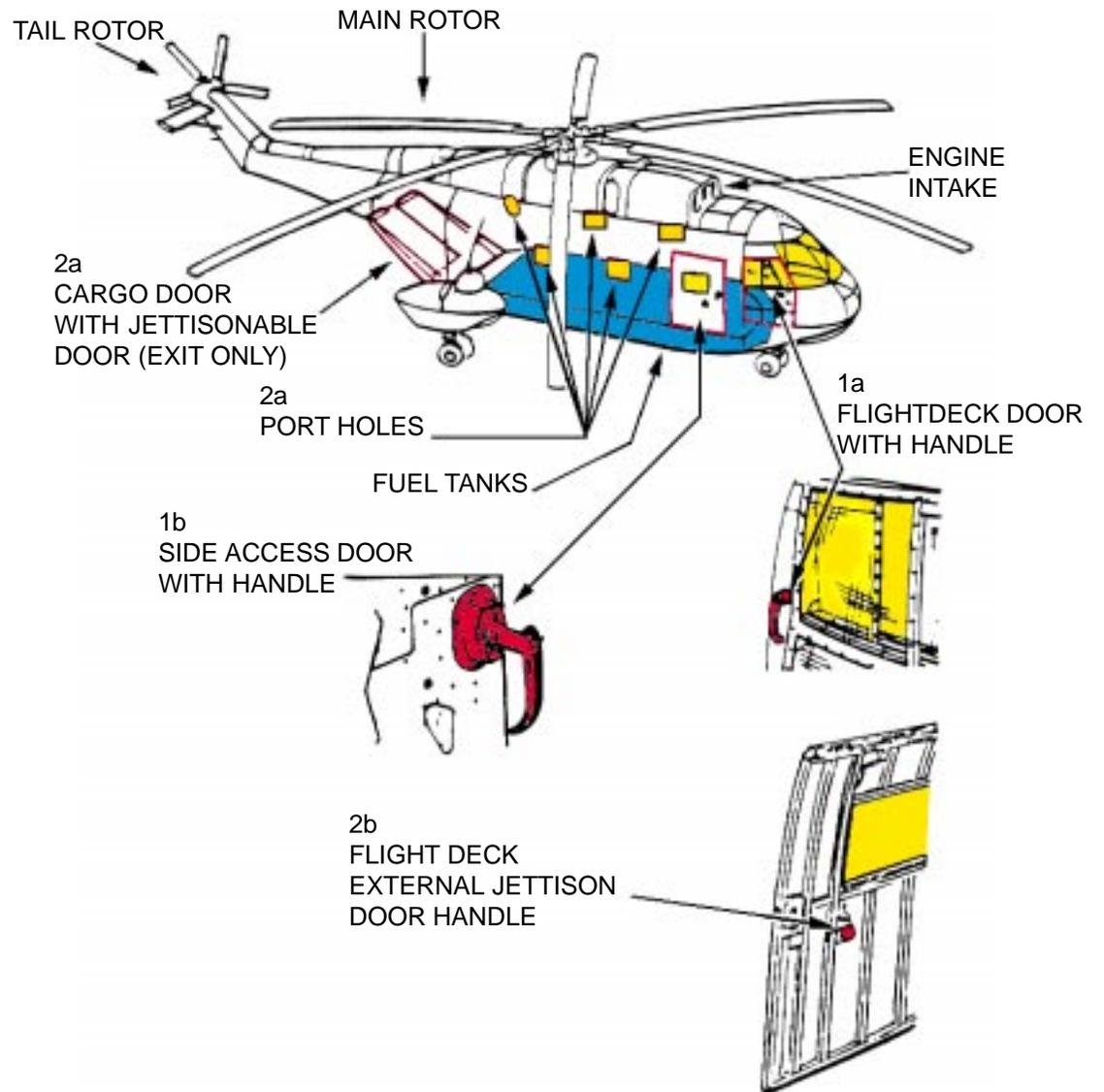
- a. Cut-in access doors, windows, and port holes.

HAZARDS:

- (1) This aircraft carries armament.
- (2) Fuel capacity 1052 gallons, 4448 litres.
- (3) Airframe materials: carbon fiber is negligible.
- (4) No oxygen system.
- (5) Rotating main and tail rotors.
- (6) Hot engine exhaust.

PERSONNEL CAPACITY:

Crew size: 2, Passengers: 37 maximum.



ENGINE SHUTDOWN AND AIRCREW EXTRACTION

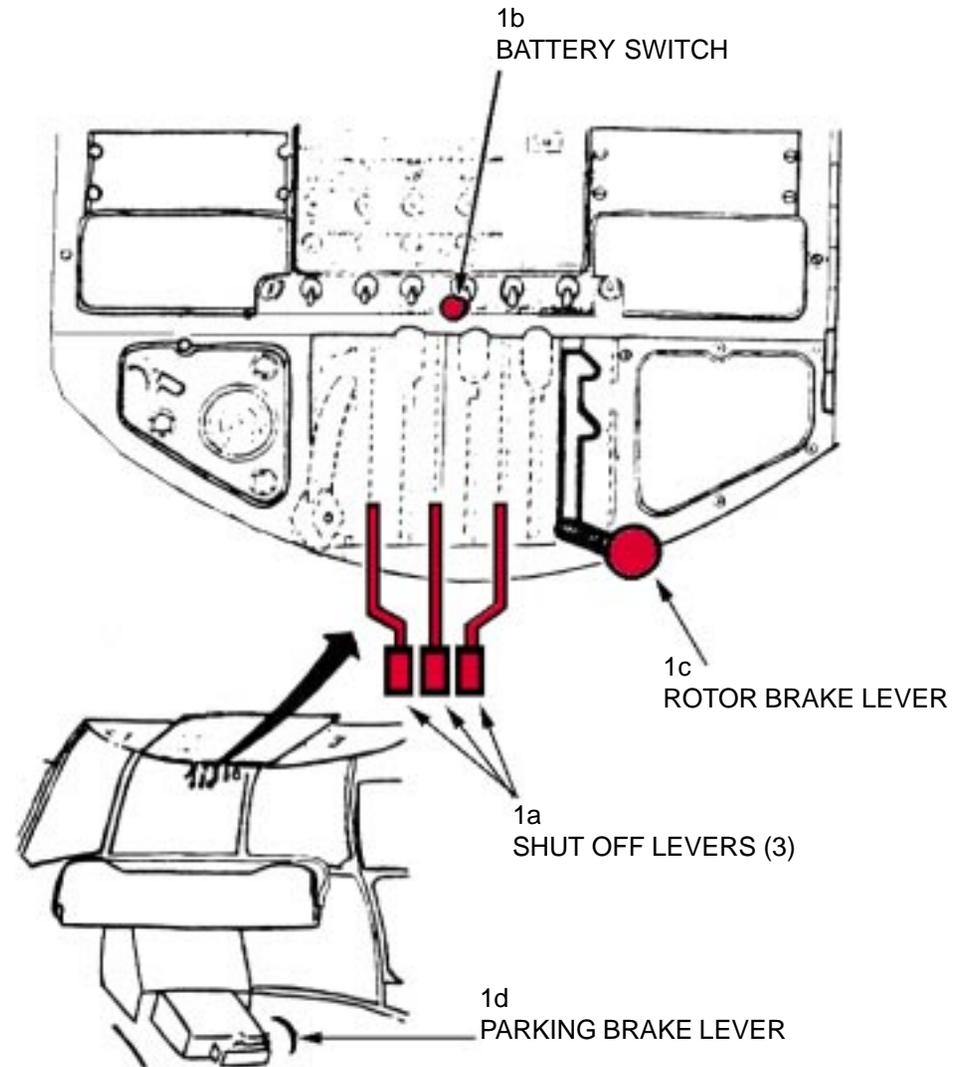
1. ENGINE SHUTDOWN

- a. Pull aft three shutoff levers, located on overhead console, to cut off fuel supply.
- b. Switch battery switch, located on overhead console, to the OFF position.
- c. Pull aft on rotor brake lever, located on overhead console.
- d. Pull upwards and lock parking brake lever. Activate the brake 90 degrees leftward.

2. AIRCREW EXTRACTION

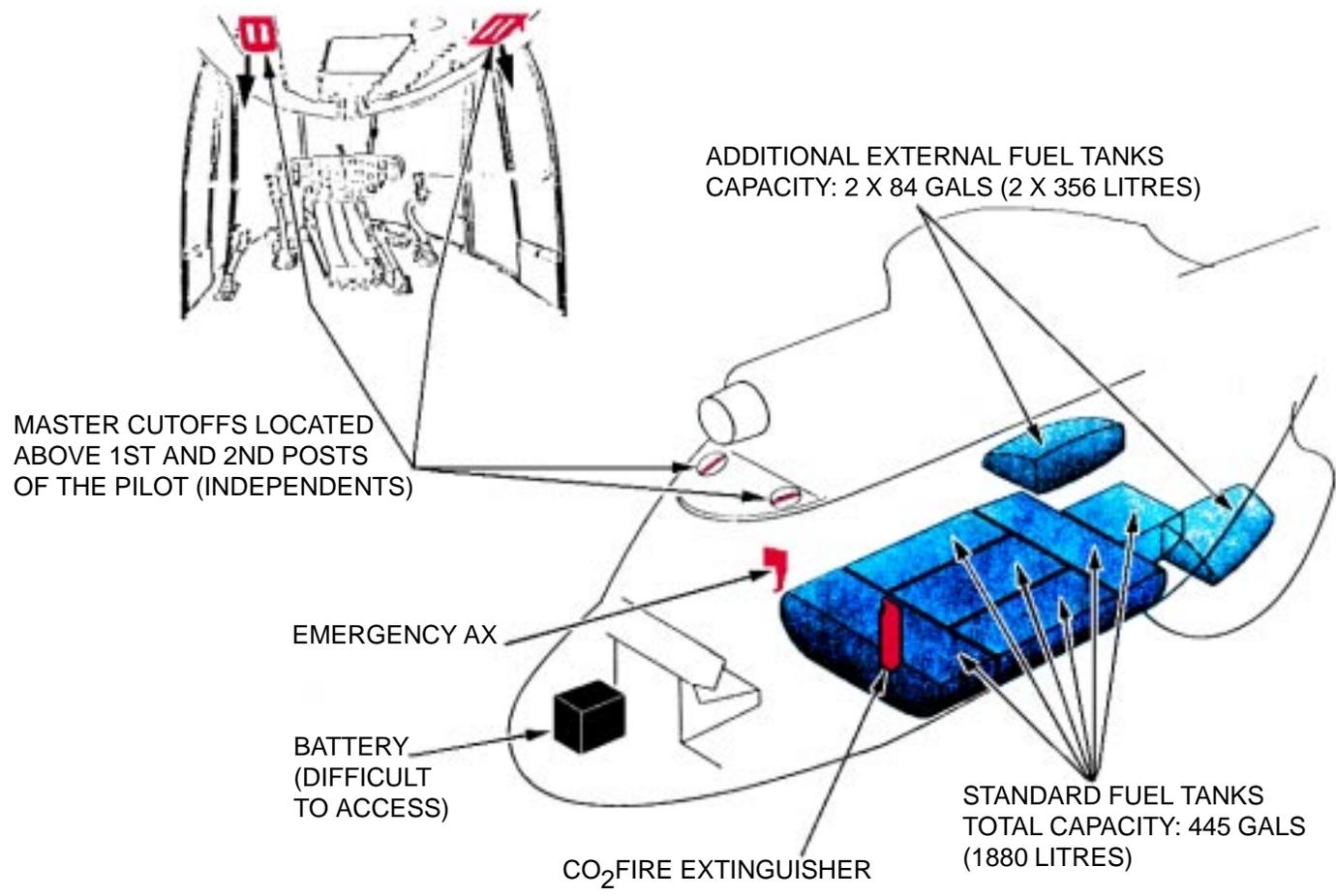
- a. Unlatch lap belt and remove shoulder harness from crewmembers.
- b. Unlatch restraints from passengers as applicable.

SUPER FRELON SA 321



AIRCRAFT HAZARDS

SUPER PUMA/COUGAR/HD-21



SPECIAL TOOLS/EQUIPMENT

Power Rescue Saw
Crash Ax

AIRCRAFT ENTRY

1. NORMAL ENTRY

NOTE:

Symmetrical doors to access and exit of passengers and crew.

a. Enter the flight deck using the external opening handle for the pilot door on right side and the ATO door on the left side of the fuselage.

b. Enter the cabin using the external opening handle for the passenger compartment on the right or left sides of the fuselage.

2. EMERGENCY ENTRY/EXIT

a. Use external door handles on all doors for emergency entry or exit.

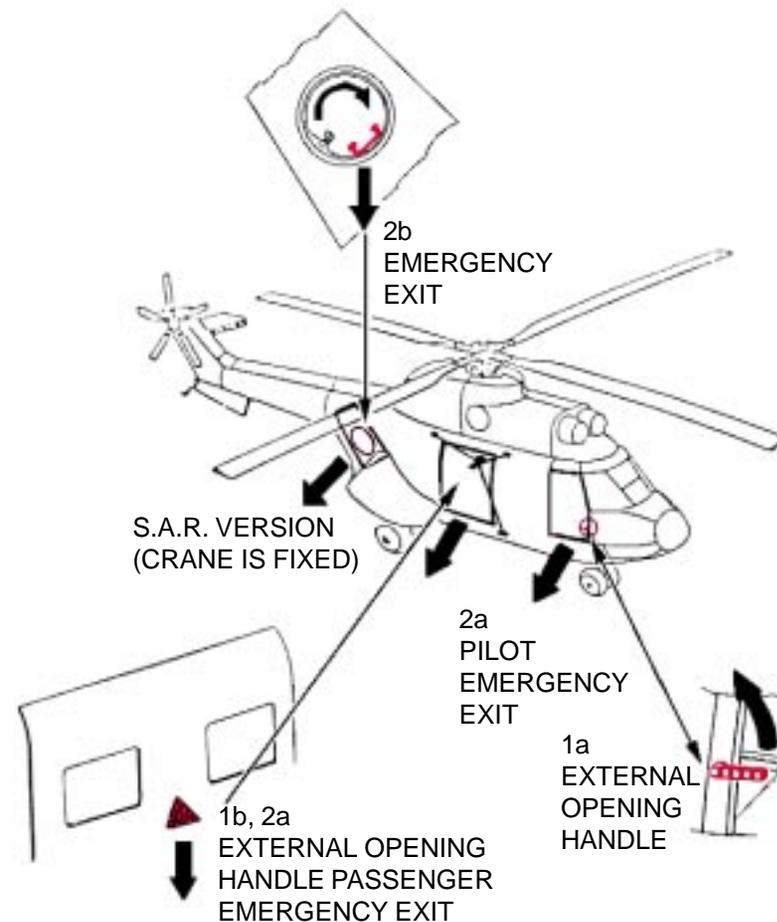
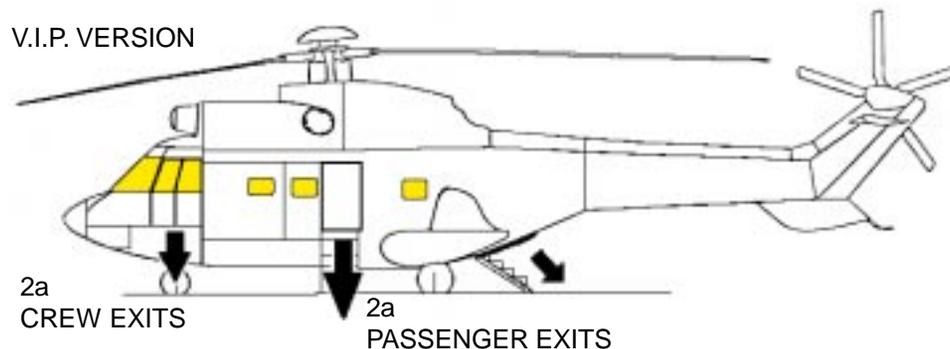
b. For the cargo door emergency exit: use the internal access by pulling the ring and push exit door outward.

3. CUT-IN

a. Cut-in flight deck or cabin doors or windows as required.

SUPER PUMA/COUGAR/HD-21

V.I.P. VERSION



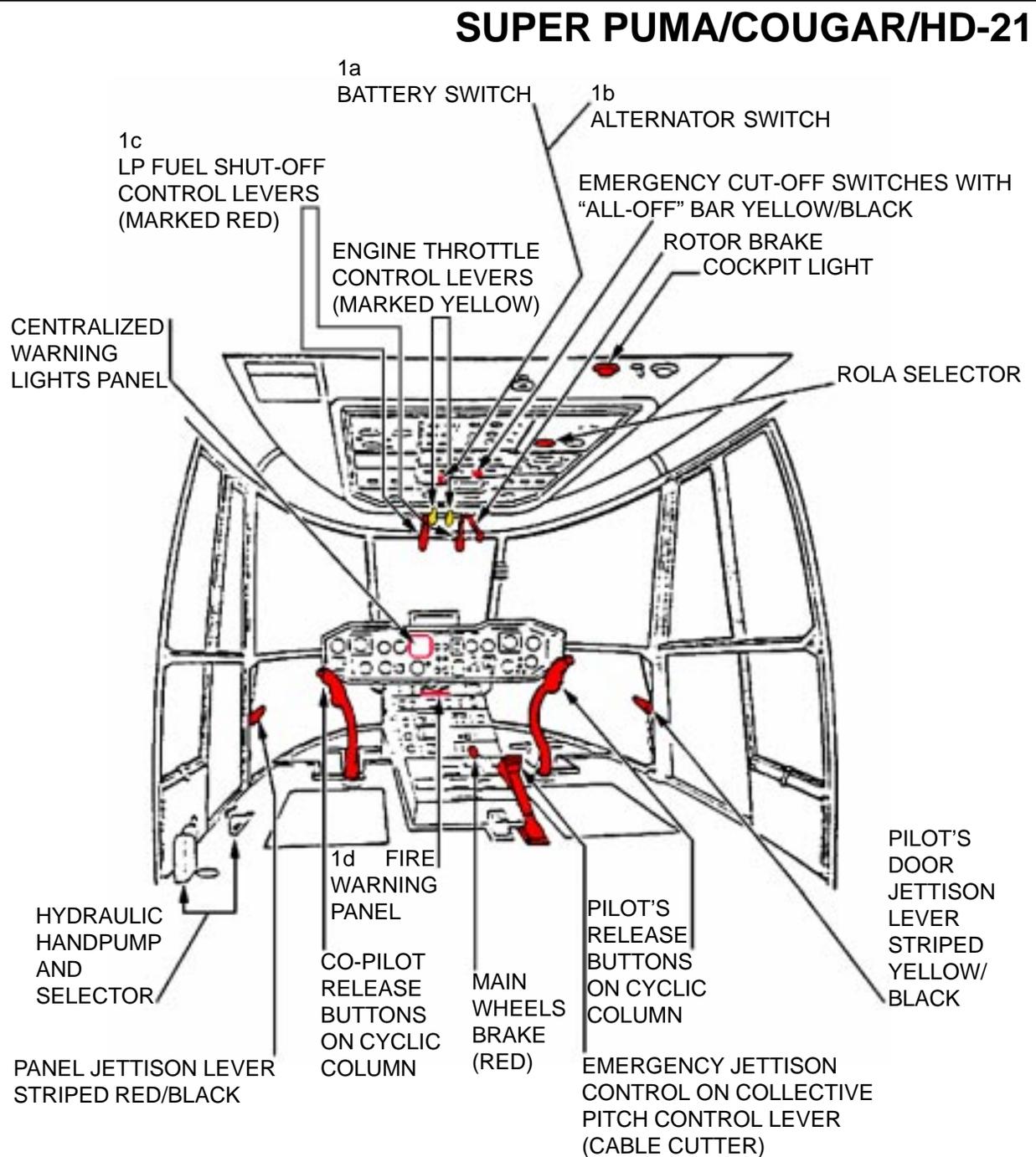
ENGINE SHUTDOWN AND AIRCREW EXTRACTION

1. ENGINE SHUTDOWN

- Pull aft on battery switch, located on the overhead control console, to OFF position.
- Pull aft on alternator switches, located on the overhead control console, to OFF position.
- Pull aft on the fuel shut-off levers, (marked red) located on the overhead control console, to OFF position.
- In case of engine fire, on the fire control warning panel, push buttons for 1 or 2 engines extinguishers. Extinguishers are single shot type.

2. AIRCREW EXTRACTION

- Release crew from lap belt and shoulder harness.
- Release passengers from restraints as required.



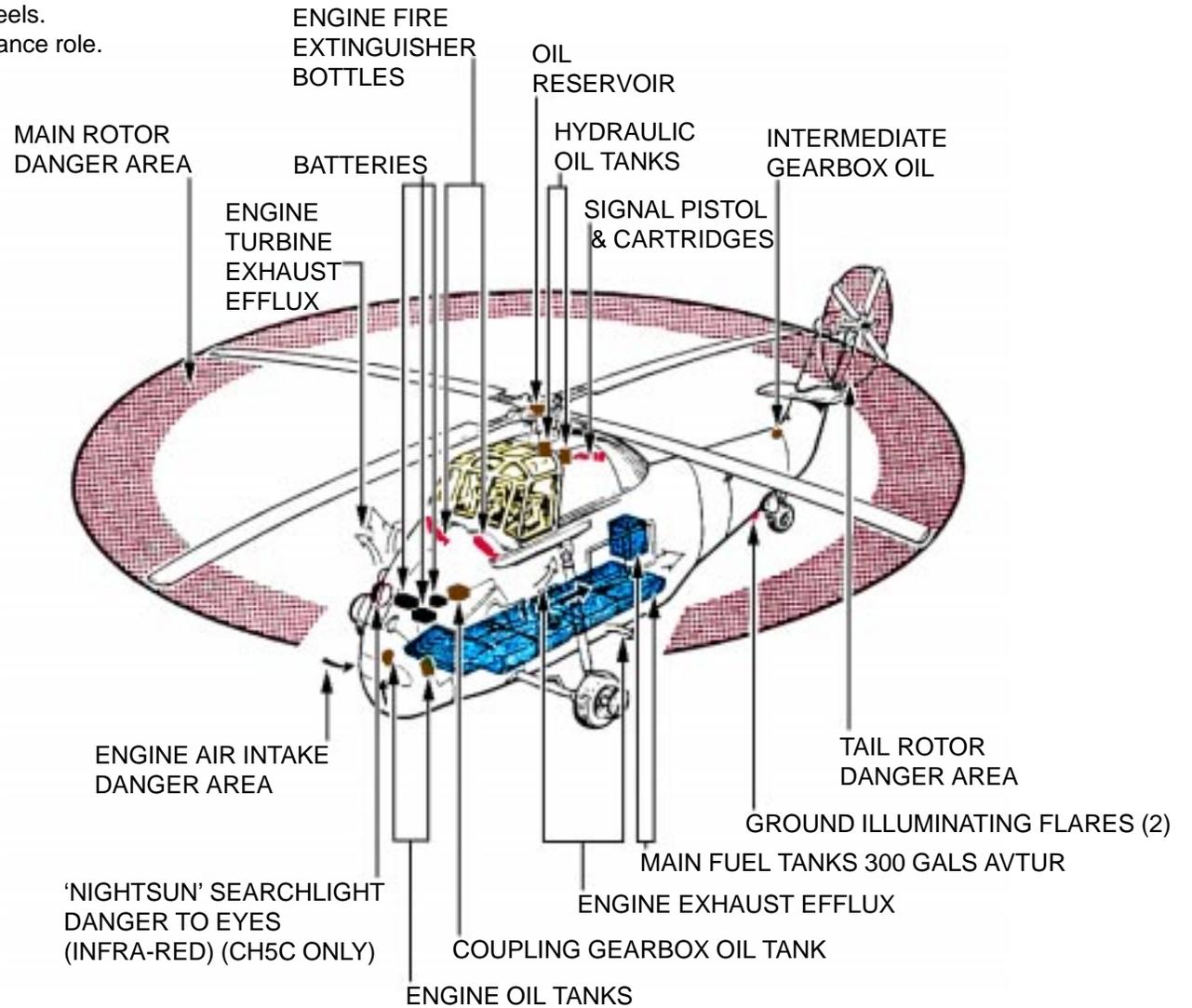
The aircraft information is located in Chapter 13
containing US Army aircraft.

The aircraft information is located in Chapter 23
containing US Navy aircraft.

AIRCRAFT HAZARDS

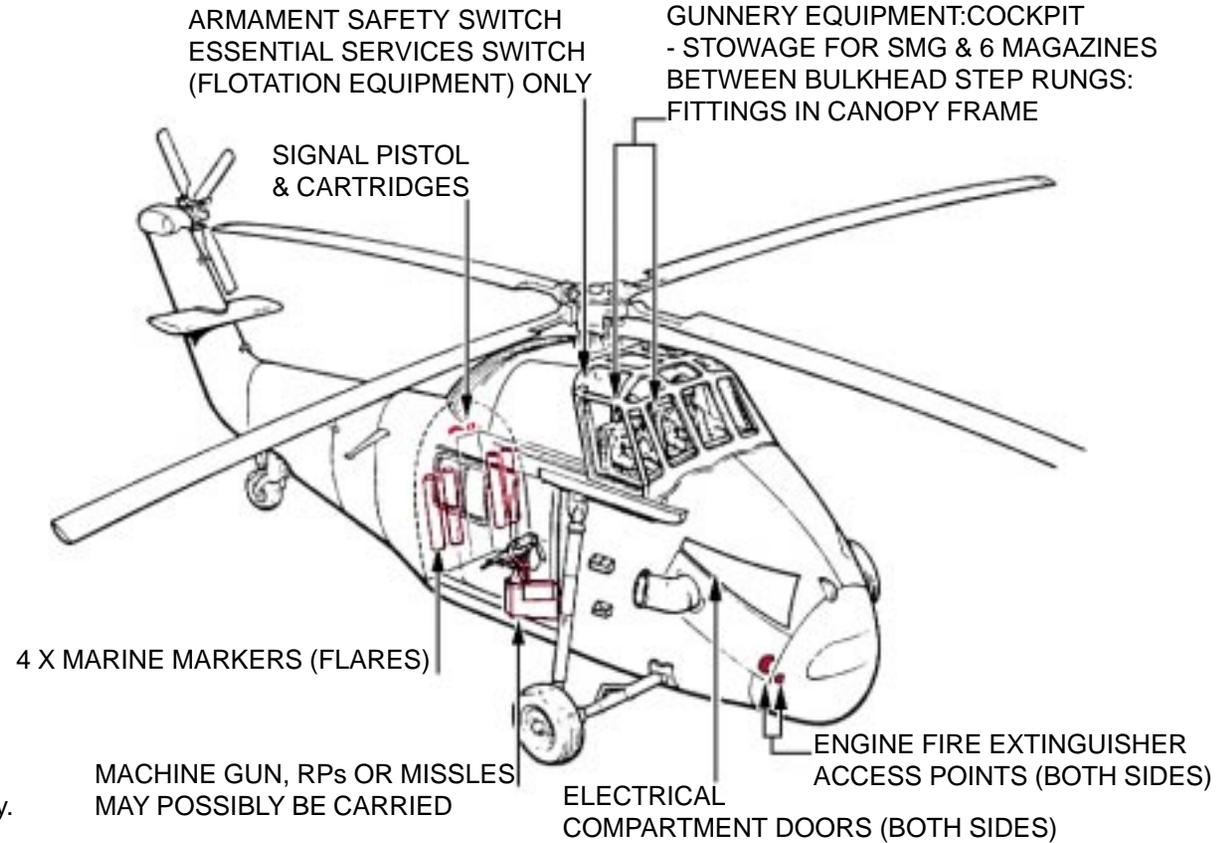
NOTE:

- Batteries are isolated and fire extinguishers fired automatically by inertia crash switches.
- Auxiliary fuel tanks may be carried inside the cabin. Plus external droptanks - HC2 only.
- Flotation equipment may be attached to main wheels.
- Medical oxygen may be carried in cabin in ambulance role.
- Beta lights at exits (radiation hazard if broken).

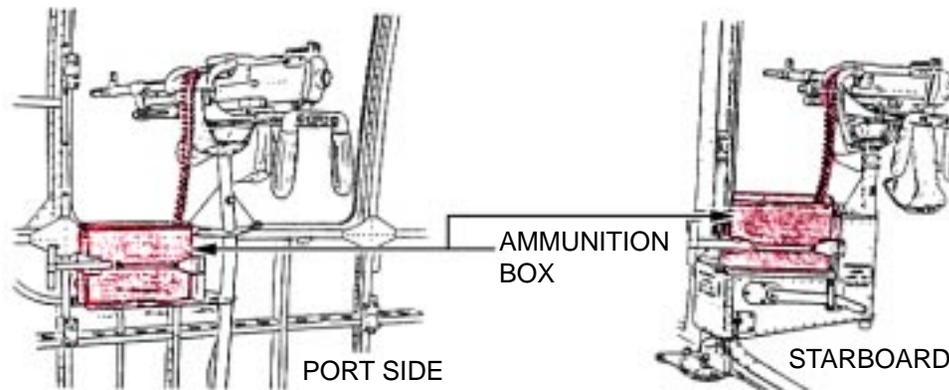


AIRCRAFT ARMAMENT

WESSEX HC2/HC5C



- NOTE:
- Mounting for 7.62mm GPMG in cabin doorway. (Starboard side) and escape hatch (Port side) with ammunition supply boxes.
 - Further boxes may be stowed within cabin, and light weapons or explosives may be carried as cargo.
 - Not controlled by armament safety switch, being manually operated.



SPECIAL TOOLS/EQUIPMENT
 Power Rescue Saw
 Crash Ax

AIRCRAFT ENTRY

1. NORMAL ENTRY

- a. Use main entrance through cabin sliding door on star-board (right) side only.

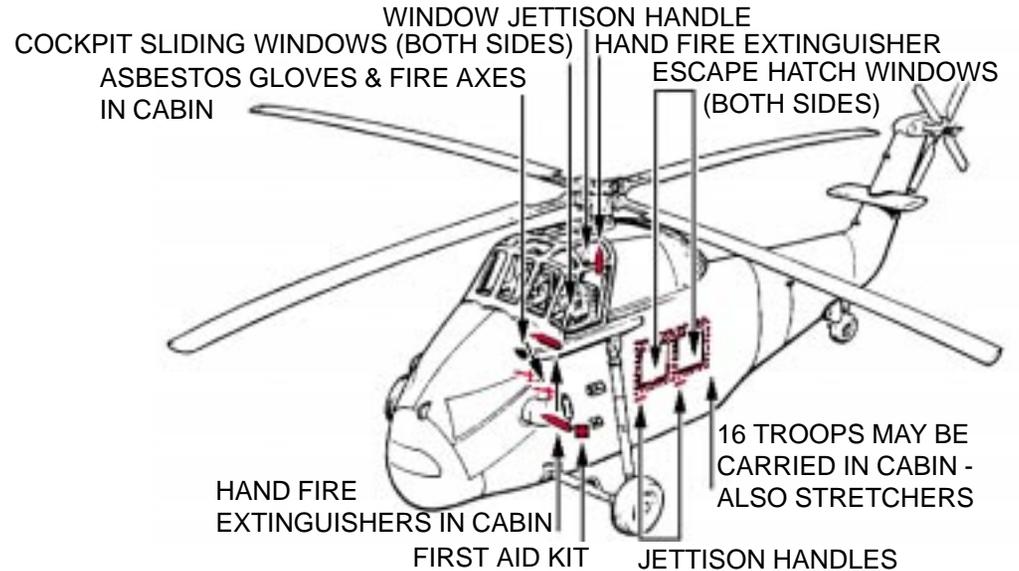
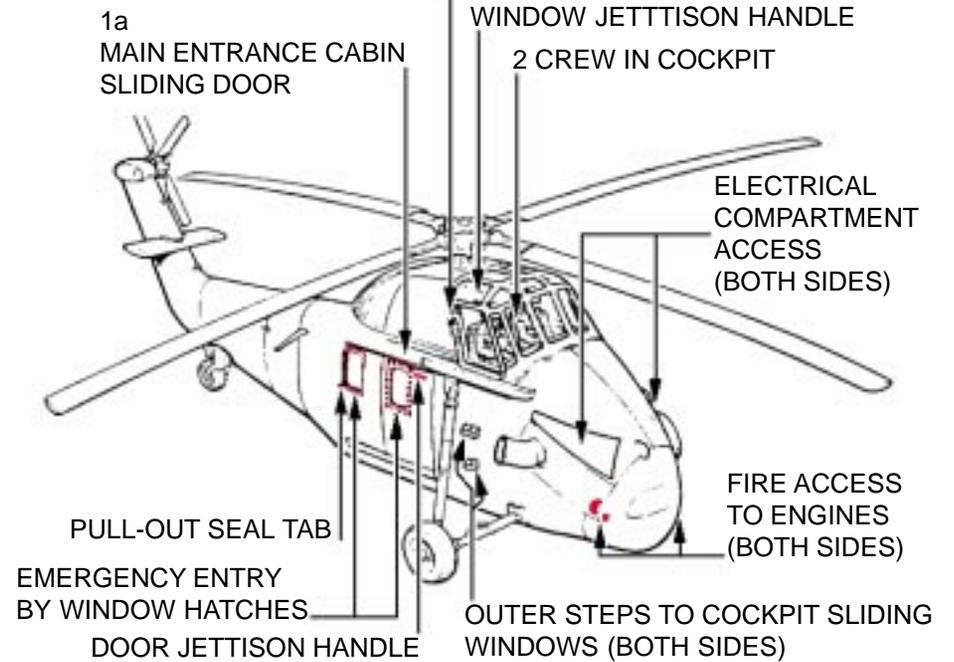
2. EMERGENCY ENTRY

NOTE:
 Emergency controls are painted yellow stripes on black.

- a. Use jettison handles at doors, windows and hatches.
- 3. CUT-IN**
- a. Dotted lines indicate cut-in areas around escape hatches and door.

WESSEX HC2/HC5C

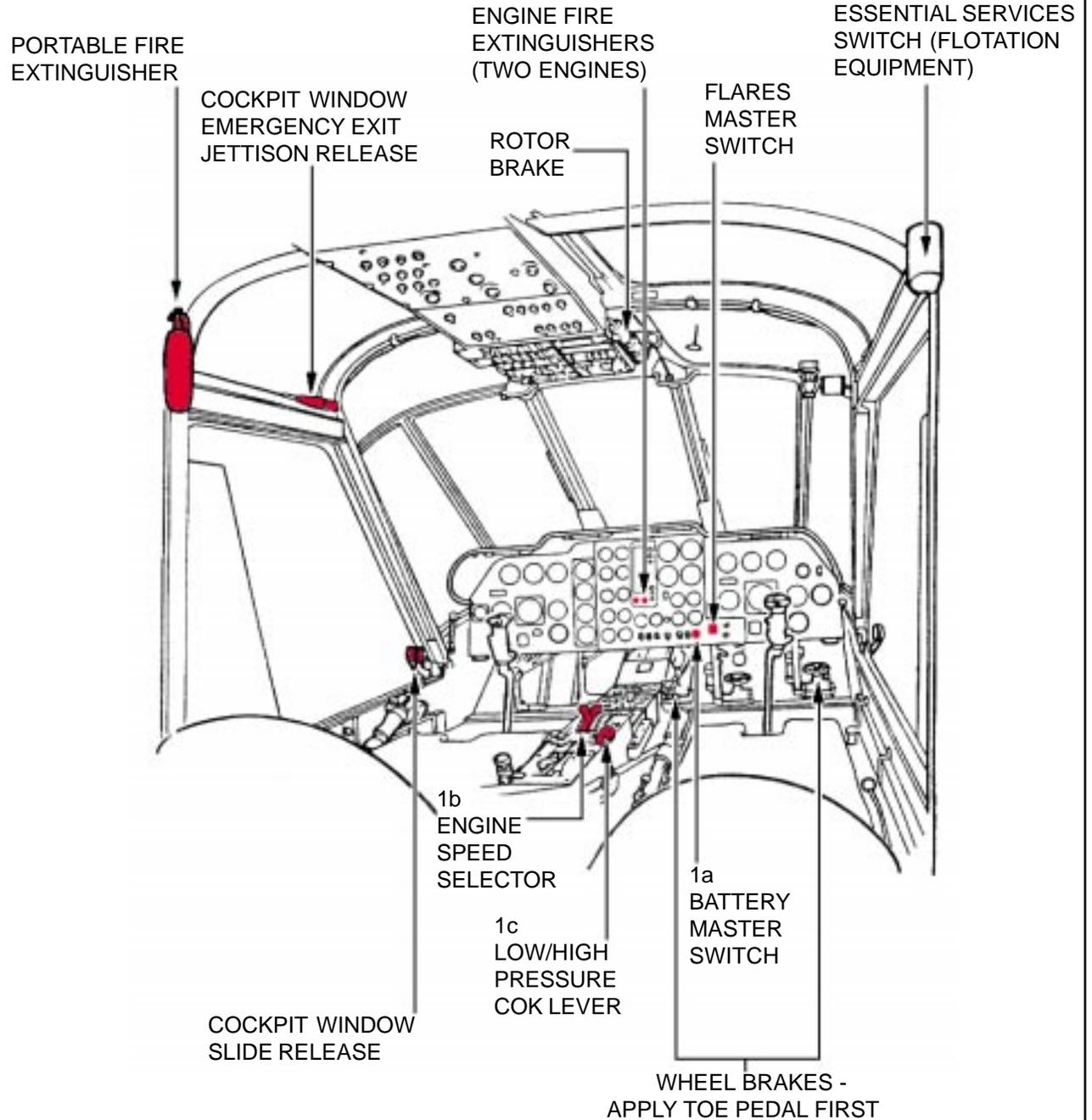
CABIN STEPS TO COCKPIT (INTERNAL)



ENGINE SHUTDOWN

1. ENGINE SHUTDOWN
 - a. Place the battery master switch, located on the center forward instrument panel, to the OFF position.
 - b. Place the engine speed selectors (2), located on the center console, to the IDLE position.
 - c. Place the low/high pressure cock lever, located on the center console, to the CLOSE position.

WESSEX HC2/HC5C

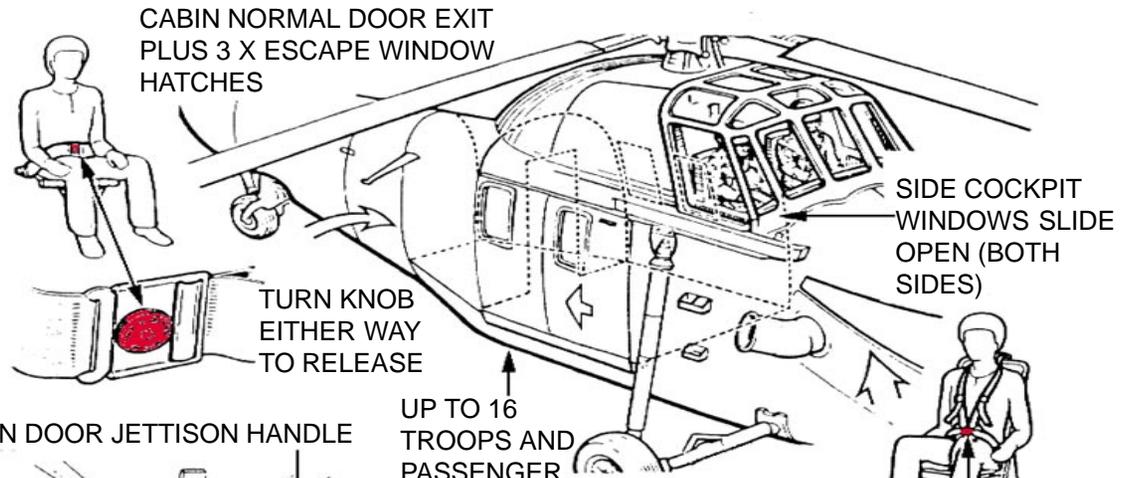


AIRCREW EXTRACTION

WESSEX HC2/HC5C

1. AIRCREW EXTRACTION

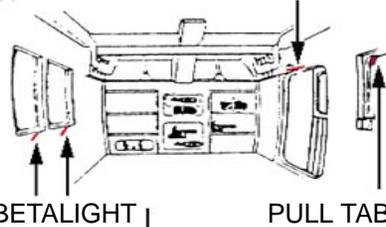
NOTE:
There are differences between the HC2 and HC5C hatches.



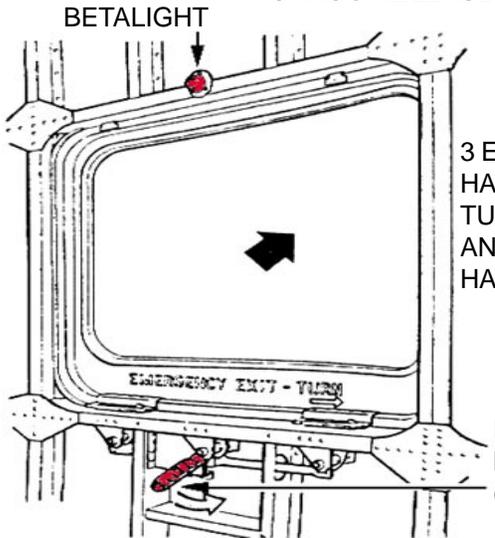
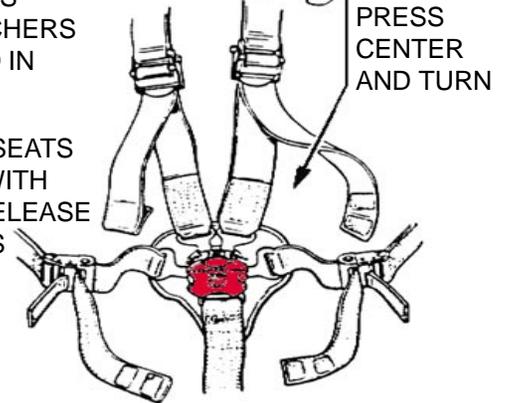
CABIN DOOR JETTISON HANDLE



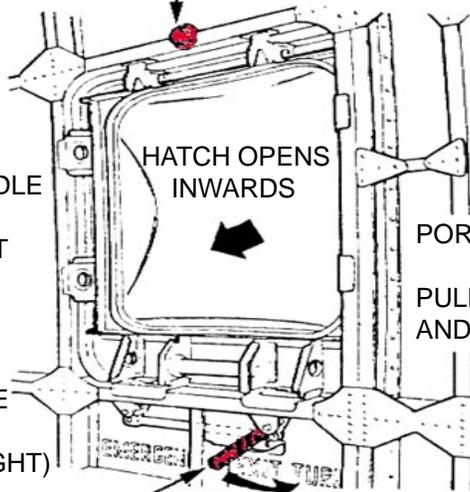
CABIN DOOR JETTISON HANDLE



2 CREW SEATS FITTED WITH QUICK-RELEASE HARNESS



HC5C



HC2

