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Office of
THE INFANTRY BOARD

IB-472.5

Fort Benning, Georgia
29 September 1945

SUBJECT: Silencer for SMG, Cal. .45; Flash Hider for SMG, Cal. .45.

THROUGH: The Commandant, The Infantry School, Fort Benning, Georgia.

TO: The Commanding General, Army Ground Forces,
Army War College, Washington 25, D. C.

1. References. a. TIB Report No. 1675 "C", "Silencers for SMG, Cal. .45, M-3", which recommends development of a flash hider or flash-hider-silencer for submachine guns.

b. Letter AGF to ASF, file number 472.5 (S) (3 Mar 1945) GNRQT-11/17516, subject: "Silencer for Submachine Gun, Cal. .45, M3", and indorsements thereto including 5th and last dated 13 August 1945. (Appendix "B")

c. OCM Item No. 27977 covering initiation of a project for development of a cone type flash-hider for the submachine gun Cal. .45, M3.

2. Authority and Purpose. Tests of the subject items were conducted pursuant to ~~instructions contained in 4th indorsement reference file (par. 1b herein)~~ to determine the following:

a. Suitability of fastening device and effectiveness of the cone in reducing muzzle flash of the submachine gun.

b. Effect of silencers on shot groups, ballistics, recoil, flash and smoke reduction of the submachine gun M-3; practicability of the devices as silencers; and probable application and employment of silenced weapons in battle. (Detailed directive covered by file 474/207 (S) (5 Sept 1944) GNRQT-11/97145, App. "C", TIB Report 16755).

3. Description of Materiel.

a. Silencer. This device consists of the following principal parts and assemblies:

(1) A radially perforated submachine gun barrel closely surrounded by a spirally and tightly wound section of copper mesh which is in turn surrounded closely by a tubular steel container.

(2) An adapter which screws around the muzzle of the barrel and holds the tubular container against the barrel and receiver adapter.

(3) A tubular container larger than the outside diameter of the barrel but smaller than the tubular container referred to in (1). This container is assembled by screw threads to the adapter referred to in (2) and is filled with copper mesh washers fitted closely within the tube and having inside diameters slightly larger than the inside diameter of the barrel.

(4) A muzzle closing screw cap which holds the mesh washers in tight contact with each other and with the adapter referred to in (2). The cap has an inside diameter approximately equal to that of the mesh washers.

b. Flash Hider. This device is similar in design to the conventional conical flash hiders used with other types of small arms. It consists of a steel truncated hollow cone to the small end of which is attached a split ring and wing-nut device for attachment to the muzzle of the submachine gun barrel.

4. Factual Background.

a. Former tests by The Infantry Board of silencers for the submachine gun Cal. .45, M-3 are covered by TIB Report No. 1675 "C". This report contains:

(1) A statement of the general principle that flash hiders and silencers are definitely required for all weapons used in combat.

(2) The conclusion that in the case of submachine guns the requirement is primarily for flash hiders.

(3) The recommendation that the silencers tested be improved and that a flash hider be submitted for comparative test. (TIB Report 1675 "C")

b. The subject devices were submitted for test pursuant to a request to the Chief of Ordnance by the Commanding General, AGF, based on the recommendations contained in the report referred to in par. 1a. (O'D Item No. 27977 and 1st Ind., reference letter, par. 1b).

5. Facts Shown by Tests.

a. The silencer is mechanically unsatisfactory. When used with the submachine gun, firing results were so erratic as to render the weapon practically useless. Tests did not include observation of silencing effect as this feature is covered by a previous report (TIB Report No. 1675 "C").

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b. The flash hider is easily and rapidly adaptable to the submachine gun. It increases the accuracy of the weapon slightly and reduces flash materially. The locking screw was bent as a result of test firing.

6. Discussion. The silencers as submitted for further test appeared to have no mechanical advantages over the ones submitted for the original tests. Every effort was made by local Ordnance personnel to eliminate bullet interference by increasing diameters of closing caps and by precision alignment of parts, but satisfactory results were not obtained. Based on the results of Test No. 5, TDB Report No. 1675 "C", the silencing feature of the device is also unsatisfactory inasmuch as a submachine gun equipped with the device can still be heard at 350 yards. Considering the short ranges at which submachine guns are used in combat, and the inherent noise of their operating parts, it is believed that further efforts to silence the noise of discharge are not warranted, until small arms of types having a louder sound of discharge are equipped with satisfactory silencers.

Flash hiders have been provided for various types of small arms. The provision of flash hiders for use with submachine guns is desirable and consistent with efforts to reduce the visibility of muzzle blasts of other weapons.

7. Conclusions. The Infantry Board concludes:

a. That there is no requirement in the Infantry for silencers of the subject type for use with submachine guns unless similar devices are developed for other types of small arms.

b. That there is a requirement in the Infantry for flash hiders for use with the submachine gun.

c. That the subject flash hider is satisfactory as to type, but should be modified to provide a stronger locking screw.

8. Recommendations. The Infantry Board recommends:

a. That the subject silencers for submachine guns be given no further consideration,

b. That development of silencers for small arms be continued with a view toward providing them for the following small arms in the order listed:

(1) Machine guns, M1917 and M1919 series.

(2) Rifles, M.

(3) Carbines.

(4) Submachine guns.

c. That pending the development of suitable silencers or flash-hider-silencers, the subject flash hider be standardized and issued on the basis of one flash hider for each submachine gun in the hands of Infantry units.

INGOMAR M. CSETH,
Colonel, Infantry,
President.

RECORD of TEST ON

SILENCER FOR SIG, CAL..45: FLASH HIDER FOR SIG, CAL..45

TEST SECTION THE INFANTRY BOARD FORT BENNING, GEORGIA

**TO: THE DIRECTOR, THE INFANTRY BOARD.
HEREWITH DETAILED RECORD OF TESTS
RELATING TO THE ABOVE PROJECT.**

EDWARD B. CROSSMAN
Lt. Colonel, Infantry
TEST SECTION EXECUTIVE

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Date SEP 1945

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TEST SECTION
THE INFANTRY BOARD
FORT BENNING, GEORGIA

SUBJECT: RECORD OF TEST OF SILENCER FOR SMG, CAL. .45; FLASH HIDER FOR
SMG, CAL. .45.

TO: THE PRESIDENT, THE INFANTRY BOARD, FORT BENNING, GEORGIA

I-N-D-E-X

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1. Authority and Reference.

a. Authority:

(1) Memorandum, The Infantry Board, IB-472.5, 2 August 1945. (Appendix "A")

(2) 1st Indorsement, Headquarters Army Ground Forces, GHEQT-11/36546 dated 11 August 1945, and accompanying correspondence. (Appendix "B").

b. References:

(1) Report of The Infantry Board No. 1675 - the report number applicable to flash hiders and/or silencers in general.

(a) Part A (Flash Hider for U.S. Rifle, Cal. .30, M1.)

(b) Part A1 (Flash Hider for U.S. Rifle, Cal. .30, M1 - improved model)

(c) Part B (Flash Hider - Flash Hiders - Silencers - for U.S. Carbine, caliber .30, M1.)

(d) Part C - (Silencer for Submachine gun, caliber .45, M3)

(e) Part D - (Preliminary Report Flash Hider, TL4, caliber .30 Browning Machine Gun, M1919M4, HB)

(f) Part D (Partial) - (Flash Hiders TL4E1, T24, T25 and T27 for caliber .30 Machine guns.)

(g) Part D1 - (Flash Hider T27E1)

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2. Introductory Information:

a. Subject equipment consists of:

- (1) A baffle-type silencer and/or flash hider.
- (2) A cone-shaped flash hider.

b. (1) The subject baffle-type silencer and/or flash hider screws into the receiver of the M3 and M3A1 SMG in place of the barrel and is designed to silence the report and hide the muzzle flash.

(2) Physical characteristics of the baffle-type silencer and/or flash hider are covered in detail on pages 15 and 16 of Report of The Infantry Board No. 1675 "C". Primarily, the subject silencer has a perforated barrel, surrounded by a roll of wire screen and a metal tube. Ahead of and screwed on the barrel is a smaller metal tube filled only with wire screen washers. A metal cap screws on the muzzle end of this smaller tube, holding the washers in. Both the screen washers and metal end cap allow for passage of the bullets. The silencer adds approximately 1.65 pounds to the weight of the gun and about 6.5 inches to the length of the gun. (See Figures No. 1, 2 and 3)

(3) A summary of reference report (1675-"C") reveals that the SMG equipped with the subject baffle-type silencer and/or flash hider:

(a) Does not produce any greater accuracy when fired from stable positions, but due to added weight of the gun and length of the barrel does give better accuracy when fired from sitting or standing positions.

(b) Reduces distance from which the gun can be heard by approximately 66%.

(c) Causes emission of excess smoke from the muzzle and breech of the gun, interfering with the firer.

(d) Completely eliminates flash from the gun whereas the gun without silencer could be seen about 20 - 25 % of the time 150 yards to the front.

(3) Alignment of end cap, screen washers, small barrel, and long large barrel was unsatisfactory, causing the bullets to hit edges of the end cap, resulting in erratic, unpredictable trajectories.

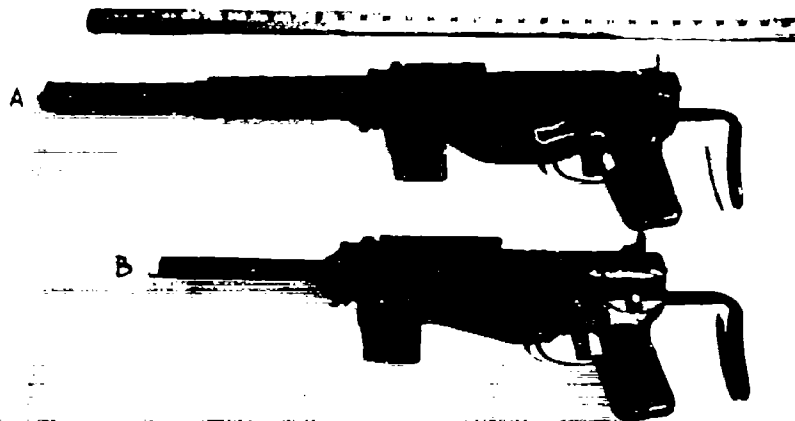
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(f) Cyclic rate of the gun is made somewhat slower.

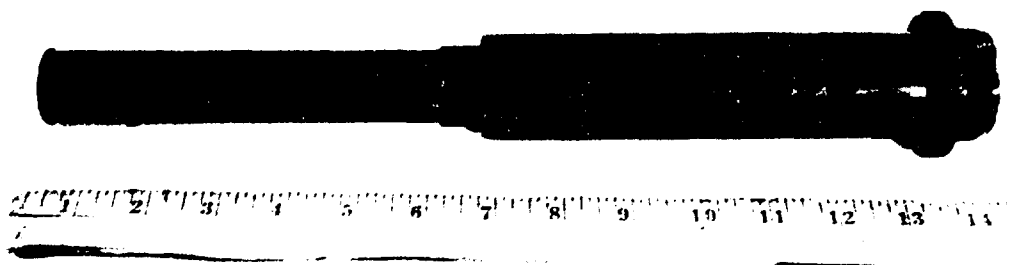
c. The subject baffle-type silencer is being retested as a result of The Infantry Board's recommendation that the subject silencer be modified so as to increase the clearance in the end cap and mesh washers and provide more durable threads on the small tube for attachment to the adapter.

(1) Attention is invited to paragraph 1, 2nd Indorsement (ASF, Ord. O, Washington 25, D.C.) of Headquarters Army Ground Forces basic letter (Appendix "B") wherein it is indicated that the silencers shipped to The Infantry Board for current test were not modified in accordance with The Infantry Board request in view of the fact that they were of later production than those previously tested (Report of Test 1675 "C"), and it was indicated that closer bore alignment had been maintained.

d. The subject cone-shaped flash hider fits over the end of the M3 or M3A1 SMG barrel and is designed to reduce the amount of visible flash when firing the SMG at night. It consists of a steel cone-shaped device, parkerized to give it a dull black finish. The subject flash hider is similar in both design and principle to the cone-type flash hidere for caliber .30 weapons except for the method of attachment to the barrel. Brazed to the small end of the cone is a slotted cylindrical extension which fits 1 inch over the end of the barrel. This is held in place by a wing nut and collar clamp. (See Figures 4 and 5)



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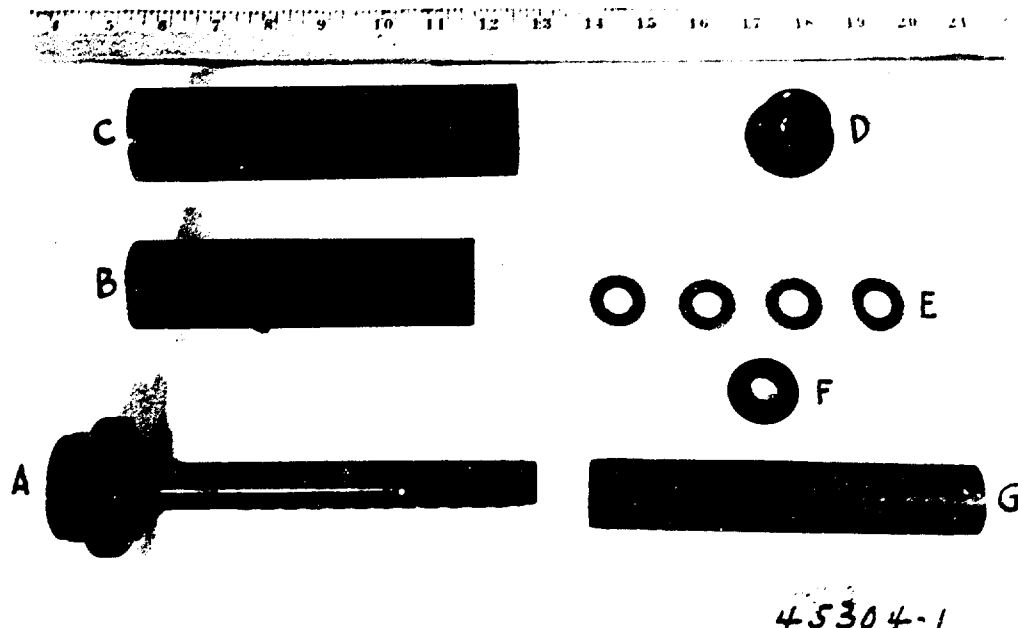


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The silencer removed from the gun
Overall length is 14.5" and weight is 3.0 lbs.

Note: Picture reproduced from Report of The
Infantry Board No. 1675 "C".

Figure 2



The Flash Hider for the M3 SMG Disassembled

- A - The perforated barrel, which screws into the gun receiver.
- B - The cylinder of wire mesh, which slips over the perforated barrel.
- C - The large metal tube, which fits over the mesh cylinder.
- D - The adapter, which screws onto the end of the barrel and into which the small tube screws.
- E - Four of the 230 wire mesh washers from the small tube.
- F - The end cap which holds the mesh washers in the small tube.
- G - The small tube

Note: Picture reproduced from Report of The Infantry Board No. 1675 "C".

Figure 3

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Subject Cone-Shaped Flash Hider

A - Pressure has bent screw downwards

Figure 4

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M3 SMG with Subject Cone-Shaped Flash
Hider attached.

Figure 6

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3. Purpose of Tests.

To determine:

- a. If the alignment and construction of the subject production model baffle type silencer and/or flash hider is satisfactory.
- b. The physical characteristics and construction of subject cone-shaped flash hider.
- c. The practicability of the method of adjustment of subject cone-shaped flash hider.
- d. The effect on accuracy of the subject cone-shaped flash hider.
- e. The amount of flash reduction of subject cone-shaped flash hider.

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4. Details of Tests and Results:

Test No. 1

a. Purpose: To determine if the alignment and construction of the subject baffle type silencer and/or flash hider is satisfactory.

b. Method: By measuring, inspection and observation of firing.

c. Results:

(1) The two subject silencers were received as improved production models from Ordnance. Diameters of the end caps of the two silencers were determined by the local ordnance shops to be .50 and .55 inches respectively. This gives a total clearance of slightly less than .05 in. one silencer and .10 inches in the other, or a clearance between the bullet and end cap of slightly less than .025 inches and .05 inches respectively. (Diameter of a caliber .45 bullet is approximately .457 inches.)

(2) Inspection of the silencers before firing showed to the naked eye that they were in good condition and seemingly aligned.

(3) Upon firing, the following facts were found:

(a) Bullets hit the end caps of both silencers causing extremely erratic trajectory, impacts being as far as 10 yards off aiming point at a range of 1000 inches.

(b) The end cap "shaved" each bullet, retaining a portion of the bullet on the inside of the cap (See Figure 6).

(c) A total of 72 rounds were fired from one of the silencers. All bullets hit the end cap and were deflected unpredictably. After 40 rounds (2 magazines) the small end of the barrel needed tightening, the threads having loosened up.

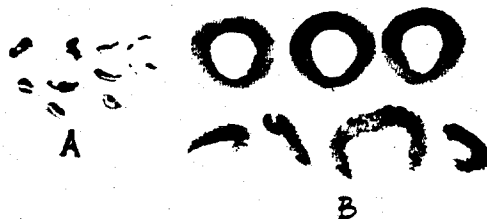
(d) The barrel was tightened and firing resumed. On the 32nd round the bullet struck the end cap, blowing it and the screen washers down range. This stripped the threads and rendered them useless for further satisfactory adjustment of the small barrel. (See Figure No.7)

(e) See Figure No. 8 for Picture of misaligned silencer. Approximately 80 rounds had been fired through this device.

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Page 30 was missed



- A - Shavings from 10 rounds of caliber .45 tracer ammunition fired through subject baffle-type silencer. These were shaved off by the end cap of small barrel.
- B - Wire screen washers broken and worn by passage of bullets indicating misalignment of small barrel on subject silencer.

Figure 6



A



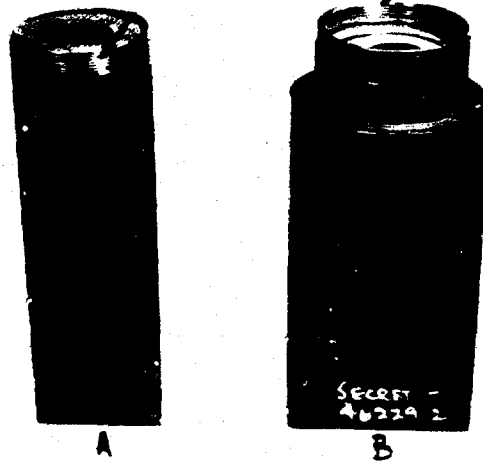
B

A - Small barrel of subject Silencer.

B - Large barrel of subject Silencer.

Note stripped threads.

Figure 7

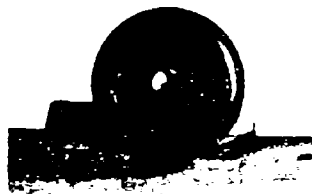


A - Small barrel of subject Silencer.

B - Large barrel of subject Silencer.

Note stripped threads.

Figure 7



Bare view of Subject Silencer

Note misalignment of small barrel.

Figure 8

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Test No. 2

a. Purpose: To determine the physical characteristics of the cone-shaped flash hider.

b. Method: By inspection, measuring and weighing.

c. Results:

- (1) Total length: 3.65 inches
Total weight: 0.20 pounds
Diameter at opening end of cone: 1.30 inches
Diameter at throat of cone: 0.67 inches
Depth of cone: 2.52 inches
Included angle of cone: 15° 30'.

(2) The entire device has been Parkerized giving it a dull black finish.

(3) The cone extension which fits over the muzzle of the barrel is brazed on the smaller end of the cone. The adjusting clamp is spot welded to the extension and is tightened or loosened on the barrel by means of a screw and wing nut. The screw head is brazed to the adjusting clamp. (See Figure 4)

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Test No. 3

a. Purpose: To determine the practicability of the expansion clamp type of adjustment of the subject cone-shaped flash hider.

b. Method: By examination and observing suitability during current tests.

c. Results:

(1) The subject flash-hider is easily and simply adjusted to or removed from the SIG muzzle in a few seconds.

(2) The subject flash hider and adjusting clamp do not interfere with sighting the submachine gun.

(3) The expansion type clamp and adjusting screw satisfactorily hold the flash hider in place although it allows it to turn on the barrel. Introduction of a small washer prevents this.

(4) The adjusting clamp screw became bent during firing. This was due to the small 3/16" screw used. It is suggested that a 1/4" or 5/16" screw be substituted to provide added strength and durability. (See Figure No.4)

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Test No. 4

a. Purpose: To determine the effect on accuracy of the subject cone-shaped flash hider.

b. Method: By having two men fire three shot groups of ten rounds each at ranges of 25, 50, 100, 150 and 200 yards with and without the cone-shaped flash hider respectively. The firing was done from the prone position, magazine resting on the ground, in bursts of 3-4 rounds. Number of hits were scored and size of groups measured.

c. Results:

The following is the tabulation of 300 rounds of ammunition fired with and without the flash hider, respectively.

Dispersion of 10 round shot groups fired from prone position.
All rounds fired in short bursts - Target 6' x 6' panel.

Firer	<u>With flash hider</u>					<u>Without flash hider</u>			
	<u>Range (Yds)</u>	<u>Hor. (in)</u>	<u>Vert. (in)</u>	<u>Max. (in)</u>	<u>No. hits</u>	<u>Hor. (in)</u>	<u>Vert. (in)</u>	<u>Max. (in)</u>	<u>No. hits</u>
Jones	25	31	31	32½	10	27½	37½	40½	8
Jones	25	10½	25	26	10	15	17½	19	10
Jones	25	16	27	29½	9	16	26½	30	9
Stiles	25	16½	30½	32	10	21½	32	38	8
Stiles	25	6	33	33	7	20	36	39	8
Stiles	25	18	20	23	10	18½	38	40	10
Total number of hits					56				
Average		16.3	27.7	32.6		19.7	31.2	34.9	
Jones	50	8½	3	8½	5	14	27	31	8
Jones	50	5½	4½	7½	5	17	28	31	8
Jones	50	27½	46	46	8	6	21	22	7
Stiles	50	29	40	45	8	27½	18	29	8
Stiles	50	25	43	44	8	32	45	52	7
Stiles	50	24	28	33	10	8	32	32	6
Total number of hits					44				

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<u>With flash hider</u>						<u>Without flash hider</u>			
<u>Firer</u>	<u>Range</u> <u>(yds)</u>	<u>Hor.</u> <u>(in)</u>	<u>Vert.</u> <u>(in)</u>	<u>Max.</u> <u>(in)</u>	<u>No.</u> <u>hits.</u>	<u>Hor.</u> <u>(in)</u>	<u>Vert.</u> <u>(in)</u>	<u>Max.</u> <u>(in)</u>	<u>No.</u> <u>hits.</u>
Jones	100	15	14	16	6	37	25	43	8
Jones	100	32	51	55	9	27	33	39	8
Jones	100	46	12	55	9	15	18	18	8
Stiles	100	29	36	37	8	33	53	61	3
Stiles	100	16	23	23	7	10	19	21	6
Stiles	100	42	21	46	<u>9</u>	14	30	33	<u>6</u>
Total number of hits					48	39			
Jones	150	17	41	41	6	4	17	17	4
Jones	150	33	40	48	6	26	49	51	7
Jones	150	32	54	56	8	14	22	25	6
Stiles	150	29	15	29	4	8½	24	26	5
Stiles	150	34	43	55	7	14	16	16	2
Stiles	150	26	40	46	<u>5</u>	5	38	38	<u>4</u>
Total number of hits					36	28			
Jones	200	30	20	33	10	33	24	38	5
Jones	200	65	26	65	4	24	52	57	9
Jones	200	35	29	47	3	38	58	58	9
Stiles	200	10	4½	10	6	66	53	68	9
Stiles	200	28	21	32	6	23	50	52	4
Stiles	200	39	38	53	<u>4</u>	—	—	—	<u>1</u>
Total number of hits					33	37			

Analysis of the above table shows an overall total of 217 hits out of a possible 300 using the flash hider as compared with 202 out of a possible 300 without the flash hider, a difference of 7%.

Group sizes are of little value due to the number of misses on the target.

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Test No. 5

a. Purpose: To determine the effect of the subject cone-shaped flash hider on flash reduction at night.

b. Method: By firing the SIG with and without subject flash hider at night. Flash of the guns was observed by five ground observers stationed on the flanks and to the front of the gun. The SIGS were fired single shot and automatic fire.

c. Results:

(1) Without flash hider.

(a) Flash from the SMG without the flash hider was visible 25% of the time to the observers 100 yards away. The flash of single shots was extremely difficult to see, and only occasionally was it observed from either the flanks or front.

(b) When firing twenty round bursts no continuous flash was visible to observers at 100 yards to the flanks or front. Occasional dull reddish-yellow flashes and occasional sparks were visible.

(c) A dull reddish-yellow flash about three inches from the muzzle was visible at the gun position while firing without the flash hider. The flash was a rough oval shape.

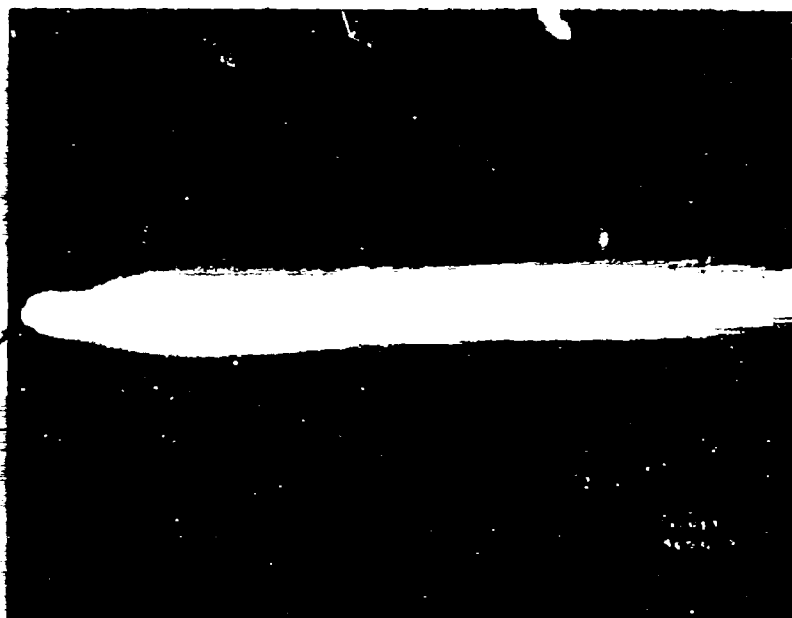
(2) With conical flash hider.

(a) Flash from the SIG equipped with the cone-shaped flash hider was visible approximately 10% of the time to the observers 100 yards distant. Flashes from single shots were more difficult to see than those from single shots fired without the use of a flash hider.

(b) Only occasional flashes and sparks were visible at 100 yards and about two flashes momentarily were all that the observer could see when firing 20 round bursts.

(c) A dull reddish-yellow streak beginning at the flash hider was visible at the gun position when firing with the flash hider. (See Figures No. 9, 10, 11, 12.)

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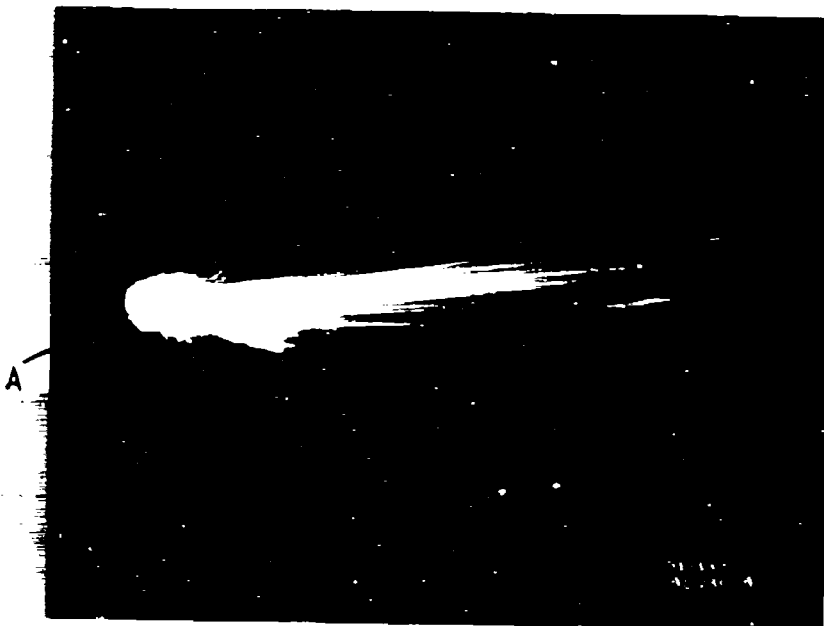
Flash and trace of 10-round burst of
tracer without flash hider.

A - End of muzzle

Figure 9

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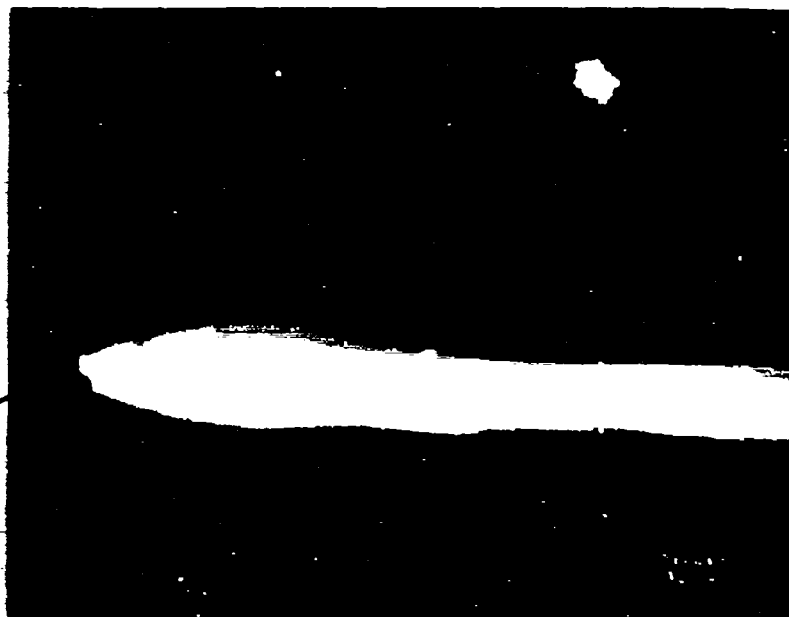
Flash and trace of 10-round burst of
tracer with cone-shaped flash hider.

A - Forward edge of flash hider.

Figure 10

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Flash and trace of 20-round burst of
tracer without flash hider.

A - End of muzzle.

Figure 11

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Flash and trace of 20-round burst of
tracer with cone shaped flash hider.

A - Forward edge of flash hider.

Figure 12

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5. Summary of Facts Determined by Tests

a. Alignment and construction of the subject baffle type silencer and/or flash hider is unsatisfactory in that the bullets strike the wire screen washers and metal end cap causing unpredictable trajectories. This also causes the threads of the small and longer barrel to strip. (Test No. 1)

b. The subject Cone-shaped flash hider has a length of 1.30 inches, depth of 2.52 inches, and an included angle of 15°, 30'. It fits over the end of the SIG barrel by means of an adjusting clamp, screw, and wing nut. (Test No. 2)

c. The adjusting clamp, screw and wing nut of the subject cone-shaped flash hider provided a simple rapid adjustment of the device on the gun. The 3/16" screws became bent during firing. (Test No. 3)

d. The subject cone-shaped flash hider slightly increases the accuracy of the gun. (Test No. 4)

e. The subject cone-shaped flash hider reduces the flash of the SIG materially. (Test No. 5)

MARLY E. WRIGHT
Capt., Infantry,
Test Officer.

I concur in the above Record of Tests:

EDWARD B. CROSSMAN,
Lt. Col., Infantry,
Test Section Executive.

Office of
THE INFANTRY BOARD

IB-472.5

Fort Benning, Georgia
2 August 1945

MEMORANDUM FOR: Test Section Executive, The Infantry Board.

SUBJECT: Silencer for SMG, Cal. .45; Flash Hider for SMG, Cal. .45
(NOTE: This is a continuation of TIB Report No. 1675 "C"
and will be numbered TIB Report No. 1675 "D").

1. References.

a. Shipment reported by Sup. O, TIB, 31 July 45.

(1) 2 ea Hiders, Flash, T23.

(2) 2 ea Silencers, for Guns, SMG, Cal. .45, M3 and M3A1.

b. AGF test directive received for above specific material -- none.

c. TIB Report No. 1675 "C", 16 Feb 45, subject: Silencer for Submachine Gun, Caliber .45, M3. This covers a baffle type silencer with integral perforated barrel similar in appearance to baffle type silencer specified in par. 1a (2), above. Flash hider specified in par. 1a (1), above, is apparently a conical flash hider for the SMGs M3 and M3A1, and accompanied the baffle type silencer, par. 1a (2), above.

Note par. 7 above TIB Report, extract:

"Conclusions:

"There is a requirement for primarily a flash hider for SMG, M3.

"The subject Silencer (Flash Hider-Silencer) in its present form is unsuitable for use with the SMG, Caliber .45, M3.

"A conical type flash hider is desired for test prior to definite recommendations as to type of device desired, that is, strictly a flash hider or a flash-hider-silencer.

"Recommendations:

"The subject silencer be modified in accordance with par. 6c, above, (increase the clearance in the end cap and mesh washers and provide more durable threads on the small tube for attachment to the adapter) and return to TIB for further test.

"A conical flash hider be submitted for comparative test."

APPENDIX "A"

2. Tests of the baffle silencers and conical flash hiders will be conducted to determine:

- a. Physical characteristics.
- b. Functioning.
- c. Effect in bullets at 25, 50, 100, 150 and 200 yards (dispersion and penetration).
- d. Sound reduction.
- e. Flash reduction.
- f. Durability.
- g. Other pertinent data.

3. Project Priority: Record of Test will be submitted by 15 Aug 45.

4. Project Officer: Col. P. E. Leiber.

For the President:

JOHN C. BRINSMEAD,
Major, Infantry,
Recorder.

APPENDIX "A"

SECRET

HEADQUARTERS ARMY GROUND FORCES
ARMY WAR COLLEGE
Washington 25, D.C.

472.5 (S) (3 MAR 1945)
GNRQT-11/17516

3 March 1945

SUBJECT: Silencer for Submachine Gun, Caliber .45, M3.

TO: Commanding General
Army Service Forces
ATTENTION: Research and Development Division,
Room 4E 633, The Pentagon

1. Herewith report of test of Silencers for the Submachine Gun, Caliber .45, M3, conducted by the Infantry Board.

2. The recommendations of the Infantry Board are approved as cited below:

a. That the subject silencer be modified by increasing the clearance in the end cap and mesh washers, and providing more durable threads on the small tube for attachment to the adapter.

b. That a conical flash hider be designed for the subject weapon and submitted to the board with models of the modified silencer cited in (a) above for comparative tests.

FOR THE COMMANDING GENERAL:

/s/ W. A. Tracy
W. A. TRACY
Capt. A. G. D.
Asst. Ground Adj. Gen.

1 Incl:
Rpt of Test of IB #1675 "C"
dtd 16 Feb 45. (in dup)

APPENDIX

COPY

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SECRET

SECRET

SUBJECT: Silencer for Submachine Gun, Caliber .45, M3.

SPROO (3 Mar 45)

1st Indorsement

Headquarters, Army Service Forces, Washington, D. C., 5 March 1945.

To: Chief of Ordnance

Attention: Research and Development Service - SPOTS.

It is desired that the Chief of Ordnance take appropriate action to comply with the recommendations contained in paragraph 8 of the Report of the Infantry Board (No. 1675 "C"), dated 16 February 1945, and as cited in paragraph 2 of the basic letter.

FOR THE COMMANDING GENERAL:

1 Incl. n/c

/t/ M. W. IRVINE
Colonel, General Staff Corps
Acting Director, Research and
Development Division

/s/ R. W. HIRD
R. W. HIRD
Lt. Colonel, Infantry
Chief, Ordnance Planning Branch

APPENDIX "B"

COPY

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SECRET

SECRET

O.O. 472.5/699 Misc (S)
Attn: SPOTS
472.5(S) (3 Mar 1945)
ONRQT-11/17516
SPROO (3 Mar 45)

MFHoolahan/afh
3085

2nd Ind

ASF, Ord O, Washington 25, D. C., 26 July 1945

THRU: CG, ASF, Washington, D. C. Attn: Research and Development Division

TO: CG, AGF, Washington, D. C. Attn: Requirements Division

1. With reference to basic correspondence, and in accordance with recommendations of Infantry Board, there has been shipped to President, Infantry Board, Fort Benning, Georgia, this date, two Hiders, Flash, T34, for the M3 and M3A1 Submachine Guns, and also two silencers (OSS). These silencers were not modified in accordance with the Infantry Board request in view of the fact that they are of later production than those previously tested, and it has been indicated that closer bore alignment has been maintained.

2. There is inclosed herewith for your information one Hider, Flash, T34, for the M3 and M3A1 Submachine Guns.

3. Test directive to be supplied by Headquarters, Army Ground Forces.

4. Upon completion of test, subject items are to be permanently retained at the Infantry Board.

FOR THE CHIEF OF ORDNANCE:

/s/ Rene' R. Studler
RENE R. STUDLER
Colonel, Ord Dept
Assistant

2 Incls
1 Incl w/d - Inf. Bd. Rep.
2 Incls added
#1 - T34 Flash Hider
#3 - Information Form

APPENDIX *B*

COPY

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SECRET

SECRET

SUBJECT: Silencer for Submachine Gun, Caliber .45, M3.

SPRCO (3 Mar 45)

3rd Indorsement

Headquarters, Army Service Forces, Washington, D. C., 28 July 1945.

To: Commanding General, Army Ground Forces
Attention: Requirements Section, Development Division

It is requested that suitable arrangements be made for test of the items mentioned in paragraph 1, 2nd Indorsement, by the Infantry Board.

FOR THE COMMANDING GENERAL:

2 Incls. n/c

/t/ E. A. REGNIER
Brigadier General, General Staff Corps
Director, Research and Development Div.

/s/ R. W. HIRD
R. W. HIRD
Lt. Colonel, Infantry
Chief, Ordnance Planning Branch

472.5 (S) (3 Mar 45)

GWRQT-11/36546

4th Ind.

HEADQUARTERS ARMY GROUND FORCES, Washington 25, D. C., 11 August 1945.

TO: President, Infantry Board, Fort Benning, Georgia. THRU: Commandant, Infantry School, Fort Benning, Georgia

1. Attention is directed to 2d indorsement, which furnishes information relative to shipment of two (2) Flash Hiders, T34 and two (2) Silencers for the M3 and M3A1 Submachine Guns to the Infantry Board.

2. Upon receipt of the Flash Hiders, the Board will conduct tests to determine the suitability of the fastening device and the effectiveness of the cone in reducing the muzzle flash of the Submachine. If the Hider is recommended for adoption, basis of issue is to be included in the report.

3. The silencers for the Submachine Gun M3A1 are an improvement over the ones previously tested, and are to be included in the final report of silencers, directive for which was previously furnished.

APPENDIX "B"

COPY

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SECRET

472.5 (S)(3 Mar 45) GNRQT-11/36546 4th Ind. (Continued)

4. The above projects are assigned a "B" priority.

BY COMMAND OF GENERAL DEVERS:

1 Incl
w/d Incl #2

/s/ R. A. Meredith
R. A. MEREDITH
Lt. Col., A.G.D.
Asst. Ground Adj. Gen.

GNRIS (D) 472.5 (3 Mar 45) 5th Ind.
Silencer for submachine gun, Caliber .45, M3.
HEADQUARTERS THE INFANTRY SCHOOL, Fort Benning, Georgia, 13 August 1945.

TO: President, The Infantry Board, Fort Benning, Georgia.

For compliance.

BY COMMAND OF MAJOR GENERAL O'DANIEL:

1 Incl:
No change

/s/ Natalie W. Yates
NATALIE W. YATES
1st Lt, WAC
Asst Adj Gen

APPENDIX "B"

SECRET

No. _____

Date 26 July 1945

INFORMATION TO BE FURNISHED FOR TESTING OF VEHICLES AND EQUIPMENT
BY VARIOUS SERVICE BOARDS

1. Item to be tested: Hider, Flash, T34 for M3 and M3A1 Submachine Gun and Silencer for M3 Submachine Guns. By Infantry Board.
2. Estimated date of shipment: 26 July 1945.
3. To be shipped from: Office, Chief of Ordnance, Washington, D. C.
4. Pertinent data that is to be secured from the test and any information that should be included in the directive:
5. Disposition of item upon completion of test: Retained at Infantry Board.
6. Date Report of desired:
 - a. Monthly report
 - b. Upon completion
 - c. Final report not later than expedited.
7. Any remarks:

APPENDIX "B"

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Incl. #3

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