

ELT or PLB? Which device is best for light aircraft?

According to EASA Regulation EU-965/2012 Part NCO, PLB devices (Personal Locator Beacons) can be carried instead of ELTs (Emergency Locator Transmitters) on light aircraft with 6 seats or less. Both beacons – ELT and PLB – are intended to make it easier for the search and rescue services to quickly locate aircraft which have been involved in an accident.

The devices work in a similar way: after activation, both transmit a signal on the designated alert frequencies (406 MHz and 121.5 MHz). Practically all PLBs and more and more ELTs are also equipped with GPS and therefore supply the exact position of the device. (Please refer to the corresponding information sheet)

In which aspects do the two systems differ?

The two greatest differences are portability and activation. The ELT device is a permanently fitted, integral component of the aircraft. The PLB, however, is not permanently fitted in the aircraft but has been designed for mobile use.

The essential difference between the two devices is that the ELT device is activated automatically on impact. The PLB device, however, must be activated manually for it to transmit signals. So if there is a crash and the pilot and/or the passengers are not familiar with a PLB or are unable to activate it, no alert signals are transmitted. Search and rescue services will therefore find it more difficult to locate the site of the crash and to be informed about an accident.

Summary:

A PLB device is optional low-cost ancillary equipment. But it does not have the advantages of an ELT which activates automatically. In most accidents, pilots would not be able to activate a PLB.

The videos are provided by COSPAS-SARSAT:

System overview https://www.youtube.com/watch?v=8jHOvWZTNj1
https://www.youtube.com/watch?v=1h17frDalg8
https://www.youtube.com/watch?v=TS5ZgpTn56w

<u>The Federal Office of Communications</u> (OFCOM) website contains important information on the use of ELTs and PLBs in Liechtenstein and Switzerland.