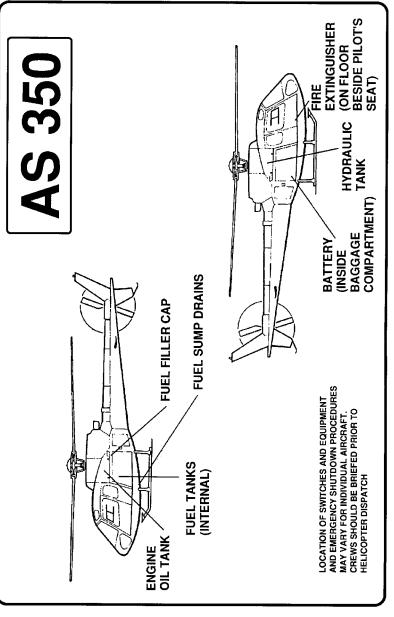
### Interagency Helicopter Operations Guide - June 2009 Appendix M

### 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** 



CARGO-PASSENGER DOOR

2 PLACES

SEE BACK SIDE FOR EMERGENCY SHUTDOWN PROCEDURE

CABIN DOOR 2 PLACES

BATTERY

### **FUEL TANK** 206B (OH-58) **OIL TANK** ENGINE EMERGENCY SHUTDOWN PROCEDURES MAY VARY FOR INDIVIDUAL AIRCRAFT. CREWS SHOULD BE LOCATION OF SWITCHES AND EQUIPMENT AND RESERVOIR HYDRAULIC BRIEFED PRIOR TO HELICOPTER DISPATCH IF CABIN OR CARGO-PASSENGER DOOR ' ALL DOORS HAVE RECESSED HANDLES FAILS TO OPEN, BREAK WINDOWS OR BACK OUTSIDE. INSIDE PULL 6TYTFRT POINTING FORWARD, PULLOUT AND HANDLES UP. WINDSHIELD

1. ENGINE SHUTDOWN

) **B**90

A. ROTATE THROTTLE, LOCATED ON PILOT'S COLLECTIVE PITCH STICK, TO *OFF* POSITION.

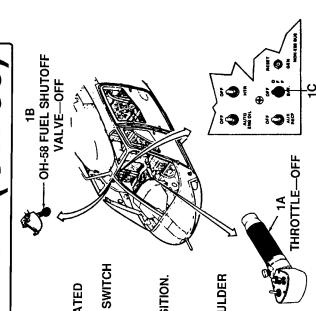
B. OH-58 PULL FUEL SHUTOFF VALVE, LOCATED OVERHEAD IN CREW COMPARTMENT, AFT TO OFF POSITION. 206B TURN FUEL SWITCH ON PANEL TO OFF POSITION.

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).

BATTERY SWITCH—OFF



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

206L-3

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

OIL TANK

ENGINE

RECESSED HANDLES POINTING FORWARD. DOOR FAILS TO OPEN, BREAK WINDOWS PILOT AND PASSENGER DOORS HAVE OUTSIDE—PULL OUT AND BACK NSIDE—PULL UP

RESERVOIR HYDRAULIC

CARGO-PASSENGER DOOR PANEL DOOR (SEE INSET) **FUEL TANKS (3)** 2 PLACES CABIN DOOR 2 PLACES **FUEL VALVE SWITCH** BATTERY SWITCH BATTERY PANEL DOOR HANDLE

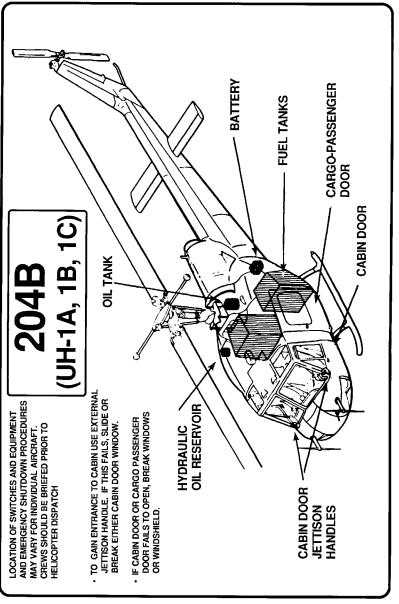
**OPENING INSTRUCTIONS** Open rear door
 Lift panel door handle
 Rotate as shown

SEE BACK SIDE FOR EMERGENCY SHUTDOWN PROCEDURES

## **Emergency Procedure:**

**206**L

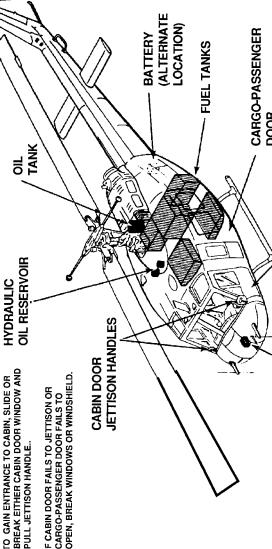
- 1. Wait until all rotors have stopped.
- 2. Shut off fuel switch located in the instrument panel. It's usually covered by a metal red cover.
- Disconnect battery located on nose of helicopter. Remove front panel, and rotate knob counterclockwise, and disconnect cable from battery. က
- 4. Evacuate personnel if necessary.
- Make sure ELT is in the on position, and remove from helicopter. ELT is located in the chin bubble area on the pilots side. Ŋ.
- 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.
- If possible, secure the area from outside interference. ထ



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

### **BREAK EITHER CABIN DOOR WINDOW AND** TO GAIN ENTRANCE TO CABIN, SLIDE OR

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

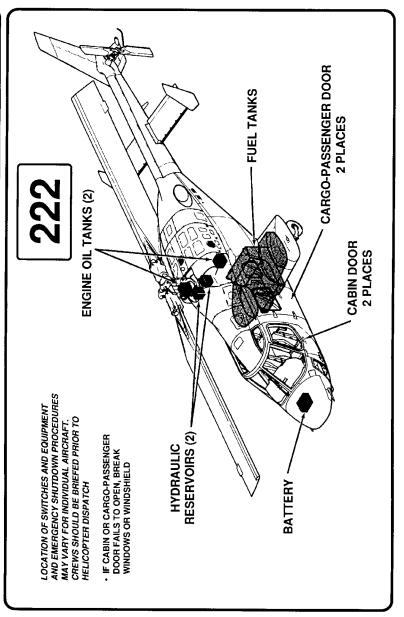


CABIN DOOR

BATTERY

### CARGO-PASSENGER DOOR **FUEL TANKS (5)** 2 PLACES CABIN DOOR 2 PLACES 412/212 OIL TANKS (2) ENGINE AND EMERGENCY SHUTDOWN PROCEDURES TO GAIN ENTRANCE TO CABIN, SLIDE OR BREAK EITHER CABIN DOOR WINDOW. DOOR FAILS TO OPEN, BREAK WINDOWS OR WINDSHIELD.. LOCATION OF SWITCHES AND EQUIPMENT BATTERY IF CABIN DOOR OR CARGO PASSENGER CREWS SHOULD BE BRIEFED PRIOR TO MAY VARY FOR INDIVIDUAL AIRCRAFT. RESERVOIR-HYDRAULIC HELICOPTER DISPATCH 🤦

### CARGO-PASSENER DOOR **FUEL TANKS (5)** 2 PLACES **CABIN DOOR** 2 PLACES **OIL TANK** ENGINE HYDRAULIC RESERVOIR TO GAIN ENTRANCE TO CABIN USE EXTERNAL JETTISON HANDLE. IF THIS FAILS, SLIDE OR BREAK EITHER CABIN DOOR WINDOW. AND EMERGENCY SHUTDOWN PROCEDURES LOCATION OF SWITCHES AND EQUIPMENT DOOR FAILS TO OPEN, BREAK WINDOWS IF CABIN DOOR OR CARGO PASSENGER CREWS SHOULD BE BRIEFED PRIOR TO MAY VARY FOR INDIVIDUAL AIRCRAFT. **BATTERIES (2)** JETTISON HANDLE9 HELICOPTER DISPATCH OR WINDSHIELD. CABIN DOOR



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

HANDLE LABELED DOOR JETTISON PUSH TRIGGER, **EMERGENCY ENTRANCE TO COCKPIT IS GAINED** TURN HANDLE. IF DOOR DOES NOT FALL AWAY, THROUGH JETTISON DOORS BY ACTUATING PULL AWAY.

DOOR ESCAPE HATCH, CABIN ESCAPE HATCH, RAMP HATCHES CAN BE OPENED BY PULLING THE YELLOW ESCAPE HATCH, AND CUTOUT PANELS. ALL ESCAPE EMERGENCY ENTRANCE TO CARGO COMPARTMENT IS GAINED THROUGH CABIN DOOR OR UPPER TAB OUT AND PUSHING THE PANEL IN.

LEVER IS LOCATED ON RIGHT SIDE OF AIRCRAFT BE-LOW THE RIGHT ENGINE. RAMP MAY BE LOWERED, AN ACCESS DOOR TO THE CARGO RAMP CONTROL PROVIDING EMERGENCY ENTRANCE, BY PLACING THE CONTROL LEVER IN THE DOWN POSITION.

COMPARTMENT MAY BE USED FOR EMERGENCY EXIT IF LOWER RESCUE DOOR HAS BEEN PREVIOUSLY A RESCUE HATCH LOCATED IN FLOOR OF CARGO OPENED.

CREW NORMAL CONDITIONS 3-A
PASSENGERS: 33 FULLY EQUIPPED GROUND TROOF
LITTERS: 24 WG MEDICAL ATTENDANT'S SEATS TWIN-TURBINE ENGINE TANDEM ROTOR

HYDRAULIC ESCAPE RESERVOIR CARGO HATCH 000 B00B RESERVOIRS HYDRAULIC CONTROL FLIGHT RAMP CONTRO! OCATED BELOW ACCESS DOOR RICHT ENGINE) LEVER SIX ARE LOCATED IN CARGO LOCATED IN PASSAGEWAY COMPARTMENT, THREE ON BETWEEN COCKPIT AND CARGO COMPARTMENT PROVIDED, ONE IS FIRST AID KIT (SEVEN ARE EACH SIDE.) RESCUE HATCH DOOR THI SIDE CARGO **EMERGENCY ESCAPE AXE** COMPARTMENT) **ESCAPE HATCH** CABIN DOOR CABIN DOOR AND UPPER THREE ARE PROVIDED. BULKHEAD IN CARGO TO RIGHT OF PILOT'S COMPARTMENT, ONE ONE IS LOCATED IN COCKPIT ON FLOOR EXTINGUISHER SEAT, ANOTHER IS S LOCATED JUST -ORWARD OF CARGO BAMP LOCATED ON SE E SDE PORWARD

ESCAPE HATCH CABIN COCKPIT JETTISONABLE DOOR AND HANDLE (ETTHER SIDE)

PORTS CAN BE KNOCKED **OUT/IN FOR EMERGENCY** 

**EXIT OR ENTRY** 

CUT HERE FOR (2 ON EACH SIDE) **EMERGENCY RESCUE** 1 ON EACH SIDE)

TANK-SOME A/C **AUXILIARY FUEL** 

JETTISON FROM INSIDE

**JETTISON CARGO** 

DOOR-SOME A/C

AIRCRAFT BY ROTATIN

RELEASE HANDLE TO

THE LEFT)

EITHER SIDE)

BATTERY

FUEL TANK

EMERGENCY SHUTDOWN PROCEDURES SEE BACK SIDE FOR

1. NORMAL SHUTDOWN

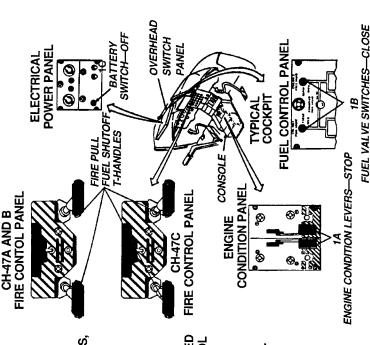
A. POSITION ENGINE CONDITION LEVERS, LOCATED ON CONTROL PEDESTAL, TO STOP.

POSITION FUEL VALVE SWITCHES, LOCATED ON OVERHEAD FUEL CONTROL PANEL, TO CLOSE. ä

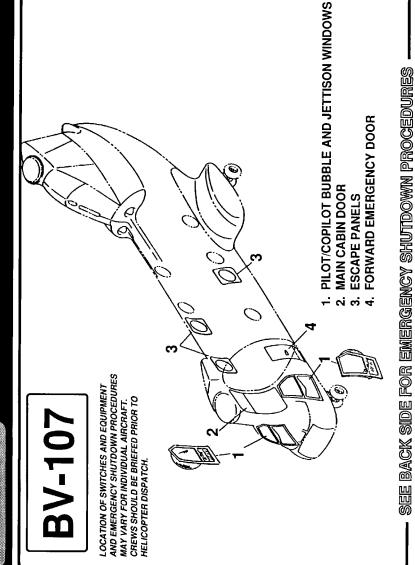
POSITION BATTERY SWITCH, LOCATED ON OVERHEAD ELECTRICAL CONTROL PANEL, TO OFF. ပ

FUEL SHUTOFF T-HANDLE, LOCATED AT IF ENGINES FAIL TO SHUTDOWN, PULL TOP OF INSTRUMENT PANEL, OUT

- 2. AIRCREW EXTRACTION
- A. UNLATCH SEAT BELTS AND REMOVE SHOULDER HARNESS FROM CREWMEMBER(S).



# BOEING CRA



### VERTOL DOMING.

# 

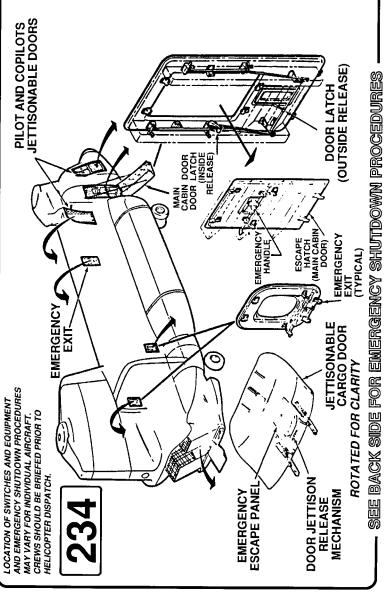
THE FOLLOWING PROCEDURES WILL BE FOLLOWED IN THE EVENT OF FIRE OR OTHER EMERGENCY DURING HOT REFUELING:

**BV-107** 

- FUEL VALVES —CLOSED
- 10月 BOOST PUMPS.
- ENGINE CONDITION LEVERS (ECLs) STOP <u>-</u> ოფ4
- JETTISON PILOT & COPILOT EMERGENCY DOORS/BUBBLES

OCATION OF REFUELING POINT BEFORE (CONSIDER LOCATION OF FIRE DUE TO JETTISONING COCKPIT DOORS.,

- AIRCRAFT EVACUATE က် တ
- FIRE EXTINGUISHER DIRECT ON FIRE



### BOEING VERTOL

## 

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

234

- 1. ENGINE CONDITION LEVERS (ECLs) STOP
- 2. T-HANDLES PULL
- 3. BOOST PUMPS OFF
- JETTISON PILOT & COPILOT EMERGENCY DOORS/BUBBLES

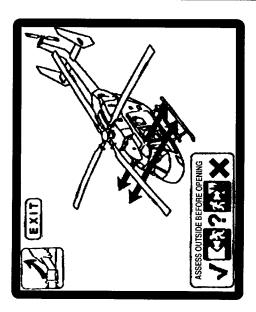
(CONSIDER LOCATION OF FIRE DUE TO LOCATION OF REFUELING POINT BEFORE JETTISONING COCKPIT DOORS.)

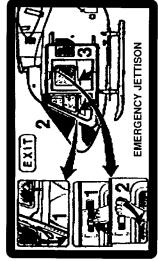
- 5. AIRCRAFT EVACUATE
- FIRE EXTINGUISHER DIRECT ON FIRE 6

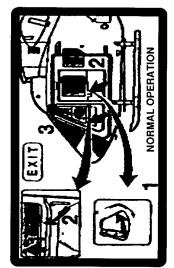
# SRASH RESCUE

### EUROCOPTER

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

### **BK-117**

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

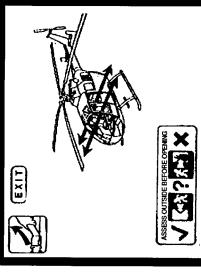
**EXTINGUISH FIRE WITH HAND FIRE EXTINGUISHER** 

### EUROCOPTER

E X

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

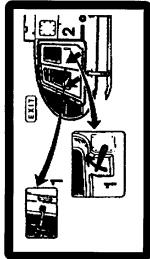






**EMERGENCY OPERATION** 

FORWARD DOOR JETTISON



NORMAL OPERATION

SEE BACK SIDE FOR EMERGENCY SHUTDOWN PROCEDURES

## EUROCOPTER EN

### **BO-105**

- PASSENGERS ALERT/EVACUATE
- BOTH EMERGENCY FUEL VALVES CLOSE
- BOTH FUEL SUPPLY PUMPS OFF
- 4. BOTH POWER LEVERS OFF
- BATTERY AND GENERATORS OFF Ŋ.

**EXTINGUISH FIRE WITH HAND FIRE EXTINGUISHER** 

ACDONNELL DOUGLAS

HUGHES

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

500-C,D (

**EMERGENCY ENTRANCES MAY BE GAINED** THROUGH CABIN DOORS AND CARGO-PASSENGER DOORS.

GAIN ACCESS TO DOOR JETTISON HANDLE, PULL TO JETTISON DOOR. IF DOORS FAIL TO OPEN, BREAK GLASS TO

**CABIN DOOR** CARGO-PASSENGER DOOR 2 PLACES OIL RESERVOIR 2 PLACES RH SIDE CARGO-PASSENGER DOOR JETTISON HANDLES

Back side for emergency shutdown procedures 

**FUEL TANKS** 

BATTERY

JETTISON HANDLES CABIN DOOR

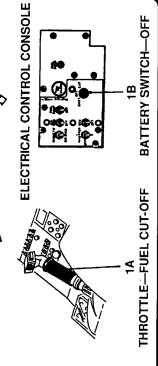
# CDONNELL DOUGLAS HUGHES

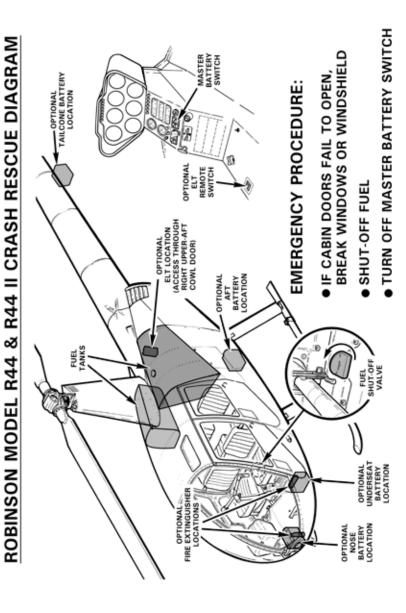
500-C,D (OH-6

A. ROTATE THROTTLE CONTROL, LOCATED ON PILOT AND COPILOT COLLECTIVE LEVERS, TO FUEL CUT-OFF POSITION.

1. ENGINE SHUTDOWN

- 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).



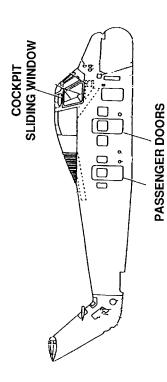


# SIKORSKY CF/A

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

EMERGENCY HATCH

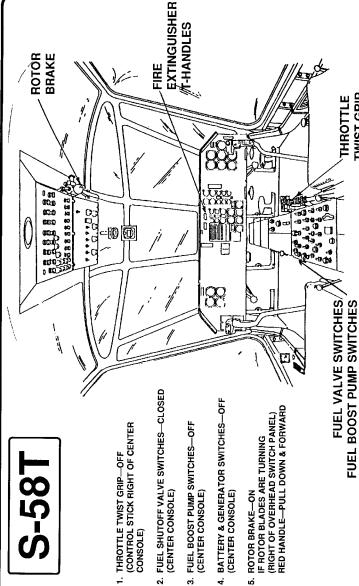
COCKPIT SLIDING WINDOWS, CARGO DOORS, PASSENGER DOORS AND EMERGENCY ESCAPE HATCHES CAN BE JETTISONED BY PULLING APPROPRATE EMERGENCY RELEASE HANDLES.



SEE BACK SIDE FOR EMERGENCY SHUTDOWN PROCEDURES

# SIKORSKY

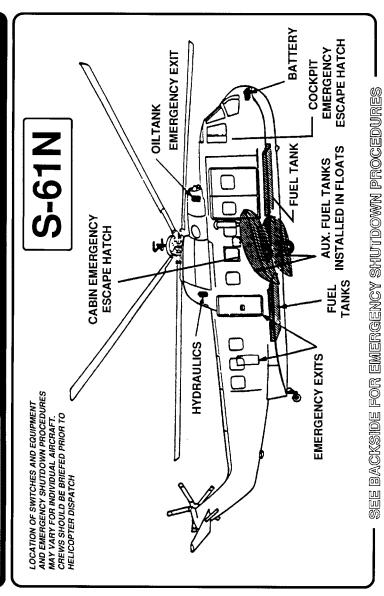




TWIST GRIP

BATTERY & GENERATOR SWITCHES

# SIKORSKY



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

"TEE" HANDLES **EXTINGUISHER** CONTROL ROTOR BRAKE ENGINE LEVERS FIRE Sec. 2000 99999 FUEL SHUT OFF VALVE SWITCHES PUMP SWITCHES FUEL BOOST

4

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COPILOT'S

BATTERY

ENTRANCE

# SIKORSKY

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

**FUEL TANK** 



ROTATE ENTRANCE HANDLE, LOCATED ON AFT EDGE OF REAR COCKPIT ENTRANCE DOOR ON ROTATE ENTANCE HANDLE, LOCATED ON AFT RIGHT SIDE OF CREW COMPARTMENT, SWING SWING DOOR OUT

DOOR OUT.

ROTATE ENTRANCE HANDLE, LOCATED ON AFT

NORMAL ENTRY

EDGE OF POD ACCESS DOORS, SWING DOOR OUT.

2. EMERGENCY ENTRY

ROTATE ENERGENCY JETTISON RELEASE HANDLE, PILOT'S AND COPILOT'S ENTRANCE DOOR, PULL LOCATED AT FORWARD LOWER CORNER OF DOOR OUT. Æ

ROTATE ENERGENCY JETTISON RELEASE HANDLE. LOCATED AT FORWARD LOWER CORNER OF REAR

œ

COCKPIT ENTRANCE DOOR ON RIGHT SIDE OF CREW PULL EXIT RELEASE TAB, LOCATED LOWER AFT CORNER OF EACH POD WINDOW, OUT AND REMOVE COMPARTMENT, PULL DOOR OUT. ပ

A. CUT AROUND WINDOWS AND ACCESS DOORS OF POD AS MARKED MODNIM 3. CUT-IN

ENTRANCE

REAR COCKPIT

ENTRANCE HANDLE

**2B** 

18.10

SWOONIW GOG

RELEASE (TYP. ALL TAB EX

**EMERGENCY JETTISON** RELEASE HANDLE

3 B

PILOT'S ENTRANCE

ENTRANCE HANDLE COCKPIT DOORS POD AND REAR

CABIN WINDOW RELEASE -ROTATE LEVER AFT (SAME FOR RIGHT SIDE)

**FUEL TANKS** 

# SIKORSKY

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

### S-70 (UH-60A) AUXILLARY

**FUEL TANKS** 

### A. TURN COCKPIT DOOR COUNTERCLOCKWISE AIRCRAFT ENTRY—ALL MODELS 1. NORMAL ENTRY

- TO THE OPEN POSITION TO OPEN DOOR.
- TURN CABIN DOOR COUNTERCLOCKWISE TO THE OPEN POSITION AND SLIDE DOOR AFT.

BATTERY

BREAK WINDOW IN COCKPIT DOOR AND PULL JETTISON LEVER AFT TO RELEASE DOOR **EMERGENCY ENTRY** ď ď

WINDOW, TO THE AFT OPEN POSITION. ROTATE BOTTOM OF WINDOW OUT TO REMOVE WINDOW. EMERGENCY HANDLE, LOCATED BELOW EACH BREAK WINDOW IN CABIN DOOR AND ROTATE œ

POSITION LOCKED CABIN DOOR JETTISON LEVER VIEW LOOKING OUTBOARD—LEFT SIDE (SAME FOR RIGHT SIDE) **CABIN DOOR HANDLE** ENERGENCY EXIT -OPEN POSITION ₩ 68 POSITION UNLOCKED OPEN, POSITION COCKPIT DOOR HANDLE ₽ VP **OPEN POSITION JETTISON LEVER** COCKPIT DOOR -PULL AFT ŻŸ.

SEE BACK SIDE FOR EMERGENCY SHUTDOWN PROCEDURES

# SIKORSK

