

ELECTRONICS & DEFENSE



NEW ELT STANDARDS

IMPACTING THE AVIATION INDUSTRY



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Emergency Locator Transmitter (ELT) regulations have evolved significantly over the last few years, impacting both aircraft manufacturers at the design level and airlines in their day-to-day operations. Two main standards requiring the adoption of new technologies, related to both fixed and cabin ELTs have recently been set by regulators such as the EASA, FAA, CAAC, ICAO and others.

These new requirements are aimed at improving the tracking of aircraft in distress globally, while enhancing the crew and passengers' safety through the next generation of batteries.

GADSS – Global Aeronautical Distress & Safety Systems

Civil aviation authorities and regulators mandated the GADSS requirements after several accidents where downed aircraft could not be located at all, or only after long and expensive search efforts.

Those new standards are aimed at rescuing potential survivors as well as locating the wreckage and flight recorders in a timely manner.

More specifically, the Autonomous Distress Tracking (ADT) portion of GADSS requires aircraft in distress to report their position (1NM or better accuracy) to the ground at least once every minute through a system which is resilient to electrical power loss.

The ADT requirements apply to all new aircraft delivered with a take-off mass greater than 27T from January 2024, according to ICAO

FAA / EASA Special Conditions for Non-Rechargeable Lithium Batteries

After several fire incidents involving lithium batteries in which the aircraft were damaged or crew members injured, the FAA, followed later by the EASA, enhanced the certification requirements for the use of lithium batteries with the final goal to demonstrate that they can mitigate all the hazardous effects of a thermal runaway or explosion.

While existing configurations remain approved, new installations of equipment powered by non-rechargeable lithium batteries that are not compliant with those requirements are now prohibited.

As part of their safety policies, several airlines have already launched campaigns to replace non-compliant equipment to improve the aircraft safety for crews and passengers.

The World's Leading Next Generation ELT Manufacturer

Safran has designed and supplied a comprehensive range of ELTs (fixed & portable) to the aviation industry for decades, becoming one of the world's leading distress beacon manufacturers. More than thirty aircraft manufacturers as well as hundreds of airlines already trust Safran for its ability to design and supply state of the art ELTs while following the highest quality standards.

As one of the major contributors in defining these new standards with regulators and architectures with aircraft manufacturers, Safran now helps operators comply with GADSS and the special requirements through next-generation ELTs, under its new Ultima range.

Ultima-DT – Fixed Distress Tracking ELT

The Ultima-DT is specifically designed to meet the [GADSS Autonomous Distress Tracking](#) requirements and includes the following features:

- Automatic in-flight activation based on flight parameters and manual activation from the cockpit
- Compliant with FAA/EASA special conditions for non-rechargeable lithium batteries
- Embedded GNSS receiver to report the accurate aircraft location to operators as well as Search & Rescue organizations globally
- Crash survivable with its ruggedized design and 121.5 MHz homing capability



Ultima-S – Portable Cabin ELT

The Ultima-S is specifically designed to meet the [FAA/EASA special conditions](#) and includes the following features:

- Manual & automatic activation through an integrated water switch sensor
- Compliant with FAA/EASA special conditions for non-rechargeable lithium batteries
- Embedded GNSS receiver to report the accurate user's location to operators as well as Search & Rescue organizations globally
- In-cabin installation, mounting bracket or bag options available
- Distress signal acknowledgement to the user based on Galileo Return Link Service (RLS) (optional)



Commercial Aircraft Compliant with the Latest ELT Regulations



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