



# **SUPPLEMENT**

## **EMERGENCY LOCATOR TRANSMITTER**

### **MODEL AK-450**

***AMERI-KING CORPORATION***

Registration mark:

Serial number:

This Supplement must be contained in the Aircraft Operating Instructions if Emergency Locator Transmitter (ELT) AK-450 is installed on the airplane in accordance with the approved airplane manufacturer documentation.

Information contained in this Supplement add or replace information from the basic Aircraft Operating Instructions in the further mentioned parts only. Limitations, procedures and information not mentioned in this Supplement are contained in the basic Aircraft Operating Instructions.



## RECORD OF REVISIONS

Rev. No.	Affected Pages	Description/Validity	Approved /Date	Incorporated/Date



## SECTION 1 – GENERAL

This Supplement adds information necessary for operation of the airplane with the Emergency Locator Transmitter (ELT) AK-450 that is installed in accordance with the approved airplane manufacturer documentation.

## SECTION 2 – LIMITATIONS

**CAUTION**

NEVER UNREASONABLY ACTIVATE ELT

## SECTION 3 – EMERGENCY PROCEDURES

Before performing a forced landing, especially in remote and mountainous areas, the ELT should be activated manually by pressing the ON button on the remote unit. The red LED on the remote unit illuminates.

Immediately after a forced landing where emergency assistance is required, the ELT should be utilized as follows:

**CAUTION**

THE REMOTE UNIT COULD BE INOPERATIVE IF DAMAGED DURING FORCED LANDING. HOWEVER, TURNING THE ELT ON REQUIRES MANUAL SWITCHING TO ON POSITION OF THE MAIN SWITCH WHICH IS LOCATED ON THE ELT MAIN UNIT.

### 1. ENSURE ELT ACTIVATION

- Press the ON button on the remote unit, even if the LED illuminates.
- Ensure that the external ELT antenna has no damage. If the antenna has broken, continue according to item 3.
- If the aircraft's radio is operable and can be safely used (no threat of fire or explosion), turn ON and select 121.5 MHz. If the ELT can be heard transmitting, it is working properly.

### 2. PRIOR TO SIGHTING RESCUE AIRCRAFT

- Conserve airplane battery. Do not activate radio transceiver.



**3. WHEN LEAVING THE SCENE OF THE ACCIDENT**

- Disconnect remote unit and external antenna.
- Remove ELT main unit from the aircraft.
- Attach an auxiliary antenna (stored on the ELT case) to the ELT and fully extend it. Keep the antenna vertically oriented as much as possible.
- Place main switch to ON position. The ELT LED ON light should be illuminated.
- When portable ELT is used in cold weather, unit should be kept as warm as possible by placing it inside your clothing with the antenna protruding.

**4. AFTER SIGHTING RESCUE AIRCRAFT**

- Press RESET button on the remote unit or on the main unit to prevent radio interference. Attempt contact with rescue aircraft with the radio transceiver set to a frequency to 121.5 MHz. If no contact is established, press ON button on the remote unit or switch on main switch on the main unit immediately.

**5. FOLLOWING RESCUE**

- Press the RESET button on the remote unit or main unit to terminate emergency transmission.

## **SECTION 4 – NORMAL PROCEDURES**

### **PREFLIGHT CHECK**

On the main ELT unit (in the baggage compartment)

1. Main switch ..... **ARM**
2. Red LED ..... check off

On the remote ELT unit (on the instrument panel)

3. Red LED ..... check off



**IN FLIGHT**

**NOTE**

The ELT may be activated inadvertently by heavy turbulence. The ELT should then be reset by pressing RESET button on the remote unit. Ensure that the ELT does not transmit – red LED must not illuminate. If the RESET button on the remote unit does not cause the LED ON light to extinguish, the RESET button on the main unit should be pressed.

**POSTFLIGHT CHECK**

On the remote ELT unit (on the instrument panel)

- 1. Red LED ..... check off

On the main ELT unit (in the baggage compartment)

- 2. Red LED ..... check off
- 3. Main switch ..... **OFF**

**SECTION 5 – PERFORMANCE – NOT AFFECTED**

**SECTION 6 – WEIGHT AND BALANCE – NOT AFFECTED**



## SECTION 7 – AIRPLANE AND SYSTEM DESCRIPTION

The emergency locator transmitter model AK-450 is installed in this aircraft. It is intended to be rigidly attached to the aircraft before the crash, but readily removable from the aircraft after a crash. The aircraft mounted antenna may be disconnected and an auxiliary antenna (stored on the ELT case) attached to the ELT. The ELT can be tethered to a survivor. The ELT is intended to aid SAR teams in locating the crash site or survivor(s).

The ELT is automatically activated upon sensing a change of velocity of 3.5 +/- 0.5 feet/second, along its longitudinal axis. When activated ELT is transmitting the standard swept tone on 121.5 and 243.0 MHz . The entire ELT system is self powered by its own internal batteries.

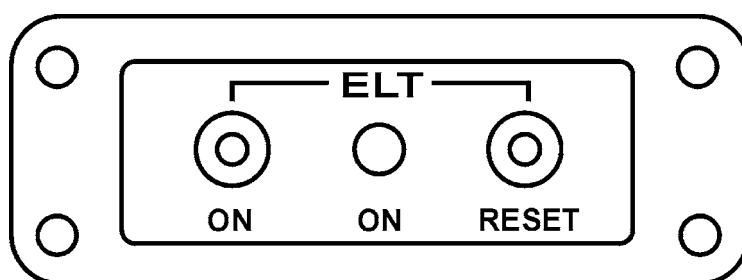


Figure1 – ELT remote unit

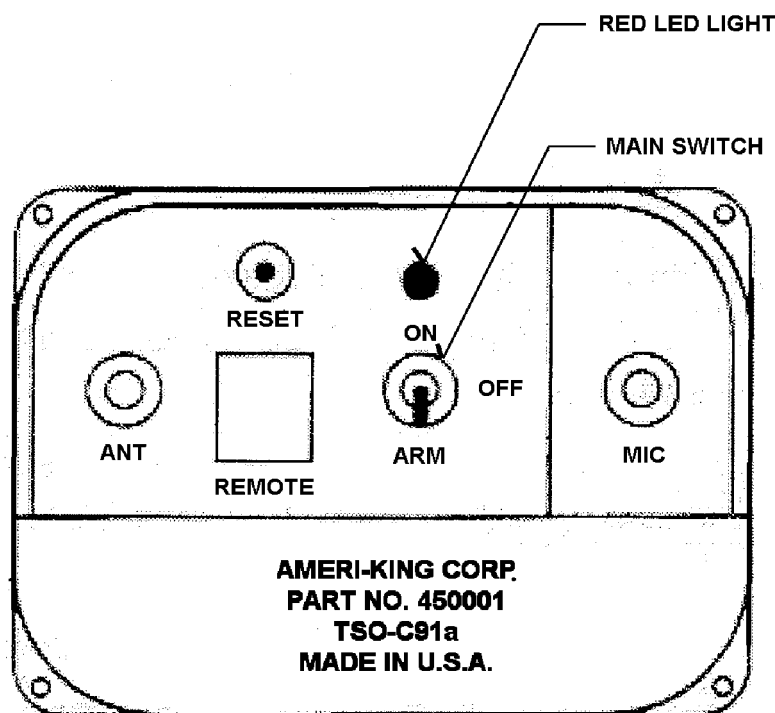


Figure2 – ELT main unit



**NOTE**

For detailed description see Installation and Operation Manual For Model AK-450, document No. IM-450, Rev. A dated 10/18/95 or later applicable version, which is delivered with the ELT.

**SECTION 8 – AIRPLANE HANDLING, SERVICING AND MAINTENANCE**

**TESTING ELT FUNCTION**

**NOTE**

The ELT function should be tested every 3 months.

The test consist of turning the unit “ON” and then resetting it to verify that the transmitter, latch circuit, batteries and associated equipment are operating properly. Regulations require that the transmitter test only be done during the first 5 minutes of each hour and must not last more then 3 audio sweeps (1.5 seconds). If you are at location where there is an control tower or other monitoring facility, notify the facility before beginning the tests. Never activate the ELT while airborne.

1. Monitor 121.5 MHz using the aircraft COM receiver or portable hand held receiver.  
Turn the squelch all the way down or OFF.

On the main unit

2. Main switch ..... **ARM**

On the remote unit

3. ON button ..... push

Verify that both the LED ON lights, located on the main unit and the remote unit, are illuminated. Verify that the audio sweep tone can be heard on the COM receiver.

On the remote unit

4. RESET button ..... push

Verify that the both LED ON lights are extinguished and the audio sweep tone should stop.



## PERIODIC MAINTENANCE

### NOTE

The ELT inspection must be performed a minimum of one time each 12 months.

Inspection procedure is mentioned in the Installation and Operation Manual For Model AK-450, document No. IM-450, Rev. A dated 10/18/95 or later applicable version.

You can also obtain manual from <http://www.ameri-king.com/pdf/9.1.22.pdf>

## BATTERY REPLACEMENT

### NOTE

Battery replacement procedure is mentioned in the item 2.5 of the Installation and Operation Manual For Model AK-450, document No. IM-450, Rev. A dated 10/18/95 or later applicable version.

## MAIN UNIT

The ELT main unit is designed to use only DURACELL MN1300 alkaline batteries which are dated by the manufacturer. The use of any other battery will void any warranties of the ELT producer and ELT does not meet the requirements of TSO-C91a.

Battery replacement is required upon reaching the date marked upon each cell. All cells must be replaced at the same time and the cells must have the same expiration date.

The expiration date of the batteries must be indicated on the outside of the ELT battery case and recorded in the aircraft log book. Adhesive labels are provided to record this information.

## REMOTE UNIT

The ELT remote unit is designed to be powered by a single Duracell DL1/3NB 3 Volt Lithium battery. Under normal operating condition the **lithium battery** must be replaced every **eight years**. Alkaline type cells are available from various manufacturers and may be used in place of the lithium cell. Under normal operating conditions, the **alkaline battery** must be replaced every **four years**.

The expiration date of the battery must be indicated on the outside of the ELT battery case and recorded in the aircraft log book. Adhesive labels are provided to record this information.





**SPORTSTAR**  
**AIRCRAFT OPERATING INSTRUCTIONS**

**Section 9**  
*ELT AK-450*

Doc. No. S2006AOIUSS17

---

**NOTE**

The all batteries (for main and remote unit) must be also replaced when the ELT has been in use for more than one cumulative hour or when ELT was activated for an unknown period of time (i.e. unintentional activation).



Intentionally left blank