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.
WRITTEN CORRESPONDENCE:

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

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

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

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

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

For technical order improvements, correcting procedures, and other inquiries, please use the above media most convenient.
SEGMENT 29 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 Retaining out of date rescue information can negatively affect the user’s operability and outcome of emergencies.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.

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

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* 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 alphanumerical 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)
- Cadmium (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.
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.

SPECIAL TOOLS/EQUIPMENT
Power Rescue Saw
Crash Ax
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.
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.

SPECIAL TOOLS/EQUIPMENT
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.
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 OVERIDE 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.

2. AIRCREW EXTRACTION
   a. Unlatch lap belts and remove shoulder harnesses from crewmembers.
   b. Unlatch lap belts for passengers.
AIRCRAFT PAINT SCHEME
AIRFRAME DIMENSIONS

FRONT VIEW

6 FT 8.13 IN (2.04 M)
9 FT 7 IN (2.49 M)

SIDE VIEW

10 FT 10.13 IN (3.30 M)
11 FT 5.35 IN (3.40 M)

TOP VIEW

46 FT (14.02 M)
4 FT 7.52 IN (.41 M)

9 FT 4.48 IN (2.86 M)

4 FT 8.24 IN (1.45 M)
14 IN (356 MM)

2 FT 6.59 IN (777 MM)

45 FT 11.67 IN (14.01 M)
41 FT 8.17 IN (12.66 M)

12 FT 10.08 IN (3.91 M)

8 FT 6.17 IN (2.61 M)

5 FT 4.8 IN (1.56 M)

1 FT 4.6 IN (226 MM)

56 FT 1.57 IN (17.11 M)

1 FT 3.47 IN (390 MM)

15 FT 0.85 IN (4.50 M)
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.)
NOTE:
The airframe material is a semi-monocoque structure with metal and fiberglass covering.
AIRCRAFT HAZARDS
DANGER AREAS AND ZONES

MAIN ROTOR BLADE TIP DANGER AREA DURING SHUTDOWN ENGAGEMENT AND SLOPE OPERATIONS

APPROACH AND DEPARTURE ZONE

FLARE/CHAFF DANGER AREA

FLARE/CHAFF DANGER AREA

TAIL ROTOR DANGER ZONE

RADAR 270 DEGREES

FUEL: F34 (KEROSENE)
1277 LITRES

200 FT

35°

200 FT

RADAR 3 METERS

ENGINE INTAKE

ENGINE EXHAUST
AIRCRAFT HAZARDS - Continued

CHAFF/FLARES AND GUN

ALE-29 CHAFF AND FLARE DISPENSER WITH CARTRIDGES

LEFT SIDE CHAFF AND FLARE DISPENSER

CHAFF CART

FLARE CART

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

GUN STOWED

GUN READY

RIGHT SIDE CHAFF AND FLARE DISPENSER
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.
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.)
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).
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.
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.
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.
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.
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.

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.

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.
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 installed in the compartment ceiling.

d. There is a baggage compartment fire warning light on the forward instrument panel in the cockpit.
CABIN CONFIGURATIONS

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

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LEGEND

SEARCH AND RESCUE (SAR)

MEDEVAC

TRAUMA

PERSONNEL/MAT TRANSPORT

PERSONNEL TRANSPORT
CRASH CHART - AB 412 (SAR)

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

- **BATTERY POWER**
  - Pull to shut off engines

- **ROTORBRAKE**
  - Above pilot's head
  - Inside to open and push back-wards

- **SLIDE PANEL**
  - Only RT side
  - LT and RT side to remove window

- **SEAT BELTS**
  - Pull to release

- **FIRE T-HANDLES**
  - Pull to shut off engines
  - In case off engine fire switch
  - To main fire continuous switch to reserve

- **BATTERY**
  - Screw-driver

- **SLIDE PANEL**
  - LT and RT side to remove door

- **DOOR**
  - Inside to open door
  - Pull to remove door
  - Inside pull to open door

- **FIRE EXTINGUISHER**
  - Switch

- **KNIFE**
  - LT and RT side to pull downward to open
  - And push back-wards

- **SLIDE PANEL**
  - LT and RT side to pull to open

- **FUEL TANKS**
  - LT and RT side
  - 270 ft

- **LIFE RAFT**
  - 9 magnesium signal makers
  - 6.7 litre cool dioxide
  - 250 BAR/3750 PSI

- **HE**
  - 2 x 18 litre helium
  - 250 BAR/3750 PSI

- **O2**
  - 2 or 10 litre oxygen
  - 200 BAR/3000 PSI

- **CO2**
  - 6.7 litre cool dioxide

- **FIRE T-HANDLES**
  - Pull fire t-handles

- **FIRE EXTINGUISHER**
  - Switch

- **FUEL TANKS**
  - LT and RT side
  - 0.26 BAR

- **CREW**
  - Each 5 magnesium signal makers

- **LIFE RAFT**
  - Each 9 magnesium signal makers

- **FIRE T-HANDLES**
  - In case off engine fire switch
  - To main fire continuous switch to reserve
  - Battery power off
  - Pull roterbrake
  - Take out crew and passengers
  - Remove battery plug
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.
ENGINE SHUTDOWN AND AIRCREW EXTRACTION

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

2. AIRCREW EXTRACTION
   a. Unlatch lap belts and remove shoulder harnesses from crewmembers.
The aircraft information is located in Chapter 13 containing US Army aircraft.
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.

NOTE: Arrows depict exit routes.
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.
AIRCRAFT PAINT SCHEME

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.
ENGINE AND ELECTRICAL SHUTDOWN

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.
1. AIRCREW EXTRACTION

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

a. Unlatch restraints at quick release point.

b. Remove lap belts and shoulder harnesses from crewmember to prevent entanglement.

c. Remove crewmember(s) from aircraft.
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.
SPECIAL TOOLS/EQUIPMENT
Power Rescue Saw
Crash Ax

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
   a. Lift cover of fuel shutoff switches, located on pilot’s center console, and place switches (not illustrated) in the EMERGENCY position.
   b. Press down spring loaded idle detent stop, located inside throttles on pilot’s overhead panel, and move throttles to the OFF position.
   c. Lift master switches, located on pilot’s center console, and move aft to the OFF position.
   d. 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.
   a. Pull red release snap from restraint quick release box until all restraint straps are released.
   b. 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.
MISSION: Personnel transport, rescue, base defence
PILOTS: According to mission, 1 or 2
PASSENGERS: Maximum of 4
FUEL: Flashpoint >41 degrees C,
   2 reservoirs front 334 L, aft 400 L
OIL: Flashpoint >246 degrees C (2x4.7 L) 9.4 L total
HYDRAULIC FLUID: Flashpoint>93 degrees C (2x3 L) 6 L total
   main transmission 4.5L, aft transmission 0.33 L
ENGINE FIRE EXTINGUISHING AGENT: Freon 13 B1 (2x0.620 kg)
   (Preferred fire extinguishing agent-powder)
ROTOR BRAKE ASSEMBLY: Brake disc material-steel

DIMENSIONS:
Length with main rotor blades 13.00 M
Main rotor diameter 10.9 M
Weight-empty 1690 kg maximum 2540 kg
ECUREUIL ALSTAR AS 355

AIRCRAFT HAZARDS

HAZARD ZONES

WITH ROTOR IN MOTION

3 M

10 M

33 M

WITH ROTOR STOPPED

3 M

10 M

30.69 M
1. ARMAMENT HAZARD

20 MACHINE GUN
1. AIRCRAFT PARTICULARITIES

1a. FIRE EXTINGUISHER LOCATION

1b. FIRST AID KIT LOCATION - BACK OF PILOT SEAT (RH SEAT)

1c. CABLE CUTTERS LOCATION - TOP OF REAR SEATS

1d. BAGGAGE COMPARTMENT LOCATION - CLOSED

1e. BAGGAGE COMPARTMENT LOCATION - OPENED
AIRCRAFT BATTERY AND COMPARTMENT

1a. Open battery compartment door, secured by three “dzus” screws.

NOTE:
Battery has two butterfly screws.

1b. Hold door open using support rod.

1c. Remove battery compartment cover, secured by four “dzus” screws.

1d. Remove black protection cover by pulling upward.

1e. Unscrew the red (battery +) connector to disconnect battery power.
ECUREUIL ALSTAR AS 355

SPECIAL TOOLS/EQUIPMENT
Power Rescue Saw
Crash Ax

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 1/4 turn, then lower it.
   b. Turn bottom door bolt 1/4 turn, then lift it.

2. CUT-IN
   a. Cut-in fuselage as required.
1. AIRCRAFT CREW DOORS

FRONT CREW DOORS

1a. Open from outside (left). Turn external handle downward. The door will open by itself.

1b. Open from outside (right). Turn external handle downward. The door will open by itself.

1c. Open from inside (left). Turn external handle downward. The door will open by itself.

1d. Open from inside (left). Turn external handle downward. The door will open by itself.
1. AIRCRAFT DOORS

REAR DOORS

REAR DOOR EXTERNAL HANDLE

1a
Open from outside (left). Turn external handle downward. Pull door slightly towards you to disengage it from its closed position and push toward the aft of the aircraft.

CREW AND REAR DOORS OPENED

1b
Pull lever “L” upward. Push down slightly away from you to disengage door from its closed position and push toward the aft of the aircraft.
1c Turn top latch a quarter turn, then pull down.

1d Turn lower latch a quarter turn, then pull up.

1e To remove the emergency door from inside the cockpit (right and left). (Inside only.)

1f To remove emergency door, remove cover.

1g Pull emergency door handle up.
1. ENGINE SHUTDOWN

a. Lift safety covers, located on the overhead panel, and place engine shutoff switches in the DOWN position.

b. Pull both fire cutoff switches, located on the overhead panel, toward the AFT position.

c. Depress the red power cutoff button ("main power interrupting") located on the center control panel, ONCE. (Only emergency flight instruments will remain powered.)

d. To operate the rotor brake, located on the overhead panel, remove safety cover and pull the rotor brake handle to the AFT position.
ENGINE SHUTDOWN-Continued

1. ENGINE SHUTDOWN-IN CASE OF FIRE

a. Pull both engine shutdown (yellow) handles, located on over head panel, slightly toward the right to unlock and continue pull all the way to the AFT position.

b. Firmly pull both fuel cut-off (red) handles, located on over head panel, to the AFT position.

OVER HEAD PANEL VIEWS

ENGINE SHUTDOWN HANDLES
(FORWARD POSITION)

ENGINE SHUTDOWN HANDLES
(AFT POSITION)

FUEL CUT-OFF HANDLES
(FORWARD POSITION)
POWER SHUTDOWN

1. POWER SHUTDOWN

a. The main power shutdown switch is located on the forward instrument panel.

b. The battery cut off switches are located on the over head panel.
AIRCRAFT EXTRACTION

1. AIRCREW EXTRACTION

a. Adjust seats allowing room for pilot and co-pilot extraction. Push down on seat adjustment lever located on left hand side of seat and then pull seat back.

b. Pull on center harness tab to release crew member from shoulder harness and safety belt.

c. Rear passengers may have safety belt only.
The aircraft information is pending release.
AIRCRAFT DIMENSIONS

1. CHARACTERISTICS

a. AIRCRAFT TYPE: Personnel transport, rescue, and base defense.

b. CREW: 1 to 2 personnel depending on mission requirements.

c. PASSENGERS: 4 maximum.
1. DANGER ZONES

NOTE:
Area outside of designated zones are considered safe.
AIRCRAFT HAZARDS-Continued

- **FUEL:** 330 L & 440 LITRES TRO (F 34) & 2 RESERVOIRS [FLASHPOINT >40 °C]
- **OIL:** 2 x 4.7 LITRES (O 156) [FLASHPOINT >246 °C]
- **HYDRAULIC FLUID:** 2 x 3 LITRES AIR 3520 [FLASHPOINT > 93 °C]
- **BATTERY:** 1

ENGINE FIRE PROTECTION: 2 x 0.620 KG FREON 13B1
BATTERY LOCATION, DISCONNECT AND REMOVAL

1. BATTERY LOCATION, DISCONNECT AND REMOVAL
   a. On the aft right side of the fuselage, depress tabs to open top cover of battery compartment.
   b. Unscrew the “DZUS” screws to open the lower cover of battery compartment.
   c. Remove the lower cover held by the “DZUS” screws.
   d. Unscrew the red connectors attached to the battery.
   e. Remove the battery from battery compartment.
AIRFRAME MATERIALS

- GLASS
- BLENDED LIGHT WEIGHT MATERIALS
- REINFORCED PLASTIC
- TITANIUM
- THERMOPLASTIC (POLYCARBONATE, POLYAMIDE)
- STEEL
SPECIAL TOOLS/EQUIPMENT
Power Rescue Saw

FENNEC AS 555 AN
T.O. 00-105E-9

AIRCRAFT ENTRY

1. NORMAL ENTRY
   a. Open crew door (left or right side) by turning door handle downward.
   b. Open rear doors (left or right side) by turning door handle downward.
   c. Pull rear door slightly towards yourself to disengage it from its closed position and push toward the back of the aircraft.

2. EMERGENCY ENTRY
   a. Same as normal entry. Doors are not jettisoned externally.

3. CUT-IN
   a. Cut into fuselage as needed. Avoid cutting near personnel.
1. NORMAL EXITS
   a. Open crew door (left or right side) by turning door handle downward.
   b. Open rear doors (left or right side) by turning door handle upward, push rear door slightly away from yourself to disengage it from its closed position and push toward the back of the aircraft.

2. EMERGENCY EXITS
   a. To release the crew doors, remove the safety cover and pull handle to jettison door.
1. ENGINE SHUTDOWN
   a. On the overhead panel, remove safety and pull the handles aft.
   b. Pull both fire cut off handles, located on the overhead panel, aft.
   c. Pull rotor brake handle, located on the overhead panel, aft.

2. ELECTRICAL SHUTDOWN
   a. Press both battery (BAT) switches, located on overhead panel, to the OFF position.
   b. Press the main power interrupter buttons, located on the forward instrument panel, to the OFF position.
AIRCREW EXTRACTION

1. AIRCREW EXTRACTION

a. Pull tab at mid section to free crew member from harness restraints.

b. Release passengers from safety harness.
SPECIAL TOOLS/EQUIPMENT
Power Rescue Saw
Crash Ax

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 Extinguishingant
   Bromotrifluoromethane - Fire Extinguishingant
   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.
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

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.
**AIRCRAFT DIMENSIONS AND GENERAL ARRANGEMENT**

**GAZELLE HT3**

**T.O. 00-105E-9**

**NOTE:**
The overall dimension should be modified again after fitting the articulated landing gear.

**BLADES SPREAD**

- **LENGTH W/BLADES:** 39.278 FT (11.972 M)
- **HEIGHT:** 10.474 FT (3.192 M)
- **LENGTH:** 31.272 FT (9.533 M)
- **DIAMETER:** 34.449 FT 10.500 M)
- **BLADES SPREAD:** 6.693 FT (2.040 M)
- **6.562 FT (2.000 M)**
- **6.458 FT (1.972 M)**
- **4.593 FT (1.400 M)**

**GAZELLE HT3.2**
AIRCRAFT DIMENSIONS AND
GENERAL ARRANGEMENT—Continued

BLADES FOLDED

NOTE:
The overall dimension should be modified again after fitting the articulated landing gear.

9.022 FT (2.750 M)

10.474 FT (3.192 M)

6.468 FT (1.972 M)

31.272 FT (9.533 M)

6.693 FT (2.040 M)
## AIRCRAFT DATA AND HAZARD LIST

### AIRCRAFT DATA
- Single Rotor Helicopter
- One Turbomesa Astezo IIIA turboshaft
- Military Freight Passenger:
  - 1 crew
  - 4 passengers
- Aircraft Weight: AUW 1657.3 Kgs

### WARNING

Fires resulting from this type of aircraft crash may produce toxic fumes which are hazardous to health.

Personal Protective Equipment (recommendations made by the GRB Royal Navy to be worn at crash site):
- Standard No.3 (combat) Dress.
- Appropriate weather protection.
- Civil Emergency Services wear normal uniform with appropriate weather protection.
- Safety helmet (as required).

### HAZARD LIST

<table>
<thead>
<tr>
<th>HAZARD TYPE</th>
<th>ITEM</th>
<th>QUANTITY</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acid - Sulfuric</td>
<td>Battery</td>
<td>1</td>
<td>Nose Compartment</td>
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<tr>
<td>Avtur F-34</td>
<td>Fuel</td>
<td>450 Liters</td>
<td>Fuel Tanks, Ferry Tanks (200L)</td>
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<td>Bromochloro fluoro - Methane (BCF)</td>
<td>Cabin Fire Extinguisher</td>
<td>2.5 Kg</td>
<td>Various</td>
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<tr>
<td>Cabin Insulation</td>
<td>Sound Insulation</td>
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<td>On Aircraft Various throughout</td>
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<tr>
<td>Cadmium &amp; Cadmium Oxide</td>
<td>Plated Components</td>
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<td>On Aircraft Various throughout</td>
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<tr>
<td>Dimethylformamide (DMF)</td>
<td>Strobe Power Pack</td>
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<td>On Aircraft</td>
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<tr>
<td>Glass Fibers</td>
<td>Main Rotor Blades</td>
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<td>SLB</td>
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<tr>
<td>Lead</td>
<td>Main Rotor Blades</td>
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<tr>
<td>Lithium (Non Rechargeable Batteries)</td>
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<td>Nitrogen Compressed</td>
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<td></td>
<td>Hydraulic Accumulators</td>
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<tr>
<td>OEP-71</td>
<td>Transmission Gear Box</td>
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<td>OM-15</td>
<td>Hydraulic System</td>
<td>2.5 Liters</td>
<td>Aircraft System</td>
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<tr>
<td>OX-7</td>
<td>Engine Lubrication System</td>
<td>10 Liters</td>
<td>Engine System</td>
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<td>Polytetrafluoroethylene (PTFE)</td>
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<td>On Aircraft</td>
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<td>Rotor Tie-Bars (Gazelic)</td>
<td>Main &amp; Tail Rotors</td>
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<td>Sonar Locator Beacon</td>
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<tr>
<td>Titanium</td>
<td>Components in Main Gear Box</td>
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<tr>
<td>Very Flare</td>
<td>Flare</td>
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</tr>
<tr>
<td>Oxygen</td>
<td>N/A</td>
<td></td>
<td>Nil</td>
</tr>
</tbody>
</table>
AIRCRAFT HAZARDS

MAIN ROTORS: Never approach the aircraft unless cleared to do so both by the pilot and the director. When cleared, approach at $90^\circ$ from the starboard side of the aircraft and keep your head covered.

BLADE SAIL AND SWOOP: Never enter the rotor disc when the rotors are being engaged or shut down.

MANHANDLING: This aircraft is very fragile so only the handgrips provided are "push" areas. No other part of the aircraft is to be used for manhandling purposes.

<table>
<thead>
<tr>
<th>DANGER AREAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
</tr>
<tr>
<td>B</td>
</tr>
<tr>
<td>C</td>
</tr>
</tbody>
</table>
NOTE:
Rubber covering on main rotor and tail rotor tie bar contain carbon fibre strands and may pose a carcinogenic hazard.

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.
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

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.
AIRCRAFT FAMILIARIZATION

GAZELLE HT3

ENGINE EXHAUST

ENGINE INTAKE

FLOTATION GEAR

BATTERY COMPARTMENT

PILOT DOOR HANDLE

THROTTLE

FUEL SHUTOFF

REAR DOOR JETTISON LEVER

FRONT DOOR JETTISON LEVER
PILOT DOOR
EMERGENCY JETTISON LEVER

BATTERY SWITCH

ROTOR BRAKE
The aircraft information is pending release.
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.

   a. Pull engine emergency T-handles, located on control quadrant, FULL AFT, to cut off fuel flow.

   b. Pull APU T-handle, located on overhead console, DOWN.

   c. Place battery switch, located on overhead console, to the OFF position.

2. AIRCREW EXTRACTION

   a. 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.

   b. Disconnect personnel leads from aircrew.

   c. 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.
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.
   a. Shut down engine after clutch is released. (Rotor will be nearly stopped.)
   b. Place mixture control in IDLE CUTOFF position.
   c. Place ignition switch in OFF position.
   d. Place alternator switch in OFF position.
   e. Place battery switch in OFF position.
   f. Place fuel shutoff valve in CLOSED position.
   g. Release restraints from crew, set aside restraint straps and remove crew.

4. AIRCREW EXTRACTION
   a. Place fuel shutoff valve in CLOSED position.

NOTE:
   Additional information for this aircraft is located in Chapter 13 for the MH-6.
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 Extinguisher
- 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
AIRCRAFT ARMAMENT

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

MARINE MARKERS
LIGHT STORES CARRIED
ARMAMENT TYPES
MARINE MARKERS
LIGHT STORES CARRIED
HEAVY STORES CARRIER
GUN
CHAFF AND FLARE DISPENSER (ONE ON EACH SIDE)

MASTERS ARmanent
SAFETY SWITCH
(SET TO SAFE)

HOIST CONTROL, Jettison BUTTON, FLOTATION & HARPOON

ARMAMENT WARNING NOTICE
ESSB BOMB RELEASE SAFETY LOCK

FLOTATION & HARPOON EQUIPMENT

HEAVY STORES RELEASE
HEAVY STORES RELEASE
HEAVY MACHINE GUN FIRING BUTTONS

BOMB & GUN CONTROL
CARGO & HARPOON MASTER
JAMMER CONTROL PANEL

ARMAMENT WARNING NOTICE

NOTE:
Armament may include bombs, missiles, torpedos, depth charges, and heavy machine guns - also flares, marine markers, and smoke (light stores).
SPECIAL TOOLS/EQUIPMENT
- Power Rescue Saw
- Crash Ax

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.
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

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.
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
- Fluororlastomers - 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

RADHAZ EMISSION DANGER (MAY BE UP TO 50 FT FORWARDS)

JET ENGINE AIR INTAKE DANGER AREA (BOTH SIDES)

HYDRAULIC RESERVOIRS (TWO SYSTEMS)

MAIN ROTOR BLADE SLEEVE BEARING RESERVOIRS (X4)

ENGINE OIL (BOTH SIDES)

INTERMEDIATE GEARBOX OIL RESERVOIR

ENGINE FIRE EXTINGUISHER BOTTLES (BCF) BOTH SIDES

MAIN FUEL AND COLLECTOR TANKS (750 KG.)

HAND FIRE EXTINGUISHER

JET ENGINE EFFLUX DANGER AREA

STROBE LIGHT AND TAIL ROTOR DANGER AREA

ENGINE FIRE EXTINGUISHER BOTTLES (BCF) BOTH SIDES

MAIN ROTOR BLADE DANGER AREA

SIGNAL PISTOL (WHEN FITTED)

BATTERY

STROBE LIGHT (UNDER)
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.
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 MK 3

AIRCRAFT PAINT SCHEME

LYNX MK 3 (RN)
LYNX MK 3
T.O. 00-105E-9

LYNX MK 3

AIRCRAFT DIMENSIONS

BLADES SPREAD

LIGHT STATIC GROUND LINE

LENGTH 42 FT (12.8M)

HEIGHT 12 FT (3.66M)

4.260M

12.800M DIA

2.210M

11.920M

7.660M

1.867M

1.147M

2.778M

2.940M

49 FT 9 IN

(15.163M)

1776.01M MAX

2.210M

1.147M

1.867M

1.147M

7.660M

11.920M

42 FT (12.8M)

3.660M

HEIGHT

LIGHT STATIC GROUND LINE

LENGTH 42 FT (12.8M)
## AIRCRAFT DATA

**AIRCRAFT DATA**

Single Rotor Helicopter
Two Rolls-Royce Gem 41-1turboshaft
Military Freight/Passenger:
  2 crew Maximim
  10 passengers
Aircraft Weight: 8,000 lbs. (3,620 Kgs)

### WARNING

Fires resulting from this type of aircraft crash may produce toxic fumes which are hazardous to health.

### Personal Protective Equipment

(recommendations made by the GRB RAF Royal Navy to be worn at crash site):
- Service issue overalls and gloves and Civil Emergency Services normal uniform with overall required.
- Appropriate weather protection.
- Safety helmet (as required).

### HAZARD LIST

<table>
<thead>
<tr>
<th>HAZARD TYPE</th>
<th>ITEM</th>
<th>QUANTITY</th>
<th>LOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acid - Sulphuric</td>
<td></td>
<td></td>
<td>On Aircraft</td>
</tr>
<tr>
<td>AL 36 Windscreen Wash Fluid</td>
<td></td>
<td></td>
<td>On Aircraft</td>
</tr>
<tr>
<td>Asbestos</td>
<td></td>
<td></td>
<td>On Aircraft</td>
</tr>
<tr>
<td>Avtur F-34 Fuel</td>
<td>Fuel</td>
<td>Internal 973 L</td>
<td>Fuel Tanks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>External 2X436 L</td>
<td>On Aircraft</td>
</tr>
<tr>
<td>Beryllium - Beriliua (Beryllium Oxides)</td>
<td></td>
<td></td>
<td>On Aircraft</td>
</tr>
<tr>
<td>Bromochlorodifluoro - Methane (BCF)</td>
<td></td>
<td></td>
<td>On Aircraft</td>
</tr>
<tr>
<td>Composite Materials (Man Made Minerals)</td>
<td>Airframe Materials</td>
<td></td>
<td>Carbon Fibre Rotor Blades</td>
</tr>
<tr>
<td>Dimethylformamide</td>
<td></td>
<td></td>
<td>Strobe Power Packs</td>
</tr>
<tr>
<td>Flourolastomers</td>
<td></td>
<td></td>
<td>Burnt Seals</td>
</tr>
<tr>
<td>Gaseous Tritium Light Sources</td>
<td>Lights</td>
<td></td>
<td>Beta Lights</td>
</tr>
<tr>
<td>Lithium (Non Rechargeable Batteries)</td>
<td>Batteries</td>
<td></td>
<td>Batteries</td>
</tr>
<tr>
<td>OEP-215</td>
<td>Engine Oil</td>
<td>6.8 L</td>
<td>Engine</td>
</tr>
<tr>
<td>OEP-70</td>
<td>Engine Oil</td>
<td>6.8 L</td>
<td>Engine</td>
</tr>
<tr>
<td>OM-15</td>
<td>Hydraulic Oil</td>
<td>20 L</td>
<td>Hydraulic System</td>
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<tr>
<td>OX-38</td>
<td>Engine Oil</td>
<td>6.8 L</td>
<td>Engine</td>
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<tr>
<td>Oxygen</td>
<td></td>
<td></td>
<td>Nil</td>
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<tr>
<td>Sonar Locator Beacon(s)</td>
<td>Sonor Beacon</td>
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<td>On Aircraft</td>
</tr>
<tr>
<td>Weapon Load (if fitted)</td>
<td>Weapon(s)</td>
<td></td>
<td>Mission Variable</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Stub Wings</td>
</tr>
</tbody>
</table>
1. HAZARDS

A Although having a “rigid” rotor, there is still blade sail and swoop to be aware of. NEVER approach the aircraft without permission from the Incident Commander/Director and pilot.

B Never approach the aircraft from the tail; always approach within full view of the pilot when cleared to do so by the Incident Commander/Director and pilot.

C Beware of engine intakes and exhausts.

D The flotation system is housed internally so does not constitute an external hazard, but can be after entry.

E Beware of external-fitted weapons, especially Heavy Machine gun Pods (HMPs).

2. BRAKING

This aircraft is very fragile, only push on the undercarriage, main frames or handholds.

NOTE:
There is no normal braking system on this aircraft. A parking brake, comprising a wheel lock arrangement, must never be applied when the aircraft is moving. “Chocks in hand” must be ordered to any move. A brakeman is used to man the cockpit, but is only to apply the parking brake in an extreme emergency.
NOTE:
Hazardous cargo may be carried in cabin, or slung externally - glass fibre panels, asbestos, strobe lights, beryllium.

3. MOVING
In the event of a Lynx recovery to a CVS, it is unlikely that the correct mechanical handling equipment will be available. A specialized version of the EN mechanical handler is available for use in small ships, but the EN on CVS may not be modified. The Lynx is therefore best manhandled if a move is required on a CVS, using the security/lashing requirements of a FF/DD flight deck as a guide.

4. SECURITY AND LASHING
The minimum standard to which Lynx aircraft are to be secured and lashed ships for various conditions of ship pitch and roll dependent on location. In all sea states, lashings are to remain on until immediately prior to aircraft launch and are to be re-applied immediately after land on unless green deck operations are being conducted. The ship is to remain on a steady flying course while lashings are removed and reapplied.
AIRCRAFT ARMAMENT

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

MASTER ARMAMENT SAFETY SWITCH (SET TO SAFE)

HEAVY STORES RELEASE

HEAVY MACHINE GUN FIRING BUTTONS
SPECIAL TOOLS/EQUIPMENT
Power Rescue Saw
Crash Ax

ARICRAFT ENTRY

1. NORMAL ENTRY
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AIRCRAFT FAMILIARIZATION

LYNX MK 3

ENGINE EXHAUST

AIR INTAKE

NORMAL DOOR RELEASE

EMERGENCY WINDOW RELEASE

NORMAL DOOR RELEASE

EMERGENCY DOOR JETTISON

NORMAL DOOR RELEASE