

**SUPPLEMENT S1  
TO THE AIRPLANE FLIGHT MANUAL  
DA 40, DA 40 F**

**EMERGENCY LOCATOR TRANSMITTER  
MODEL E-01**

**ACK**

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## **1. GENERAL**

This Supplement supplies the information necessary for the efficient operation of the airplane when the ELT (Emergency Locator Transmitter) ACK Model E-01 is installed. The information contained within this Supplement is to be used in conjunction with the complete AFM.

This Supplement is a permanent part of this AFM and must remain in this AFM at all times when the ELT ACK Model E-01 is installed.

## **2. LIMITATIONS**

No change.

## **3. EMERGENCY PROCEDURES**

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

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

### **CAUTION**

The RCPI-unit could be inoperative if damaged during a forced landing. However, turning the ELT OFF and ON again requires manual switching of the main switch which is located on the ELT unit. The following points must then be executed directly on the ELT-unit.

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1. ENSURE ELT ACTIVATION:
  - Press the ON-button on the RCPI-unit, even if the LED flashes.
  - If the airplane'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. AFTER SIGHTING RESCUE AIRCRAFT:
  - Press the RESET-button on the RCPI-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 the ON-button on the RCPI-unit immediately.
4. FOLLOWING RESCUE
  - Press the RESET-button on the RCPI-unit, terminating emergency transmissions.

The ELT may be activated by hard landings or in heavy turbulence. The ELT should then be reset by pressing the RESET-button on the RCPI-unit. Ensure that the ELT does not transmit.

#### **4A. NORMAL OPERATING PROCEDURES**

No change.

#### **4B. ABNORMAL OPERATING PROCEDURES**

No change.

#### **5. PERFORMANCE**

No change.

#### **6. MASS AND BALANCE**

Upon removal or installation of the ELT the change of empty mass and corresponding center of gravity of the airplane must be recorded according to Chapter 6 of the Airplane Flight Manual.

## 7. DESCRIPTION OF THE AIRPLANE AND ITS SYSTEMS

### FRONT VIEW





## DESCRIPTION

The system consists of a Remote Control (RCPI-Unit, Remote Control Panel/Indicator), installed in the instrument panel, and the Emergency Locator Transmitter-Unit (ELT-Unit), which is installed behind the baggage compartment frame.

An acceleration indicator ('g'-switch) activates the ELT upon sensing a change of velocity, along the airplane's longitudinal axis. Therefore the Main-Switch of the ELT-Unit must be on the 'ARMED' position. The ELT will transmit a distinctive downward swept tone on the distress frequencies 121.50 MHz and 243.00 MHz. If this signal is being received, it will initiate a search and rescue operations, and is also used as a locating signal. The red LED flashes when the ELT is transmitting.

The ELT can also be manually activated, for example for testing or after an emergency landing. It can be activated either by pushing the ON button on the RCPI-Unit or by positioning the Main switch of the ELT to the ON position.

The 'g'-switch can be reset by pressing the RESET button on the RCPI-Unit or by positioning the Main switch of the ELT to the OFF position.

The ELT-Unit is connected to a antenna which is installed in the airplane. For operation of the ELT outside the airplane, the ELT has also a portable antenna, which is located on the mounting tray.

## **GENERAL INFORMATION**

To prevent a unintended activation of the ELT, the ELT should only be removed and transported when the Main Switch of the ELT is on the 'OFF' position, except in case of emergency.

The ELT might be activated by hard landings or severe turbulence. The ELT should then be reset by pressing the 'RESET' button, and it has to be checked that the ELT is not transmitting any more (see also Function Test).

## **FLIGHT OPERATION**

The Main Switch of the ELT must be on the ARMED position during flight. The ELT is in standby-mode, that means, the ELT can now be activated by the 'g'-Switch. The function test (only during the first five minutes of each hour) gives the pilot the possibility to verify that the ELT is in the 'ARMED'-mode. In 'ARMED'-mode, the ELT has no electric power consumption.

## **OPERATION ON GROUND AFTER AN ACCIDENT**

The operation of the ELT outside the airplane may be necessary after an emergency landing, when the airplane must be left.

At first loosen the interior trim of the baggage compartment frame, which is fixed with velcro fasteners. The ELT is located behind the frame, slightly below, on the right side of the fuselage. Open the mounting tray of the ELT and slide it out of the bracket. Remove the cable from the ELT, and connect the portable antenna. The antenna is fixed on the mounting tray. The ELT transmits the distress signal when the Main Switch is in the 'ON' position. The portable antenna must be fully extended and pointing skyward.

At low temperatures it is recommended in order to obtain the longest operating life, to keep the ELT inside your jacket, with the antenna outside, pointing skyward.

### **FUNCTION TEST**

The following function test must be done every 3 months to verify that the ELT is operating properly. Regulations require that transmitter tests only be done during the first 5 minutes of each hour and must not last for more than 3 audio sweeps (approx. 1.5 seconds).

Note that the batteries are replaced when the transmitter has been in use for more than 1 cumulative hour.

Performing the Test:

- Monitor 121.50 MHz using the airplane's COM Receiver. Turn the squelch off.
- Press the 'ON'-button on the RCPI-Unit (for maximum 3 sweeps), verify that the red LED flashes. Verify that the audio sweep tone can be heard on the COM Receiver. Push the 'RESET'-button on the RCPI-Unit. The LED should stop flashing and the audio sweep tone should stop. If the LED don't stop flashing and the audio sweep tone is still hearable, the Main Switch on the ELT-Unit should be set to the OFF position.

### CIRCUIT PROTECTION

The ELT is completely independent of the airplane's electric system. Power for the ELT-Unit is provided by eight batteries, and one battery for the RCPI-Unit. Replacement of the batteries is part of the periodic maintenance.

## 8. AIRPLANE HANDLING, CARE AND MAINTENANCE

No change.