



CERTIFICATE OF TYPE APPROVAL

(EC Certificate of Type Examination - Module B)
(Marine Equipment Directive - 96/98/EC)

Applicant:-
McMurdo Ltd
Silver Point
Airport Service Road
Portsmouth, PO3 5PB
United Kingdom

Manufacturer:-
McMurdo Ltd
Silver Point
Airport Service Road
Portsmouth, PO3 5PB
United Kingdom

This is to certify that the applicant has submitted details of a:-

406 MHz EMERGENCY POSITION INDICATING RADIO BEACON (EPIRB)
(COMMISSION DIRECTIVE 2002/75/EC – ITEM A.1/5.6)

Of system type known and designated as:-

a) SAILOR SE406-II, 406MHz EPIRB

(Comprising component parts and having technical characteristics shown in shedule 1)

and that these have been assessed, tested and when used in a combination of component parts as described in the attached schedules, is **CERTIFIED** as complying with the relevant parts of:

IEC 61097-2 : 2002 "COSPAS-SARSAT Satellite EPIRBs operating on 406 MHz"

BS EN 60945 : 2002 "General Requirements for marine equipment"

(being specifications for Technical Characteristics and Methods of measurements, published by the European Telecommunications Standards Institute and the British Standards Institute).

It is also **RECOGNISED** that the equipment conforms to performance standards not inferior to those adopted by the International Maritime Organisation, and which are contained in Resolution A810(19), Resolution MSC/Circ 862 (as applicable) and the relevant parts of Resolution A694(17).

SIGNED:

P J Goddard Authorised Signatory

DATE of ISSUE: 30th August 2006

DATE of EXPIRY : 24th August 2011

Certificate Number: QQ-MED-18/06-03

This Certificate is Valid until expiry date shown, subject to the standard conditions of issue printed on the attached schedule
McMurdo Ltd are Module D registered with QinetiQ in accord with standard condition 3, ref Certificate DQAS-03/01-McM001R7

QinetiQ
Cody Technology Park
Ively Road, Farnborough
Hampshire. GU14 0LX



Maritime and Coastguard Agency
The MCA is an Executive Agency of
the Department for Transport,

Under the terms of the United Kingdom Statutory Instrument, No 1957 : 1999, the QinetiQ Group PLC (formerly known as DERA) has been Notified to the European Commission by the Maritime and Coastguard Agency as a Body authorised to conduct Conformity Assessment procedures under the provisions of the European Council Directive 96/98/EC on Marine Equipment and issue Certificates of Type Approval.

Certificate of Type Approval - Schedule 1

SAILOR SE406-II, 406MHz Emergency Position Indicating Radio Beacon

The applicant declared that the following units comprise an EPIRB equipment of the system designation given at a) on sheet 1. These units have been assessed & tested, and satisfactory details of these units were included in the technical file. These units form systems consistent with the Item Description A1/5.6, given in Annex A1 of Commission Directive 2002/75/EC.

MAIN UNITS Comprising:-

406MHz SE406-II EPIRB Beacon ^{1,2} mounted in float-free Auto Housing (Hammar H20 Hydrostatic unit)	82-801-004A	*3,4
or 406MHz SE406-II EPIRB Beacon ^{1,2} with Manual Release Bracket	82-801-003A	*5

----- End of List -----

*NOTES:-

- 1 The SAILOR SE406-II beacon unit is identical to the McMurdo E5 SMARTFIND EPIRB, approved under certificate number QQ-MED-18/06-01, dated 25th August 2006, except for SAILOR labels. This EPIRB has been tested and assessed to Class 2 temperature requirements.
- 2 These beacons have additionally been assessed to the requirements of IMO A814(19), Annex clause 2.1 to 2.5.
- 3 This Assembly is an automatic float free release EPIRB (Category 1), the Auto Housing unit is part number 82-892.
- 4 The float free release case assembly has been tested for correct hydrostatic release at temperatures of -30°C and +65°C.
- 5 This Unit is a manual release, carry-off EPIRBs (Category 2) complying with Annex 1 of IMO Resolution A810(19) except clause 2.2. Their installation on vessels may be restricted by administrations until the mandatory carriage requirements for Category 1 EPIRBs are satisfied.
- 6 Marine COSPAS-SARSAT 406MHz EPIRBs form a distress alerting component of the Global Maritime Distress & Safety System (GMDSS). The McMurdo E5 series EPIRBs have been granted COSPAS-SARSAT Type Approval certification No.163, dated 23 August 2006.

Technical Characteristics

FREQUENCY OF OPERATION	406.028MHz and 121.5MHz	TRANSMIT Only
EMISSION CODE	16K0G1D 3K20A3X	
POWER CHARACTERISTIC	5W 50mW	- 406.028MHz - 121.5MHz
GNSS Location Device fitted	No	Normal beacon location by COSPAS SARSAT orbital satellite method.
TEMPERATURE RANGE Category 1 & Category 2	-20°C to +55°C.	- Class 2 Note: Hydrostatic release operation tested at -30°C and +65°C
POWER SOURCE	9V lithium Battery Pack (3 x Part no. 82-939)	48hour minimum battery life at -20°C. Label shows expiry date. Manufacturer authorised service centre replacement only

Conditions of Issue of this certificate are printed the reverse of this sheet.

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Certificate Number QQ-MED-18/06-03

Certificates of Type Approval Conditions of Issue

1. Each Certificate will be used in its entirety and not reproduced in part.
2. This certificate remains valid until the date shown (normally 5 years) unless cancelled or revoked, provided:-
 - i) the design and manufacture remain unmodified from the specimen tested and recorded in the Technical Construction File;
 - ii) any conditions contained in the schedule are complied with;
 - iii) Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply;
 - iv) and, the equipment remains satisfactory in service.
3. The mark of conformity may only be affixed to the equipment listed on this certificate and a manufacturer's Declaration of Conformity issued when the production Quality Assurance requirements laid down in Annex B, of the Directive (96/98/EC) is fully complied with and controlled by a written inspection agreement with a Notified Body. The use of the QinetiQ Notified Body Number (0191) in combination with the Wheelmark implies that the manufacturer is Registered with the QinetiQ Quality Assurance Scheme. A Certificate of Registration is issued to the manufacturer and should be made available on request. The manufacturer is responsible for ensuring that annual renewal and surveillance are maintained.
4. This certificate does not confer any approval status to this equipment other than defined by, and tested according to the specifications listed on sheet 1.
5. The labeling requirements of IMO Resolution A694(17) shall be met. Descriptions of each unit of apparatus forming part of the equipment will be as given on this Certificate. Each unit of equipment will be marked with the minimum safe distance at which it should be mounted from a standard and steering magnetic compass.
6. No unit of apparatus shall be advertised or labeled as "approved" or "certified" on behalf of the Maritime and Coastguard Agency, the Department of Transport or the QinetiQ Group in any sense other than that it is a type that has been assessed as satisfactory against the specification;
7. The manufacturer must advise QinetiQ of any intended changes to the design or production of the equipment which might affect the equipment performance.
8. Minor Modifications to the equipment will be considered on a case-by-case basis. QinetiQ will review any factory test results, in consultation if necessary, with the test facility that conducted the original Type Approval testing on the equipment. QinetiQ will advise the manufacturer if any further testing is required to maintain valid certification.
9. If an equipment manufacturer wishes to have the type approved equipment designated under alternative names (e.g. agent/distributor's name and model number), a separate application should be completed and sent to QinetiQ.

QinetiQ Ltd
Marine Approval and Testing Service
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