



Indian Register of Shipping

CLASS COMPLIANCE CERTIFICATE

PORT : **MUMBAI**

DATE : **09 Oct 2017**

CERTIFICATE NO.: **BOM17B001**

CONSTRUCTED BY	SHM SHIPCARE
YARD NUMBER	202
TYPE OF THE VESSEL	RESCUE BOAT
LENGTH(OVERALL)	4.73 m
BREADTH(MOULDED)	1.55 m
DRAUGHT	0.35 m
CARRYING CAPACITY	9 PERSONS (ALL INCLUSIVE)
DEPTH(MOULDED)	0.87 m
APPLICABLE RULES	RULES AND REGULATIONS FOR THE CONSTRUCTION AND CLASSIFICATION OF HIGH SPEED CRAFTS AND LIGHT CRAFTS, JULY 2016

THIS IS TO CERTIFY

The above vessel has been built satisfactorily under our supervision in accordance with the approved/noted plans (refer annexure 1) and for compliance with the following equivalent notations

SU, HSLC, RS 2

RESCUE BOAT

NOTES

- 1 a) Inspection of the boat in accordance with IRS endorsed plans & QAP carried out and found satisfactory.
- b) Type approved resin and glass fibre reinforcements used in the construction of hull and deck of the boat.
- c) Verified and reviewed the controlled conditions at various stages in which the boat construction carried out and found satisfactory.
- d) FRP laminate sample prepared by the yard during lamination of the hull tested in presence of the attending surveyor to this society at NABL accredited laboratory with satisfactory results.
- e) Swamp test, conducted in the calm waters was witnessed and the test report has been reviewed & found in order for maximum 9 persons.
- f) Water performance trials of the boats conducted by yard, in presence of the naval representative/s as per trial protocol prepared by the yard in calm water conditions at Vasai creek, Ghodbandar, Thane. Same witnessed and test reports endorsed.

This certificate is issued upon the following terms and conditions as laid down in the Society's regulations:-

"Whilst Indian Register of Shipping (hereinafter referred to as IRS) and its Committees use their best endeavors to ensure that the functions of IRS are properly carried out, in providing services, information or advice neither IRS nor any of its servants or agents warrants the accuracy of any information or advice supplied. Except as set out herein neither IRS nor any of its servants or agents (on behalf of each of whom IRS has agreed this clause) shall be liable for any loss damage or expense whatever sustained by any person due to any act or omission or error of whatsoever nature and however caused of IRS its servants or agents or due to any inaccuracy of whatsoever nature and howsoever caused in any information or advice given in any way whatsoever by or on behalf of IRS, even if held to amount to a breach of warranty. Nevertheless, if any person uses service of IRS, or relies on any information or advice given by or on behalf of IRS and suffers loss damage or expenses thereby which is proved to have been due to any negligent act omission or error of IRS its servants or agents or any negligent inaccuracy in information or advice given by or on behalf of IRS then IRS will pay compensation to such person for his proved loss up to but not exceeding the amount of the fee charged by IRS for that particular service, information or advice.

Any notice of claim for loss, damage or expense as referred to above shall be made in writing to IRS Head Office within six months of the date when the service information or advice was first provided, failing which all the rights to any such claim shall be forfeited and IRS shall be relieved and discharged from all liabilities."

ANNEXURE – 1**LIST OF APPROVED/ REVIEWED/ NOTED DRAWINGS**

Sr. No.	PLAN TITLE	DRAWING NO.	STATUS	Date
1	General Arrangement	SHM/202/01 Rev 0	Noted	08/06/2017
2	Lines plan and offset table	SHM/202/03 Rev 0	Noted	02/06/2017
3	Details of structural profile, bottom, deck and transverse section	SHM/202/02 Rev 0	Approved	08/06/2017
4	Fuel tank structure	SHM/202/06 Rev.0	Approved	08/06/2017
5	Sch. Fuel filling, sounding, supply and air vent	SHM/202/11 Rev.0	Approved	28/06/2017
6	Endurance calculation	SHM/202/14 Rev.0	Examined	08/06/2017
7	Details of deck fitting	SHM/202/07 Rev.0	Approved	08/06/2017
8	Details of lifting arrangement	SHM/202/08 Rev.0	Approved	29/09/2017
9	Buoyancy Distribution	SHM/202/05 Rev.0	Noted	27/06/2017
10	Detail of collar arrangement	SHM/202/09 Rev.0	Approved	27/06/2017
11	Weight calculation	SHM/202/13 Rev.0	Noted	27/06/2017
12	Details of console	SHM/202/15 Rev.0	Approved	22/09/2017
13	Swamp test procedure	SHM/202/12 Rev.0	Approved	27/06/2017
14	Swamp test report	SHM/202/17 Rev.0	Reviewed	06/10/2017
15	Electrical circuit diagram and load chart	SHM/202/10 Rev.0	Reviewed	13/06/2017
16	Draught mark	SHM/202/04 Rev.0	Noted	02/06/2017

The vessel's hull scantling has been examined equivalent to a hull notation SU, HSLC, RS2, RESCUE BOAT for operation in Coastal waters having a sea condition such that the design significant wave height does not exceed 2.5 m towards issuance of Class Compliance Certificate.

The scantlings of the vessels have been verified in association with the following limiting criteria:

Speed of the vessel 22 Knots
 Breadth at waterline 1.54 m
 Length at waterline 3.552 m
 acg value limited to 2.5 g
 Displacement 0.9 tones
 Service area RS 2
 Design draft 0.35 m
 Significant wave height 0.185 m
 Dead rise angle at LCG 23.85°
 Running trim angle 3°

The speed [V] /Design significant wave height [Hs] for the loading condition have been worked out and the same would be in accordance to the table below.

V (Knots)	Hs (m)
25	0.114
23	0.158
22	0.185
20	0.250
18	0.339



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16	0.463
14	0.644
12	0.923
10	1.386
8	2.237

Any other operating conditions that will cause higher slamming pressure are to be reviewed for structural adequacy. The above limit of design significant wave height is to be clearly displayed at the coxswain position.



g) Owner Details: L & T Shipbuilding (For FDN2 project).

2 Various requirements of NCD 4003, Issue 6 March 2015, have been verified during the survey. However, following not dealt with:

a). Certification of Outboard Engine.

b). Witnessing of Inclining test.

c). Verification of standard tools and OBM spares as required by NCD 4003, Issue 6, Clause-7.9, Pg 17/34.

d). As fitted drawings/ documents, Equipment Schedule, Boat Log book, maintenance and workshop manuals of OBM as required by NCD 4003, Issue 6, Clause-9.2, Pg 21/34.

e). List of fittings, accessories, onboard and B&D spares as required by NCD 4003, issue 6, clause - 11.

For identification purpose, the vessel has been identified by its Naval Regn no : " RIB 4.7-2017-162"



Neerav D. Akhani

for

Neerav D. Akhani
(Surveyor to Indian Register of Shipping)

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