

## **APPENDIX M: CRASH-RESCUE DIAGRAMS**

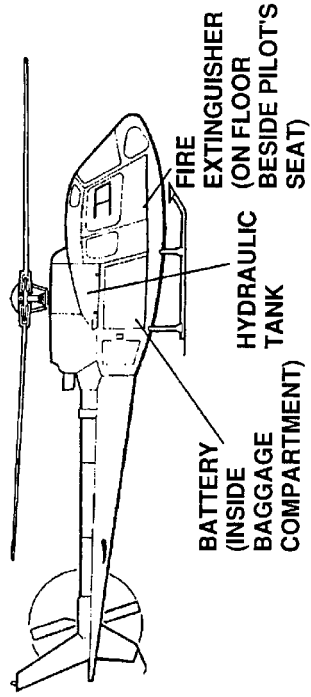
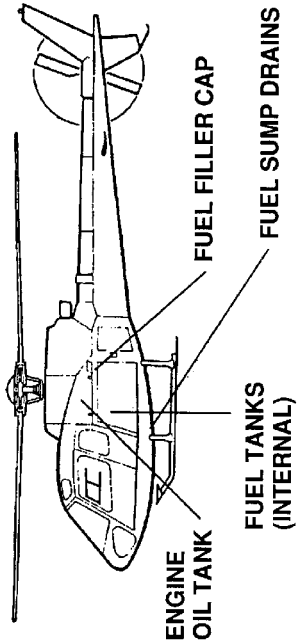
This appendix provides typical diagrams of various makes and models of helicopters. The intent is to provide crash-rescue personnel on helibases or at other locations with general information concerning aircraft layout, emergency ingress and egress, and emergency procedures for fuel and electrical power shutoff.

It is essential that helibase and other personnel with crash-rescue responsibilities, or who may be assigned such responsibilities, receive a briefing by the pilot on the specific characteristics of the helicopter with which they are working.

AEROSPATIALE

# CRASH RESCUE

## AS 350



LOCATION OF SWITCHES AND EQUIPMENT AND EMERGENCY SHUTDOWN PROCEDURES MAY VARY FOR INDIVIDUAL AIRCRAFT. CREWS SHOULD BE BRIEFED PRIOR TO HELICOPTER DISPATCH

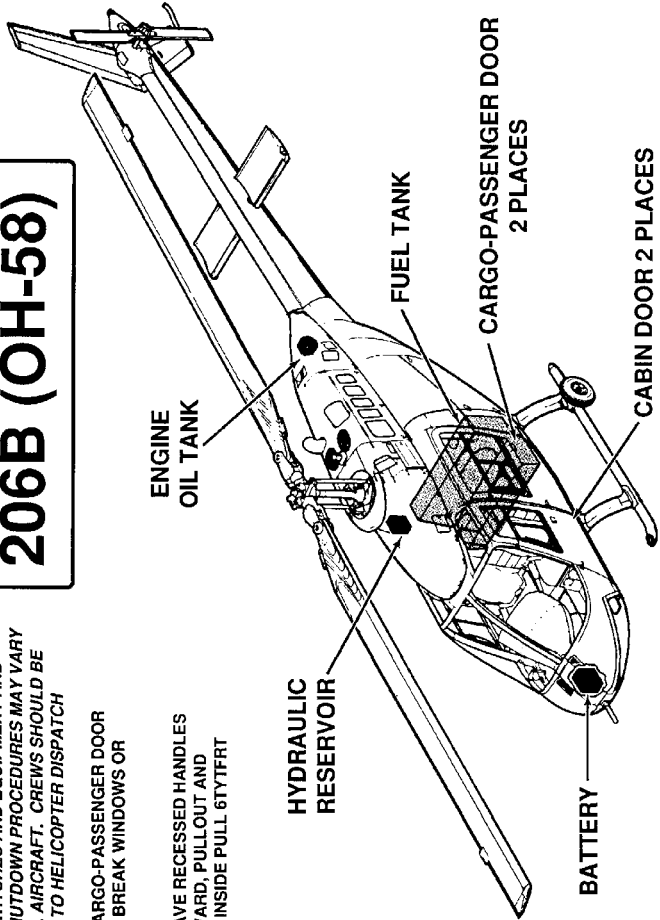
# BELL CRASH RESCUE

## 206B (OH-58)

LOCATION OF SWITCHES AND EQUIPMENT AND EMERGENCY SHUTDOWN PROCEDURES MAY VARY FOR INDIVIDUAL AIRCRAFT. CREWS SHOULD BE BRIEFED PRIOR TO HELICOPTER DISPATCH

\* IF CABIN OR CARGO-PASSENGER DOOR FAILS TO OPEN, BREAK WINDOWS OR WINDSHIELD

\* ALL DOORS HAVE RECESSED HANDLES POINTING FORWARD, PULLOUT AND BACK OUTSIDE. INSIDE PULL 6TYFR1 HANDLES UP.



SEE BACK SIDE FOR EMERGENCY SHUTDOWN PROCEDURE

**BELL**

**ENGINE SHUTDOWN &  
AIRCREW EXTRACTION**

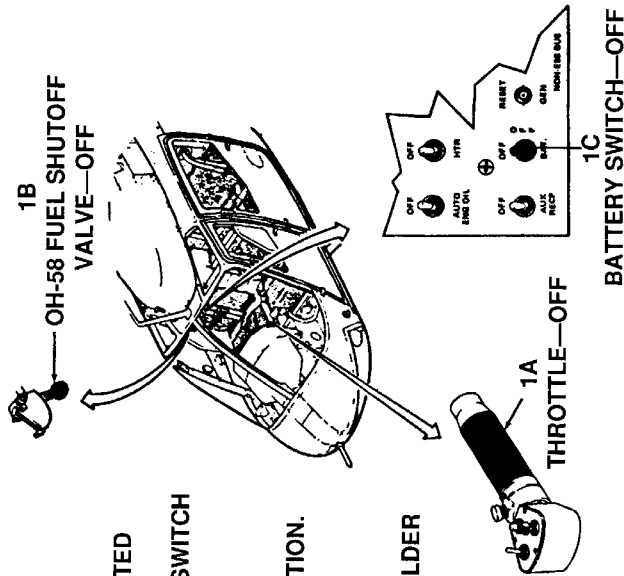
**206B (OH-58)**

**1. ENGINE SHUTDOWN**

- A. ROTATE THROTTLE, LOCATED ON PILOT'S COLLECTIVE PITCH STICK, TO OFF POSITION.
- B. OH-58 PULL FUEL SHUTOFF VALVE, LOCATED OVERHEAD IN CREW COMPARTMENT, AFT TO OFF POSITION. 206B TURN FUEL SWITCH ON PANEL TO OFF POSITION.
- C. PLACE BATTERY SWITCH, LOCATED ON OVERHEAD SWITCH PANEL, TO OFF POSITION.

**2. AIRCREW EXTRACTION**

- A. UNLATCH LAP BELTS AND REMOVE SHOULDER HARNESS FROM CREWMEMBER(S).

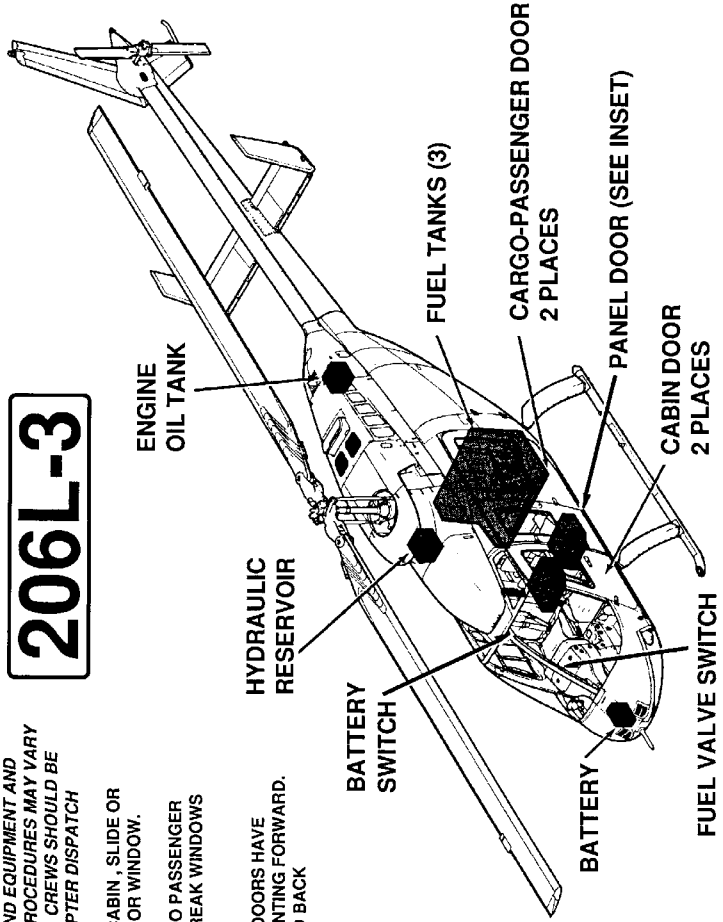


# BELL CRASH RESCUE

## 206L-3

LOCATION OF SWITCHES AND EQUIPMENT AND EMERGENCY SHUTDOWN PROCEDURES MAY VARY FOR INDIVIDUAL AIRCRAFT. CREWS SHOULD BE BRIEFED PRIOR TO HELICOPTER DISPATCH

- TO GAIN ENTRANCE TO CABIN, SLIDE OR BREAK EITHER CABIN DOOR WINDOW.
- IF CABIN DOOR OR CARGO PASSENGER DOOR FAILS TO OPEN, BREAK WINDOWS OR WINDSHIELD
- PILOT AND PASSENGER DOORS HAVE RECESSED HANDLES POINTING FORWARD. OUTSIDE—PULL OUT AND BACK INSIDE—PULL UP



PANEL DOOR HANDLE

OPENING INSTRUCTIONS

1. Open rear door
2. Lift panel door handle
3. Rotate as shown

SEE BACK SIDE FOR EMERGENCY SHUTDOWN PROCEDURES

# BELL CRASH RESCUE PROCEDURES

## Emergency Procedure:

### 206L-3

1. *Wait until all rotors have stopped.*
2. *Shut off fuel switch located in the instrument panel. It's usually covered by a metal red cover.*
3. *Disconnect battery located on nose of helicopter. Remove front panel, and rotate knob counterclockwise, and disconnect cable from battery.*
4. *Evacuate personnel if necessary.*
5. *Make sure ELT is in the on position, and remove from helicopter. ELT is located in the chin bubble area on the pilots side.*
6. *Remove fire extinguisher. It's located between the two front seats at shoulder level.*
7. *Remove first aid kit. It's located between the two aft facing seats in the rear passenger area.*
8. *If possible, secure the area from outside interference.*

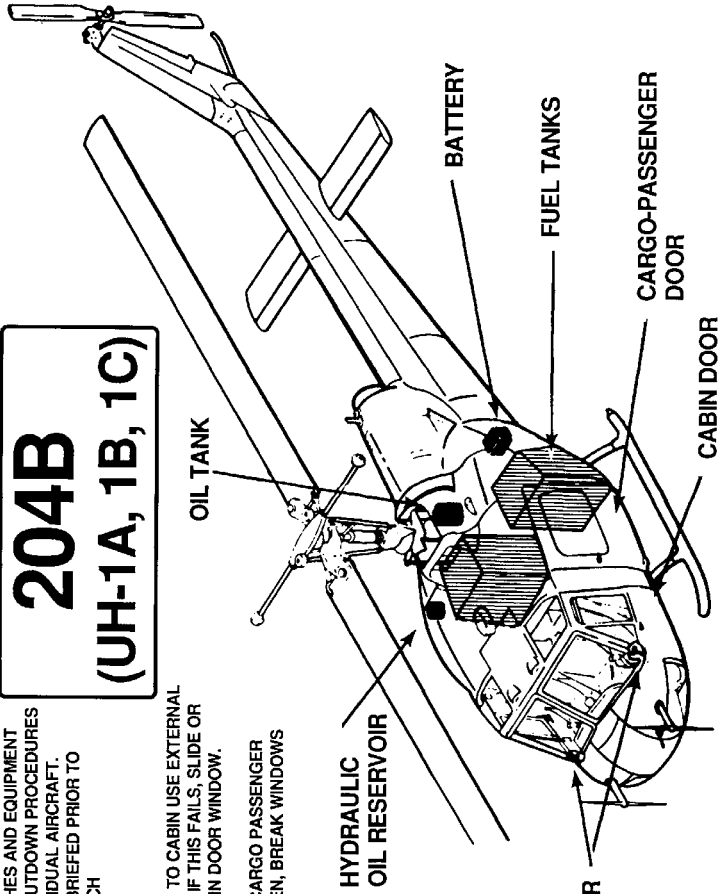
# BELL CRASH RESCUE

## BELL

LOCATION OF SWITCHES AND EQUIPMENT AND EMERGENCY SHUTDOWN PROCEDURES MAY VARY FOR INDIVIDUAL AIRCRAFT. CREWS SHOULD BE BRIEFED PRIOR TO HELICOPTER DISPATCH

### 204B (UH-1A, 1B, 1C)

- TO GAIN ENTRANCE TO CABIN USE EXTERNAL JETTISON HANDLE. IF THIS FAILS, SLIDE OR BREAK EITHER CABIN DOOR WINDOW.
- IF CABIN DOOR OR CARGO PASSENGER DOOR FAILS TO OPEN, BREAK WINDOWS OR WINDSHIELD.



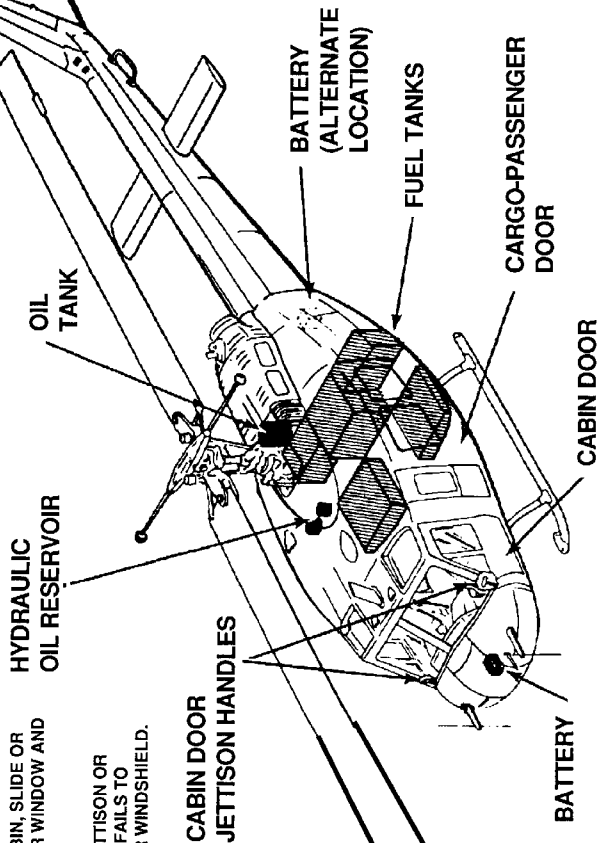
# BELL

# CRASH RESCUE

## 205 (UH-1D,-1H)

LOCATION OF SWITCHES AND EQUIPMENT AND EMERGENCY SHUTDOWN PROCEDURES MAY VARY FOR INDIVIDUAL AIRCRAFT. CREWS SHOULD BE BRIEFED PRIOR TO HELICOPTER DISPATCH

- TO GAIN ENTRANCE TO CABIN, SLIDE OR BREAK EITHER CABIN DOOR WINDOW AND PULL JETTISON HANDLE..
- IF CABIN DOOR FAILS TO JETTISON OR CARGO-PASSENGER DOOR FAILS TO OPEN, BREAK WINDOWS OR WINDSHIELD.



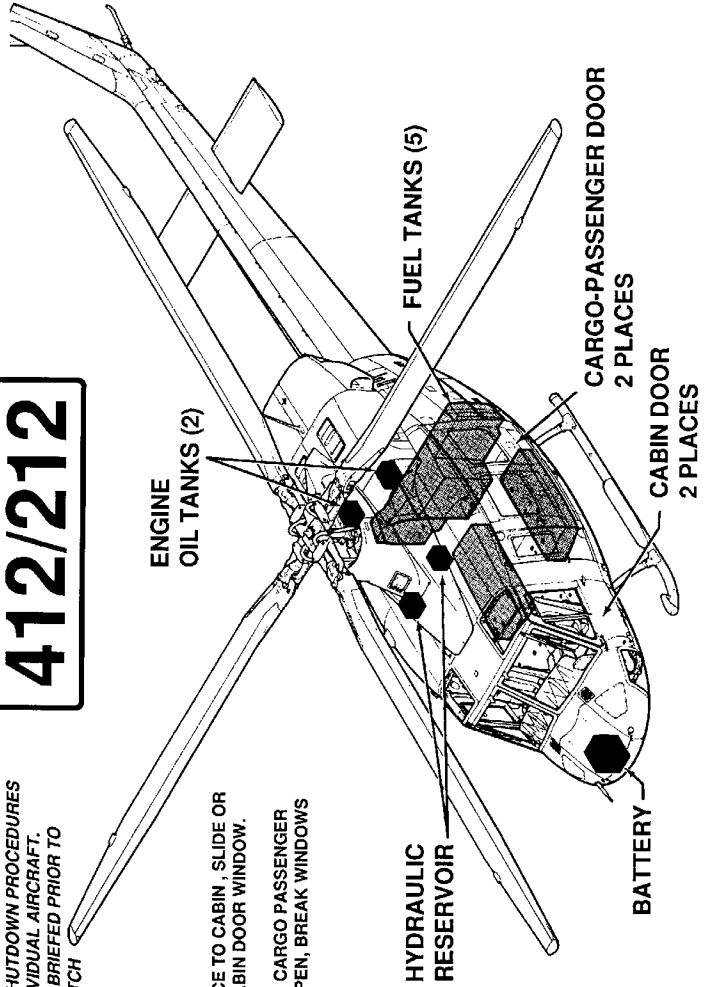


# BELL CRASH RESCUE

412/212

LOCATION OF SWITCHES AND EQUIPMENT AND EMERGENCY SHUTDOWN PROCEDURES MAY VARY FOR INDIVIDUAL AIRCRAFT. CREWS SHOULD BE BRIEFED PRIOR TO HELICOPTER DISPATCH

- TO GAIN ENTRANCE TO CABIN, SLIDE OR BREAK EITHER CABIN DOOR WINDOW.
- IF CABIN DOOR OR CARGO PASSENGER DOOR FAILS TO OPEN, BREAK WINDOWS OR WINDSHIELD..



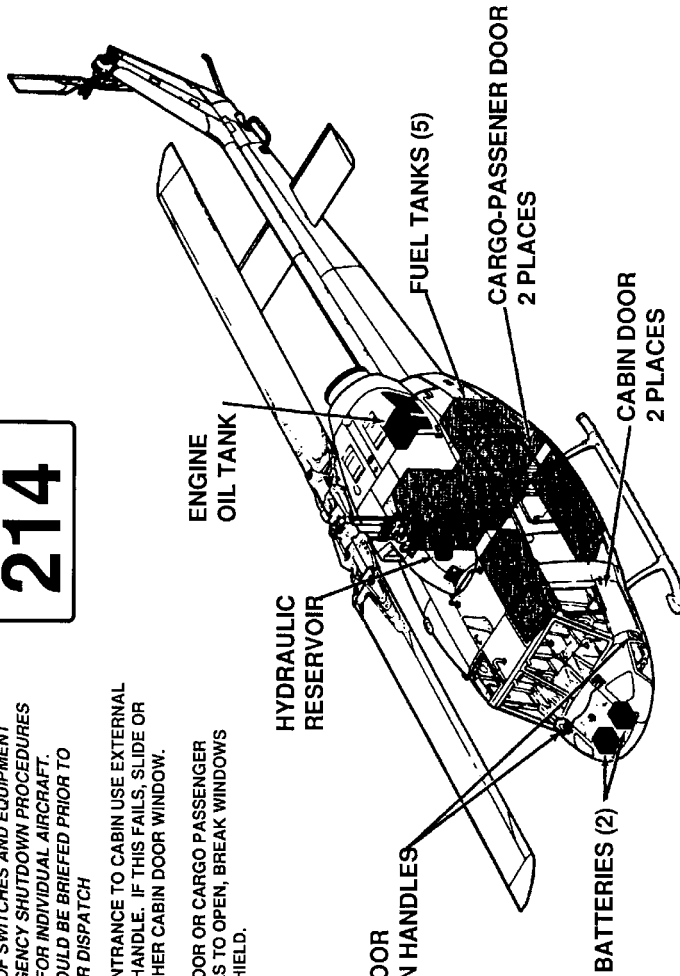
# BELL CRASH RESCUE

**BELL**

**214**

**LOCATION OF SWITCHES AND EQUIPMENT AND EMERGENCY SHUTDOWN PROCEDURES MAY VARY FOR INDIVIDUAL AIRCRAFT. CREWS SHOULD BE BRIEFED PRIOR TO HELICOPTER DISPATCH**

- TO GAIN ENTRANCE TO CABIN USE EXTERNAL JETTISON HANDLE. IF THIS FAILS, SLIDE OR BREAK EITHER CABIN DOOR WINDOW.
- IF CABIN DOOR OR CARGO PASSENGER DOOR FAILS TO OPEN, BREAK WINDOWS OR WINDSHIELD.



# BELL CRASH RESCUE

## BELL

222

LOCATION OF SWITCHES AND EQUIPMENT AND EMERGENCY SHUTDOWN PROCEDURES MAY VARY FOR INDIVIDUAL AIRCRAFT. CREWS SHOULD BE BRIEFED PRIOR TO HELICOPTER DISPATCH

- IF CABIN OR CARGO-PASSENGER DOOR FAILS TO OPEN, BREAK WINDOWS OR WINDSHIELD

ENGINE OIL TANKS (2)

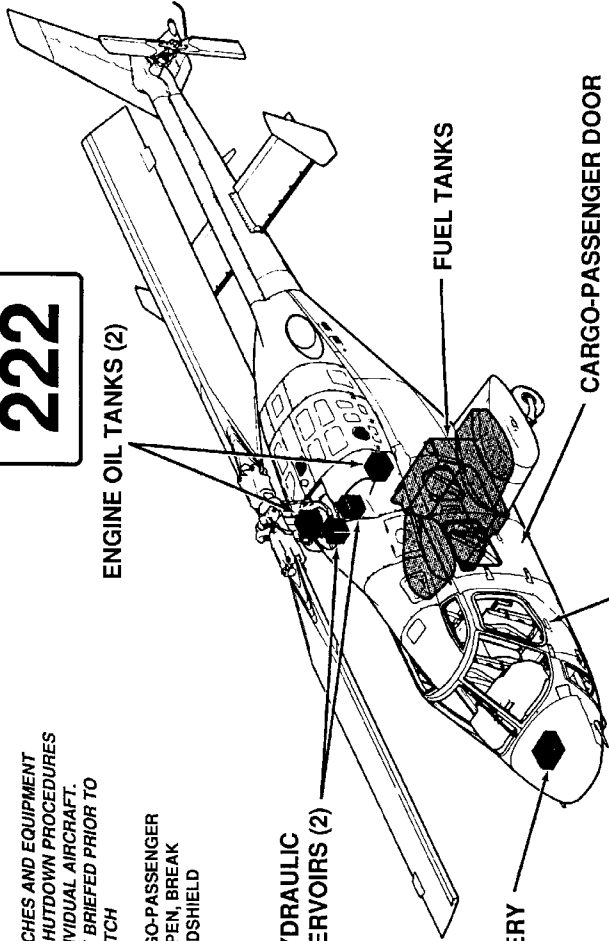
HYDRAULIC RESERVOIRS (2)

FUEL TANKS

CARGO-PASSENGER DOOR  
2 PLACES

CABIN DOOR  
2 PLACES

BATTERY



**BOEING  
VERTOL**

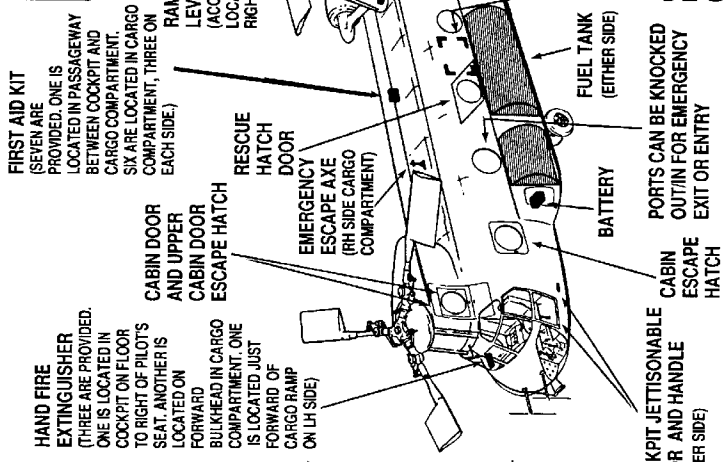
# CRASH RESCUE

**LOCATION OF SWITCHES AND EQUIPMENT AND EMERGENCY SHUTDOWN PROCEDURES MAY VARY FOR INDIVIDUAL AIRCRAFT. CREWS SHOULD BE BRIEFED PRIOR TO HELICOPTER DISPATCH**

- EMERGENCY ENTRANCE TO COCKPIT IS GAINED THROUGH JETTISON DOORS BY ACTUATING HANDLE LABELED **DOOR JETTISON PUSH TRIGGER**, TURN HANDLE. IF DOOR DOES NOT FALL AWAY, PULL AWAY.
- EMERGENCY ENTRANCE TO CARGO COMPARTMENT IS GAINED THROUGH CABIN DOOR OR UPPER DOOR ESCAPE HATCH, CABIN ESCAPE HATCH, RAMP ESCAPE HATCH, AND CUTOUT PANELS. ALL ESCAPE HATCHES CAN BE OPENED BY PULLING THE YELLOW TAB OUT AND PUSHING THE PANEL IN.
- AN ACCESS DOOR TO THE CARGO RAMP CONTROL LEVER IS LOCATED ON RIGHT SIDE OF AIRCRAFT BELOW THE RIGHT ENGINE. RAMP MAY BE LOWERED, PROVIDING EMERGENCY ENTRANCE, BY PLACING THE CONTROL LEVER IN THE DOWN POSITION.
- A RESCUE HATCH LOCATED IN FLOOR OF CARGO COMPARTMENT MAY BE USED FOR EMERGENCY EXIT IF LOWER RESCUE DOOR HAS BEEN PREVIOUSLY OPENED.

**TYPE: TWIN TURBINE ENGINE TANDEM ROTOR  
CREW: NORMAL CONDITIONS 2  
PASSENGERS: 33 FULLY EQUIPPED GROUND TROOP  
LITTERS: 4 (4 MEDICAL ATTENDANT'S SEATS)**

## CH-47



**SEE BACK SIDE FOR EMERGENCY SHUTDOWN PROCEDURES**

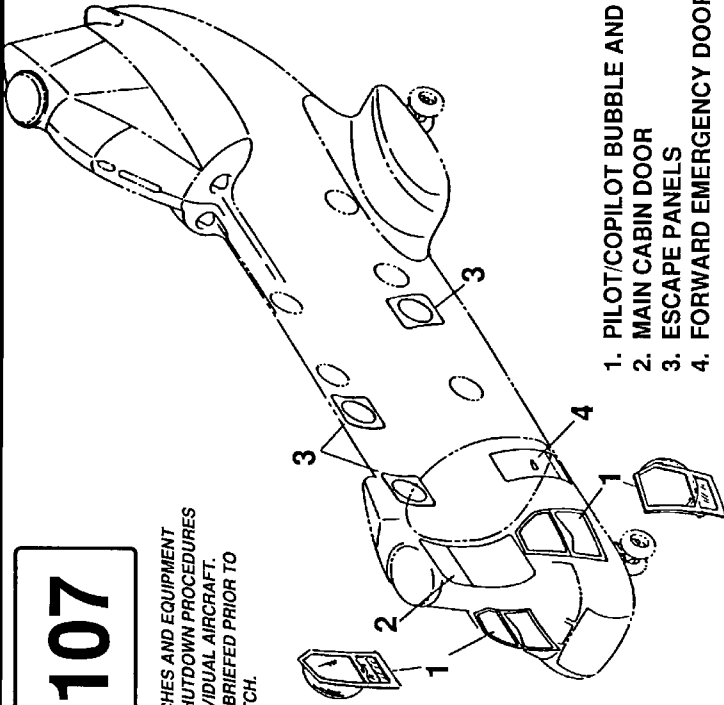


**BOEING  
VERTOL**

# CRASH RESCUE

## BV-107

LOCATION OF SWITCHES AND EQUIPMENT  
AND EMERGENCY SHUTDOWN PROCEDURES  
MAY VARY FOR INDIVIDUAL AIRCRAFT.  
CREWS SHOULD BE BRIEFED PRIOR TO  
HELICOPTER DISPATCH.



1. PILOT/COPILOT BUBBLE AND JETTISON WINDOWS
2. MAIN CABIN DOOR
3. ESCAPE PANELS
4. FORWARD EMERGENCY DOOR

**SEE BACK SIDE FOR EMERGENCY SHUTDOWN PROCEDURES**

**BOEING  
VERTOL**

# **EMERGENCY SHUTDOWN PROCEDURE**

**BV-107**

**THE FOLLOWING PROCEDURES WILL BE FOLLOWED IN THE EVENT OF FIRE OR OTHER EMERGENCY DURING HOT REFUELING:**

- 1. FUEL VALVES — CLOSED**
- 2. BOOST PUMPS — OFF**
- 3. ENGINE CONDITION LEVERS (ECLs) — STOP**
- 4. PILOT & COPILOT EMERGENCY DOORS/BUBBLES — JETTISON**

*(CONSIDER LOCATION OF FIRE DUE TO LOCATION OF REFUELING POINT BEFORE JETTISONING COCKPIT DOORS.)*

- 5. AIRCRAFT — EVACUATE**
- 6. FIRE EXTINGUISHER — DIRECT ON FIRE**

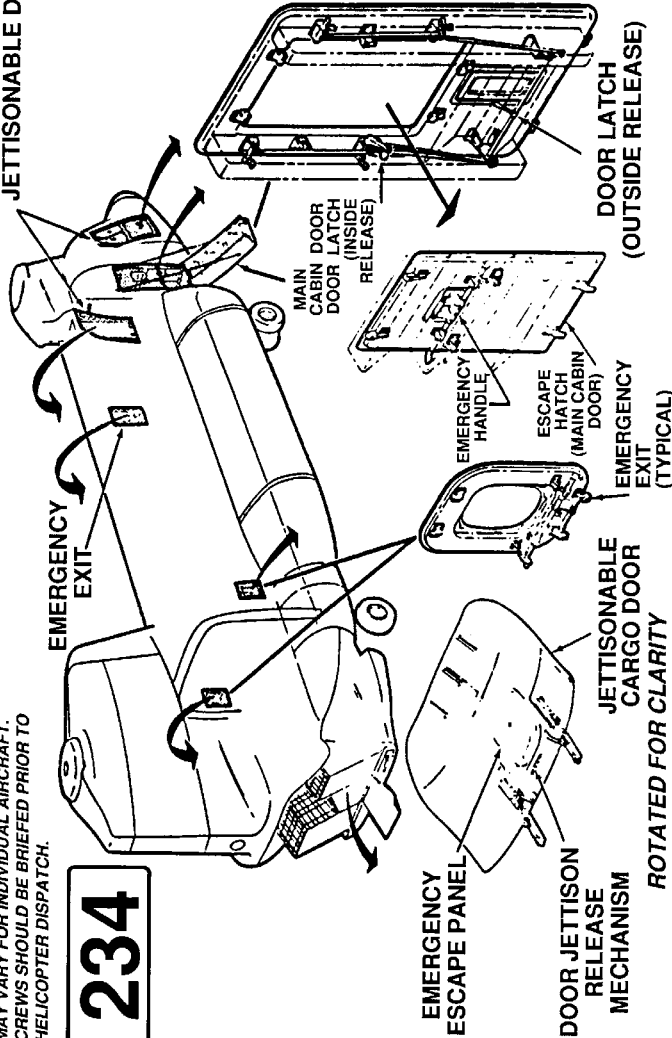
# BOEING VERTOL

# CRASH RESCUE

LOCATION OF SWITCHES AND EQUIPMENT  
AND EMERGENCY SHUTDOWN PROCEDURES  
MAY VARY FOR INDIVIDUAL AIRCRAFT.  
CREWS SHOULD BE BRIEFED PRIOR TO  
HELICOPTER DISPATCH.

**234**

PILOT AND COPILOTS  
JETTISONABLE DOORS



SEE BACK SIDE FOR EMERGENCY SHUTDOWN PROCEDURES



**BOEING  
VERTOL**

# **EMERGENCY SHUTDOWN PROCEDURE**

**234**

**THE FOLLOWING PROCEDURES WILL BE FOLLOWED IN THE EVENT OF FIRE OR OTHER EMERGENCY DURING HOT REFUELING:**

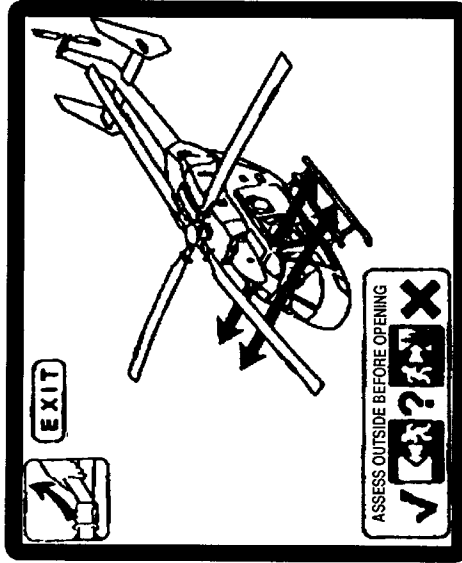
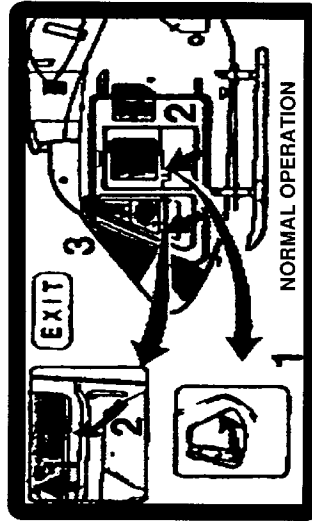
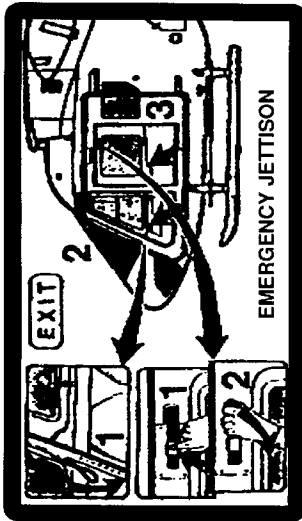
- 1. ENGINE CONDITION LEVERS (ECLs) — STOP**
- 2. T-HANDLES — PULL**
- 3. BOOST PUMPS — OFF**
- 4. PILOT & COPILOT EMERGENCY DOORS/BUBBLES  
— JETTISON**  
*(CONSIDER LOCATION OF FIRE DUE TO LOCATION OF REFUELING POINT BEFORE JETTISONING COCKPIT DOORS.)*
- 5. AIRCRAFT — EVACUATE**
- 6. FIRE EXTINGUISHER — DIRECT ON FIRE**

# CRASH RESCUE

## EUROHELICOPTER

### BK-117

LOCATION OF SWITCHES AND EQUIPMENT AND EMERGENCY SHUTDOWN PROCEDURES MAY VARY FOR INDIVIDUAL AIRCRAFT. CREWS SHOULD BE BRIEFED PRIOR TO HELICOPTER DISPATCH.



SEE BACK SIDE FOR EMERGENCY SHUTDOWN PROCEDURES

**EUROCOPTER**

**EMERGENCY PROCEDURE/  
ENGINE FIRE ON GROUND**

**BK-117**

1. PASSENGERS — ALERT/EVACUATE
2. BOTH EMERGENCY FUEL VALVES — CLOSE
3. BOTH FUEL SUPPLY PUMPS — OFF
4. BOTH POWER LEVERS — OFF
5. BATTERY AND GENERATORS — OFF

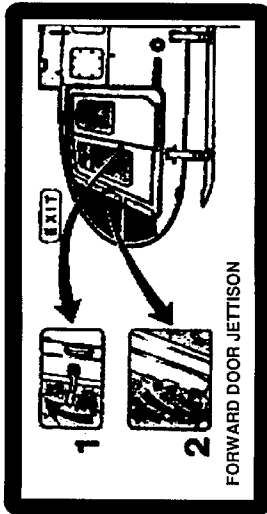
**EXTINGUISH FIRE WITH HAND FIRE EXTINGUISHER**

# CRASH RESCUE

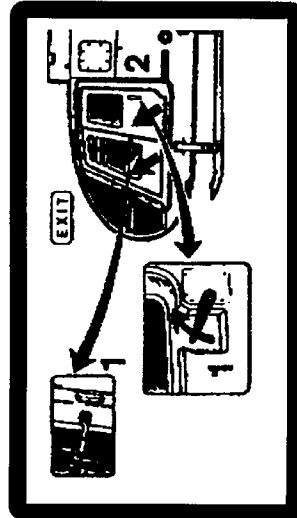
EUROHELICOPTER

## BO-105

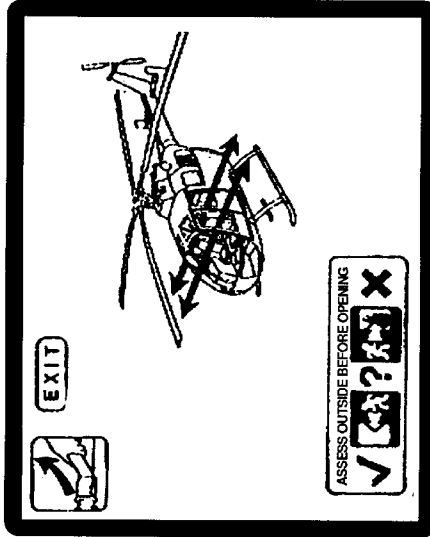
LOCATION OF SWITCHES AND EQUIPMENT AND EMERGENCY SHUTDOWN PROCEDURES MAY VARY FOR INDIVIDUAL AIRCRAFT. CREWS SHOULD BE BRIEFED PRIOR TO HELICOPTER DISPATCH.



EMERGENCY OPERATION



NORMAL OPERATION



SEE BACK SIDE FOR EMERGENCY SHUTDOWN PROCEDURES

**EUROCOPTER**

# **EMERGENCY PROCEDURE/ ENGINE FIRE ON GROUND**

**BO-105**

- 1. PASSENGERS — ALERT/EVACUATE**
- 2. BOTH EMERGENCY FUEL VALVES — CLOSE**
- 3. BOTH FUEL SUPPLY PUMPS — OFF**
- 4. BOTH POWER LEVERS — OFF**
- 5. BATTERY AND GENERATORS — OFF**

**EXTINGUISH FIRE WITH HAND FIRE EXTINGUISHER**

**MCDONNELL DOUGLAS  
(HUGHES)**

# CRASH RESCUE

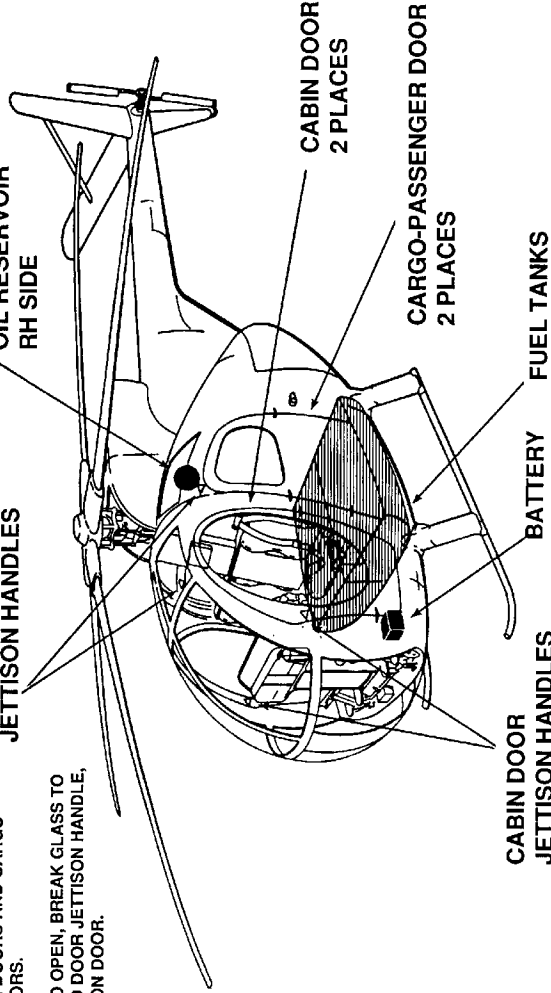
## 500-C,D (OH-6)

LOCATION OF SWITCHES AND EQUIPMENT AND EMERGENCY SHUTDOWN PROCEDURES MAY VARY FOR INDIVIDUAL AIRCRAFT. CREWS SHOULD BE BRIEFED PRIOR TO HELICOPTER DISPATCH

- EMERGENCY ENTRANCES MAY BE GAINED THROUGH CABIN DOORS AND CARGO-PASSENGER DOORS.
- IF DOORS FAIL TO OPEN, BREAK GLASS TO GAIN ACCESS TO DOOR JETTISON HANDLE, PULL TO JETTISON DOOR.

CARGO-PASSENGER DOOR  
JETTISON HANDLES

OIL RESERVOIR  
RH SIDE



**SEE BACK SIDE FOR EMERGENCY SHUTDOWN PROCEDURES**

# ENGINE SHUTDOWN & AIRCREW EXTRACTION

McDONNELL DOUGLAS  
(HUGHES)

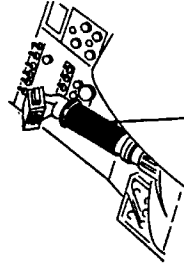
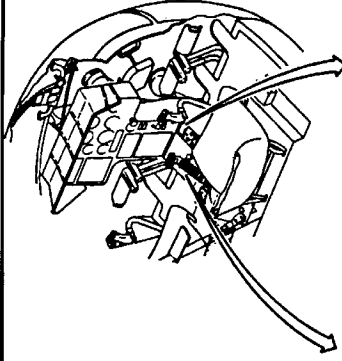
## 500-C, D (OH-6)

### 1. ENGINE SHUTDOWN

- A. ROTATE THROTTLE CONTROL, LOCATED ON PILOT AND COPILOT COLLECTIVE LEVERS, TO *FUEL CUT-OFF* POSITION.
- B. PLACE BATTERY SWITCH, LOCATED ON ELECTRICAL CONTROL CONSOLE, TO *OFF* POSITION.

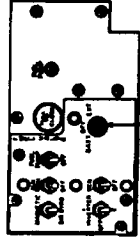
### 2. AIRCREW EXTRACTION

- A. UNLATCH LAP BELT AND REMOVE SHOULDER HARNESS FROM CREWMEMBER(S).



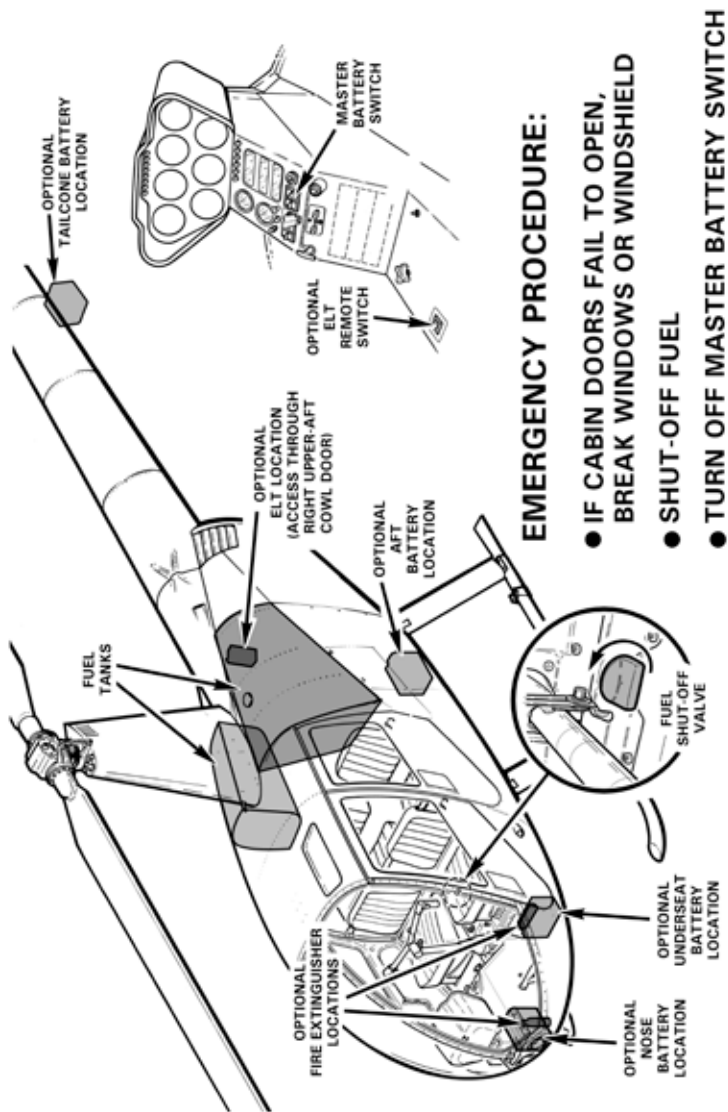
1A  
THROTTLE—FUEL CUT-OFF

ELECTRICAL CONTROL CONSOLE



1B  
BATTERY SWITCH—OFF

## **ROBINSON MODEL R44 & R44 II CRASH RESCUE DIAGRAM**



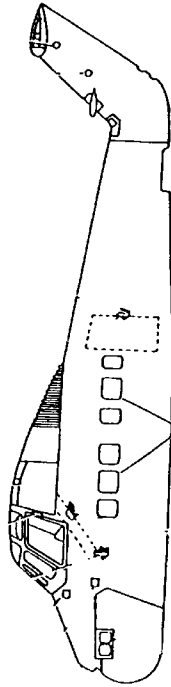


# SIKORSKY CRASH RESCUE

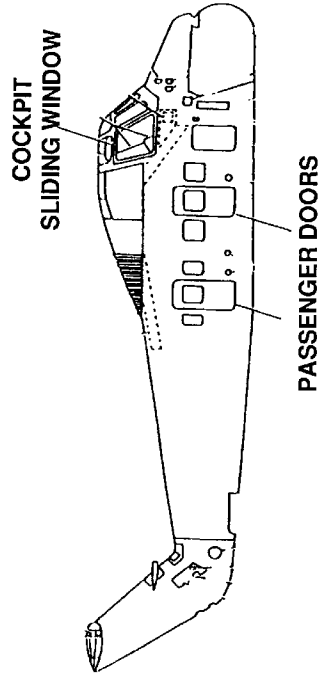
## S-58T

LOCATION OF SWITCHES AND EQUIPMENT AND EMERGENCY SHUTDOWN PROCEDURES MAY VARY FOR INDIVIDUAL AIRCRAFT. CREWS SHOULD BE BRIEFED PRIOR TO HELICOPTER DISPATCH.

COCKPIT SLIDING WINDOWS, CARGO DOORS, PASSENGER DOORS AND EMERGENCY ESCAPE HATCHES CAN BE JETTISONED BY PULLING APPROPRIATE EMERGENCY RELEASE HANDLES.



EMERGENCY  
HATCH



COCKPIT  
SLIDING WINDOW

PASSENGER DOORS

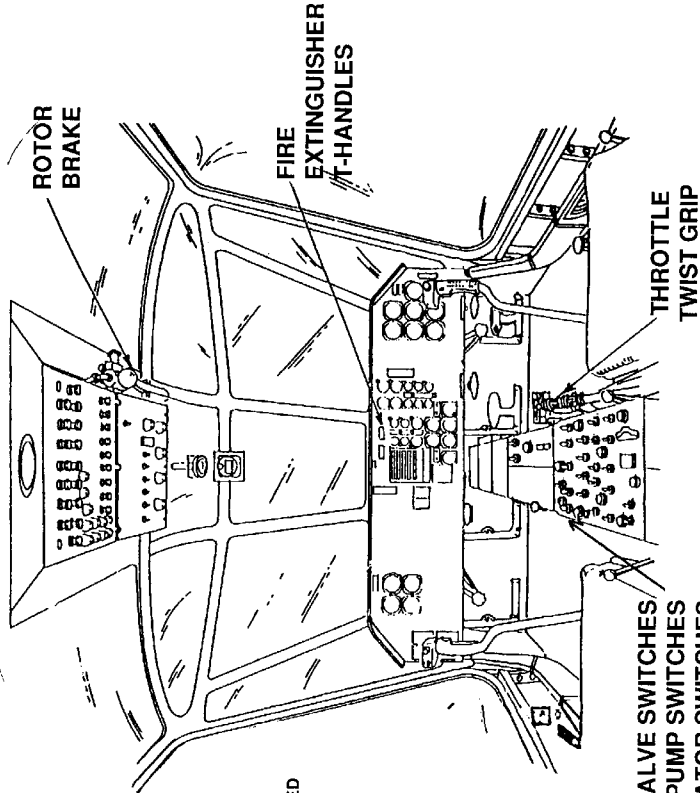
SEE BACK SIDE FOR EMERGENCY SHUTDOWN PROCEDURES

# EMERGENCY SHUTDOWN PROCEDURE

SIKORSKY

S-58T

1. THROTTLE TWIST GRIP—OFF  
(CONTROL STICK RIGHT OF CENTER  
CONSOLE)
2. FUEL SHUTOFF VALVE SWITCHES—CLOSED  
(CENTER CONSOLE)
3. FUEL BOOST PUMP SWITCHES—OFF  
(CENTER CONSOLE)
4. BATTERY & GENERATOR SWITCHES—OFF  
(CENTER CONSOLE)
5. ROTOR BRAKE—ON  
IF ROTOR BLADES ARE TURNING  
(RIGHT OF OVERHEAD SWITCH PANEL)  
RED HANDLE—PULL DOWN & FORWARD

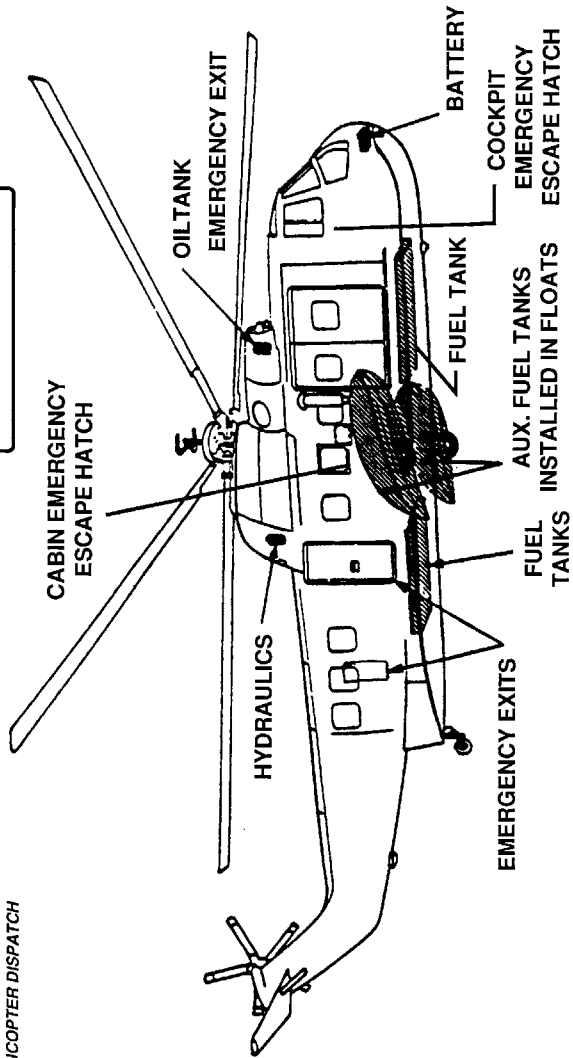


FUEL VALVE SWITCHES  
FUEL BOOST PUMP SWITCHES  
BATTERY & GENERATOR SWITCHES

# SIKORSKY CRASH RESCUE

## S-61N

LOCATION OF SWITCHES AND EQUIPMENT  
AND EMERGENCY SHUTDOWN PROCEDURES  
MAY VARY FOR INDIVIDUAL AIRCRAFT.  
CREWS SHOULD BE BRIEFED PRIOR TO  
HELICOPTER DISPATCH



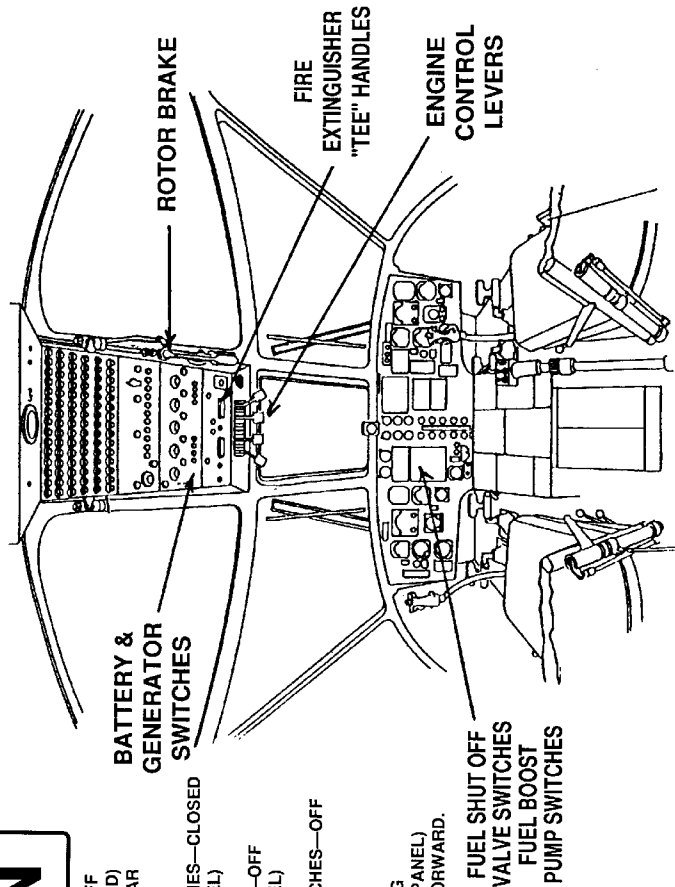
SEE BACKSIDE FOR EMERGENCY SHUTDOWN PROCEDURES

# ENGINE SHUTDOWN & AIRCREW EXTRACTION

## SIKORSKY

### S-61N

1. ENGINE CONTROL LEVERS—OFF  
(CENTER OVERHEAD—FORWARD)  
PULL AFT, THEN DOWN TO CLEAR  
DETTENT AT END OF ARC.
2. FUEL SHUT OFF VALVE SWITCHES—CLOSED  
(CENTER OF INSTRUMENT PANEL)
3. FUEL BOOST PUMP SWITCHES—OFF  
(CENTER OF INSTRUMENT PANEL)
4. BATTERY & GENERATOR SWITCHES—OFF  
(OVERHEAD SWITCH PANEL)
5. ROTOR BRAKE—ON  
IF ROTOR BLADES ARE TURNING  
(RIGHT OF OVERHEAD SWITCH PANEL)  
RED HANDLE—PULL DOWN & FORWARD.





**SIKORSKY**

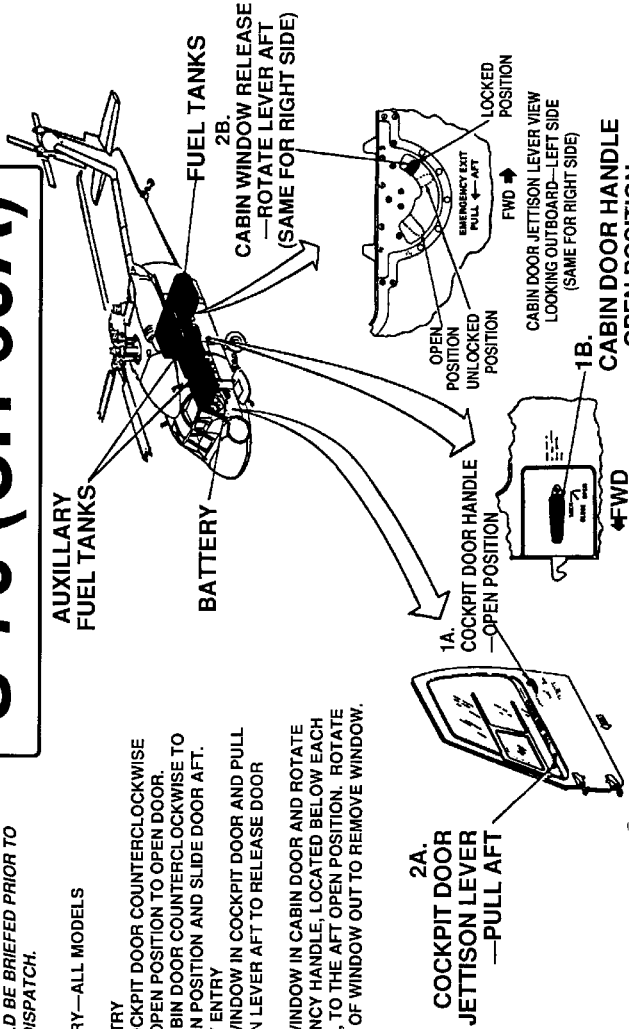
# CRASH RESCUE

LOCATION OF SWITCHES AND EQUIPMENT AND EMERGENCY SHUTDOWN PROCEDURES MAY VARY FOR INDIVIDUAL AIRCRAFT. CREWS SHOULD BE BRIEFED PRIOR TO HELICOPTER DISPATCH.

## S-70 (UH-60A)

AIRCRAFT ENTRY—ALL MODELS

1. NORMAL ENTRY
  - A. TURN COCKPIT DOOR COUNTERCLOCKWISE TO THE OPEN POSITION TO OPEN DOOR.
  - B. TURN CABIN DOOR COUNTERCLOCKWISE TO THE OPEN POSITION AND SLIDE DOOR AFT.
2. EMERGENCY ENTRY
  - 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 EACH WINDOW, TO THE AFT OPEN POSITION. ROTATE BOTTOM OF WINDOW OUT TO REMOVE WINDOW.



**SEE BACK SIDE FOR EMERGENCY SHUTDOWN PROCEDURES**

# ENGINE SHUTDOWN & AIRCREW EXTRACTION

SIKORSKY

## S-70 (UH-60A)

### 1. ENGINE SHUTDOWN

**NOTE:** 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. BATTERY SWITCH MUST BE IN THE ON POSITION.

A. PULL ENGINE EMERGENCY (T) HANDLES, LOCATED ON CONTROL QUADRANT, FULL AFT.

B. PULL APU (T) HANDLE LOCATED ON UPPER CONSOLE, DOWN.

C. PLACE BATTERY SWITCH, LOCATED ON UPPER CONSOLE, TO THE OFF POSITION.

### 2. AIRCREW—TROOP EXTRACTION

**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.

