

RESPONSE TO QUERY: RFI OF RIGID HULL BOAT

SI No	Para/Clause No of RFI	RFI Parameter	Query /Clarification required	Response
M/s Max AeroSpace & Aviation Pvt Ltd				
1			It is proposed that the M134D Mini Gun system, with mounts and requisite ballistic protection, be considered for fitment on the subject RHBs.	You may propose the system in response to RFI alongwith complete details, including origin & subsequent replacement of ammunition.
2			The M134D-H is an electrically powered, six barrelled gun, capable of firing a minimum of 3,000 rounds per minute. M 134D-H is recoil free and uses the standard 7.62x51mm cartridge. The system is practically maintenance free and has a life, that is in excess of 1.5 million rounds. Its operating temperature range, covers the extremities that are encountered in India (photos of M134D fitted on RHBs/hovercrafts, for riverine operations is placed at attachment).	
M/s Aquarius Shipyard Pvt Ltd				
3	RFI Part-I, Para 4 (a)	Overall length between 9 to 11 Metres.	Overall length may be between 9 to 12 Metres instead of 9 to 11 meters.	Vendors may propose with reasons.
4	RFI Part-I, Para 4 (b)	Draught less than 0.5 Metres.	Draught to be less than 0.8 mtrs.	Draught of 0.5 metres is an operational requirement.
5.	RFI Part-I, Para 4 (d)	Hull of Marine Grade Aluminium/ equivalent material.	Please clarify if composite hull will be acceptable as equivalent material of construction.	Vendors may propose with reasons.
6	RFI Part-I, Para 5 (c)	The equipment of all TEC clared vendors would be put through a 'Field Evaluation Trial' in India on a "No Cost No Commitment" basis. A staff evaluation would be carried out by Indian SHQ to analyse the result of field evaluation and shortlist the equipment for introduction into service.	The equipment required as per the RFI is not standard COT's equipment. Therefore it needs to be developed specifically for the needs of IHQ-MoD. The field evaluation trial requirement may be deleted and Bulk Production Clearance (BPC) method may be applied. Request confirm.	Vendors may propose with reasons.
7	Appendix B, General Description, Para 2 (a)	<u>Length Overall (wheels up).</u> 9 to 11 Metres.	Length overall to be 9 to 12 Metres.	Vendors may propose with reasons.
8	Appendix B, General Description, Para 2 (b)	<u>Width & Height in Aircraft Transport Mode.</u> Not more than 3.4 Metres and 3.00 Metres respectively.	Width may be considered as 3.5 mtrs.	Vendors may propose with reasons.
9	Appendix B, General Description, Para 2 (b)	<u>Draught.</u> Not more than 0.5 Metres in fully loaded mode.	Draught to be less than 0.8 mtrs.	Draught of 0.5 metres is an operational requirement.

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10	Appendix B - General Description, Para 2 (f)	<u>Fuel/ Oil capacity.</u> The fuel tank should cater for normal endurance of the RHB(Amph) with 10% reserve.	Request confirm if Petrol as fuel is acceptable.	Vendors may propose with reasons.
11	Appendix B - General Description, Para 2 (k)	<u>Transportability.</u> The RHB (Amph) shall be transportable by road (CHTT) and by air (IL-76 air craft).	Request kindly confirm what is CHTT	Civil Hired Truck Transporter
12	Appendix B - Propulsion, Para 4	<u>Propulsion.</u> Of appropriate capacity (<i>suitable type of propulsion system to be suggested</i>).	Please confirm Out Board Motor (BM) with petrol as fuel is acceptable	Vendors need to propose the recom propulsion system with reasons.
13	Appendix B- Life Saving Equipment, Para 17 (c)	Jason's Cradle with each boat.	We request to waive off requirement of Jasons cradle as the stretcher shall be provided as per Sr no 38 on pg no 13.	Vendors may propose with reasons.
14	Appendix B- Hull, Para 20	<u>Hull.</u> The hull shall be of minimum 5 mm thick Marine Grade Aluminium and constructed in accordance with Classification Society Rules.	Confirm composite/RFP hull constructed in accordance to classification rule is acceptable.	Vendors may propose with reasons.
15	Appendix B - Propulsion Package, Para 24	<u>Propulsion Package.</u> Vendors shall propose the machinery and propulsion package which should be able to provide sustained operations for endurance of 08 hours at cruising speed with maximum pay load. The propulsion units are to be seated on suitable vibration mounts to minimise the vibrations.	Request confirm Out Board Motor (OBM) are acceptable.	Vendors need to propose the recom propulsion system with reasons.
16	Appendix B - Amphibious Power Sources, Para 35	<u>Amphibious Power Sources.</u> The Amphibious power source should be separate other than the main engines, but drawing fuel from the common tank. It should be able to provide a top speed of atleast 15 Km/hr on land.	Top speed may be considered as 10-15 Km/hr. Request Confirmation.	Vendors may propose with reasons.

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17	Appendix B - Features, Para 36	<u>Features.</u>	Amphibious system can be operated on sandy soil, beaches & slopes of about 15 degrees. However the same cannot be used in slush, soft soil & marshes. Request confirm acceptance.	For equipment operating terrain conditions. Please refer Para 4 of RFI and Para 1 of Appendix B..												
		(a) All wheel drive.														
		(b) Power Steering with a manual backup in case of failure of the hydraulic pump. It should also have the provision to check centering of the boat wheel alignment during transition from marine to land operations.														
		(c) Tyres should be of all terrain type with alloy rim.														
M/s M.R. Engineering																
18	RFI Part-I, Para 4 (d)	Hull of Marine Grade Aluminium/ equivalent material.	Kindly confirm that we can provide hull of the bot in Fibreglass material.	Vendors may propose with reasons.												
19	RFI Part-I, Para 5 (h)	<u>Integrity Pact (if applicable).</u> An integrity pact alongwith appropriate Bank Guarantee is a mandatory requirement as per Appendix I to Appendix O of Schedule I of DAP 2020.	As we are a start up firm we request kindly waive the condition of submission of Integrity pact with bank guarantee.	In accordance with DAP 2020.												
20	Appendix C - Financial Details, Para 5	<u>Financial Details.</u>	As we are a start up firm started in the year 2021, 3 yrs balance sheet will not be available with us, Request confirm if acceptable.	Details as applicable be brought out. Eligibility shall be as per DAP 2020.												
		(a) Category of Industry (Large/medium/small Scale) : _____														
		(b) Annual turnover: _____ (in INR).														
		(c) Number of employees in firm: _____														
		(d) Details of manufacturing infrastructure: _____														
(e) Earlier contracts with Indian Ministry of Defence/Government agencies:																
		<table><tr><th>Contract Number</th><th>Equipment</th><th>Quantity</th><th>Cost</th></tr><tr><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td></tr></table>	Contract Number	Equipment	Quantity	Cost										
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M/s ITUS Sports and Safety Pvt Ltd				
21	RFI Part-I, Para 5 (j)	<u>Performance/ Warranty Bonds.</u> Performance-cum-Warranty Bond both equal to 3% value of the contract inclusive of taxes and duties or as amended from time to time is required to be submitted after signing of contract.	Would a Performance-cum-Warranty Bond be required during submission of RFI or at RFP Stage.	RFP Stage.
22	Appendix B - General Description, Para 2 (f)	<u>Endurance in Water (at cruising speed).</u> Not less than 300 Km with maximum payload at environmental conditions as at Paragraph 5 below	Will it be acceptable that additional bladder tanks be provided to ensure endurance.	Vendors may propose with reasons.
23	Appendix B - General Description, Para 2 (g)	<u>Top Speed on Land.</u> Not less than 15 Km/hr.	In our experience, speed of 15 Kmph is detrimental to the stability of the boat and longevity of inboard engine. As such, it is requested that this be reduced to 10 Kmph.	Vendors may propose with reasons.
24	Appendix B - General Description, Para 2 (j)	<u>Carrying capacity/ Payload.</u> Capable of carrying atleast 12 personnel with combat load including crew of two (approximate pay load 1560 Kg).	It may be noted that Payload of 12 persons should be while driving.	Vendors may propose with reasons.
25	Appendix B - Class, Para 3	<u>Class.</u> RHB(Amph) shall be SOLAS compliant and designed & constructed as per IRS/ LRS/ DNV-GL/ BV/ ABS/ RINA/ NK Rules class notation/ SUL/ HSLC, RS-2 Patrol, SWASTIK 1Y for open sea operations Boat should have “V” shape hull with optimum dead rise angle to meet the desired speed and stability requirements. <i>(in case the RHB(Amph) is in adherence to all these Rules, but of a Classification Society other than IRS, details of the same to be brought out)</i>	The boat shall be constructed as per IACS standards that are considered and accepted to be the global standards for boat building. SOLAS is focussed towards rescue boats and lifeboats and is not applicable in case of IACS certification.	Vendors may propose with reasons.
26	Appendix B - Main Console, Para 11 (g)	The canopy/ enclosure shall be ballistic protected (NIJ Level III) on all sides.	The main point 11 mentions “Dismantlable/ Collapsible rain proof canopy/ enclosure shall be provided for the crew”. This However is not possible for Bullet proof Enclosures. It must also be further noted that weight increase due to excessive bullet proofing will affect performance on land and Water.	Vendors may propose with reasons, including corresponding impact on other parameters.
27	Appendix B - Life Saving Equipment, Para 17 (c)	Jason's Cradle with each boat.	As the boats are amphibious, it may not require a jasons cradle with every boat and this may be reduced.	Vendors may propose with reasons.

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28	Appendix B, Para 11 (g)	In what time frame can the prototype of RHB(Amph) be fielded for trials after contract? This data should factor time for transportation etc.	As this is a novel technology, it is proposed that a technology demonstration be undertaken prior to opening of commercial bids to ensure that suitable product is provided as per the requirements of the Armed Forces. Furthermore, the boat builder must have enough experience in building amphibious boats to ensure that a well established boat builder provides a rugged and tested product to the forces to avoid future hassles in an untested and/ or unverified prototype.	Vendors may propose with reasons.