



## CERTIFICATE OF TYPE APPROVAL

(EC Certificate of Type Examination - Module B)  
(Marine Equipment Directive - 96/98/EC, as amended\* <sup>note1</sup>)

**Applicant:-**  
ACR Electronics Inc.  
5757 Ravenswood Road  
Fort Lauderdale  
Florida FL33312  
United States of America

**Manufacturer:-**  
ACR Electronics Inc.  
5757 Ravenswood Road  
Fort Lauderdale  
Florida FL33312  
United States of America

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

**9 GHZ SEARCH AND RESCUE RADAR TRANSPONDER**  
**(COMMISSION DIRECTIVE 2008/67/EC – ITEM A.1/4.18)**

Of system type known and designated as:-

- a) **ACR Pathfinder 3 SART**
- b) **ACR TelluSART MK 3 SART**

(Comprising component parts and having technical characteristics shown in schedules 1 & 2)  
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 61097-1 : 2007 “Part 1, Radar Transponder - Marine Search and Rescue (SART)”**  
**IEC 60945 : 2002 “General Requirements for marine equipment” - EMC Clauses**

(being Operational requirements - Methods of testing and test results, performance specification, published by the International Electrotechnical Commission and by the British Standards Institution as BS EN61097-1 :1993 and BS EN60945 :2002)

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 A802(19) and the relevant parts of Resolution A694(17).

**SIGNED:**

**R A Sharp**      **Authorised Signatory**

**DATE of ISSUE:**      **7<sup>th</sup> December 2009**

**DATE of EXPIRY:**      **6<sup>th</sup> December 2014**

**Certificate Number:**      **QQ-MED-22/08-01R**

This Certificate is Valid until expiry date shown, subject to the standard conditions of issue printed on the attached schedule  
QinetiQ is not involved in this manufacturers Module D compliance.  
Module D compliance is provided by BSH

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.

Note 1 Commission Directives 2008/67/EC, 2002/75/EC & 2002/84/EC

*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

### ACR Pathfinder 3 SART

The applicant declared that the following units comprise the Search And Rescue Transponder equipment of the system designation given at a) on sheet 1. This unit has been assessed & tested, and satisfactory details of these units were included in the technical file. These units form systems consistent with the Item Description A1/4.18, given in Annex A1 of Commission Directive 2008/67/EC.

MAIN UNIT Comprising:-

ACR Pathfinder 3 SART Transponder

INTERNAL BATTERIES:

<i>Unit designation</i>	<i>Battery Pack Type</i>	<i>Pack Designation</i>
P/N 2714	Lithium Cells (pack of 2)	PH0205-0100-AA1
P/N 2714NH	Lithium Cells (3 x 3 CR123A)	A3-06-2511

----- End of List.

\*NOTES:-

- 1 This schedule and certificate supersedes and replaces certificate number QQ-MED-22/08-01 issued on 6-11-2008
- 2 This SART fits the description for Category B) 'Portable and capable of floating' with a pole mounting arrangement for attaching to liferafts

#### Technical Characteristics

FREQUENCY OF OPERATION	TRANSMIT:	9.2 to 9.5 GHz
	RECEIVE:	9.2 to 9.5 GHz
CHANNELS	N/A	Swept response covers transmit frequency band
EMISSION CODE	300MPONAN	12 sweep response
DSC CLASS	None	
RF POWER OUTPUT	400mW to 1W	Fixed
IEC 61162-1 SERIAL PORTS	None	Not require for this equipment.
Temperature Range & IEC 945 Class	-20°C to +55°C Portable	Operational
Power Supply	5.7V	Internal Lithium primary cells, may be user replaceable.

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

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

Certificate Number    **QQ-MED-22/08-01R**

## Certificate of Type Approval - Schedule 2

### ACR TelluSART Mk 3

The applicant declared that the following units comprise the Search And Rescue Transponder equipment of the system designation given at b) on sheet 1. This unit has been assessed & tested, and satisfactory details of these units were included in the technical file. These units form systems consistent with the Item Description A1/4.18, given in Annex A1 of Commission Directive 2008/67/EC.

MAIN UNIT Comprising:-

ACR TelluSART Mk 3 SART Transponder

INTERNAL BATTERIES:

*Unit designation*

P/N 2716

P/N 2716NH

*Battery Pack Type*

Lithium Cells (pack of 2)

Lithium Cells (3 x 3 CR123A)

*Pack Designation*

PH0205-0100-AA1

A3-06-2511

----- End of List.

\*NOTES:-

- 1 This schedule and certificate supersedes and replaces certificate number QQ-MED-48/03-01 issued on 04-11-2003.
- 2 This SART fits the description for Category B) 'Portable and capable of floating' with a pole mounting arrangement for attaching to liferafts
- 3 This SART shares identical electronic circuitry with the ACR Pathfinder 3 of schedule 1.

#### Technical Characteristics:

FREQUENCY OF OPERATION	TRANSMIT:	9.2 to 9.5 GHz
	RECEIVE:	9.2 to 9.5 GHz
CHANNELS	N/A	Swept response covers transmit frequency band
EMISSION CODE	300MP0NAN	12 sweep response
DSC CLASS	None	
RF POWER OUTPUT	400mW to 1W	Fixed
IEC 61162-1 SERIAL PORTS	None	Not require for this equipment.
Temperature Range & IEC 945 Class	-20°C to +55°C Portable	Operational
Power Supply	5.7V	Internal Lithium primary cells, may be user replaceable.

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

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

Certificate Number      QQ-MED-22/08-01R



## 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 certification renewal and periodic surveillance are maintained.
4. USCG Approval Number, A Mutual Recognition Agreement (MRA) on marine equipment exists between the European Commission and the US Coastguard but only applies to equipment types included in the listing of marine equipment annexed to the MRA. For included equipment a USCG Approval number may be issued. If Issued this can be found under the MED certificate number on the first page and should be used on the main identity label of the equipment. Radio and Radar equipment continues to need separate or additional approval by the USA FCC.
5. 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.
6. 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.
7. 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;
8. The manufacturer must advise QinetiQ of any intended changes to the design or production of the equipment which might affect the equipment performance.
9. 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.
10. 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  
Cody Technology Park, Room 1005/A5  
Ively Road, Farnborough  
Hants, GU14 0LX  
United Kingdom