

Automatic Deployable ELT with Memory Module



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Cockpit Control Panel

- System test
- Beacon transmit guarded switch
- Beacon deploy guarded switch
- 'Test' and 'Beacon Deployed' LEDs
- Compatible with Night Vision Goggles (NVG)

"The Techttest 503-16 deployable ELT series combines full Cospas/Sarsat coverage together with transmission of last known GPS co-ordinates to accurately pinpoint downed aircraft."



System Interface Unit

- System 'Arm' and 'Off' guarded switch
- Multi-Axis programmable G-Switch
- Back-up battery

The next step in post-crash data recovery.

Previous requirements to locate the Flight Data Recorder in ditched or crashed aircraft were costly and time consuming, not to mention high risk for the recovery teams themselves. The memory module (MM) option, of the 503 series Deployable ELT from Techttest, eliminates this need, by providing a storage system for data from the FDR/CVR, within the deployable beacon. Our unique Recorder Interface Unit (RIU) takes data from the FDR / CVR and relays it to the memory module housed within the deployable beacon.

Once the deployable ELT has been recovered, the data can be downloaded from the memory, used to assess the incident and work to establish cause.



Recorder Interface Unit

- Inputs
 - ARINC 429 / ARINC 717 / ARINC 664
 - Discreet Inputs
- RIPS (Recorder Independent Power Supply) optional

Designed specifically for the offshore market, this device offers three methods of deployment:

- Manual** - Pilot activation via a cockpit control panel.
- G Switch** - The SIU detects considerable changes in pre-programmed parameters and deploys the beacon. These parameters are dictated by the make and model of each specific aircraft involved.
- Water switch** - In the case of water ingress, the switch detects this and will deploy the beacon. This is the final trigger for deployment.

This product also contains RIPS to ensure that data continues to be recorded for up to 2 hrs post aircraft power loss, providing vital further insight into the development of an incident. Powered by state of the art capacitors, the easy to install system can be simply maintained, with capacitor replacement set at once every 10yr interval.



Beacon Release Unit

- Compressed spring for deployment
- CPI beacon attachment point
- Water activated switch (optional)



CPI Beacon with Memory Module

- 121.5MHz, (243MHz optional) & 406MHz
- GPS co-ordinates transmitted via 406MHz
- Class 1 ELT
- FDR and CVR memory module
- Crash Proof

Specification

Transmitter Signal

Frequency	121.5MHz/243MHz*/406.025MHz
Peak Effective	75mW at 121.5MHz
Radiated Power	5.0W at 406.025MHz
Frequency Stability	2 x 10 ⁻⁹ per min
Transmission Duration	24Hrs min, 5W PERP at -40°C 48Hrs min, 75mW PERP at -40°C
Repetition Rate	520ms (±1%) every 50 secs (±5%)

Memory Module

CVR audio storage	min 2 hours
FDR data storage	min 25 hours

Activation

Manual	The 503 Series of CPI can be manually operated via the cockpit control panel
Automatic	The CPI can be reliably activated by the multi-axis G-Switch or together with the on-board water activated switch

Compliance

The 503 Series of CPIs are compliant with the following specifications:

- COSPAS/SARSAT specification C/ST.001
- EUROCAE ED-62/RTCA DO-204/RTCA DO-183
- EUROCAE ED-14C/RTCA DO-160C
- CAA Specification No16, Issue 2

Dimensions, Weight and Battery Storage Life

CPI Beacon	305mm x 92mm
Part No. 503-16-MM	(12 ins x 3.62 ins)
Battery Storage Life	5 years
Cockpit Control Panel	146.2mm x 38mm x 66mm
Part No. 503-22 Series	(5.75ins x 1.5ins x 2.6ins)
Beacon Release Unit	140mm x 70mm x 67mm
Part No. 503-21-MM	(5.5ins x 2.76ins x 2.64ins)
Recorder Interface Unit	187mm x 165mm x 68.9mm
Part No. 503-57-A	187mm x 165mm x 100mm
Part No. 503-57-B	
System Interface Unit	217mm x 120mm x 82mm
Part No. 503-24 Series	(8.5ins x 4.7ins x 3.2ins)
Part No. 503-42 Series	
Water Activated Switch	140mm x 59mm x 31mm
Part No. 503-23-2	(5.5ins x 2.6ins x 1.2ins)
Beacon Deployment Control	140mm x 55mm x 89mm
Part No. 503-41	(5.5ins x 2.17ins x 3.5ins)
Aircraft Ident Config. Unit	150mm x 66mm x 40mm
Part No. 503-40	(5.9ins x 2.6ins x 1.57ins)

Approvals

- TSO C91a, JTSO-2C91a, TSO C126 and JTSO-2C126
- CAA WR01029
- COSPAS/SARSAT Approval 244
- TCCA

PLB Units

Our range of PLB's transmit modulated signals on 121.5 / 243MHz distress frequency with characteristics in accordance with STANAG 7007, plus 406MHz in accordance with COSPAS/SARSAT.



ELT's

All 503 series Emergency Locator Transmitters are designed to work with the COSPAS-SARSAT emergency satellite system and operate on 406 MHz, 121.5 MHz and 243 MHz. The latest upgrade utilises the iridium satellite network for aircraft tracking and automatic ELT Activation.

Direction Finding SAR

Our DF system is designed to reduce the time to locate 121.5MHz, 243 MHz and 406MHz emergency locator beacons. The system is capable of monitoring four separate beacons at once and comprises of three modules: an antenna, a cockpit display and a control unit.

