

EMERGENCY POSITION INDICATING RADIO BEACONS (EPIRB'S)

GME MT310

GME Electrophone MT310 Is a self-contained radio transmitter that transmits an internationally recognised distress signal on the 121.5 MHz and 243 MHz aviation emergency frequencies for a minimum of 48 hours. These frequencies are monitored not only by commercial and military aircraft but also by the COMPAS/SARSAT satellite systems. The satellites can pick up your distress signal and relay it to a local ground receiving station (known as a Local User Terminal or LUT) from there the beacon's position can be calculated to within about 20km. This information is then passed to the Search and Rescue Headquarters where rescue operations are commenced.

Australia's LUTs are located at Albany in WA and Bundaberg in QLD. Darwin and the Northern Territory are in the 2 hour zone, that means that within 2 hours of triggering the transmitter your approximate position should be calculated and someone should be on their way, in theory. The signal may still be picked up by over flying aircraft. An aircraft at 10,000 meters can detect the MT310's signal up to 200km away and 4000km by satellite relay. The beacon will transmit for at least 48 hours and up to 55 hours.

EPIRB's also have some weaknesses, of which all users should be aware.

- ?? The signal may not be received from deep valleys or under dense canopies.
- ?? Triggering an EPIRB sends an emergency signal "**WE ARE IN GRAVE AND IMMEDIATE DANGER TO LIFE**" There is no "we are in a bit of shit because Fred has broken his foot and can't walk properly".
- ?? Once triggered, the signal cannot be cancelled by the user, although false alarms can be notified to the Maritime Safety Authority on **1800 641 792**.
- ?? EPIRBs transmit only. You cannot seek advice, send a specific message, know that the message has been received or even that the signal was successfully transmitted.
- ?? Searches triggered by EPIRBs are generally undertaken from the air, so groups should make every effort to be visible to searchers in aircraft.

EPIRBs should be regarded as a last resort, and groups need to make every effort to be self reliant in dealing with any emergencies which may arise.

The final call is up to the group leader or whoever is in charge of the group in the situation, if you have done all you can, or all you are capable of and to the best of your medical knowledge, and you think the person is in grave danger and getting worse activate the EPIRB!

Be aware that for a false activation (or for a minor reason that is not life threatening) you may be liable for the costs of the search and evacuation!!!!!!!!!!!!!!

SOME HELPFUL HINTS

- ☞ Place the beacon in a cleared area so trees will not block transmissions.
- ☞ Place the beacon on high ground if you are in a gully.
- ☞ Place the beacon on a metal surface (car roof, space blanket or damp soil).
- ☞ All ways have one person on look-out for planes or helicopters on a high or prominent feature or a large cleared area so you can be seen easier.
- ☞ It is said that the use of a mirror on a perfect day can be seen as far as 160km away, so this may be a good option to signal search aircraft.
- ☞ Lay out as much brightly coloured clothing and equipment as possible, or wave it as much as possible, when you hear or see an aircraft

HOW TO USE A MIRROR FOR SIGNALLING

A mirror is utilised by pointing it directly towards an object, a noise or sweeping the horizon. To use it properly, proceed as follows:

1. Reflect sunlight from the mirror onto a nearby surface.
2. Move the reflection to your hand or a stick held out in front of you.
3. Move the reflection towards the aircraft you have seen or heard.

Note 1. Don't shine directly into the pilot's eyes, the body of the aircraft will do.

2. The mirror need not be rocked deliberately as the hand does this inadvertently.

SIGNALLING WITH SMOKE

Smoke is an easy way of letting aircraft know where you are, but bear in mind the high fire risk particularly in the Territory. Also ensure adequate protection of your patient against further injury.

There are internationally recognised methods of setting out your signal fires.

1. Set three fires 30m apart in a straight line.
2. Set out your fires 30m apart as 3 corners of a triangle.

These methods are very time consuming (in making them and keeping them going) and require a large amount of green vegetation to produce an effective plume of white smoke.

WORKING WITH HELICOPTERS

Landing, take off and loading procedures.

- ✂✂ The landing area should be approximately 7m x 7m, as flat as possible and away from any power lines and large trees that could hamper their approach.
- ✂✂ Remove any loose branches or protruding sticks that may interfere with the landing and beware of the extreme down-wind that is produced by the main rotor and the side wind from the tail rotor.
- ✂✂ For safety, stay at least 50m away from helicopters landing and taking off.
- ✂✂ If directing a helicopter pilot for landing, stand on the upwind side of the selected landing area with your arms outstretched indicating the landing area.
- ✂✂ If a cable is lowered from a hovering helicopter, let it touch the ground first to dissipate the static electricity. After hooking up the cargo or person, move forward or to the side of the aircraft and signal to the pilot that the operation is complete.
- ✂✂ Always approach and depart the helicopter from the front and only after being given the **all clear** by the pilot, which is indicated by the thumbs up signal.
- ✂✂ **Never go near the tail section of the aircraft!!!!!!!!!!!!!!**
- ✂✂ Do not wear hats or any other articles of clothing that can be blown away.

Whenever working in and around helicopters: always take your time, think what you are doing, watch the pilot and keep your head down.

Fill out the attached observation chart with the patient's name, address, and any emergency contacts which you might have. Include what happened to the person, basically as much information as possible, and pass it on to the pilot or whoever is in charge.

After the incident, sit down and document what happened, especially timings and specifics of what occurred. After documenting the incident have a debriefing session with the group and discuss any problems or points that arose.