

ARTEX C406-N EMERGENCY LOCATOR TRANSMITTER SYSTEM - DESCRIPTION AND OPERATION

1. General

- A. An ARTEX C406-N Emergency Locator Transmitter (ELT) System is installed to help rescue teams find the airplane if there is 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 C406-N ELT.
 - (1) The ARTEX C406-N Emergency Locator Transmitter (ELT) system includes an ELT unit, integral battery pack, warning buzzer, internal G-switch, antenna, remote switch, cable assembly, antenna coaxial cable, and can include an optional programming adapter. The ELT unit transmits on 121.5/243.0 MHz and 406.028 MHz.
 - (2) The battery pack has four cells mounted under a battery cover. The battery pack is replaced as necessary in the field.
 - (3) The ELT energizes a buzzer that is installed near the ELT assembly. The buzzer makes a noise to show that the ELT is on.
 - (4) The G-switch is installed in the ELT transmitter and is started 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 you can 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 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 for 520 milliseconds approximately every 50 seconds. This transmission is an encoded digital message and is sent to a satellite as a distress signal.

- A. ARTEX C406-N ELT.
 - (1) When an accident occurs, the ELT will start automatically and transmit a standard swept tone on the 121.5 and 243.0 MHz (emergency frequencies). The 121.5/243.0 MHz transmission will continue until the ELT battery has expired, which will be more than 50 hours. The 406.028 MHz transmitter is activated and will send a message to the satellite every 50 seconds for 520 milliseconds. The 406.028 MHz transmission will continue for 24 hours, then stop. During operation, the ELT will receive electrical power from the ELT battery pack only.
- B. ELT Remote Switch.
 - (1) You also can start the ELT manually in the cockpit with the ELT remote switch. To manually start the ELT, put the ELT remote switch in the ON position. The red LED will flash twice each second when the remote switch is set in the ON position. You also can use the ELT remote switch to do a test of the ELT system (refer to ARTEX C406-N Emergency Locator Transmitter - Troubleshooting). During typical operation, the ELT remote switch will be in the ARM position.