

TYPE APPROVAL CERTIFICATE

For a 406 Megahertz Distress Beacon for use with the Cospas-Sarsat Satellite System

Certificate Number: 204

Manufacturer:

McMurdo Ltd., United Kingdom

Beacon Type(s):

FF EPIRB and Non FF EPIRB

Beacon Model(s):

G5 Smartfind Plus (a) & (m) / E5 Smartfind (a) & (m)

Additional Names:

Test Laboratory:

SGE406-II (a) & (m), EG50:AUTO & EG50:MAN SE406-II-(a) & (m), EP50:AUTO & EP50:MAN

TUV Product Service, UK

Dates of Test:

February 2006 - June 2006

Details of the beacon features and battery type are provided overleaf.

The Cospas-Sarsat Council hereby certifies that the 406 MHz Distress Beacon Model identified above is compatible with the Cospas Sarsat System as defined in documents;

C/S T.001

Specification for Cospas-Sarsat 406 MHz Distress Beacon

Issue 3 – Rev. 7, November 2005

C/S T.007

Cospas-Sarsat 406 MHz Distress Beacon Type Approval Standard

Issue 4, November 2005

Original TAC 163 issued: 23 August 2006

TAC 163 re-issued to Signature Industries Ltd.: 30 March 2007 TAC 163 re-issued to McMurdo Ltd.: 18 November 2009

1-st extension TAC 204 issued: 10 May 2010

D. Levesque

Head of Cospas-Sarsat Secretariat

NOTE, HOWEVER:

- 1. This certificate does not authorize the operation or sale of any 406 MHz distress beacon. Such authorization may require type acceptance by national administrations in countries where the beacon will be distributed, and may also be subject to national licensing requirements.
- 2. This certificate is intended only as a formal notification to the above identified manufacturer that the Cospas-Sarsat Council has determined, on the basis of test data of a beacon submitted by the manufacturer, that 406 MHz distress beacons of the type identified herein meet the standards for use with the Cospas-Sarsat System.
- 3. Although the manufacturer has formally stated that all beacons identified with the above model name(s) will meet the Cospas-Sarsat specification referenced above, this certificate is not a warranty and Cospas-Sarsat hereby expressly disclaims any and all liability arising out of or in connection with the issuance, use or misuse of the certificate.
- 4. This certificate is subject to revocation by the Cospas-Sarsat Council should the beacon type for which it is issued cease to meet the Cospas-Sarsat specification. A new certificate may be issued after satisfactory corrective action has been taken and correct performance demonstrated in accordance with the Cospas-Sarsat Type Approval Standard.
- 5. Cospas-Sarsat type approval testing requirements only address the electrical performance of the beacon at 406 MHz. Conformance of the beacon to operational and environmental requirements is the responsibility of national administrations.

Certificate Number: 204 Dated: 10 May 2010

Beacon Model(s): G5 Smartfind Plus (a) & (m) / E5 Smartfind (a) & (m)

Operating temperature range: -20°C to +55°C

Battery Details: VARTA, Lithium-Manganese Dioxide (Li-MnO₂), 3 x 3 'CR 2/3 AH' cells, or

Panasonic, Lithium-Manganese Dioxide (Li-MnO₂), 3 x 3 'CR 123A' cells

Operating Lifetime: 48 hours

Transmit Frequency: 406.028 MHz

Beacon Model Features:

- Internal Navigation device (GPS), EAZIX model EZGPM01 or uBlox model TIM-4P (*);

- 121.5 MHz auxiliary radio locating device (50 mW, continuous duty cycle);

- Built-in strobe light (Intensity 0.75 cd, flash rate: 21 per minute);

- Manual activation;

- Automatic activation combined with hydrostatic beacon release mechanism; and

- Self-test mode, one burst of 520 ms - long format (*) and 440 ms - short format (**).

Approved Beacon Message Protocols: Beacon is approved for use with the message protocols indicated with "Yes" and black text below:

| | USER PROTOCOLS (**) | | USER-LOCATION PROTOCOLS (*) | ~ L | OCATION PROTOCOLS (*) |
|-----|---|-----|--|--------|--|
| Yes | Maritime with MMSI | Yes | Maritime with MMSI | Yes | Standard Location: EPIRB with MMSI |
| Yes | Maritime with Radio Call Sign | Yes | Maritime with Radio Call Sign | Yes | Standard Location: EPIRB with Serial Number |
| Yes | EPIRB Float Free with Serial Number | Yes | EPIRB Float Free with Serial Number | No | Standard Location: ELT with 24-bit Address |
| Yes | EPIRB Non Float Free with Serial Number | Yes | EPIRB Non Float Free with Serial Number | No | Standard Location: ELT with Aircraft Operator Designator |
| Yes | Radio Call Sign | Yes | Radio Call Sign | No | Standard Location: ELT with Serial Number |
| No | Aviation | No | Aviation | No | Standard Location: PLB with Serial Number |
| No | ELT with Serial Number | No | ELT with Serial Number | Yes | National Location: EPIRB |
| No | ELT with Aircraft Operator and Serial Number | No | ELT with Aircraft Operator and Serial Number | No | National Location: ELT |
| No | ELT with Aircraft 24-bit Address | No | ELT with Aircraft 24-bit Address | No | National Location: PLB |
| No | PLB with Serial Number | No | PLB with Serial Number | | |
| No | National (Short Format Message) | | | | |
| No | National (Long Format Message) | | | | |

NOTES:

^{* -} applicable only to G5 Smartfind Plus (a) & (m), SGE406-II (a) & (m), EG50:AUTO & EG50:MAN

^{** -} applicable only to E5 Smartfind (a) & (m), SE406-II (a) & (m), EP50:AUTO & EP50:MAN