

Emergency Locator Transmitter Activation (Source: ICAO)

The parameters in the query for the status of Emergency Locator Transmitters (ELT) after an occurrence were set at:

Dates between 1 January 1983 and 30 June 2014 (approximately 30 years), including all occurrences (accidents and incidents) involving aircraft in the mass group 5 701 kg and above and records with descriptive factors and ELT parameters that have value.

The query found 403 records in the ADREP database in which a response was inserted relating to ELTs. Of these occurrences 257 were classified as accidents. Due to incidents being less severe, a lower probability of ELT implications are expected. The query then focused on accidents. The following table indicates the aircraft mass groupings of the aircraft involved in accidents:

Aircraft mass group	Accidents
5 701 to 27 000 Kg	161
27 001 to 272 000 Kg	87
> 272 000 Kg	9
Total	257

The taxonomy for the attribute to indicate the status of the ELT (whether it worked as designed or why it did not work) was used to compile the following table: (* after 1994)

ELT status	Cases
Battery failed	14
Damaged	11
Internal failure	5
Not activated	22
Not carried	84 (12)*
Operated effectively	39
Other	21
Submerged	1
Terrain shielding	1
Unknown	59
Total	257

In 39 cases of the 257 accident records, the ELT operated effectively, which implies that 15% of the ELTs operated effectively. The data indicated that in 84 cases, *no ELT* was carried. Considering that provisions for the carriage of ELTs became applicable in Annex 6 on 10 November 1994, the *no ELT carried* data was evaluated to determine the situation after 1994 (past 20 years approximately) and the number reduced from 84 to 12.

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