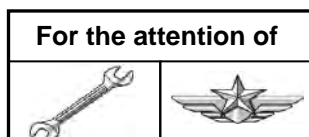


# SAFETY INFORMATION NOTICE

**SUBJECT: GENERAL**

Ground Rescue Booklet



| AFFECTED HELICOPTERS | Model(s)  |          |
|----------------------|-----------|----------|
|                      | Civil     | Military |
| MBB BK117            | C-2, C-2e | –        |

Flight safety is the first priority for Airbus Helicopters. In line with our constant commitment to improving the safety of your operations, we are providing you with this new Ground Rescue Booklet for EC145/645 helicopters. This booklet, which was developed in collaboration with the EC145/645 operators, will give you additional information in order to adapt your Emergency Response Plans (ERP) within the scope of your Safety Management System (SMS).

We would like to point out that this document covers a generic configuration which may be different from the specific configurations of your helicopters. This booklet will initially be issued in English only and will not be subject to systematic updating. Dedicated versions will be prepared for other helicopters from the Airbus Helicopters range.

These booklets will be made available free of charge on the Airbus Helicopters website, in order to be used by fire fighters and rescue teams around the world.

# BK117 C-2(e)

## Emergency off and rescue from helicopter



Issued on 01 August 2016

### NOTE

This Ground rescue booklet provided by Airbus Helicopters gives general and safety information on the BK117 C-2(e). This document shall only be considered as a support for users to elaborate their own documentation. It will not be systematically updated according to aircraft modification process. Depending on the country and the modification of the helicopter, systems may differ in their location.

## Table of Contents

|  |           |
|--|-----------|
| <b>GENERAL INFORMATION .....</b>   | <b>3</b>  |
| <b>OCCUPANCY.....</b>  | <b>3</b>  |
| <b>DIMENSIONS.....</b>   | <b>3</b>  |
| <b>POWERPLANTS .....</b>   | <b>4</b>  |
| <b>FUEL SYSTEM .....</b>   | <b>4</b>  |
| <b>TANK CAPACITY .....</b>   | <b>4</b>  |
| <b>OIL CAPACITY .....</b>  | <b>4</b>  |
| <b>AUXILIARY FUEL TANK.....</b>  | <b>5</b>  |
| <b>SAFETY INFORMATION – OUTSIDE THE HELICOPTER.....</b>                                      | <b>6</b>  |
| <b>FIREFIGHTING RECOMMENDATIONS.....</b>   | <b>6</b>  |
| <i>General.....</i>  | <i>6</i>  |
| <i>Fire around the aircraft.....</i>   | <i>6</i>  |
| <i>Fire in the main gear box (MGB) compartment.....</i>                                      | <i>6</i>  |
| <i>Fire in the engine compartment.....</i>   | <i>7</i>  |
| <b>EMERGENCY FLOATATION SYSTEM.....</b>  | <b>8</b>  |
| <b>PITOT TUBES .....</b>   | <b>9</b>  |
| <b>ACCESS TO THE HELICOPTER .....</b>  | <b>10</b> |
| <i>Open the cockpit door.....</i>  | <i>10</i> |
| <i>Open the passenger door.....</i>  | <i>11</i> |
| <i>Open the clamshell doors.....</i>   | <i>11</i> |
| <i>Open the emergency exit (sliding door).....</i>   | <i>12</i> |
| <b>SAFETY INFORMATION – INSIDE THE HELICOPTER .....</b>                                      | <b>14</b> |
| <b>GENERAL.....</b>  | <b>14</b> |
| <b>DISCONNECT THE BATTERY.....</b>   | <b>14</b> |
| <b>ENGINE SHUTDOWN .....</b>   | <b>15</b> |
| <i>Cockpit layout.....</i>   | <i>15</i> |
| <i>Engine shutdown (variant 1) - normal procedure (only possible from Pilot's side).....</i> | <i>16</i> |
| <i>Engine shutdown (variant 2) in case of fire.....</i>                                      | <i>17</i> |
| <b>ROTOR BRAKING.....</b>  | <b>18</b> |
| <b>ADJUSTMENT OF THE PILOT SEATS.....</b>  | <b>19</b> |
| <b>REMOVAL OF THE PILOT SEATS.....</b>   | <b>20</b> |
| <b>SAFETY BELT.....</b>  | <b>21</b> |
| <b>QUICK REFERENCE CARD .....</b>  | <b>22</b> |

## General Information

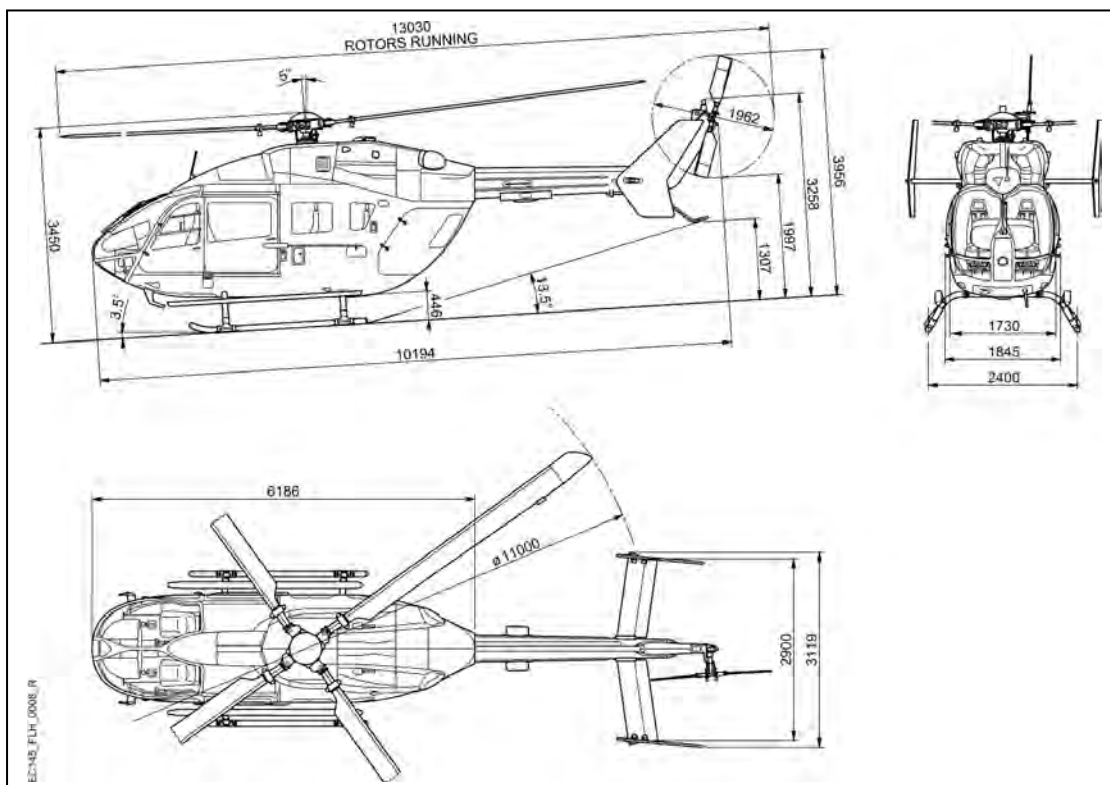
Empty weight..... 1750 kg  
 Takeoff weight max. .... 3585 kg

## Occupancy

Max. Crew (Cockpit) ..... 2  
 Max. Passengers (Cabin)..... 9

## Dimensions

Overall length ..... 13.03 m  
 Main rotor height with low (standard) landing gear ..... 3.45 m  
 Tail Rotor height ..... 3.96 m  
 Landing gear width ..... 2.40 m  
 Rotor diameter ..... 11.00 m

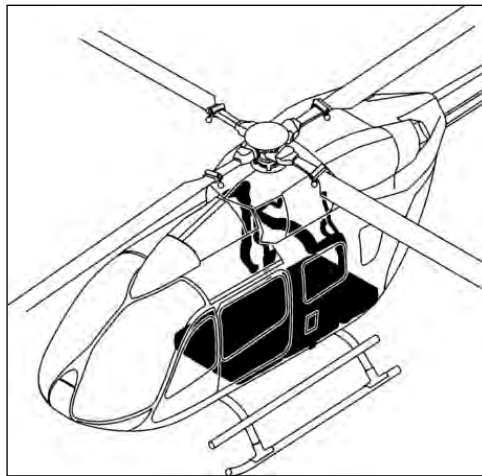


## Powerplants

Two Turbomeca ARRIEL 1E2.

## Fuel System

The EC145 has two fuel tanks which are located under the cabin floor (seat area), made of impact resistant rubber bladders. The fuel filler is located on the left side, behind the passenger door.



## Tank capacity

Maximum tank capacity ..... 880 l / 704 kg  
1552 lb / 232.5 US gal.

## Oil capacity

Maximum oil tank capacity per engine ..... 5.50 l  
Main transmission ..... 12.5 l  
Intermediate gearbox..... 0.75 l  
Tail Rotor gearbox ..... 0.65 l  
Main rotor hub ..... 1.90 l

## Auxiliary fuel tank



Maximum tank capacity ..... 222 l / 178 kg  
392.5 lb / 58.6 US gal.

## Safety information – outside the helicopter



**Aircraft may be charged with static electricity. Use gloves and if possible discharge the aircraft by establishing an electrical grounding.**

### Firefighting recommendations

#### General

- When possible, ground staff must be in contact (radio/visual signs) with the aircrew in order to coordinate and secure the intervention.
- Ground staff must wear adequate protective equipment.

#### Fire around the aircraft

- If possible wait for the rotor to full stop.
- Fuel leakage along the aircraft structure and/or presence of fire spill on ground must be fought with foam first.
- Cool external adjacent structures with foam or water spray.

#### Fire in the main gear box (MGB) compartment

- Wait for the engines and rotor to stop.

## Fire in the engine compartment

- Wait for engines and rotor to stop.



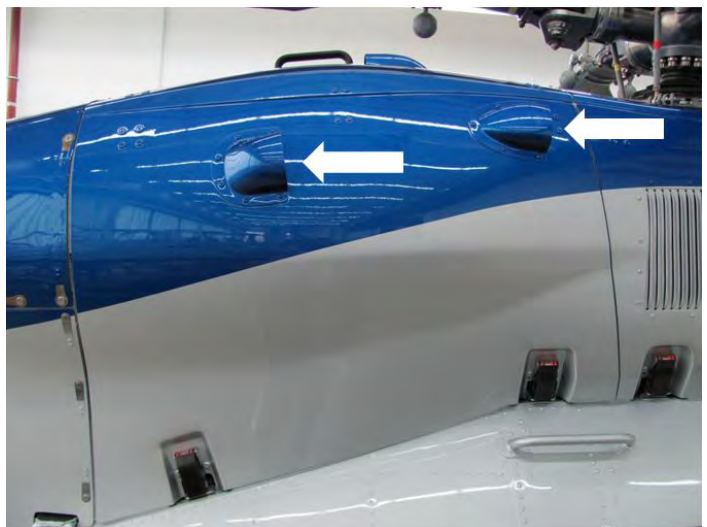
**The engine exhaust could be very hot (up to 600 °C)**



Engine exhaust

- Spray the extinguishing agent (gaseous extinguisher recommended) between engine exhaust and engine nozzle.
- Proceed by using circular movements until saturation.

- Spray the extinguishing agent (gaseous extinguisher recommended) in the inlets.



Inlets



## Emergency floatation system



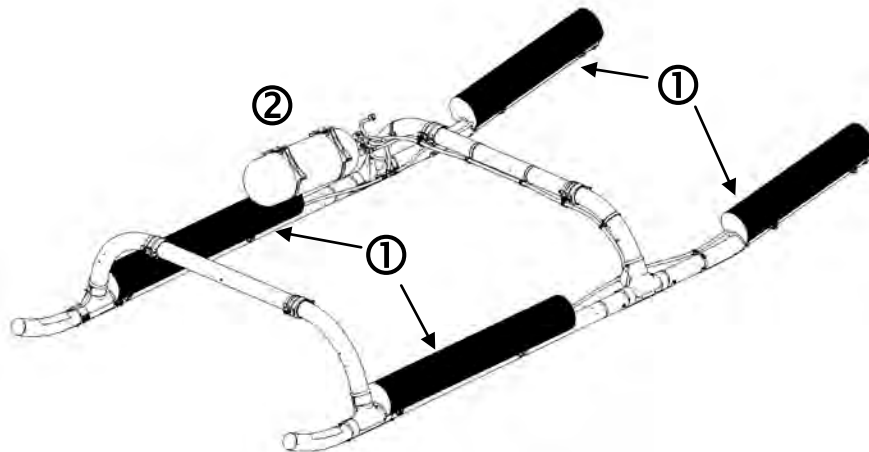
The front and rear sponsons might inflate suddenly! The pressure bottle is filled with helium (approx. 250 bar)!



① Packed floats



② Pressure bottle



Emergency Floatation System – typical installation on Landing Gear

See next page for helicopter with inflated floats.



### Pitot tubes

**Pitot tubes are heated in flight and can cause injury!**



## Access to the helicopter

### Open the cockpit door



Turn the pilot door handle



To enlarge the door opening, unhook the gas pressure spring on the cabin side. Press the gas pressure spring upward with some force.

### Open the passenger door

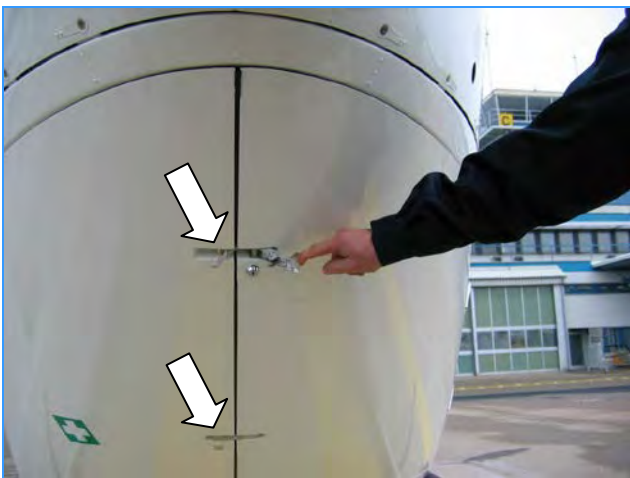


Turn the door handle



Push the door backwards

### Open the clamshell doors



Open both locks



to open the clamshell doors.

## Open the emergency exit (sliding door)

If the sliding door is equipped with an (optional) Sliding Doors Jettisoning System, one of the below shown placards is attached to the door. Follow the instructions to remove the door.

### EMERGENCY EXIT

PULL EMERGENCY HANDLE TO FULL STOP  
TURN DOOR HANDLE AT LEAST 90° TOWARDS THE "OPEN" POSITION  
PULL DOOR OUTWARDS

or

### EMERGENCY EXIT

REMOVE CAP  
PULL HANDLE  
TURN DOOR HANDLE AT LEAST 90° TOWARDS THE "OPEN" POSITION  
PULL DOOR OUTWARDS

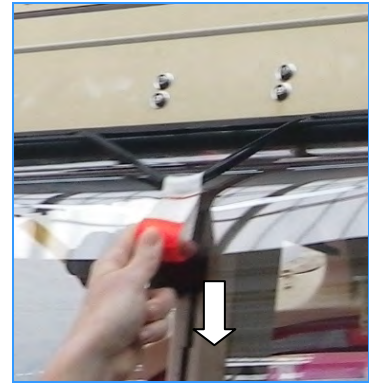


1: **Pull** emergency handle  
2: **Turn** door handle **at least 90°**,  
then **pull** the sliding door **outwards**

If the sliding door is **not** equipped with a Sliding Door Jettisoning System, use the emergency exit via the window as shown below:



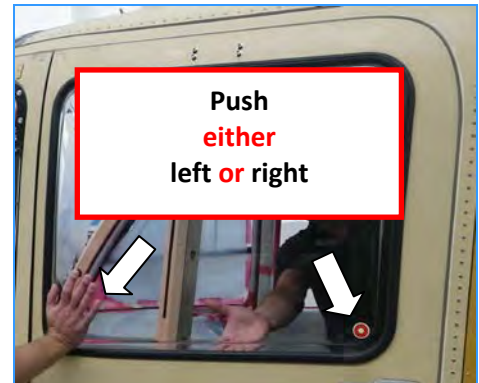
Remove cap



Pull handle down



Remove rubber



Push window at **ONE** marking spot



Remove window

## Safety information – inside the helicopter

### General

The following procedures are to be used in case of emergency on ground only if pilots are incapacitated.

### Disconnect the battery



**Disconnect the battery only when the engines are switched off and the rotors are stopped!**

The battery is located right behind the engine cover on helicopters right side. To disconnect the battery turn the screw until cable can be pulled from the battery.



## Engine shutdown

### Cockpit layout

1. **Collective lever** → for engine shutdown (variant 1) - normal procedure (only possible from Pilot's side)
2. **Warning panel** → for engine shutdown (variant 2) in case of fire



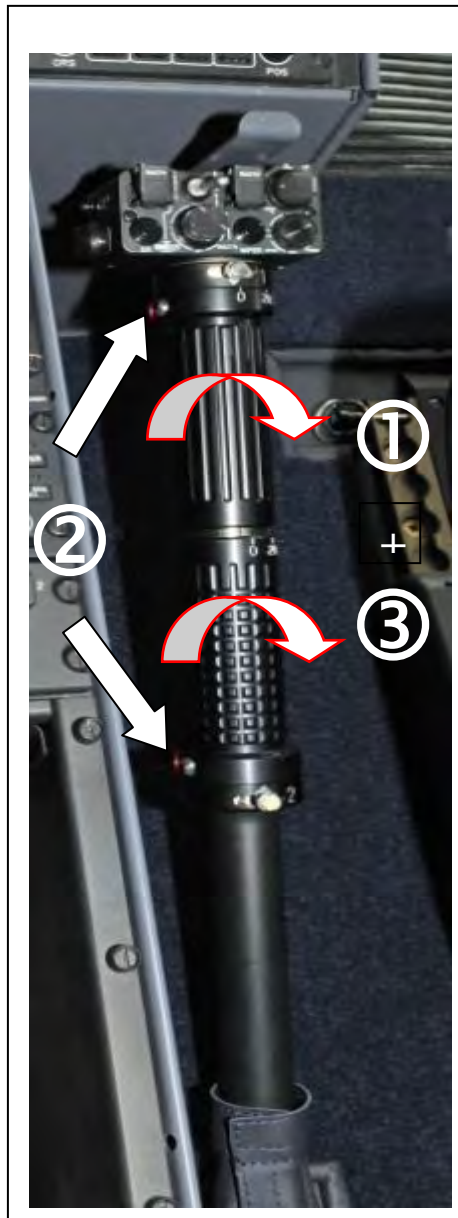


## Engine shutdown (variant 1) - normal procedure (only possible from Pilot's side - right hand seat)



**Make sure to turn the twist grips in the correct direction.**

1. Turn **both** twist grips to the right until position "30" (idle)
2. Press the two red unlock buttons (only available on pilot's side).
3. Turn **both** twist grips to the right until complete stop (position "0") → Engine shutdown is completed



**Engine shutdown (variant 2) in case of fire**



1. Fold the two guards (red caps) up
2. Press the two buttons
3. The fuel supply is interrupted.
4. Turn twist grips to OFF as mentioned in Variant 1.

## Rotor braking



**Apply rotor brake only with both engines shutdown. Activate rotor brake carefully when parked on ice or snow covered surfaces.**

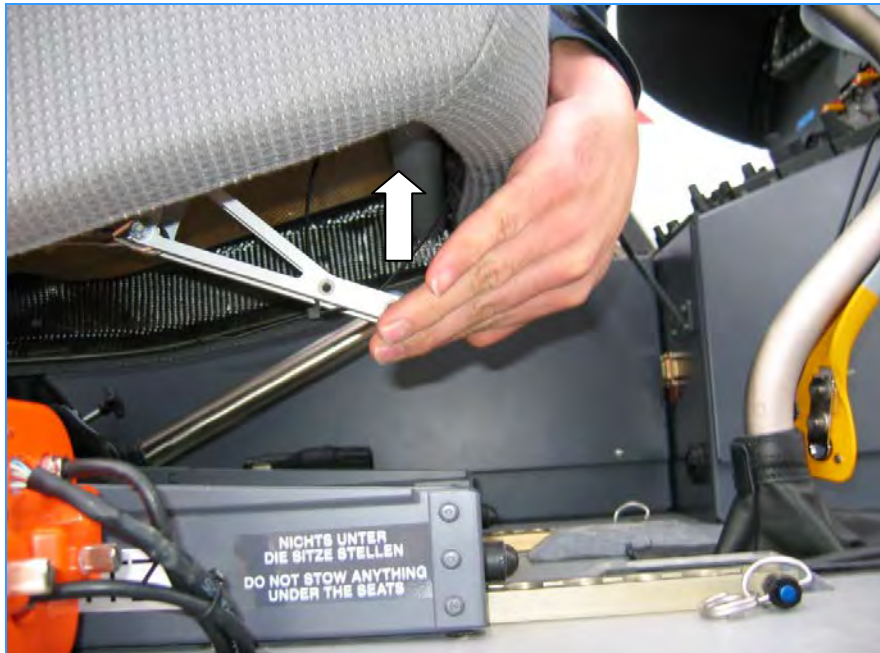


Rotor brake lever is located beside the Pilot seat



For activation press button on front of the lever and pull

## Adjustment of the pilot seats



Pull the lever under the seat to move the seat forward/backward

## Removal of the pilot seats



## Safety belt



To open the safety belt, turn the turn lock until each belt is free.

## Quick Reference Card

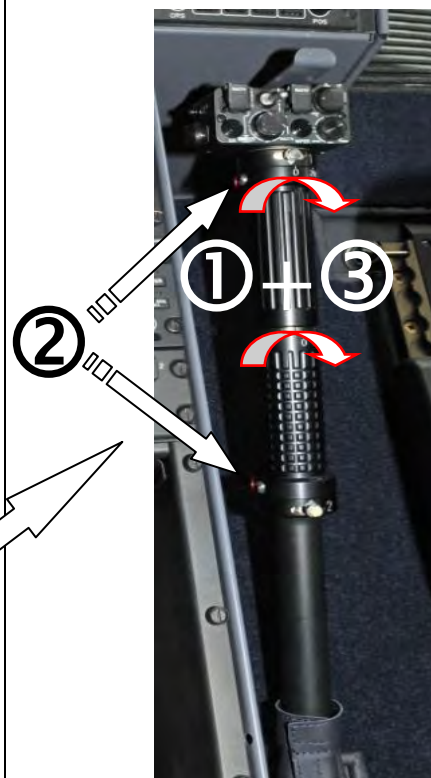
**Detailed procedures are given in the rescue booklet!**

**In case of fire or power failure refer to the information given in the rescue booklet!**

### 1. Open cockpit door



### 2. Shut down engines (only possible on pilot's side)



### 3. Stop the rotor

- Press the release button on front of the lever
- Pull the lever



### 4. Open the harnesses and evacuate the occupants

