

### C, B, & G 406 Series ELT'S

### **PURPOSE**

An Artex ELT (Emergency Locator Transmitter) is a vital aircraft component that provides identification about an aircraft in distress. When activated, the ELT sends a signal identifying the aircraft's location and the information that the ELT has been programmed to transmit. In order to transmit information, the ELT must be programmed with a unique identification code. An ELT cannot be shipped from the manufacturer's facility without a code and the code must be selected by the customer on record at the time of purchase. All Artex beacons are programmed per Cospas-Sarsat International regulations.

The following pages will help you select the correct protocol for your needs. It contains a definition of the types of codes, the options for your specific ELT, and a section of frequently asked questions. You will also find the form that needs to be completed in order to ship your ELT from our factory.

### **Protocol Definitions:**

# **Aviation User Tail Number Long:**

Used when you know the plane's tail number to make it more unique to the plane. This unit cannot be moved from plane to plane without reprogramming.

# **Standard Location ELT Serial Long:**

Used for standard country protocols with the unique serial number assigned to the unit.

### **National Location Long:**

Used for reprogramming older ELT's or if there is a specific aircraft serial number to be assigned.

# Serial User Aircraft 24 Bit Address Long:

Used when you know the registration (Octal code of the Mode S Transponder) of aircraft upon which the unit will be installed. This programming would *not* allow the unit to be moved from plane to plane without reprogramming it.

Note: An ELT can be programmed in Octal or Hexadecimal. This is mainly used when interfacing with Artex Navigational Interface Unit.

www.acrartex.com

# **Generic Protocol:**

Used when the end use of aircraft is unknown. All units must be reprogrammed before installation on the aircraft.

Note: If no Artex Navigational Interface is on the aircraft short message is required.

# **Programming Form**

Company:	
Point of Contact:	
Purchase Order Number:	
Date:	
B, C & G Series Programming Form	
Please choose ONE of the options below to progr Series ELT. If no Artex Navigational Interface is short message is required.	
MESSAGE OPTIONS	
Option 1: Aviation User Tail Number Long Tail Number Country Country Code Short Message  Option 2: Standard Location ELT Serial Long Country Country Code Short Message  Option 3: National Location Long Country	
Country Code	
National serial number Short Message	
Option 4: Standard Location ELT 24 Bit Address L	ong
Hexadecimal Code	
Or Binary CodeOr Octal Code	
Option 5: Generic Protocol  999	

### **Frequently Asked Questions**

# What is the difference between short messaging and long messaging? When do I choose one over the other?

- o Long messaging transmits longitude and latitude. Short messaging does not.
- Long message works with the Artex Navigational Interface. If you do not have a Navigational Interface installed on your aircraft you will need to choose a short message.

# Can I choose more than one programming option?

o No. The ELT can only retain one programming protocol.

# > If I have the tail number and the 24 bit address which one do I use?

- For long message, this is typically a matter of preference. Some countries will
  not allow tail number, and will only allow the 24 bit address. Please contact your
  local aviation authority for regulations.
- A 24 Bit address runs off of the octal code of the mode S Transponder. The customer must provide a Hexadecimal ID with the 24 Bit address.
- Programming to the 24 Bit address or the tail number depends on what information you want transmitted from the ELT.

# ➤ I am purchasing an Artex Navigational Interface with my ELT, what programming should I use?

- With an Artex Navigational Interface, you can choose any protocol with a long message for the ELT.
- If using an Artex Navigational Interface strapping feature, the ELT must be programmed to 24 bit address. However, you can provide an octal code to ACR if you so choose which we will then convert to 24 bit.
- The strapping feature allows for hardwire reprogramming when replacing the ELT. Please refer to the Navigational Interface installation manual for further information on Strapping.

### What is a 999 programming used for?

- 999 Programming is the generic protocol for programming ELT's. When manufactured, all ELT's must be programmed. The 999 protocol is used when a customer or an OEM plans to reprogram the unit upon installation onto the aircraft.
- \*\*\*\* All ELT's programmed to 999 must be reprogrammed before installation on the aircraft. The ELT will automatically reprogram upon installation, if the aircraft has a strapped Navigational Interface.

www.acrartex.com

# > Can I program a Artex Navigational Interface

 No an Artex Navigational Interface is not programmable. The Artex Navigational interface interprets information provided by the flight management system and translates the data to a format that the ELT can understand and emit.

# Can I use my own firmware on the ELT's?

- No. The Artex ELT's were manufactured with specific firmware to be used specifically with our products. Firmware manufactured for other purposes will not work properly with Artex products.
- o The Firmware version and level is indicated on the label of the ELT. This is the parameter under which the ELT was TSO'd by the FAA. Changes to the firmware render the ELT non-airworthy. It also negates any warranty.

# If we are shipping a product to my aircraft OEM and they have specific recommendations that I must use, why can't we ship it blank to the OEM? Why must I select programming?

- If you know that the manufacturer of your aircraft has specific programming instructions, you are highly encouraged to send the programming sheet for your ELT to the OEM to obtain those instructions.
- You may also have the ELT programmed to the 999 protocol (unless it is an N-series which will not accept 999) and request that the OEM reprogram the unit prior to installation on the aircraft.

### Can I use binary code to program an ELT?

 Yes. A binary code can be translated to a decimal code and then translated from decimal code to a Hexadecimal I.D.

### What is an octal code?

The octal code is an 8 digit number that when decoded is the aircraft's MODE S
Transponder's ID.

#### Can I use an octal code?

 Yes, you can provide us an octal code. We will then translate that code into the hexadecimal code.

# > Can I reprogram the ELT?

Only an Artex trained Battery Replacement Center and Authorized Service
 Centers have the capability to reprogram ELT's. You can find the facility closest to you on our website <a href="https://www.acrartex.com">www.acrartex.com</a>

www.acrartex.com

### Can I provide the serial number of a unit to be used on another unit?

 The serial number of an ELT cannot be changed. If the serial number of the ELT is chosen to emit a message, the manufactured serial number of the ELT must be used.

# Can I use a Hex code from a different satellite system?

 We can only use an approved Hexadecimal code generated by Cospas-Sarsat International. You can verify your current Hexadecimal code by going to <a href="https://www.cospas-sarsat.com">www.cospas-sarsat.com</a>, click on Beacon, click on decode Beacon.

Should you need additional information, feel free to contact the Artex representatives below:

Sarah Mohan Stephanie Mason 954-862-2109 954-862-2182

<u>Sarah.Mohan@acrartex.com</u> <u>Stephanie.Mason@acrartex.com</u>

Our Technical Services Department is also available to assist you at 954-862-2173 or 954-862-2193 or by emailing <a href="mailto:arretechsupport@acrartex.com">arretechsupport@acrartex.com</a>.