

**Section VII. Technical Specifications**

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**STATEMENT OF COMPLIANCE  
TO TECHNICAL SPECIFICATIONS**

The bidder must state in the last column opposite each parameter and required specifications either **“Comply”** or **“Not Comply”**. All pages shall be properly signed. Bidders must state here either “Comply” or “Not Comply” against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of “Comply” or “Not Comply” must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer’s un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidders statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the provisions of **ITB** Clause above goods manufactured by us.

**CLARIFICATION AND SETTLEMENT OF CONFLICTING INTERPRETATION OF  
THE TECHNICAL SPECIFICATIONS**

All clarifications regarding the technical specifications stipulated in this section will be clarified by the members of the **PN TWG member; the Rocket Launcher Light (RLL) Acquisition Project of the Philippine Navy** Circular of Requirements will be referred to. In cases of conflicting interpretations, the nature and purpose of the equipment will be the basis of interpretation. The main basis for technical specifications and requirements is the nature and purpose of the equipment and its intended use as determined by the doctrinal application of the end-users represented herein by the **Project Management Team**.

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**TECHNICAL SPECIFICATIONS**

<b>1.0</b>	<b>GENERAL</b>	
1.1 General Description	1.1.1	<p>The procurement of (702) units of Rocket Launcher Light will fill-up the gap and raise the readiness rating of the Philippine Marine Corps in terms of firepower. This will not only enhance the operational capability of the Corps in the pursuit of Internal Security Operations but will also fulfill its tasks in the Territorial Defense Operations and Humanitarian Assistance and Disaster Response Operations to accomplish its mission. The Rocket Launcher Light will provide additional fire power for MBLT's and MARSOG Companies designed primarily for tactical movement and combat operations that will be included in the inventory of the PMC.</p> <p>RLL that is portable, reusable, direct-fire "rocket-launched" weapon to defeat the enemy in fortified positions. A shoulder fired weapon that is lightweight so as not to sacrifice the maneuverability and speed of execution of operating troops. A weapon that can be an add-on weaponry for each PMC squad.</p>
<b>2.0</b>	<b>PHYSICAL, OPERATIONAL, TECHNICAL SPECIFICATIONS AND OTHER REQUIREMENTS (TABULAR FORM)</b>	
<b>2.1 PHYSICAL REQUIREMENTS (ROCKET LAUNCHER LIGHT)</b>		
<b>SPECIFICATIONS</b>	<b>CHARACTERISTICS</b>	<b>STATEMENT OF COMPLIANCE</b>
a. Caliber	The caliber of Rocket Launcher Light must be 40mm.	
b. Barrel	The barrel must be standard smooth bore. Steel 4140 minimum and chrome plated	
c. Length	The overall length of Rocket Launcher Light must not be more than 1.0m	
d. Weight	The overall weight of the Rocket Launcher Light, including the bipod and optic sight, must not be more than 8kg.	
e. Markings	Each RLL should have its own serial	

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	number, make, model engraved on the launcher.	
f. Bipod	It must be attachable and detachable to the RLL and its legs must be telescopic.	
<b>3.0</b>	<b>OPERATIONAL CHARACTERISTICS OF ROCKET LAUNCHER LIGHT</b>	
	<b>CHARACTERISTICS</b>	<b>STATEMENT OF COMPLIANCE</b>
Capable of Launching the following ammunitions:	Can fire a variety of warheads for Anti-Personnel, Anti-Tank, Thermobaric, Fragmentation and Tandem Charges.	
Muzzle velocity	The muzzle velocity of the rocket launcher light should be at least 100 m/s	
Rate of fire	The rocket launcher light should be able to fire at least 4 rds per minute. (sustained)	
Effective range	500 meters	
Maximum range	900 meters	
Trigger Pull	The trigger pull of the rocket launcher light must be adjustable to within the range of 5lbs – 10lbs.	
Area of rearward blast	Maximum distance of thirty (30) meters at a maximum angle of hundred (100) degrees	
Service Life	The Rocket Launcher Light must be able to fire a minimum 1,000 rounds	
Anti-cook-off	Must not cook off when firing 4 rounds in one minute.	
<b>4.0</b>	<b>ROCKET LAUNCHER LIGHT SPARE PARTS TOOLS AND ACCESSORIES</b>	
	<b>SPECIFICATIONS</b>	<b>STATEMENT OF COMPLIANCE</b>
<b>4.1 Accessories</b>	<b>Description</b>	
Integrated Individual Accessory, 1 each per weapon	Collapsible bipod (folding and telescopic legs)	
	Optical sight with elevating mechanism	

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	Sling	
	Backpack with a capacity of three (3) rounds ammunition (2 per weapon)	
	Tools for assembling and disassembling the launcher	
Individual Spare parts Tools and accessories. 1 Set per Weapon	Manufacturer's Standard Set Package	
Individual Spare parts Tools and accessories. 1 Set for every 9 launchers	Manufacturer's Standard Set Package	
<b>4.2 Optical Sight Mechanism</b>		
a. Magnification	At least 2.7x	
b. Field of view	At least 13 Degrees	
c. Range (direct aiming)	500 meters	
<b>5.0</b>	<b>OPERATORS AND TECHNICAL MANUALS</b>	
5.1	OPERATORS MANUAL	Provide operating instructions for the rocket launcher light and unit level preventive and corrective maintenance procedures as applicable. Provide print out and electronic copy. One printed and e-copy each per launcher, sub-caliber training device and optical sight in English language
<b>6.0</b>	<b>PAINING, MARKING AND PACKING OF ROCKET LAUNCHER LIGHT</b>	
	SPECIFICATIONS	STATEMENT OF COMPLIANCE
6.1	<b>Painting of Rocket Launcher Light</b>	Painting of all Rocket Launcher Light should be similar to Philippine Marine Corps' weapons.
6.2	<b>Marking of Rocket Launcher Light</b>	Each RLL should have its own serial number, make and model engraved on the launcher.
6.3	<b>Packaging</b>	
6.3.1	Packing of Rocket Launcher Light	Manufacturer's Standard

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6.3.2	Packing for Individual SPTA for each Launcher	Manufacturer's Standard	
6.3.3	Packing for SPTA for every 9 Launchers	Manufacturer's Standard	
<b>7.0</b>	<b>WARRANTY</b>		<b>STATEMENT OF COMPLIANCE</b>
The proponent shall guarantee the normal operation of the RLL's, warranties the parts and services for up to two (2) years from the date of delivery to the end-users. Any part found to be defective due to factory defect within the two (2) years period from date of delivery must be repaired or replaced by technical/ field service representative free of charge to include services.			
<b>8.0</b>	<b>SPARE PARTS AND REPAIR PARTS</b>		<b>STATEMENT OF COMPLIANCE</b>
The proponent must guarantee the availability of spare and repair parts for at least 15 years from the date of the delivery to the end-users.			
<b>9.0</b>	<b>RLL OTHER REQUIREMENTS</b>		<b>STATEMENT OF COMPLIANCE</b>
Condition	Must be Brand New, unused and manufactured after the signing of the contract.		

<b>10.0</b>	<b>ROCKET PROPELLED GRENADE, 40MM, HIGH EXPLOSIVE, FRAGMENTATION, ANTI-PERSONNEL</b>		
	<b>SPECIFICATION</b>		<b>STATEMENT OF COMPLIANCE</b>
<b>10.1</b>	<b>Description</b>	Designed to destroy enemy personnel in open terrain, in ditches, behind light fortifications and light shelters.	
<b>10.2</b>	<b>Weapons Application</b>	Rocket Launcher Light (40mm)	
<b>10.3</b>	<b>Technical Data:</b>		
<b>10.3.1</b>	<b>Dimension and Weight:</b>		
<b>10.3.1.1</b>	Diameter of Body	40mm	
<b>10.3.1.2</b>	Round Weight, max	2kgs	

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10.3.1.3	Grenade Weight, max	1.5 kgs	
10.3.2	<b>Grenade Warhead:</b>		
10.3.2.1	Type	Fragmentation	
10.3.2.2	Material	Steel	
10.3.2.3	Filler	High Explosive	
10.4	<b>Color</b>	Manufacturer's Standard	
10.5	<b>Marking (round)</b>	Nomenclature Lot Number (Indicating Manufacturer's Code, Lot Number, Year of production)	
10.6	<b>Type of Filler</b>		
10.6.1	Fuze	Manufacturer's Standard	
10.6.2	Primer:	Manufacturer's Standard	
10.6.3	Propelling Charge:	Manufacturer's Standard	
10.7	<b>Performance:</b>		
10.7.1	Lethal Radius	At least 20 meters	
10.7.2	Maximum Range	900 meters	
10.7.3	Effective Range	150 meters	
10.7.4	Velocity	At least 100 mps	
10.8	<b>Inner Packaging:</b>		
10.9	<b>Outer Packaging</b>	Philippine Marine Corps, PN, AFP Property Nomenclature Lot Number (Indicating Manufacturer's Code, Lot number, Year of Production) Manufacturer Quantity per Box Weight (N.E.W./Net/Gross) Dimension Hazard Classification Code	
10.10	<b>Other Requirements</b>	<ul style="list-style-type: none"> <li>- Not valid if the product is found to have alteration or erasures;</li> <li>- Palletized according to Manufacturer's Standard;</li> <li>- The product must be sealed in its Original Manufacturer's Packaging;</li> <li>- Delivered ammunition must not be more than one year from the date of manufacture to delivery;</li> <li>- Test firing and evaluation</li> </ul>	

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		procedures shall be conducted in-country during TIA,	
<b>11.0</b>	<b>ROCKET PROPELLED GRENADE, 40/73MM, HIGH EXPLOSIVE, ANTI-TANK</b>		
	SPECIFICATIONS		STATEMENT OF COMPLIANCE
<b>11.1</b>	<b>Description</b>	Designed to destroy enemy tanks, gun emplacements, and armored vehicles. May be used also to destroy enemy personnel and heavy weapons in bunkers, ditches, shelters or behind light-walled defenses.	
<b>11.2</b>	<b>Weapons Application:</b>	Rocket Launcher Light (40mm)	
<b>11.2.1</b>	<b>Technical Data:</b>		
<b>11.2.2</b>	<b>Dimension and Weight:</b>		
<b>11.2.2.1</b>	Diameter of Body	40mm	
<b>11.2.2.2</b>	Diameter of Warhead (maximum)	100mm	
<b>11.2.2.3</b>	Round Weight (maximum)	3.0kgs	
<b>11.2.2.4</b>	Grenade Weight (maximum)	3.0kgs	
<b>11.3</b>	<b>Grenade Warhead:</b>		
<b>11.3.1</b>	Type	High Explosive Anti-Tank (HEAT)	
<b>11.3.2</b>	Material	Manufacturer's Standard	
<b>11.3.3</b>	Filler	High Explosive	
<b>11.4</b>	<b>Color</b>	Manufacturer's Standard	
<b>11.5</b>	<b>Marking (round)</b>	Nomenclature Lot Number (Indicating Manufacturer's Code, Lot Number, Year of production)	
<b>11.6</b>	<b>Type of Filler</b>		
<b>11.6.1</b>	Fuze:	Manufacturer's Standard	
<b>11.6.2</b>	Primer:	Manufacturer's Standard	
<b>11.6.3</b>	Propelling Charge:	Manufacturer's Standard	
<b>11.7</b>	<b>Performance:</b>		
<b>11.7.1</b>	Armor Penetration	At least 250mm	
<b>11.7.2</b>	Maximum Range	500 meters	
<b>11.7.2</b>	Effective Range	200 meters	
<b>11.7.3</b>	Velocity	At least 100 m/s	
<b>11.8</b>	<b>Inner Packaging:</b>	Manufacturer's Standard	



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11.9	<b>Outer Packaging</b>	Philippine Marine Corps, PN, AFP Property Nomenclature Lot Number (Indicating Manufacturer's Code, Lot number, Year of Production) Manufacturer Quantity per Box Weight (N.E.W./Net/Gross) Dimension Hazard Classification Code	
11.10	<b>Other Requirements</b>	<ul style="list-style-type: none"> <li>- Not valid if the product is found to have alteration or erasures;</li> <li>- Palletized according to Manufacturer's Standard;</li> <li>- The product must be sealed in its Original Manufacturer's Packaging;</li> <li>- Delivered ammunition must not be more than one year from the date of manufacture to delivery;</li> <li>- Test firing and evaluation procedures shall be conducted in-country during TIA;</li> </ul>	
12.0	<b>ROCKET PROPELLED GRENADE, 40/106MM, THERMOBARIC</b>		
	<b>SPECIFICATIONS</b>		<b>STATEMENT OF COMPLIANCE</b>
12.1	<b>Description</b>	Designed to destroy enemy personnel in the open field, light shelters, behind building walls, concrete bunkers, and light armored vehicles.	
12.2	<b>Weapons Application</b>	Rocket Launcher Light (40mm)	
12.3	<b>Technical Data</b>		
12.3.1	<b>Dimension and Weight:</b>		
12.3.1.1	Diameter of Body	40mm	
12.3.1.2	Diameter of Warhead (maximum)	110mm	
12.3.1.3	Round Weight	5.0kgs	

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	(maximum)		
12.3.1.4	Grenade Weight (maximum)	5.0kgs	
12.3.2.1	<b>Grenade Warhead:</b>		
12.3.2.2	Type	Thermobaric	
12.3.2.3	Material	Manufacturer's Standard	
12.3.2.4	Filler	Thermobaric Composition	
12.3.2.5	Color	Manufacturer's Standard	
12.3.2.6	Marking (round)	Nomenclature Lot Number (Indicating Manufacturer's Code, Lot Number, Year of production)	
12.3.3	<b>Type of Filler</b>		
12.3.3.1	Fuze:	Manufacturer's Standard	
12.3.3.2	Primer:	Manufacturer's Standard	
12.3.3.3	Propelling Charge:	Manufacturer's Standard	
12.3.4	<b>Performance:</b>		
12.3.4.1	Lethal Effect	Combined High Pressure Blast Wave with Thermal Emission (Shock and Heat)	
12.3.4.2	Maximum Range	900 meters	
12.3.4.3	Effective Range	150 meters	
12.3.4.4	Velocity	At least 60 mps	
12.4	<b>Inner Packaging</b>		
		Manufacturer's Standard	
12.5	<b>Outer Packaging</b>	Philippine Marine Corps, PN, AFP Property Nomenclature Lot Number (Indicating Manufacturer's Code, Lot number, Year of Production) Manufacturer Quantity per Box Weight (N.E.W./Net/Gross) Dimension Hazard Classification Code	
12.6	<b>Other Requirements</b>	<ul style="list-style-type: none"> <li>- Not valid if the product is found to have alteration or erasures;</li> <li>- Palletized according to Manufacturer's Standard;</li> <li>- The product must be sealed in its Original Manufacturer's Packaging;</li> <li>- Delivered ammunition must not be more than one year</li> </ul>	

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		from the date of manufacture to delivery; - Test firing and evaluation procedures shall be conducted in-country during TIA;	
<b>13</b>	<b>SUB-CALIBER TRAINING DEVICE</b>		
	<b>SPECIFICATIONS</b>		<b>STATEMENT OF COMPLIANCE</b>
	<b>PARAMETERS</b>		
<b>13.1</b>	Description	Designed to provide realistic training to RLL operators by simulating the muzzle velocity of a 40mm rocket ammunition with the use of a tracer bullet that is inserted and fired from its auxiliary barrel.  The size, shape and weight of the Sub-Caliber Training Device is comparable to a real 40mm rocket and is loaded into the muzzle breach of the RLL like a real 40mm rocket ammunition.	
<b>13.2</b>	Diameter of Body	40mm	
<b>13.3</b>	Caliber of the auxiliary barrel	Manufacturer's Standard	
<b>13.4</b>	Firing range	At least 300 m	
<b>13.5</b>	<b>Dimensions of the training device</b>		
<b>13.5.1</b>	Length	Not more than 1meter	
<b>13.5.2</b>	Weight	Not more than 5kg	
<b>13.6</b>	Accessories	Operations Manual Record Book	
<b>13.7</b>	Spare parts	Manufacturer's Standard	
<b>13.8</b>	Packaging	Manufacturer's Standard	
<b>14</b>	<b>SUB-CALIBER TRAINING DEVICE BULLET</b>		
	<b>SPECIFICATIONS</b>		<b>STATEMENT OF COMPLIANCE</b>
<b>14.1</b>	Description	This is any standard tracer bullet that can be loaded into and fired from the Sub-Caliber Training Device specified in line item 13.	
<b>14.2</b>	Caliber	Compatible with the Auxiliary Barrel of the Sub-Caliber Training Device specified in line item 13.	

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14.3	Packing	Manufacturer's Standard	
14.4	Palletizing	Manufacturer's Standard	
14.5	Cartridge Case	Steel	
14.6	Bullet-type	Tracer	
14.7	Primer	Manufacturer's Standard	
14.8	Propellant	Manufacturer's Standard	

-- END OF TECHNICAL SPECIFICATIONS--