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The paper examines the current state and the need for improving sound suppressor designs for small arms to increase their efficiency. Special aspects of sound suppressors and positioning systems used within the ATO zone are reported. Information on major sound ranging systems and the status of their development in Ukraine are specified. Descriptions and specifications of sound suppressors for small arms developed in the Russian Federation are provided. The state of the world's development of sound suppressors and their characteristics for the weapon using a high-energy ammunition are specified.

It is demonstrated that high-performance sound suppressors for small arms are created in Ukraine. They are standardized using the Hartmann–Sprengr effect and have conical and spherical baffles. Conclusions are drawn and the basic lines for designing advanced sound suppressors for small arms are presented.

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Boomerang – PDCue (AAI Corp.),
10 (BBN), Gun PACS
Boomerang (Raytheon), REDOWL (I ROBOT), ISIS
(Vanderbilt University), SWATS (Qinetiq North America) – 17
, Ears VMS (Qinetiq), Sniper Egg (Ultra
Electronics), Pin Point (Cobhani Bio Mimetic System).

Met-
ravib – Pilar, Pearl Renault Tuck Defense – SLATE,
– ASLS AKSL (Reinmetall), – SADY (Rafael),
– MDA (Ferret).

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» [26], [27 – 35].

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 : suppressor, sound moderator, silencer. , silencer –
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-1 200 .
 -4 -5 (.1) 5,45 × 39,0



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.2 - -5, Red Jacket Firearms

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 Red Jacket Firearms (.2) BMF-17K.



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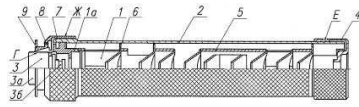
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-2 (.3, 4).

- (.5, 6). -
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[47]. : Advanced Armament Corporation, AWS Systems Technology, Bowers, De Croat Tactical Armaments, Gemtech, Knight's Armament Company, Opsine, Sure Fire, SWR, Tactical Innovation, HTG, Yankee Hill Manufacturing (YHM) – , Ase Utra, BR Reflex Suppressors (), Brügger & Thomet AG (), Hausken Lyddemper (), SAI-Small Arms (), Hussh Sound Moderators ().

«Reflex Suppressor» ().

R15, M4, M16, C7, .308M62 [49],
MG34, LS26 (. 7,62×53R) [50].

– Juha Hartikka –

[39, 40].

1991 1995 Hartikka 300
Reflex.

BR-Toute Ky, Ase Utra Juha. – Ase
Utra. 60 Reflex Suppressors. [51].

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AWS Systems Technology	THURBO-DYNEX	.50BMG	16,5	2,0		30,0	304		51
Advanced Armament Corporation	CYCLOPS	.50BMG	15,75	2,5		32,0	304	2500,0	52
HTG	Hercules	.50BMG	13,0	2,0	90,0	30,0	Inconel-6SS	1750,0	53
AWS Systems Technology	THUNDER TRAP	.338L	10,15	1,625	29,0	30,0	304 / Ti-	1595,0	51
GEMTECH		.338LM	12,0	2,0	27,0	39,0	Ti-304 / Inconel718		54
Advanced Armament Corporation	TITAN	.338LM	10,0	2,0		38,0	Inconel718, 316LSS		55
Advanced Armament Corporation	TITAN-SS	.338LM	10,0	1,85		38,0	Ti-Grades 5,9		55
HTG	Posidon	.338	10,1	1,5	35,0	25,0	Inconel 304 /	855,0	53
YHM	Phantom	.338LM	10,15	1,625	33,0	28,0	304 /		56

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— [43].

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-19 .12-7,62 -



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1— -11 .12-5,45; 2— -12 .12-7,62; 7,62

3— -19 .12-7,62 7,62 .

— 14x1 . -

: Ø43 , L=224 . -

-19 .12-7,62 -

Blaser R93, 7,62 (.30-06). -

- 14x1
: Ø43 , L=231



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-11 .12-5,45

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-74 (5,45).

- 24x1,5

: Ø43 , L=195

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Ø5,0 . Ø7,0

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- 74.

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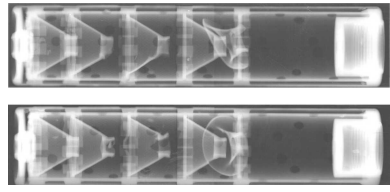
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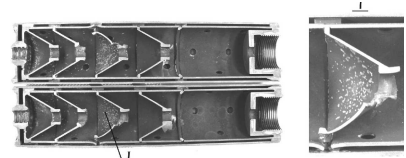
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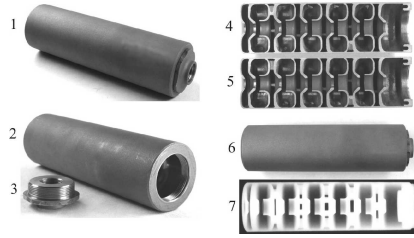


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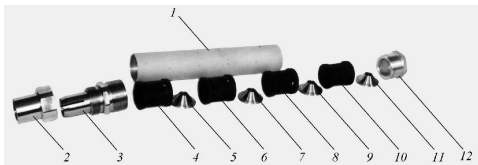
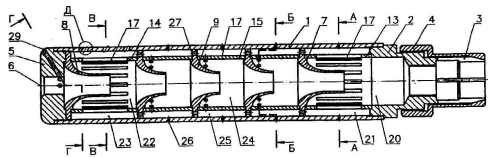
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- 7,62 - Blaser, Browning Bar, SAKO, Manlicher, - ;
 - 5,45 - -74 , -74,
 -16, Blaser, M4A1, SAKO, .

. 14 [61]



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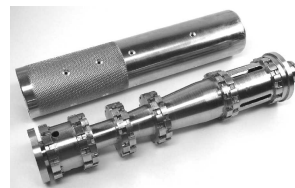
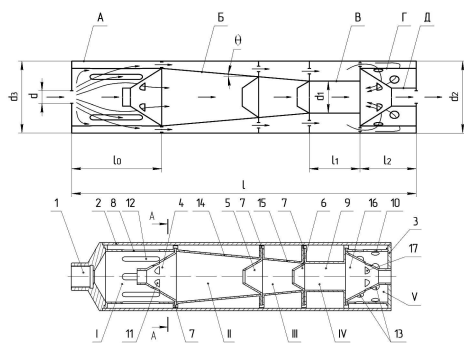
[57].

-74 , -132 -5,45,

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[63] . 16 [64].



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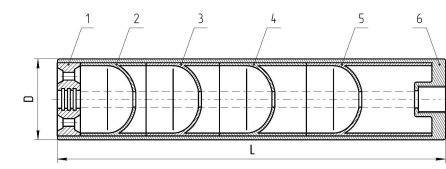
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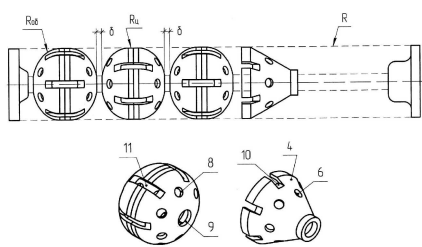
60 – 90°, -
 [66]. -

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