



EC TYPE EXAMINATION (MODULE B) CERTIFICATE

This is to certify that :

LLOYD'S REGISTER VERIFICATION LIMITED (LRV), specified as a "notified body" under the terms of The Merchant Shipping (Marine Equipment) Regulations S.I. 1999 No. 1957, did undertake the relevant type approval procedures for the equipment identified below which was found to be in compliance with the essential Life Saving Appliance requirements of Marine Equipment Directive (MED) 96/98/EC as modified by Commission Directives 98/85/EC, 2001/53/EC, 2002/75/EC, 2002/84/EC, 2008/67/EC, 2009/26/EC, 2010/68/EU, 2011/75/EU, 2012/32/EU and 2013/52/EU subject to any conditions in the Design Appraisal Document attached hereto.

Manufacturer	Narwhal Boats S.L.
Address	Camiño Serra de Auga 26 36416 Mos Pontevedra Spain
Annex A1 Item	A.1/1.20 FAST RESCUE BOATS (c) RIGID INFLATED
Product Type	RIGID/INFLATED FAST RESCUE BOAT
Product Description	Rigid/Inflated Fast Rescue Boat Type - "FRB 700".
Specified Standard	IMO Resolution MSC.81 (70), Part 1 as amended by MSC.226 (82), MSC.274 (85), MSC.323 (89) & MSC.321 (89). IMO MSC/Circ. 1006 ISO 15372.

The attached Design Appraisal Document (schedule) forms part of this certificate. This certificate remains valid unless cancelled or revoked, provided the conditions in the attached schedule are complied with and the equipment remains satisfactory in service.

Date of issue 7 January 2015 Expiry date 6 January 2020

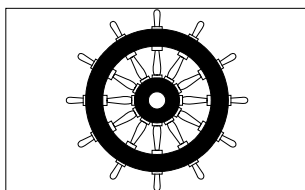
Certificate No. MED 1550005 Signed



Sheet No 1 of 5 Name N. Ramos
For and on behalf of Lloyd's Register Verification
LRV EC Distinguishing No. 0038

Note:

This certificate is not valid for equipment; the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify the notified body named on this certificate of any modification or changes to the equipment in order to obtain a valid Certificate.



0038/yy

Subject to compliance with the conditions in the attached Design Appraisal Document (schedule), which forms part of this certificate, and those of Articles 10.1(i) and 11 of the Directive, the Manufacturer is allowed to affix the "Mark of Conformity" to the Product described herein.
yy Last two digits of year mark affixed.

This certificate is issued under the authority of the MCA.

Lloyd's Register Verification Limited (Reg. no. 4929226) is a limited company registered in England and Wales. Registered office: 71 Fenchurch Street, London, EC3M 4BS, UK.
A subsidiary of Lloyd's Register Group Limited.



Lloyd's
Register

Lloyd's Register Verification Limited

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DESIGN APPRAISAL DOCUMENT

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The undernoted documents have been appraised for compliance with the relevant requirements of International Conventions and European Union legislation for the EC Type Examination of Marine Equipment for use on Merchant Ships Registered in the European Economic Area.

This Design Appraisal Document (schedule) forms part of the Certificate.

EXAMINED DOCUMENTATION

Operation and Maintenance Manual for the Rigid/Inflated Fast Rescue Boat Type "FRB 700" and dated 2014.

<u>Drawing No:</u>	<u>Rev. No:</u>	<u>Date:</u>	<u>Title:</u>
FRB70003	2	24/10/2014	General Layout
FRB70012	2	24/10/2014	General Layout 2
FRB70002	1	15/07/2014	Inflatable Collar
FRB70001	2	24/10/2014	Main Dimensions
FRB70004	1	10/09/2014	Deck Scantling
FRB70005	1	10/09/2014	Hull Scantling 1
FRB70006	1	15/07/2014	Hull Lines
FRB70007	1	15/07/2014	Hull Buoyancy Foam
FRB70008	2	24/10/2014	Electric System
FRB70009	2	24/10/2014	Fuel System
FRB70010	1	15/07/2014	Roll Bar
FRB70011	1	15/07/2014	Fuel Tank
FRB70014	2	24/10/2014	Retro-Reflective Material
FRB70016	2	24/10/2014	Quick Release Hook

TEST REPORTS

MSC/Circ. 980 Prototype Test Report for Rigid/Inflated Fast Rescue Boat Type "FRB 700", Report No ES NWL 052 SBC 313, dated 09/10/2013 as witnessed by Lloyd's Register Surveyor.

MSC/Circ. 980 Prototype Test Report for Rigid/Inflated Fast Rescue Boat Type "FRB 700", Report No ES NWL 052 SBC 313, dated 18/12/2014 as witnessed by Lloyd's Register Surveyor.

Fire Retardant Test Report for the material used in the construction of the Rigid/Inflated Fast Rescue Boat, performed as per MSC/Circ. 1006 Paragraph 3 at Exova Warringtonfire, Report No 34704 Issue No 1 and dated 23rd September 2014.

Flame Resistant Test Report for the material used in the construction of the Rigid/Inflated Fast Rescue Boat, performed as per MSC/Circ. 1006 Paragraph 4 at Exova Warringtonfire, Report No 34705 Issue No 1 and dated 18th September 2014.



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CONDITIONS OF CERTIFICATION

- | | |
|--|--|
| <p>1. Maximum Weights:-
 Lightweight: 1656 kg
 Loose Equipment: 30 kg
 Fuel Oil: 200 kg
 Complement Weight: 660 kg (8 Persons @ 82.5 kg)
 Recovery Weight: 2381 kg (6 Persons @ 82.5 kg)
 Fully Laden Weight: 2546 kg (8 Persons @ 82.5 kg)</p> | <p>Dimension (Overall):-
6.81 x 2.7 x 0.5</p> |
|--|--|

2. **Certified Equipment details:-**

Rescue Boat Propulsion Engine:

- Manufacturer:** AB Volvo Penta
Type: D3 -220
Bollard Pull: 7500 N (impulsor Turbo T2,9 kw)
 6600 N (impulsor T2,9 kw)

Approved Hook Release Gear details:-

- Manufacturer:** H. Henriksen AS
Type: HMK 3.5
SWL: 3.5 tonnes

3. **Materials:-**

Proof Fabric for Inflatable Crafts:

Poliurethane ref. 1P U4-U4 AR/GR Chiorino.

<u>Materials:</u>	<u>Type:</u>	<u>Manufacturer:</u>
Gel Coat	Neogel NPG Ral 2004	BUFA
Resins	P4-01 & 8175-W-1	Palatal DSM & BUFA
Chopped Strand Mat	MAT 300	PPG SINOMA Jinjing Fibre Glass Co., Ltd
Woven Roving	ROVIMAT 450/800	CHOMARAT Textiles Industries
Buoyancy Foam	NG 55-040-5	Lackfa Isolierstff GmbH & Co. KG

4. This Rescue Boat is automatic self-righting using manual initiation.
5. The launch and recovery appliance is to be capable of raising the rescue boat from the water with its full complement of persons and equipment at a rate of not less than 0.8 m/s.
6. For compliance with SOLAS Regulation III/35 and III/36 fully detailed operations and maintenance manuals shall be supplied with each rescue boat.



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7. The Release Gear does not form part of this Design Appraisal Document but it is expected that the Release Gear used in conjunction with the rescue boat covered under this Certificate is an approved type.
8. The Rescue Boat is approved for 8 persons, provided the seating arrangement is to the satisfaction of the attending Surveyor.
9. Equipment items listed on the current version of Annex 1 of the Marine Equipment Directive which are supplied with the boat are to be delivered with their own Declaration of Conformity issued by the corresponding manufacturer when delivered to EC flagged vessels.
10. The Rescue Boat is to be provided with a 'foul weather recovery strop (s)' of Safe Working Load equivalent to at least the maximum laden weight of the boat. Additionally, if necessary for stowage without re-launching, provision is to be made for "hanging off".
11. The Rescue Boat is to be marked in block capitals of the Roman Alphabet with the number of persons it is approved to carry, the name and port of registry of the ship to which the boat belongs; and means of identifying same from above, as required by SOLAS and LSA Code.
12. Each Rescue Boat is to be marked with the information required by LSA Code Paragraph 1.2.2.9 and 4.4.1.2.
13. Alterations/modifications of the Type Approved Rescue Boat will invalidate the Type Approval Certificate which, in turn, will affect the validity of the related Statutory Certificate (of the vessel on which the Rescue Boat is installed). In such cases, where the equipment requires alterations/modifications, these are only to be carried out with agreement/approval of the Flag State Administration (of the vessel on which the Rescue Boat is installed) on an installation-by-installation basis.
14. Inflated sections of the Rescue Boat are to be maintained and repaired at a service station authorized by the manufacture which also approved by Lloyd's Register or the Flag Administration.
15. **Installation on board:** The on board arrangements and installation of the Rescue Boat are not part of this Design Appraisal or Certificate. All such arrangements are to be to the satisfaction of the Surveyors attending on board.
16. If the specified standards are amended during the validity of this Certificate, this product type is to be re-approved prior to it being supplied to vessels to which the amended standards apply.
17. Production items are to be manufactured in accordance with either an approved Production Quality Assurance system (Module D) or Product Quality Assurance (Module E) or Product Verification (Module F) of the Marine Equipment Directive.



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18. Production tests are to be conducted in accordance with the applicable requirements of IMO Resolution MSC.81 (70), Part 2 and be recorded by the manufacturer in accordance with either the approved Production Quality Assurance system (Module D) or Product Quality Assurance (Module E) or witnessed by the Notified Body (LRV) as required by the Product Verification (Module F) of the Marine Equipment Directive. This does not preclude any further testing to additional requirements of the Marine Administration of the country where the ship is registered (i.e. the flag state) or those acting on behalf of that Administration.
19. Each item, batch or lot of the equipment is to have the "Mark of Conformity" affixed and be issued with a "Declaration of Conformity".
20. Should a change of Place of Production from that stated below be required i.e. where the stages of manufacture/assembly/testing of this product take place, the new Place of Production is to be advised to us prior to the change taking place. This Certificate will require to be updated for Approval to be maintained.

PLACE OF PRODUCTION

NARWHAL BOATS S.L.
Camiño Serra da Auga 26
36416 Mos
Pontevedra
Spain



N. Ramos
Specialist
Fire & Safety
Marine Technology and Engineering Services
For and on behalf of Lloyd's Register Verification
LRV EC Distinguishing No. 0038