How to Locate Additional Information About a Beacon from the Type Approval Certificate (TAC) Number

Locate the TAC number on the USMCC message. It appears next to MANUFACTURER in the section entitled BEACON ID CONTAINS THE FOLLOWING ENCODED INFORMATION, as shown in this example from a SIT 171 message:

```
**** BEACON ID CONTAINS THE FOLLOWING ENCODED INFORMATION ****
COUNTRY     : SINGAPORE        BEACON TYPE: ELT SERIAL (STANDARD)
COUNTRY CODE: 563              CRAFT ID   :
MANUFACTURER: TAC 112          SPECIFIC BEACON:
SERIAL NUM  : 4916             MODEL      :
POSITION DEVICE: EXTERNAL      HOMING     : 121.5
POSITION RESOLUTION: NONE
```

To see the complete SIT 171 message, scroll to the end of this document.

Go directly to the link for TACs on the C/S website at:

https://cospas-sarsat.int/en/beacons-pro/experts-beacon-information/approved-beacon-models-tacs
Or you can navigate to the Cospas-Sarsat Website starting at: https://www.cospas-sarsat.int/en/:

Click on Cospas-Sarsat Professionals in the upper right hand corner:

Click on the Beacons header, then scroll down to Approved Beacon Models:
The **Approved Beacon Models** table default is in order by TAC Number (third column from the left). Click on the “Show instructions” bar at the top of the page for more information about navigating the table. Generally, once on the **Approved Beacon Models** page, you can search the table by entering keywords in the Filter field, or searching (if known) for a specific manufacturer or beacon type using the pull-down menus next to the Filter field. The entire table or portions of it can be exported using the tabs underneath “Show instructions” at the top of the page.

Selecting “All Manufacturers” results in this pulldown list:
Selecting “All Beacon Types” results in the pictured pulldown list:

<table>
<thead>
<tr>
<th>Full</th>
<th>Full</th>
<th>Beacon Model Name</th>
<th>Manufacturer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report 001</td>
<td>Tron 30Si</td>
<td>Jotron AS (from Jotron Electronics)</td>
<td></td>
</tr>
<tr>
<td>Report 002</td>
<td>RT 160M</td>
<td>Novamarine S Ldt. (not in business) Orolia Limited</td>
<td></td>
</tr>
<tr>
<td>Report 003</td>
<td>BSU 85</td>
<td>ELTA SA (not in business) See ECA</td>
<td></td>
</tr>
</tbody>
</table>

Options in the pulldown list:
- ELT
- ELT (Auto Portable)
- ELT (Auto)
- ELT (Auto) / PLB
- ELT (Automatic Deployable)
- ELT (Automatic Fixed)
- ELT (Man)
- ELT (Man) - Survival
- ELT (S)
- ELT (Auto) / ELT (Portable)
- ELT (Auto) / ELT (Portable) ETL (Survival) / PLB
- ELT (Automatic Fixed) and ELT (Automatic Portable)
- ELT (OT) - Designed to Withstand a Crash
- ELT (Man) / PLB
- ELT (S) - manual
- ELT (S) / PLB
- EPIRB (S-VDR)
- EPIRB (VDR)
- FF / Non FF EPIRB
Selecting “Report” opens a PDF of the official TAC Report, as shown in the next two examples.

**TAC Report Nr. 112-1**

<table>
<thead>
<tr>
<th>TAC Number</th>
<th>112</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAC Date</td>
<td>20-JUL-1999</td>
</tr>
<tr>
<td>TAC Rev. date</td>
<td>01-SEP-2003</td>
</tr>
<tr>
<td>Beacon Model Name</td>
<td>C406-1</td>
</tr>
<tr>
<td>Additional Names</td>
<td>C406-1HM</td>
</tr>
<tr>
<td>Manufacturer</td>
<td>Artex Aircraft Supplies, Inc (see ACR Electronics)</td>
</tr>
<tr>
<td>Tx Frequencies</td>
<td>406.025 MHz</td>
</tr>
<tr>
<td>In Production</td>
<td>not in production</td>
</tr>
<tr>
<td>Type</td>
<td>ELT (Auto)</td>
</tr>
<tr>
<td>Battery</td>
<td>Blue Star (LM-3455/LM-3355, 4D), Ultralife (U3360H, 4D)</td>
</tr>
</tbody>
</table>

**Battery Legend:** Battery cell manufacturer, Cell chemistry, Cell model, No. of cells, Cell size.

<table>
<thead>
<tr>
<th>Protocols tested</th>
<th>U - User, SL - Standard Location, NL - National Location.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self Test</td>
<td>yes</td>
</tr>
<tr>
<td>Self Test RF</td>
<td>yes</td>
</tr>
<tr>
<td>Self Test RF (Short/Long)</td>
<td>long</td>
</tr>
<tr>
<td>Self Test Consistent with 15 Hex ID</td>
<td>yes</td>
</tr>
<tr>
<td>Homer Freq</td>
<td>121.5/243 MHz</td>
</tr>
<tr>
<td>Homer Duty Cycle</td>
<td>Continuous</td>
</tr>
<tr>
<td>Homer Power</td>
<td>100mW</td>
</tr>
<tr>
<td>Strobe Light</td>
<td>no</td>
</tr>
<tr>
<td>Strobe Brightness</td>
<td>N/A</td>
</tr>
<tr>
<td>Nav Device</td>
<td>Ext</td>
</tr>
<tr>
<td>Nav Device Model</td>
<td>Unknown</td>
</tr>
<tr>
<td>Separable Antenna</td>
<td>yes</td>
</tr>
<tr>
<td>Antenna Model</td>
<td>Artex 110-335 rod, Artex 110-338 rod, Artex 110-340 blade, Artex 110-341 blade, Artex 110-343 whip</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional functions</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>General comments</td>
<td>Single (121/243/406) RF output. Homer 1 s pause at 406 burst. Osc. EWOS 0500-1 repl. by EWOS 0500-1/B, bcn S/N 01933 and higher (CNF 5 Feb 02, accept 18 Feb 02). Osc. EWOS 0500-1/B repl. by EWOS 0500-1/B-1 (19 Aug 03); approved with upgraded software version 510-0134 - Rev. 'A' (14 June 07) NOTE FOR CUSTOMERS: For technical support, battery replacement and customer support matters please contact ACR Electronics, Inc - USA</td>
</tr>
</tbody>
</table>

**TAC rev history**

1. 20/07/99; 2. 27/06/00; 3. 20/08/01; 4. 9/09/01; 5. 10/12/01; 6. 31/12/01; add. of G406-4; 6. 31/12/01; add. of Ultralife U3360H; 7. 17/01/02; chg nomenclature of Blue Star cells - LM-3455 to LM-3355; 8. 18/02/02: osc. repl.; 9. 19/08/03: osc. repl., trns mod.; 10. 1/09/03: chg nomenclat. of ant; 11. 22-Jan-07: extension TAC 170 issued; 12. 14-Jun-07: software upgrade to version 510-0134 - Rev. 'A'.


# TAC Report Nr. 361-1.0

<table>
<thead>
<tr>
<th>TAC Number</th>
<th>TAC Date</th>
<th>TAC Rev. date</th>
</tr>
</thead>
<tbody>
<tr>
<td>361</td>
<td>12-AUG-2022</td>
<td>01-JAN-2023</td>
</tr>
</tbody>
</table>

**Beacon Model Name**

KANNAD ULTIMA-DT-05

**Manufacturer**

Orolia S.A.S.

**Tx Frequencies**

406.031 MHz

**In Production**

in production

**Type**

ELT(DT) - Designed to Withstand a Crash

**Battery**

SAFT LM 17500, Lithium Manganese Dioxide, 8 x A size cells, 2 parallel of 4 in series

Battery Legend: Battery cell manufacturer, Cell chemistry, Cell model, No. of cells, Cell size.

**Protocols tested**

<table>
<thead>
<tr>
<th>Protocol</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>DT - ELT(DT)</td>
<td>Location</td>
</tr>
</tbody>
</table>

**Self Test**

yes

**Self Test RF**

yes

**Self Test RF (Short/Long)**

long

**Self Test Format Flag**

Corresponds to nominal flag

**Self Test Consistent with 15 Hex ID**

yes

**Homer Freq**

121.5 MHz

**Homer Duty Cycle**

37%

**Homer Power**

80 mW

**Strobe Light**

no

**Strobe Brightness**

n/a

**Strobe Duty Cycle**

n/a

**Nav Device Model**

UBLOX NEO-M8N

**Encoded Position Data Update Interval**

Other – Continuous until 30 minutes after crash detection, then 15 minutes

**Separable Antenna**

no

**Antenna Model**

DAYTON GRANGER ELT10-903

**Additional functions**

Beacon activation: manual via switch on remote control panel or on the beacon, and automatic via external trigger received through ARINC bus (label 202), loss of aircraft power, loss of ARINC-bus data-stream labels, or internal crash sensor; Programming via Aircraft Information Module (AIM) required for operation; Automated status check (Equipment Built In Test, EBIT) executed on application of 28 volt aircraft power.

**General comments**

Approved for encoding with variants of ELT(DT) Location Protocol for ELT: ELT with Serial Number, ELT with Aircraft Operator Designator and Serial Number, ELT with Aircraft 24-bit Address, ELT with Serial Number and rotating 3LD in PDF-2, ELT with Aircraft 24-bit Address and rotating 3LD in PDF-2. NOTE for CUSTOMERS: For technical support, battery replacement and other matters related to customer support - please contact Orolia S.A.S. (France).

**TAC rev history**

1) 1 JAN 2023: Approved for use with operational ELT(DT) protocols commencing on 1 January 2023.
SIT 171 Message Showing TAC Number Location:

/74542 00000/3660/15 049 1315
/171/366G

**** 406 BEACON INITIAL LOCATED ALERT ****

BEACON ID: 46683 82668 FFBFF  SITE ID: 75102

****************** DETECTION TIME AND POSITIONS FOR THE BEACON ******************

PROB EE SOL LATITUDE LONGITUDE DETECT TIME SAT NUM SOURCE SRR /BUFFER/BUFF_2
61 N/A A 01 22.2N 103 59.9E 18 130234 FEB S13 008 VNMCC SIMCC
39 N/A B 08 29.5N 135 58.9E 18 130234 FEB S13 008 VNMCC MARSEC

DETECTION FREQUENCY: 406.0343 MHZ

**** BEACON ID CONTAINS THE FOLLOWING ENCODED INFORMATION ****

COUNTRY : SINGAPORE  BEACON TYPE: ELT SERIAL (STANDARD)
COUNTRY CODE: 563  CRAFT ID : SPECIFIC BEACON:
MANUFACTURER: TAC 112  MODEL :
SERIAL NUM : 4916  HOMING : 121.5
POSITION DEVICE: EXTERNAL  POSITION RESOLUTION: NONE

**** BEACON REGISTRATION DATABASE INFORMATION ****

REGISTRATION INFORMATION AT MCC SINGAPORE
AFTN: WSSSZSZX
PHONE: (65) 65425024
FAX: (65) 65422548
EMAIL: CAAS_RCC(AT)CAAS.GOV.SG
WEB: WWW.406REGISTRATION.COM

**** SUPPORTING INFORMATION ****

USMCC PROCESSING TIME: 18 1315 FEB

THIS ALERT MESSAGE IS BEING SENT TO:
MARSEC,SIMCC

ALERT MESSAGES FOR THIS SIGNAL PREVIOUSLY SENT TO:
SIMCC

PREVIOUS MESSAGE INFORMATION:

PROB EE SOL LATITUDE LONGITUDE DETECT TIME SAT NUM SOURCE SRR /BUFFER/BUFF_2
N/A N/A U N/A 18 125944 FEB S11 001 GU1 SIMCC

QQQQ
/LASSIT
/ENDMSG