

Evaluation Report – December 2017

Report period: 4th – 6th Dec. 2017

m/v Dona Mercedes
Hull No.: HY-2186
73,6 m ROPAX Catamaran



Prospective Buyers:-

Trinidad and Tobago Government

Builder:

Nansha Shipyard in Guangzhou, Guandong, China.

Reported by:

Schulte Marine Concept

SMC
Schulte Marine Concept

Base line Evaluation for Hull No.: HY-2186		Notes
Type of Vessel	Double Hull, Double ended, Daily, Cap pax	
Principal Particulars		
LOA	about 73.6M	
Beam	Max about 22M	
Depth	Moulded about 5.75M	
Draft Max	Loaded about 2.75M	
Speed	Service speed at 2.5m draft – approx. 22 knots; max speed – approx. 23 knots	
Revenue DWT	approx. 460t (vehicles + pax)	
Passengers	772 (+10 Crew)	# 1
Class Notation	Lloyd's - LR +100A1 SSC Passenger, Catamaran, LDC, G3, LMC, Special Duties Notation - RoRo Passenger Catamaran Ferry, Service Restriction – Venezuelan Coastal Service	
Flag	Venezuelan Flag Authority (INEA)	# 2
QUANTATIVE FACTORS		
Design		
Design House	Design is from Sea Transport Solutions (STS), specialists in naval architecture and ship building, marine consulting and surveying, ferry operation and transshipment services. Web site shows 22/ 24 Ferries of various constructions and sizes but all with a maximum of 68 meters in length.	# 3
Builders	Nansha Shipyard. Guangzhou Part of the GNG (Guangdong Navigation Group) the shipyard has been building ships for the past 20 plus years –The yard has worked closely with the Design house for several projects with the Sea transport design, actual track records are not listed on the web sites or made available to SMC.	
Documents Review and Approvals		
Original Plans	Vessel is completed, plans and plan assessment was not available. Review of the vessel shows it to be of a modern design incorporating all the requirements for the trade intended (local inland classifications). Documentation for the Building of the Vessel is exceedingly limited with no access to SMC.	#4
Revised Plans		
Approvals		
Document control		
Outline Specification of the Vessel	The technical specification (57 pages of draft document) made available. The full Technical specification and final as signed specification is not available. From the draft specification and the Pre-purchase condition Inspection Report it can be seen there are several differences between the draft specification and the final vessel.	#5
Ships Drawings	Original draft drawings for the General arrangement and the mid ship section were made available.	#6

Vessel Fittings Suppliers standards			
		The machinery list coordinates with the machinery fitted onboard, the signed copy of the makers list is available.	
	Machinery	Main Engines, Gear Box, Auxiliary engines, bow thrusters and Steering gears all of international standards from well established companies serving the Marine industry.	#7
	Outfitting's	Windlass, Pumps and Hydraulic systems etc. as above, all of international standards from well established companies serving the Marine industry	
	Navigation	Primarily from Furuno Japan, others from international makers.	
	Communications	Mainly from Chinese origin.	
	Electrical	Main generators and emergency generator from Norther lights, remaining electrical machinery from Chinese makers.	
Construction Building Standards			
	Hull	<p>There are no records available for the schedules of the hull construction nor any supervision records showing any master list of inspections or the results of those inspections.</p> <p>The shipbuilding yards claim to follow the Chinese shipbuilding practices and standards for ship building. These standards are wildly accepted and recognized in today's shipbuilding industry.</p> <p>The Pre-purchase condition Inspection allowed for the inspectors to evaluate the vessel at close up.</p> <p>No internal inspections to any tanks and with the vessel afloat no underwater hull inspections.</p> <p>Apart from a few minor poor shipbuilding practices the vessel (as far as can be seen) is constructed to a good quality and standard compared to the Chinese shipbuilding practices and standards</p>	
	Accommodation		
	Wheel house		
	Machinery space(s)		
Construction Outfitting to vessel			
	Machinery	Please see the Pre-purchase condition Inspection Report, it has been recorded there was damage at some time during the ship sea trials to the propellers which subsequently cause damage to the drive shafts and the stern tube systems.	#8
	Outfitting's	<p>There are no records of the commissioning of any of the equipment. There are several sea trial reports which show some but not all the equipment as being tested during the trials.</p> <p>Classification society notes show several outstanding items which require to be closed out before delivery.</p>	
	Navigation		
	Communications		
	Electrical		
	Automation		

QUALATIVE FACTORS		
Ship performance evaluation		
Service speed evaluation	The service speed of the vessel has not been shown to be proven in the sea trial report. Design speed is 22 knots.	
Fuel Consumptions	Specific fuel consumptions have not been given, Draft Technical Specification quotes " <i>The approximate fuel consumption will be measured from the difference in tank soundings that are recorded before and after the endurance trials.</i> " But does not give any SFOC.	#9
Power Evaluation	Power Measurements for the different speeds have not been given	
Speed v Power	Numerical speed and power prediction or actual(s) have not been given. The draft specification does not indicate the speed for power curve or the SFOC.	
Buyers chartering requirements		
	Not Given	
NOTES		
#1	Basis is taken from the Ships particulars given in mail and not from the GA plan – whilst the vessel is intended for Daily use the crew of 10 persons allowed for there are limited accommodation and galley space,	
#2	Flag is mentioned in particulars and specification as Venezuelan Flag but in inspection documentation as	
#3	Design company does not advertise this 74M length vessel in its web site not does it have any Track Records available on the web site.	
#4	Documentation from the Site Supervision team, overlooking the construction of the Vessel is exceedingly limited with no access to SMC.	
#5	The technical Specification given to SMC is only 57 pages long, this appears to be a draft specification, the final (signed) specification has not been given.	
#6	The General Arrangement plan given to SMC does not tally with the Draft Specification nor does it tally with the as built vessel. Several abnormalities with the numbers of passengers, cars and final dimensions.	
#7	The information passed to the Buyers suggests there is a high temperature issue on the number two main engine, it must be noted this is the one shaft where the drive shaft and stern tube were NOT replaced. Further there is a main engine manufacturers report suggesting not to run the engines above 100% load even for a short period (suggesting it should not be done for the sea trials).	
#8	There is evidence the vessel underwent an incident where in the Four Propellers were damaged. The Vessel was docked at least once and there were four propellers, three drive shafts and three stern tubes replaced. (NB No. 2 Stern tube and drive shaft not replaced and No.2 Main engine reportedly to have high running temperatures on the last sea trials)	
#9	There are no SFOC given for any loads (on the engines) or speeds for the vessel.	

COMPARATIVE VALUES

- Valuations for a new vessel of this type can vary with several factors from the hull form, hull materials, length and breadth with carrying capacity.
- The vessels are usually made as one off putting selectiveness to smaller yards with smaller order books but specialist skills, expertise and experience.
- Value of the Machinery suppliers and outfitting to the standards of the materials being used for the area to which the vessel will be employed should also be a consideration (spares purchase and delivery in service).
- The Building yard is a small selective yard giving the expertise to this type of vessel.
- The makers machinery and outfitting's are of a reasonable international standard with worldwide outlets apart from the Electrical fittings.
- Considering a new build vessel, the estimated cost would be in the region of \$38 to \$40 million with high quality European or international standard equipment throughout. Unfortunately, the full specification has not been made available and the GA plan does not match with the draft specification to such assumptions have to be made.
- Consideration has to be given to the Sellers requirements to sell the vessel as well as the buyers requirements for a readymade, ready for service vessel.
- Considerations to the above taking in to accounts the notes #1 ~ 9 with the intended buyers unknown chartering (trading) requirements and the remaining unknown factors we would in a statement of opinion only, and anyone intending to rely up the valuation should satisfy themselves as to its correctness, value this vessel at approximately USD \$ 35 to 38 Million Dollars (United States Dollars thirty-five million to thirty eight million dollars).

This inspection and report are conducted based on only visual inspection of the readily accessible and visible areas of the vessel and the study of the relevant documents, data and reports made available to INSPECTOR. The inspection and report are based upon observations of appearing conditions that exist at the time the inspection was performed. The INSPECTOR is provided with incomplete information and cannot determine the accuracy of the information received. Cost estimates are "ballpark" estimates only and are not intended to be relied upon by any person for accuracy. The CLIENT should obtain written offers from shipyards for the same type of vessel to determine the real market value of the vessel.

It is understood and agreed that should the INSPECTOR be found liable for any loss or damages resulting from a failure to perform any obligations, including but not limited to negligence, breach of contract, or otherwise, then the liability of the INSPECTOR shall be limited to a sum equal to the amount of the fee paid by the CLIENT for the Inspection and Report.

Report information

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