

22 DEC 2014

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DG

F.No. P/604/2014(389)/NSG/MHA 9845  
Bharat Sarkar/Government of India  
Grihas Mantralaya/Ministry of Home Affairs  
PM Division/Prov.II  
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14/12/14  
Dial (books)  
An

26, Man Singh Road, Jaisalmer House,  
New Delhi. Dated : 16 December 2014

To

DsG : AR (through LOAR), BSF, CISF, CRPF, ITBP, SSB, NSG & BPR&D.

Subject :- QRs and Trial Directives of Round 40mm Low Velocity Red Phosphorous.

The QRs and trial directives of Round 40mm Low Velocity Red Phosphorous (as per annexure) have been accepted by the competent authority in MHA subject to condition that no deviation will be made from the proposed QRs and Trial Directives without the permission of MHA.

- Henceforth, all the CAPFs should procure the above item strictly as per the laid down Technical Specifications/QRs subject.
- CAPFs concerned will be accountable for correctness of the QRs and TDs.

Encl: A/a

Yours Faithfully,

*P.K. Srivastava*

(P.K. Srivastava)  
Under Secretary to the Govt. of India  
Tele/Fax: 2338 1278

Copy forwarded for necessary action to:-

The Section Officer (IT), MHA: it is requested to host the QRs (soft copy attached) on the MHA website (under the page of Organizational set up- Police Modernization Division- QRs under A & A items)

*Ritesh Kumar*  
16/12/14

(Ritesh Kumar)  
Section Officer (Prov.II)  
Tel No: 2338 6034

Copy to :- DDG, (Procurement), MHA, Jaisalmer House

4063  
19/12/14

सूचना (Information)	
सूचना संख्या (Information No.)	
डी.डी. (D.D.)	
डी.डी. संख्या (D.D. No.)	
डी.डी. तिथि (D.D. Date)	
डी.डी. स्थान (D.D. Place)	
डी.डी. प्राप्त (D.D. Received)	
डी.डी. जारी (D.D. Issued)	
डी.डी. कर्ता (D.D. Officer)	
डी.डी. प्राप्त (D.D. Received)	
डी.डी. जारी (D.D. Issued)	
डी.डी. कर्ता (D.D. Officer)	
डी.डी. प्राप्त (D.D. Received)	
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डी.डी. प्राप्त (D.D. Received)	
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डी.डी. कर्ता (D.D. Officer)	

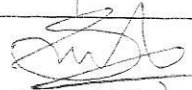


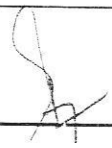
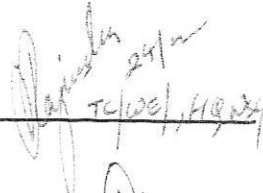


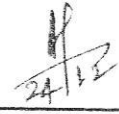

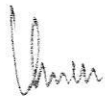


*Anil*

23/12 - copy to ops  
- update.

IG (Prov) Secretariat
By No. 657
Date 19/12/14



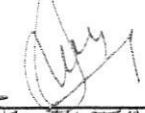

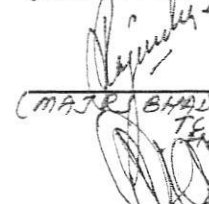
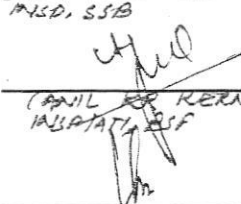
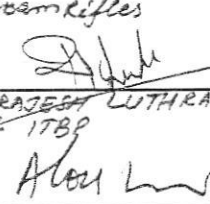
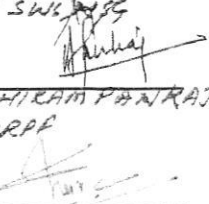

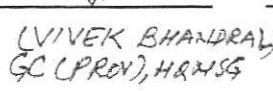
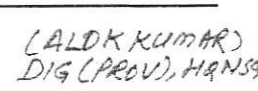
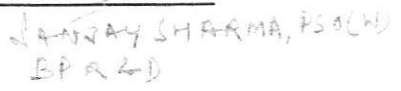
QRS OF ROUND 40 MM LOW VELOCITY RED PHOSPHORUS

Ser No	Parameter	Specification
1.	Caliber	40 X 46 mm.
2.	Length of Round	103± 0.5 mm.
3.	Weight of Round	Min 225 gms
4.	Compatibility with weapon	40 mm MGL(Breech Loading) and 40 mm UBGL (Breech loading type). The Model of the UBGL & MGL to be specified by the indenter.
5.	Explosive Charge weight/ Mass of Filling	32 ± 3 gms.
6.	Explosive Type / Filling	Red Phosphorus Pyrotechnic Composition.
7.	Muzzle Velocity	76±3 m/s.
8.	Maximum Range	400 m.
9.	Fuze Arming	8m to - 28 m.
10.	Casualty Radius	2 m.
11.	Scatter Radius	10 m.
12.	Reliability	90%
13.	Accuracy at 75 meters	Grouping of 0.95 m x 0.95 m or smaller on a vertical target of steel plate with dimensions 2000x2000x2mm.
14.	Operational Temperature Range	-40°C to +52°C.
15.	Shelf Life	10 years.
16.	Fit for Air Drop	Ammunition should be air droppable and packed inside the boxes.

 S.S. BHOSALE Asst. Dir. DGDA			
 24/12			 24/12
			

**QRS OF ROUND 40 MM LOW VELOCITY RED POSPHORUS (Contd)**

Ser No	Parameter	Specification
17.	<p>The following minimum information will be supplied in English language by the manufacturer :-</p> <p>(a) Frequency of Inspection, time, month etc. of inspection.</p> <p>(b) Parameters for Visual Inspection, Static Proof &amp; Dynamic Proof.</p> <p>(c) Parameters for declaring the ammunition as serviceable, unserviceable and repairable.</p> <p>(d) Instructions for breakdown of ammunition (if any) &amp; method of disposal.</p> <p>(e) Instructions for storage of ammunition.</p> <p>(f) Instructions for safe transportation of ammunition by rail, road, sea and by air.</p> <p>(g) Description of each safety feature designed into the ammunition, how each safety feature is intended to function and for those under shooter control (if any), how the shooter should operate (activate/deactivate) each safety feature.</p> <p>(h) Illustrated/ detailed diagrams identifying/ depicting all the parts of the ammunition.</p>	<p>10 Sets</p>

 <u>(SS BHASALE) Asst. Dir</u> DGRA	 <u>(ASHOK KUMAR)</u> Asst. Dir, SSB	 <u>(LT COL SR THAKUR)</u> Asst. Dir, Rifles	 <u>(MAJ UDAY BADHANI)</u> SWS, HNSG
 <u>(MAJ BHADARIA)</u> TCS, HNSG	 <u>(ANIL K. KERI)</u> Asst. Dir, SSB	 <u>(RAJESH LUTHRA)</u> DC, ITBP	 <u>(ABHIRAM PANRAT)</u> DC, CRPF
 <u>(MAJ RISHI JAIN)</u> HNSG	 <u>(VIVEK BHANDRAL)</u> GC (PROV), HNSG	 <u>(ALDIK KUMAR)</u> DIG (PROV), HNSG	 <u>(JITENDRA SHARMA)</u> PSO (CD) EP & RD


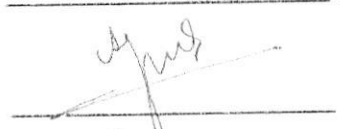

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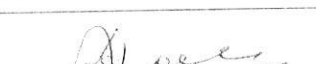
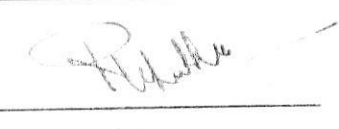

(J N Choudhury)  
DG NSG


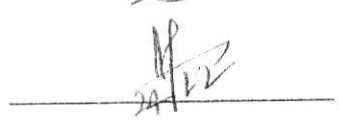
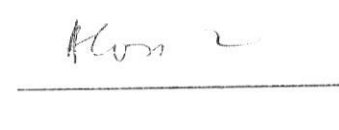
**TRIAL DIRECTIVES OF ROUND 40 MM LOW VELOCITY RED PHOSPHORUS**




Ser No	Parameter	Specifications	Method
1.	Caliber	40 X 46 mm.	To be physically checked by the board of officers. Gauges and tools for the same to be provided by the OEM/Firm.
2.	Length of Round	103± 0.5 mm.	To be physically checked by the board of officers.
3.	Mass of Round	Min 225 gms.	-do-
4.	Compatibility with weapon	40 mm MGL(Breech Loading) and 40 mm UBGL (Breech loading type). The Model of the UBGL & MGL to be specified by the indenter.	OEM/Firm to provide laboratory test report from a laboratory accredited in terms of ISO/IEC 17025 for the relevant services by an Accreditation Body which is member of the International Laboratory Accreditation Cooperation (ILAC) Arrangement.
5.	Explosive Charge Weight/ Mass of Filling	32 ± 3 gms.	-do-
6.	Explosive Type/Filling	Red Phosphorus Pyrotechnic Composition.	-do-
7.	Muzzle Velocity	76± 3 m/s.	-do-
8.	Maximum Range	400 m.	When fired from the weapon at an angle of elevation that causes the projectile to achieve maximum horizontal distance, the projectile shall impact at a horizontal distance of 400 mtrs.
9.	Fuze Arming	8m – 28 m.	OEM/Firm to provide laboratory test report from a laboratory accredited in terms of ISO/IEC 17025 for the relevant services by an Accreditation Body which is member of the International Laboratory Accreditation Cooperation (ILAC) Arrangement.
10.	Casualty Radius	2m.	-do-
11.	Scatter Radius	10 m.	-do-

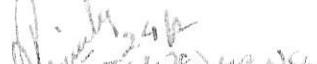
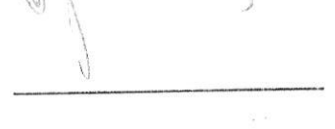
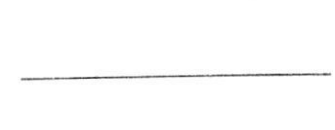
(S.S. BHOSALE) Asst Dir. D.G. QA


  
  


TRIAL DIRECTIVES OF ROUND 40 MM LOW VELOCITY RED PHOSPHORUS (Contd..)

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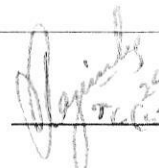
Ser No	Parameter	Specifications	Method
12.	Reliability	Min 90%	10 Rounds should be fired at max. distance. Acceptance criteria :- (a) Premature burst at barrel bore- none allowed. (b) Premature burst along the grenade trajectory- non allowed. (c) Primer blowback - None allowed. (d) Round stuck up - None allowed. (e) Failure to extract cartridge case- None allowed. (f) Incomplete burst/Misfire - 1 out of 10 allowed.
13.	Accuracy at 75 m	Grouping of 0.95 m x 0.95 m or smaller on a vertical target of steel plate with dimensions 2000x2000x2mm.	25 out of 30 rds fired shall have a grouping of 0.95 x 0.95 meters or smaller at a distance of 75 meters on a vertical target of steel plate with dimensions 2000x2000x2mm.
14.	Operational Temperature Range	-40°C to +52°C.	OEM/Firm to provide laboratory test report from a laboratory accredited in terms of ISO/IEC 17025 for the relevant services by an Accreditation Body which is member of the International Laboratory Accreditation Cooperation (ILAC) Arrangement.
15.	Shelf Life	10 years.	-do-
16.	Fit for Air Drop	Ammunition should be air droppable and packed inside the boxes.	-do-

  
(S.S. BHOSALE) Asst. Dir. DGRA









  
24/12  
TC (200), HQ DGRA





  
24/12

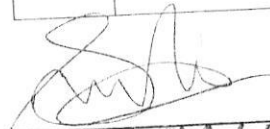






  
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**TRIAL DIRECTIVES OF ROUND 40 MM LOW VELOCITY RED PHOSPHORUS (Contd..)**

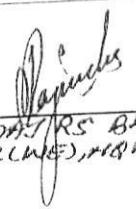
Ser No	Parameter	Specifications
17.	<p><b>The following minimum information will be supplied in English language by the manufacturer :-</b></p> <p>(a) Frequency of Inspection, time, month etc. of inspection.</p> <p>(b) Parameters for Visual Inspection, Static Proof &amp; Dynamic Proof.</p> <p>(c) Parameters for declaring the ammunition as serviceable, unserviceable and repairable.</p> <p>(d) Instructions for breakdown of ammunition (if any) &amp; method of disposal.</p> <p>(e) Instructions for storage of ammunition.</p> <p>(f) Instructions for safe transportation of ammunition by rail, road, sea and by air.</p> <p>(g) Description of each safety feature designed into the ammunition, how each safety feature is intended to function and for those under shooter control (if any), how the shooter should operate (activate/deactivate) each safety feature.</p> <p>(h) Illustrated/ detailed diagrams identifying/ depicting all the parts of the ammunition.</p>	<p>To be provided by the OEM/Firm and the same to be checked by the Board of Officers.</p>

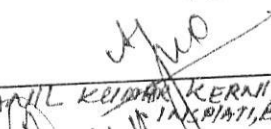
  
 (SS BHOSALE) Asst Dir  
 DGQA


  
 (ASHOK KUMAR)  
 INSP, SSB


  
 (DC SANKAR)  
 Asst Comd  
 Assam Rifles


  
 (MAJ PRADY BADWANI)  
 SWS, NSS


  
 (MAJ RS BHADAURIA)  
 TELNES, HQ NSS


  
 (ANIL KUMAR KERI)  
 INSP, BSF

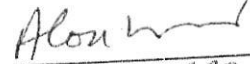
  
 (RAJESH LUTHRA)  
 AC, MOP

  
 (ABHINAV PANIKAR)  
 DC, CRPF

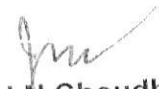
  
 (SANJAY SHARMA, PSO(W))  
 EP 2-D

  
 (Rajan Jain)  
 HQ NSS

  
 (VIVEK BHANDRAL)  
 GCCPROV, HQ NSS

  
 (ALOK KUMAR)  
 DIS (PROV), HQ NSS

APPROVED/NOT APPROVED

  
 (J N Choudhury)  
 DG NSS