USE OF PLB IN SWITZERLAND AND IN THE PRINCIPALITY OF LIECHTENSTEIN – PERSONAL LOCATOR BEACON

A factsheet compiled by Federal Office of Communications OFCOM

The abbreviations used in this factsheet are explained at the end.

What are PLB?
PLB are small, portable transmitters which can be activated in an emergency to transmit distress signals. The distress signals are received by polar orbiting and/or geostationary satellites and relayed via a ground receiving station to a Rescue Coordination Center (RCC). A PLB can only function reliably in open terrain.

How does the alert process work?
The distress signals are received by polar orbiting and/or geostationary satellites and are then relayed via the receiving ground station and the FMCC Toulouse to the responsible Rescue Coordination Center (RCC).

How long does it take until an alert is received at the Rescue Coordination Center?
If the PLB is equipped with GPS, a geostationary satellite can receive the distress signal together with the current position of the PLB and relay this information to the RCC. With such equipment, it usually takes only a few minutes until the RCC receives the alert.

Condition: There must be "line of sight" between the PLB and the satellite.
If the PLB is not equipped with GPS, its position cannot be calculated by geostationary satellite. In certain circumstances, several passes of an orbiting satellite may be required before the signal is received and the distress position is located. Several hours could therefore elapse before the RCC receives the alert.

Who operates the Rescue Coordination Center in Switzerland and for the Principality of Liechtenstein?
The RCC Zurich, operated by Kantonspolizei Zürich, by order of the Federal Office of Civil Aviation.

What options does the Rescue Coordination Center have when it receives an alert from a PLB?

A PLB does not allow voice communication.

- The search and rescue units therefore do not know what kind of emergency it is and they must always assume a worst-case scenario on receiving an alert.
- The rescue might be delayed.
- In some circumstances the exact location of the emergency must be determined using special locator aircraft and/or helicopters.
- Rescue operations in these circumstances can be extremely expensive.

It is therefore recommended that the holder carries other means of communication in addition to the PLB, e.g.:

- a mobile telephone;
- an emergency radio equipped with REGA's emergency channel (161.300 MHz);
- an emergency telephone; or
- a satellite telephone.
Do PLB’s have a test function?
PLB usually have a function for testing the performance of the batteries, the transmitter and the internal GPS.

An alert shall never be initiated for test purposes!

How much does a PLB cost?
The costs for a PLB depend on the different manufacturers. They may be purchased in specialist shops.

Are there any alternatives to PLB?
Due to Switzerland’s well-developed emergency network, REGA recommends the use of:

- a mobile telephone;
- an emergency radio equipped with REGA’s emergency channel (161.300 MHz)
- an emergency telephone (e.g. a mobile telephone equipped with a GPS receiver and an alarm button); or
- a satellite telephone.

When can I carry a PLB in Switzerland or in the Principality of Liechtenstein?
As soon as it is registered in the IBRD (International 406 MHz Beacon Registration Database) from COSPAS SARSAT. In order for the rescue chain to function properly, and also in the holder’s interest, the PLB must be registered with COSPAS SARSAT.

May I buy a PLB anywhere in the world?
In certain overseas countries other technical standards than those in Europe apply. Problems may be encountered on programming PLB’s; not all of them can be programmed with a Swiss or a Liechtenstein “identity” which would therefore prevent registration in Switzerland. If a PLB is purchased abroad the dealer should program it with the country code 269 for Switzerland or 252 for the Principality of Liechtenstein.

How do I register my PLB?

- In order for the rescue chain to have all the necessary data available a PLB must be registered with COSPAS SARSAT as a personal rescue transmitter under the name of the holder. **The registration is free of charges.**
- It is essential to indicate a contact person who can be reached around the clock so that the responsible RCC can obtain details about the PLB holder. For obvious reasons the contact person cannot therefore be the holder. The contact person should be able to give detailed information about the holder, if he can be reached in case of an alert (number of a mobile telephone, a satellite or an emergency phone he carries) or if he carries an emergency radio.

May a PLB registered in Switzerland also be used abroad?
Permission from the authorities of the host country must be obtained in advance. Warning: The infrastructure necessary for search and rescue operations is only available in certain countries. You should therefore ensure in advance that the possible use of PLB will actually have any benefit, otherwise you may be giving yourself a false sense of security.

May a PLB registered in Switzerland also be carried on a charter ship at sea?
Permission from the authorities of the country under whose flag the ship is registered must be obtained in advance.
May a PLB be carried on a yacht under Swiss flag?
Only if it can be programmed with an MMSI. A PLB should in this case be programmed as an EPIRB and is only approved for use on the ship for which the MMSI is valid. The EPIRB must be registered with the Swiss Maritime Navigation Office.

May a PLB be carried on a domestic flight in a Swiss-registered aircraft?
If a PLB is carried on board a Swiss-registered aircraft, it must be coded and registered as a PLB. (Personal emergency transmitters are approved only in the name of the holder of the PLB and not the aircraft). A PLB may not be used instead of a mandatory ELT. Special regulations apply to ELT, primarily in relation to technology and mounting. But a correctly coded and registered PLB may be carried in addition to an ELT.

May a PLB be carried on an international flight in a Swiss-registered aircraft?
Permission from the foreign authorities must be obtained in advance unless an ELT or a PLB is not mandatory in these countries. A PLB may not be used instead of a mandatory ELT. Special regulations apply to ELT, primarily in relation to technology and mounting. But a correctly coded and registered PLB may be carried in addition to an ELT.

How can I cancel a false distress alert?
The RCC Zurich must be informed without delay by telephone, regardless of whether the false alert was initialized on Swiss or Liechtenstein territory or abroad.
Telephone: +41 58 717 06 50 (only to be used in the case of an emergency or for cancelling a false alert).

Who can supply me with further information concerning the use and registration of PLB?

OFCOM
Andreas Hager
Tel: +41 58 460 58 24
E-Mail: andreas.hager@bakom.admin.ch
Abbreviations used in this factsheet:

ELT Emergency Locator Transmitter. Emergency transmitter which automatically transmits a distress signal in the case of an aircraft accident.

EPIRB Emergency Position Indicating Radio Beacon. Maritime emergency radio buoy which transmits a distress signal which is received by satellites and relayed via a ground station to a maritime emergency rescue centre.

FOCA Federal Office of Civil Aviation.

GPS Global Positioning System. Navigation system which uses several orbiting satellites to determine the exact position on the Earth’s surface.

MMSI Maritime Mobile Service Identity. Unique identification for the radio communications equipment on a ship.

OFCOM Federal Office of Communications.

RCC Rescue Coordination Centre.

REGA Swiss Air Rescue.

SAR Search and Rescue.