

ARTEX ME406 EMERGENCY LOCATOR TRANSMITTER SYSTEM - DESCRIPTION AND OPERATION

1. General

- A. An Artex ME406 Emergency Locator Transmitter (ELT) System is installed to help rescue teams find the airplane in the event of a crash. It is made to operate in a wide range of environmental conditions and is resistant to the forces caused by many types of accidents.

2. Description

- A. Artex ME406 ELT.
 - (1) The Artex ME406 Emergency Locator Transmitter (ELT) system includes an ELT unit, an integral battery pack, warning buzzer, internal G-switch, antenna, remote switch, cable assembly, and antenna coaxial cable. The ELT unit transmits on 121.5 MHz and 406.028 MHz.
 - (2) The battery pack has two D-size lithium cells mounted under a battery cover. The battery pack is replaced as necessary in the field.
 - (3) The ELT activates a buzzer that is installed near the ELT assembly. The buzzer makes a loud noise to let people know that the ELT is on.
 - (4) The G-switch is installed in the ELT transmitter and is activated with a sudden reduction in forward speed.
- B. Artex ELT Antenna.
 - (1) The ELT system uses an antenna to transmit the emergency locator signal. The ELT antenna is installed on top of the tailcone skin, forward of the vertical stabilizer at FS 311.45 and RBL 3.62 for the 208 and at FS 359.45 and RBL 3.62 for the 208B. The ELT antenna is connected with a coaxial cable to the ELT unit inside the dorsal.
- C. ELT Remote Switch.
 - (1) The ELT remote switch is installed on the right panel. The ELT remote switch is a two-position rocker switch that can be set in the ARM or the ON positions.

3. Operation

CAUTION: Operate the Emergency Locator Transmitter (ELT) system only during the first five minutes of each hour. If you must complete the functional test at a time other than the first five minutes of the hour, you must do the test with a direct connection to the ELT and a 30 dB attenuator. Refer to the FAA Advisory Circular AC-91-44A.

CAUTION: Do not operate the Emergency Locator Transmitter (ELT) for more than five seconds at a time. Do not operate the ELT again for 15 seconds. The ELT will transmit a 406.028 MHz signal after it is activated for approximately 50 seconds. This signal is identified as a distress signal.

- A. Artex ME406 ELT.
 - (1) When an accident occurs, the ELT will activate automatically and transmit a standard swept tone on the 121.5 MHz (emergency frequency). The 121.5 MHz transmission will continue until the ELT battery has expired. The 406.028 MHz transmitter is activated and will send a message to the satellite every 50 seconds for 440 milliseconds. The 406.028 MHz transmission will continue for 24 hours and then stop. During operation, the ELT will receive electrical power from the ELT battery pack only.
- B. ELT Remote Switch.
 - (1) The ELT can also be activated manually in the cockpit with the ELT remote switch. To manually activate the ELT, put the ELT remote switch in the ON position. The red LED will come on when the remote switch is set in the ON position. The ELT remote switch can also be used to do a test of the ELT system (refer to Artex ME406 Emergency Locator Transmitter - Troubleshooting). During typical operation, the ELT remote switch will be in the ARM position.