

1.29 Emergency Locator Transmitter (ELT)

General

No person shall operate an aircraft unless it is equipped with one or more ELT's as required by the aircraft type and area of operation. An ELT required to be carried shall be armed as specified in the AFM, AOM, POH or equivalent document provided by the manufacturer.

ELT's help search crews locate downed aircraft. They send out an audible signal on 121.5 MHz and/or 243.0 MHz that can be heard by aircraft listening over the emergency frequencies. 406 MHz ELT signals can be detected by SARSAT and COSPAS satellites, and a precise location of the aircraft will be known by SAR.

ELT Categories

There are 5 types of ELT:

- TYPE A or AD - Automatic Ejectable or Automatic Deployable.** Automatically ejects from the aircraft and activates during crash force.
- TYPE F or AF - Fixed or Automatic Fixed.** Activates based on inertia switch when aircraft subject to crash force. Most GA aircraft use this type.
- TYPE AP - Automatic Portable.** This type is similar to Type F or AF except that the antenna is integral to the unit for portable operation.
- TYPE P - Personnel.** This type has no fixed mounting and does not transmit automatically.
- TYPE W or S - Water Activated or Survival.** Transmits automatically when immersed in water. It is waterproof and floats and should be tethered to life rafts or survivors.

Schedule of Requirements

Review Fig. 1-10 for a schedule that outlines the requirements to carry an ELT.

Column I	Column II	Column III
Aircraft	Area of Operation	Minimum Equipment
1. All aircraft except those exempted.	Over land	One ELT of type AD, AF, AP, A, or F.
2. Large multi-engine turboprop aeroplanes engaged in an air transport service carrying passengers.	Over water at a distance from land that requires the carriage of life raft pursuant to CAR 602.63.	Two ELTs of type W or S or one of each.
3. All aircraft that require an ELT other than those set out in item 2.	Over water at a distance from land that requires the carriage of life raft pursuant to CAR 602.63.	One ELT of type W or S.

Fig. 1-10: ELT Schedule of Requirements.

Exceptions

An aircraft may be operated without an ELT on board where the aircraft is

- a glider, balloon, airship, ultra-light aeroplane or gyroplane;
- registered under the laws of another state, equipped with a serviceable radio transmitter that is approved by that state

for search and rescue purposes, having a distinctive siren like sound capable of communication on frequencies 121.5/243.0 MHz;

- operated by the holder of a flight training unit operating certificate, engaged in flight training and operated within 25 NM of the aerodrome of departure;
- engaged in a flight test;
- a new aircraft engaged in flight operations incidental to manufacture, preparation or delivery of the aircraft;
- operated for the purpose of permitting a person to conduct a parachute descent within 25 NM of the aerodrome of departure.

ELT Repairs/Removal

Where an aircraft is required to carry an ELT, the aircraft may be operated without a serviceable ELT if the operator

- repairs the ELT or removes it from the aircraft at the first aerodrome at which repairs or removal can be accomplished;
- on removal of the ELT, sends the ELT to a maintenance facility; and
- displays on a readily visible placard within the aircraft cockpit, until the ELT is replaced, a notice stating that the ELT has been removed and setting out the date of its removal.

If an aircraft is required to have one ELT as per the ELT Schedule of Requirements, the operator shall re-equip the aircraft with a serviceable ELT within 10 days after the date of removal, if the aircraft is operated under Commuter or Airline operator requirements or 30 days after the date of removal in the case of any other aircraft.

If an aircraft is required to have two ELT's under the ELT Schedule of Requirements, the operator shall, if one of the ELT's is unserviceable, repair or replace it within 10 days after the date of the removal and if both ELT's are unserviceable, repair or replace one ELT at the first aerodrome at which a repair or replacement can be accomplished and the second ELT within 10 days after the date of removal.

ELT Activation

No person shall activate an ELT except in an emergency. A person may activate an ELT during the first 5 minutes of any hour UTC for a duration of not more than 5 seconds for the purpose of testing it. Where an ELT has been inadvertently activated during flight, the PIC of the aircraft shall ensure that the nearest ATC unit, FSS or CARS is so informed as soon as possible and the ELT is switched off.

NOTE: Transport Canada is expected to mandate that all ELT's be capable of transmission over 406 MHz soon, so as to make ELT's more compatible with SAR satellites. As at the time of the printing of this edition, this has not yet formally been made law.

[Ref: CARs 605.38, 605.39, 605.40]