

Republika ng Pilipinas

Republic of the Philippines

Kagawaran ng Tanggulang Pambansa

Department of National Defense

DND BIDS AND AWARDS COMMITTEE

22 March 2016

SUPPLEMENTAL BULLETIN NR. DND/PA-25-HEI-T-16-002 (Procurement of 7,000 rds Ctg, 25mm, HEI-T, Linked)

1. This Supplemental/Bid Bulletin is issued to inform prospective bidders the modifications/amendments that shall form part of the bidding documents for the **Procurement of 7,000 rds Ctg, 25mm, HEI-T, Linked** under ITB No.

REF	PARTICULAR	FROM	ТО
BDS 12- TAB F	Eligibility and Technical Component s- Audited Financial Statements	Audited financial statements, stamped "Received" by the Bureau of Internal Revenue (BIR) or its duly accredited and authorized institutions, for the preceding calendar year, which should not be earlier than two (2) years (2013 or 2014) from bid submission or its equivalent documents in case of a foreign bidder, provided that the same shall be in accordance with International Financial Reporting Standards.	Audited financial statements, stamped "Received" by the Bureau of Internal Revenue (BIR) or its duly accredited and authorized institutions, for the preceding calendar year, which should not be earlier than two (2) years (2014) from bid submission or its equivalent documents in case of a foreign bidder, provided that the same shall be in accordance with International Financial Reporting Standards.
BDS 12- TAB I	Eligibility and Technical Component s- Bid Security	Bid Security as to form, amount, and validity period stated in ITB Clause 18 using the following forms: 1. Cash, or cashier's / manager's check issued by a Universal or Commercial Bank equivalent to two percent (2%) of the ABC; and 2. Notarized Affidavit of Bid Securing Declaration.	Bid Security as to form, amount, and validity period stated in ITB Clause 18 using any of the following forms: 1. Cash, or cashier's / manager's check issued by a Universal or Commercial Bank equivalent to two percent (2%) of the ABC; or 2. Bank draft/guarantee or irrevocable letter of credit issued

			by a Universal or Commercial Bank: Provided, however, that it shall be confirmed or authenticated by a Universal or Commercial Bank, if issued by a foreign bank equivalent to two percent (2%) of the ABC; or 3. Surety bond callable upon demand issued by a surety or insurance company duly certified by the Insurance Commission as authorized to issue such security equivalent to five percent (5%) of the ABC; or
			 4. Any combination of items (1) to (3) proportionate to share of form with respect to total amount of security; or 5. Notarized Affidavit of Bid
BDS 18.1	Bid Security	Bid Security as to form, amount, and validity period stated in ITB Clause 18 using the following forms: 1. Cash, or cashier's / manager's check issued by a Universal or Commercial Bank equivalent to two percent (2%) of the ABC; and 2. Notarized Affidavit of Bid Securing Declaration.	Securing Declaration. Bid Security as to form, amount, and validity period stated in ITB Clause 18 using any of the following forms: 1. Cash, or cashier's / manager's check issued by a Universal or Commercial Bank equivalent to two percent (2%) of the ABC; or 2. Bank draft/guarantee or irrevocable letter of credit issued by a Universal or Commercial Bank: Provided, however, that it shall be confirmed or authenticated by a Universal or Commercial Bank; if issued by a foreign bank equivalent to two percent (2%) of the ABC; or 3. Surety bond callable upon demand issued by a surety or insurance company duly certified by the Insurance Commission as authorized to issue such security equivalent to five percent (5%) of

			the ABC; or
			4. Any combination of items (1) to (3) proportionate to share of form with respect to total amount of security; or
			5. Notarized Affidavit of Bid Securing Declaration.
BDS 34.2	Notice to Proceed	The effective date of the Contract shall be upon receipt/ acknowledgement of the Notice to Proceed (NTP).	The effective date of the Contract shall be upon receipt/ acknowledgement of the Notice to Proceed (NTP) by the supplier which date shall not be later than seven (7) calendar days from the issuance of NTP.
SCC 10.1f	Expiration Date of LC	Two Hundred Ten (210) Calendar Days from issue date of the L/C;	Two Hundred Seventy (270) Calendar Days from issue date of the L/C;
SCC 10.1j	Latest Date of Delivery	Complete delivery within one hundred eighty (180) calendar days receipt of NTP, which is the receipt of the Notice to Proceed by the supplier which date shall not be later than seven (7) calendar days from the issuance of the NTP;	Complete delivery within two hundred forty (240) calendar days upon receipt of NTP, which is the receipt of the Notice to Proceed by the supplier which date shall not be later than seven (7) calendar days from the issuance of the NTP; should the supplier fail to comply, the delivery period shall commence.
Section IX	Post Qualificatio n Evaluation Checklist TAB F	Audited statements, stamped "Received" by the Bureau of Internal Revenue (BIR) or its duly accredited and authorized institutions, for the preceding calendar year, which should not be earlier than two (2) years (2013 or 2014) from bid submission or its equivalent documents in case of a foreign bidder, provided that the same shall be in accordance with International Financial Reporting Standards.	Audited financial statements, stamped "Received" by the Bureau of Internal Revenue (BIR) or its duly accredited and authorized institutions, for the preceding calendar year, which should not be earlier than two (2) years (2014) from bid submission or its equivalent documents in case of a foreign bidder, provided that the same shall be in accordance with International Financial Reporting Standards.

Section IX Post Bid Security as to form. Bid Security as to form, amount, Qualificatio amount, and validity period and validity period stated in ITB n Evaluation stated in ITB Clause 18 using Clause 18 using any of the Checklist the following forms: following forms: TAB I 1. Cash, or cashier's / 1. Cash, or cashier's / manager's check issued by a manager's check issued by a Universal or Commercial Bank Universal or Commercial Bank equivalent to two percent (2%) equivalent to two percent (2%) of of the ABC; and the ABC; or 2. Notarized Affidavit of Bid 2. Bank draft/guarantee or Securing Declaration. irrevocable letter of credit issued by a Universal or Commercial Bank: Provided, however, that it shall be confirmed authenticated by a Universal or Commercial Bank, if issued by a foreign bank equivalent to two percent (2%) of the ABC; or 3. Surety bond callable upon demand issued by a surety or insurance company duly certified by the Insurance Commission as authorized to issue such security equivalent to five percent (5%) of the ABC; or 4. Any combination of items (1) to (3) proportionate to share of form with respect to total amount of security; or 5. Notarized Affidavit of Bid Securing Declaration.

2. In Schedule of Requirements:

From:

Item Nr	Description	Quantity	Total (peso)	Delivered, Days/Weeks/Months
1	Ctg, 25mm, HEI-T, Linked	7,000 rounds	64,610,000.00	To be delivered within One Hundred Eighty (180)
2	Cut-aways Ctg 25mm HEI-T,	5 rounds	. 64,610,000.00	calendar days from receipt of Notice to Proceed.

Linked		

To:

Item Nr	Description	Quantity	Total (peso)	Delivered, Days/Weeks/Months
1	Ctg, 25mm, HEI-T, Linked	7,000 rounds	64,610,000.0	To be delivered within Two Hundred Forty (240) calendar days from receipt of Notice to Proceed by the supplier which date shall
2	Cut-aways Ctg 25mm HEI-T, Linked	5 rounds	0	not be later than seven (7) calendar days from the issuance of the NTP; should the supplier fail to comply, the delivery period shall commence.

- 3. In Section VII: Technical Specifications <u>delete in its entirety</u> SPECS NR FP 10-01-13 dated 12 December 2013 <u>and replace with PA SPECS NR FAM 10 01 16 10 February 2016 (attached).</u>
- 4. In Section VII: Test and Acceptance Procedure <u>delete in its entirety</u> **TEST NR FP 10-01-14 dated 15 November 2014** <u>and replace with</u> **PA TEST NR FAM 10 03 16 dated 16 March 2016 (attached):**
 - 5. For the Date and Time of Opening of Bids:

From: TBAL

To: April 05, 2016 at 11AM

6. Please be guided accordingly.

ASEC ERNESTO D BOAC

Chairman, DND Bids and Awards Committee

PA SPECS NR FAM - 10 - 01 - 16



HEADQUARTERS PHILIPPINE ARMY

OFFICE OF THE ARMY CHIEF ORDNANCE AND CHEMICAL SERVICE

Fort Andres Bonifacio, Metro Manila

PA SPECS NR FAM - 10 - 01 - 16 (This rescinds Specs Nr FP 10-01-13 dated 12 December 2013)

TECHNICAL SPECIFICATIONS FOR Cartridge, 25mm, HEI-T, Linked

Description:	A fixed type Small Arms Ammunition used against personnel, light materiel, and for fire suppression roles.
Weapons Application:	Automatic Cannon, 25mm, M242; Oerlikon KBA
Technical Data:	
1. Dimension and Weight:	
Round Weight	503 grams <u>+</u> 10 grams
Round Length	219.2 mm <u>+</u> .3mm
Projectile Weight	Manufacturer's Standard
Projectile Length	10 cms – 12 cms
Projectile Diameter	24.50 – 25.40mm
Cartridge Case Length	Manufacturer's Standard
2. Projectile Type:	High Explosive Incendiary - Tracer (HEI-T)
Body	Steel, C1045
Fuze	Point Detonating Self-Destroying (PDSD)
Tracer	Pellet
Color	Yellow with Red Band and Black Markings
3. Cartridge Case Type:	Steel, C1030
4. Primer Type:	Percussion
5. Propellant Type:	WC 890 or Manufacturer's Standard
Weight:	90 grams ± 6 grams
6. Performance:	
Velocity	1,100 <u>+</u> 10 mps
Max Effective Range	At least 3,000 Meters
Tracer	Minimum of 3.5 seconds
Self-Destruct	4.5 seconds to 7.5 seconds
Cartridge Markings:	
Cartridge Case Head	Manufacturer's Code
Stamp	Year of Manufacture (last 2 digits)
Packaging:	30 linked cartridge in two 15-round belts packed
	nose-to-nose with two plastic separators in plastic
	shipping and storage container M621.
Packaging Markings:	
Primary Packaging	Standard Nomenclature (Ctg, 25mm, HEI-T, Linked)
18-1	Standard Lot Number (MIL-STD-1168A)

TECHNICAL SPECIFICATIONS FOR Cartridge, 25mm, HEI-T

F-4 x-4-x-4-x-4-x-4-x-4-x-4-x-4-x-4-x-4-x		PA SPECS NR FAM - 10 - 01 - 16
Markings		Manufacturer
		Date of Manufacture
al de comma dance. All an unity parameter que en en entrappe, referente de del malcar que en pagrapa, que en est		Quantity per Box
Outer	Packaging	Standard Nomenclature (Ctg, 25mm, HEI-T, Linked)
Markings		Standard Lot Number (MIL-STD-1168A)
		Manufacturer
		Date of Manufacture
		Quantity per Box
		Weight
		Dimension
		Hazard Classification Code

PREPARED BY:

RECOMMENDED BY:

ROMEO E NORIEGA Major, (OS) PA Chief, Firepower Branch

ERNESTO TLOPENA Colonel, GSC (OS) PA Chief

APPROVED BY:

EDUARDO M AÑO Lieutenant General, AFP Commanding General, PA



HEADQUARTERS PHILIPPINE ARMY

OFFICE OF THE ARMY CHIEF ORDNANCE AND CHEMICAL SERVICE

Fort Andres Bonifacio, Metro Manila

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<u>PA TEST NR FAM - 10 - 03 - 16</u> (This rescinds Test NR FP10-01-14 dated 15 November 2014) 16 HAR 2016

TEST AND ACCEPTANCE PROCEDURES FOR CARTRIDGE, 25mm, HEI-T, Linked

I. REFERENCES:

- a. Technical Specifications for Ctg, 25mm, HEI-T, Linked (PA SPECS NR FAM 10 01 16)
- b. Military Standard 105E dtd 1 May 1989, subject; Sampling Procedures and Tables for Inspection by Attributes.
- c. MIL-PRF-71139A (AR) DTD 22 October 2006, Suject: Performance Specification for Ctg, 25mm, HEI-T
- d. Military Standard 636, Subject: Visual Inspection Standard of Small Arms Ammunition through Ctg, Cal .50.
- e. Military Standard 644A, Subject: Visual Inspection Standard and Inspection Procedures for Inspection of Packaging, Packing and Markings of Small Arms Ammunition.

II. OBJECTIVES:

- a. To ascertain compliance to standards and specifications.
- b. To determine the functional reliability of the ammunition.
- c. To determine the stability of the ammunition when subjected to adverse field and storage conditions.
- d. To determine user safety when ammunition is fired in various environmental conditions.

III. PROCEDURES:

- a. The manufacturer/supplier shall ensure that the complete quantity stated in the contract is packed/palletized prior to the inspection.
- b. The Technical Inspection and Acceptance Committee (TIAC) for Ordnance-Firepower or its representatives shall conduct random sampling from the lot or lots. The samples shall be properly segregated, packed, marked and secured by the members/representatives of the committee.



TAP for Cartridge, 25mm, HEI-T, Linked

PA TEST NR FAM - 10-03-16

- Technical inspection and test shall be conducted on the representative samples of the lot by physical, dimensional and weight measurements to determine the over-all workmanship, markings, color and appropriate packaging of the items.
- d. Functional Test will be done to determine the functional performance of the ammunition.
- Results obtained shall be recorded and evaluated to determine the e. compliance of the items to technical specifications and as basis for acceptance or rejection of the lot or lots.

IV. **TESTS AND INSPECTION PARAMETERS**

Α. PHYSICAL INSPECTION:

PURPOSE: This non-destructive test shall be performed to determine the inspected items conformity to technical specifications, overall workmanship, standard drawings and packaging to ensure that the finished product shall be free from defects and meet the specifications.

PROCEDURE: Visually check the inner, intermediate and outer packaging, and markings of the product. Each sample cartridges shall be examined for evidence of defects.

STANDARDS:

- The quantity required should be complete, properly marked and packed including the required components/accessories.
- The inner, intermediate and outer packaging shall be free from defects as stated in Table 2: Types and Classification of Defects.
- The inner, intermediate, and outer packaging markings of the product shall conform to the required specifications.
- The sample cartridges shall be free from defects as stated in Table 2: Types and Classification of Defects.

B. WEIGHT AND DIMENSIONAL INSPECTION:

PURPOSE: This test shall be performed to ensure that the weight and dimensional measurements of the ammunition are within specification and the provided tolerance for it to positively perform its function and conform to the technical data required.

PROCEDURE: The sample cartridges, its parts or components shall be measured by using go and no go gages, vernier caliper, micrometer caliper or other measuring instruments that will precisely measure the named parts of the cartridges.

STANDARD: The sample cartridges shall conform to the provided measurements in the specifications and shall be free from defects as stated in Table 2: Types and Classification of Defects.



TAP for Cartridge, 25mm, HEI-T, Linked

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C. FUNCTIONAL AND PERFORMANCE TESTS

A series of tests shall be performed to ensure that the ammunition will efficiently function and perform accordingly based on the established standards and specifications when subjected to various methods of actuation simulating field usage and storage conditions.

1. Projectile Extraction Test.

<u>PURPOSE</u>: This test shall be performed to determine the minimum force needed to pull-out the projectile from the cartridge case.

<u>PROCEDURE</u>: The projectile of the sample cartridges shall be pulled by an extraction machine.

STANDARD: The tensile force required to extract the projectile from the cartridge case shall be between 2,000 to 4,100 lbs.

2. Waterproof Test.

<u>PURPOSE</u>: This test shall be performed to ensure water tightness/resistance of ammunition wherein moisture cannot penetrate inside ammunition.

PROCEDURE: The cartridges shall be submerged in a water bath according to Manufacturer's Procedure. After which, the cartridges shall be conditioned for a minimum of four (4) hours at 21° ± 3°C. The appropriated number of rounds subjected to this test shall be fired.

STANDARD: The average velocity of (wet) projectiles of the sample cartridges shall not vary from the average velocity (dry) by more than 30.5 meters per second and the action time shall not exceed 6.0 milliseconds.

3. Muzzle Velocity test.

<u>PURPOSE</u>: This test shall be performed to obtain the conformity of the velocity of the ammunition to the required performance in the specifications.

PROCEDURE: The ammunition shall be conditioned at 21° ± 3°C. Using a standard test barrel/weapon, the appropriated number of rounds shall be fired. This test may be carried-out simultaneously with the chamber pressure test and action time tests.

STANDARD: The average muzzle velocity measured at 3.2m from the barrel of the weapon shall be 1,100 m/s \pm 25m/s and the standard deviation of the velocities shall be no greater than 13m/s. Failure to meet the required average muzzle velocity will cause outright rejection of the lot.

4. Chamber pressure.

<u>PURPOSE</u>: This test shall be performed to determine the amount of pressure applied to the chamber during firing.

PROCEDURE: The appropriated number of rounds shall be conditioned at 21° \pm 3°C for a minimum of four hours and shall be fired using a standard

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test barrel/weapon. Chamber pressure shall be measured with a piezoelectric transducer or equivalent. This test may be carried-out simultaneously with the muzzle velocity test and action time tests.

STANDARD: The average plus 3.0 standard deviations of chamber pressure shall not exceed 454 MPa. Individual chamber pressure shall not exceed 496 MPa. Failure to meet the required average chamber pressure will cause outright rejection of the lot.

5. Action time.

<u>PURPOSE</u>: This test shall be performed to determine the time taken for the projectile to exit the barrel.

<u>PROCEDURE</u>: The appropriated number of rounds shall be conditioned at $21^{\circ} \pm 3^{\circ}$ C for a minimum of four hours and shall be fired using a standard test barrel/weapon. Action Time shall be measured using appropriate equipment. This test may be carried-out simultaneously with the muzzle velocity test and chamber pressure tests.

STANDARD: The action time shall not exceed 6.0 milliseconds (6ms).

6. Dispersion Test.

<u>PURPOSE</u>: This test shall be performed to determine the precision of hits of the ammunition and consistency of results or performance.

PROCEDURE: The appropriated number of rounds shall be conditioned for a minimum of four hours at 21° ± 3°C and shall be fired using a standard test barrel/weapon to a target placed at a distance from 300 meters and/or 100 meters. Cloth or paper target, when used, shall be taut; without sagging or wrinkles. The standard deviation of each cartridge group shall be calculated in both the horizontal and vertical directions.

STANDARD: The standard deviation of projectile impacts in both the horizontal and the vertical directions shall be no greater than 0.77 mils when fired from a Mann Barrel and no greater than 0.87 mils when fired at a rate of 100 shots per minute (spm) from an Automatic cannon, 25mm, M242.

7. Projectile Trace Test.

PURPOSE: This test shall be performed to determine the visibility of

the tracer rounds.

PROCEDURE: The appropriated number of rounds shall be conditioned for a minimum of four hours at 21° ± 3°C and shall be fired using a standard test barrel/weapon in a low lighted range or in a dark background. This test may be carried-out simultaneously with the projectile self destruct function test.

STANDARD: The projectile shall exhibit visible trace when viewed against a dark background for a minimum time of 3.5 seconds from the gun muzzle.

8. Projectile Self Destruct Function Test.

<u>PURPOSE:</u> This test shall be performed to determine the compliance to self-destruct function requirement.



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The appropriated number of rounds shall be PROCEDURE: conditioned for a minimum of four hours at 21° ± 3°C and shall be fired using a standard test barrel/weapon. This test may be carried-out simultaneously with the projectile trace test when trace burn time is being recorded.

STANDARD: The projectile shall function within 4.5 to 7.5 seconds and prior to impact.

9. Projectile Impact Function Test.

PURPOSE: This test shall be performed to determine the function of the fuze and projectile upon impact to the target.

PROCEDURE: The appropriated number of rounds shall be conditioned for a minimum of four hours at 21° + 3°C. A target that is 0.063 inch nominal thickness 2024-T3 aluminum plate at 0°+ 10° obliquity shall be placed at a distance of 200 meters from the muzzle. The sample cartridges shall be fired to said target.

STANDARD: The projectile shall function upon impact.

10. **Functioning and Casualty Test.**

PURPOSE: This test shall be performed to determine the functional conformance of the ammunition to the standard specifications.

PROCEDURE: The appropriated number of rounds shall be conditioned for a minimum of four hours at 21° + 3°C. Sample rounds shall be fired using Automatic Cannon, 25mm, M242.

The cartridges shall function without casualty while STANDARD: maintaining metal parts security. Cartridges and subcomponent parts shall exhibit integrity during weapons cycling, chambering, firing, and in ballistic flight. Maximum effective range of the projectile should be attained.

11. Metallic Link Corrosion Test:

PURPOSE: This test shall be performed to determine that the Metallic Links are corrosion protected and conform to standards of the required type/model.

PROCEDURE: Samples of Metallic Links shall be subjected to Salt Spray Test for 72 hrs per procedure in ASTM B117 (Fog Test). Manufacturer's Test Procedure may be used for this Test.

STANDARD: No signs of corrosion shall be observed on the metal links.

D. ALLOCATION OF REPRESENTATIVE SAMPLES:

Table 1 TYPES OF INSPECTION/TEST NR OF SAMPLES A.1 Physical Inspection for Cartridges 100% of the Lot samples A.2 Physical Inspection for Packaging 100% of cases/ boxes corresponding to the quantity of ammunition samples for inspection.



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B. Weight/ Dimensional Inspection	100% of the Lot samples
C. Functional and Performance Tests	
Projectile Extraction Test	10% of samples for Functional Tests
2. Waterproof Test	10% of samples for Functional Tests
Muzzle Velocity Test	
4. Chamber Pressure Test	10% of samples for Functional Tests
5. Action Time Test	
6. Dispersion Test	20% of samples for Functional Tests
7. Projectile Trace Test	**************************************
Projectile Self Destruction Test	10% of samples for Functional Tests
Projectile Impact Function Test	10% of samples for Functional Tests
10. Function and Casualty Test	Remaining quantity of samples for Functional Tests
11. Metallic Link Corrosion Test	Links of 100% of the quantity of samples for Functional Tests less the Links for the Function and Casualty Test

E. MANUFACTURER'S QUALITY CONTROL CERTIFICATE:

For every lot of ammunition, the manufacturer shall submit the following quality control certificates for raw materials and major components used during manufacture/ assembly of the ammunition lot:

- 1. That primers came from one (1) production lot.
- 2. That propellants came from one (1) production lot.
- 3. That projectile came from one (1) production lot.
- 4. That cartridge case came from one (1) production lot.
- 5. That the metallic links came from one (1) production lot.
- 6. Result of quality control tests conducted of the above metallic links.

IV. TYPES AND CLASSIFICATIONS OF DEFECTS

TABLE -2

CLASSIFICATION OF DEFECTS		
CRIT	MAJ	MIN
·		<u> </u>
		X
· · · · · · · · · · · · · · · · · · ·		x
<u> </u>		X
		DEFECTS



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	PA TE	ST NR FAM	1-10-
 Incorrect , missing or illegible marks 			Х
 Severe dents, buckles or other damage 			Х
- Protective coating damaged			Х
 Number of cartridges/ belt or Nr of rounds/ container not complied 			х
- Packaging not as required		(X
2. Metallic link belt		**************************************	
 Link not of M28 type 		X	· · · · · · · · · · · · · · · · · · ·
 Frozen belt, Stretched or broken, malformed or unaligned belt 		х	
 Rust, oil/grease, foreign material in belt 			Х
 Improper insertion of cartridges in belt/links 			х
 Defective protective finish or rust on link 			Х
3. Cartridges			
 Any split or perforation in Figure 1 that allows propellant to leak 	Х		
 Crack or split in the projectile 	X		
 Fuze not in fully safe configuration 	Х		
- Primer: cocked, loose, inverted or missing		X	
- Sealant missing around primer	***************************************	X	
 Crimp missing, improper or incomplete (case/projectile) 		х	
 Missing, cracked, split or dented nose cap 	***************************************	X	
- Loose Fuze		X	
- Evidence of corrosion			X
 Head stamp marking incorrect, incomplete, illegible or missing 	***************************************		×
 Cartridge case defect (le case draw, case dent, fold, bulge, wrinkle, or buckle) 			Х
- Presence of foreign matter			X
 Color improper/ not as specified 	<u> </u>	X	
 Rotating band damage 			X
 Gap between Fuze and Projectile body 			Х
 Case without head stamping or illegible 			X
- Projectile loose		X	
 Projectile type not HEI-T 		X	
 Projectile Body not made of Steel, C1045 		X	
 Fuze type not PDSD 		X	
- Tracer- not pellet		Х	
 Cartridge case not made of steel, C1030 	V	X	
- Primer type not percussion		X	

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	PATESTNR	. r min 10- 0.
- Primer leak	X	,
- Incorrect packing of cartridges		Х
B. Weight/Dimensional Inspection		
- Round weight not within requirement	X	·
- Round length not within requirement	×	
- Projectile length not within requirement	l x	,
- Projectile diameter not within requirement	X	<u> </u>
- Propellant weight not within requirement		<u> </u>
C. Functional Test		**************************************
C.1: Projectile Extraction Test:		***************************************
- Failure to comply with projectile extraction		
requirement.	X	
C.2: Waterproof Test:		
- Average velocity of (wet) projectiles vary		
from the average velocity (dry) by more	×	;
than 30.5 meters per second		
- The action time of (wet) projectiles		
exceeded 6.0 milliseconds.	X	
- Primer leak		
C.3: Velocity Test:		
- Required average velocity not within	***************************************	
requirement.	×	
- Standard deviation of the velocities		
greater than 13m/s	×	ζ
C.4: Chamber Pressure Test:		سرسياريل ودردوا فانشسا المستهجهاول والمراسس فسند المستد
- The average plus 3.0 standard deviations		
of chamber pressure exceeded 454 MPa.	X	
- Individual chamber pressure exceeded	Х	,
496 MPa.		
C.5: Action Time Test:		
- Action time exceeded 6.0 milliseconds	Х	
C.6: Dispersion Test:		
- The standard deviation of projectile		
impacts in both the horizontal and the		
vertical directions is greater than 0.77 mils		
when fired from a Mann Barrel and	X	
greater than 0.87 mils when fired at a rate		
of 100 shots per minute (spm) from an		Ì
Automatic cannon, 25mm, M242		
C.7: Projectile Trace Test:		
- Failure to exhibit visible trace for a	X	reconstruction in the principal structure of the section of the se
minimum time of 3.5 seconds from the	^	



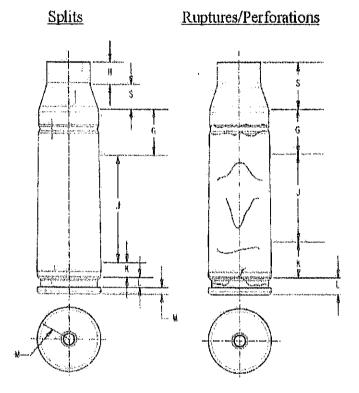
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	PAIL	ST NR FAM	1-10-1
gun muzzle.			
C.8: Projectile Self Destruction Test:			
- Projectile failed to function within 4.5 to	,,,, , , , , , , , , , , , , , , , , ,	~	
7.5 seconds and prior to impact.		X	
C.9: Projectile Impact Function Test:	· · · · · · · · · · · · · · · · · · ·	4	
 Projectile failed to function upon impact. 		Х	
Note: Following shall be inspected for tests	<u> </u>		
involving functional firing:			
 Case: split or perforated in K, L, M zones of Figure 1. 	X		
 Case: split or perforated in zones other than K, L, M Figure 1. 		х	
Cartridge:			
- Cartridge misfire	-	Х	
- Failure to chamber		Х	
- Failure to extract		X	<u> </u>
- Projectile remaining in bore	X	 	
- Premature function of projectile	X	- p	
Primer:			
- Primer perforation		X	
- Loose Primer		X	
- Blown Primer		Х	
Case:	**************************************	<u> </u>	
- Longitudinal split in G,H,S or J of Figure 1	en de la companya de	ļ	Х
- Longitudinal split in K,L or M of Figure 1	X		
- Circumferential rupture (partial) in S, J or K of Figure 1	- to the transfer of the trans		×
Circumferential rupture (partial) in G or L of Figure 1		X	
- Circumferential rupture (complete)	Х		
- Detached Metal (metal sheared or			A MARINE BOOK BOOK OR AND THE MARINE ARE ABOUT A
missing from the fired cartridge case exterior	X		
- Empty shell failed to extract		X	
Projectile:			**************************************
 Metal parts separation (as evidenced by evaluation of hole (s) in the witness panel (s) or by recovery of parts 		х	
- No sign of hit or penetration.	***************************************	X	
C.10: Metallic Link Corrosion Test:			
- Metallic Link exhibited corrosion			X



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G - In link groove section

H - In mouth or neck

- J In main body section, no closer than 0.25 inch to extractor groove
- K In lower body section from forward edge of extractor groove
- L In extractor groove
- M In case head
- S In shoulder section

G - In link groove section

- S In neck and shoulder
- J In upper 0.75 body section
- K In lower 0.25 body section above extractor groove
- L In head and extractor groove

FIGURE 1. Identification of defects for case, cartridge, 25mm.

VI. ACCEPTANCE AND REJECTION:

Acceptability of lots shall be determined by using General Inspection Level II-Single Sampling Plan for Normal Inspection for Visual, Weight and Dimensional Inspection and Special Inspection Level 4 for Functional and Performance Tests using the Acceptance Quality Level as shown in the sampling plan table.

PHYSICAL, WEIGHT AND DIMENSIONAL INSPECTION

SAMPLING PLAN : SII	NGLE SAMPL	NG Level II - NORMAL		
OF DEFECTS	AQL	LOT SIZE: 3,201 -	LOT SIZE: 3,201 – 10,000 SAMPLE SIZE: 200	
		ACC	RE	
CRITICAL	0.04	0	1	
MAJOR	2.50	10	11	
MINOR	4.00	14	15	

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Army Core Purpose: Serving the people. Securing the land.

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Army Vision: By 2028, a world-class Army that is a source of national pride.

TAP for Cartridge, 25mm, HEI-T, Linked
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FUNCTIONAL AND PERFORMANCE TESTS

SAMPLING PLAN: SP	ECIAL INSPE	CTION LEVEL - 4		
CLASSIFICATION OF DEFECTS	AQL	LOT SIZE: 3,201-10 SAMPLE SIZE: 32	LOT SIZE: 3,201-10,000 SAMPLE SIZE: 32	
		ACC	RE	
CRITICAL	0.04	0	1	
MAJOR	2.50	2	3	
MINOR	4.00	3	4	

Note:

ACC- Acceptance Number

RE- Rejection Number

VII. RESULT

The result of the above acceptance test shall be the basis for the PA - Technical Inspection and Acceptance Committee for Ordnance-Firepower in the acceptance or rejection of the Cartridge, 25mm HEI-T, Linked for use of the Philippine Army.

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