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**RIFLE
EVALUATION
STUDY. (U)** 11 27 Dec 62



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RIFLE EVALUATION STUDY (U)

Let the objective of the study be

1. (S) Objective. To evaluate the employment of small arms to determine the desired military characteristics of a rifle; to assess the M14, M14 (USAIB), AR-15, AK-47, and SPIW to determine the preferable weapon in meeting the desired military characteristics; to make recommendations on retention of the M14, adoption of the AR-15, and development of the AK-47 type and SPIW. ←

2. (U) References.

a. Letter, Office of the Chief of Staff, Department of the Army, 26 October 1962, subject: "Rifle Evaluation (U)."

b. Letter, ODCSOPS, Department of the Army, 9 November 1962, subject: "Rifle Evaluations (U)."

c. Message, DA, DCSOPS, CDDC, 921911(S), 21 November 1962.

d. Letter, CDCRE-E, Hq USA Combat Developments Command, 14 December 1962, subject: "Rifle Evaluation (U)," with one inclosure.

3. (S) Employment.

a. The principal user of the rifle in combat is the rifle squad infantryman; the desired rifle characteristics depend primarily on his needs. The mission of the rifle squad is to close by foot movement to within visual observation of enemy personnel and to render them ineffective by killing, wounding, or capturing them or by restricting their movement. Foot movement permits dispersion concealment, and freedom of movement not possible in any type of vehicle. However, a variety of air and ground vehicles are employed to transport the rifle squad as close as possible to the enemy in order to minimize the distance to be traversed on foot.

b. The targets which must be engaged by the rifle squad are those which, because of their proximity, protection, or fleeting nature, cannot be engaged by other weapons such as machine guns, mortars, and artillery. To engage these targets, both area and point, the infantryman usually must close to within 400 meters. This is the maximum distance that the rifleman usually can detect suitable point targets on which rifle fire can be adjusted effectively. However, the rifle squad can, at times, identify and engage lucrative targets at greater ranges.

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c. In rendering the enemy ineffective, the rifle squad must be capable of delivering a large volume of aimed fire in a relatively short time with minimum casualties to itself. This large volume is to kill, wound, and demoralize the enemy, force him to seek cover, and reduce his ability to return fire effectively. Rifle squad targets at times also include large masses of enemy attacking at close proximity ("human sea" attacks). Therefore, ideally all rifles should be capable of automatic fire even though not habitually employed in this mode.

d. The machine gun provides a capability for rapid reaction in delivering point or area sustained fires principally at ranges up to about 1100 meters, the maximum range at which its fires can be observed and adjusted effectively. Unlike indirect fire weapons, machine gun fire can be adjusted from the weapon and shifted almost instantaneously to engage targets of opportunity or to furnish continuous close support to advancing rifle squads. It also can deliver sustained prearranged fires under all conditions of visibility, and can deliver overhead fire with an acceptable degree of troop safety. The machine gun assists the rifle squad to close with the enemy by delivering large volumes of suppressive fires beyond the range capability of the individual hand-held weapon. The machine gun also reduces the effectiveness of attacking enemy infantry before they come within effective range of the rifleman. Because of its weight and ammunition consumption the machine gun requires a crew to serve it. Its rapid reaction, its prearranged fire capability, and its ability to cover ranges from 400 to 1100 meters complement but do not supplant any of the rifles of the rifle squad, regardless of whether all or some of these rifles are capable of automatic fire.

e. The irregularity of terrain dictates the requirement for a weapon to deny the enemy the protection of close-in (400 meters or less) areas that are defiladed from the relatively flat trajectory of rifles and machine guns. Such targets very frequently cannot be taken under fire by supporting units because of safety considerations, minimum range capabilities, and the need for rapid reaction. The lack of visibility over such areas further dictates a weapon that produces a relatively large lethal area such as that obtained by high explosive fragmentation grenades. Additionally, the lethal area of high explosive fragmentation fires permits efficient attack of massed area targets. To fill the gap between the range of the hand grenade and 400 meters, there is need for a grenade launcher. Until each man in a rifle squad has an effective

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grenade launching capability, it will be necessary to include individuals armed with the M79 grenade launcher in the squad organization. Ideally, each rifle should be capable of launching grenades without degrading the ability of the rifle to deliver quickly either automatic or semiautomatic fire. The weight penalty for the grenade capability should be minimized. In addition to its requirement for an antipersonnel grenade the squad also has a requirement for a grenade capable of destroying enemy armor.

f. When infantry employs armored personnel carriers (APC's), it generally employs them for movement, not fighting. The APC is not designed to be a fighting vehicle, but rather a means for transporting infantry with some protection from shell fragments and small arms fire to the point where the tactical situation requires dismounting. Basically, the APC is only a means of protected transport and in combat is usually escorted by fighting vehicles. The need to fire rifles from the APC is unusual and is limited to a requirement that two men other than the commander be able to fire from the opened hatches.

g. As regards reducing the squad to 5 or 7 men, such a reduction would also reduce the size of the area the squad could control effectively. Therefore, if the size of the squad is reduced, additional squads will be required to control a given area. Because the principal duty of the squad leader is to control the actions of others, increasing the number of squads results in a higher proportion of leaders and a lesser proportion of those whose principal duty is to engage the enemy directly. The span of control within the present 10-man squad is within the capabilities of one leader. Tactically, squads frequently must be transported separately as a unit. With a 5 to 7 man squad, more carriers will be needed and total requirements for their operation and maintenance will be increased.

h. There is no evidence, except for isolated instances, of the bayonet being used in recent combat to produce casualties. That it is effective for psychological purposes in combat has not been established factually but is widely accepted by experienced infantrymen. It is a valuable tool for use in control of civil disturbances since it can be used actually or as a threat without resort to gunfire. The rifle should be able to accept a bayonet if this capability can be obtained without significant detriment to other desired characteristics. Preferably the bayonet should be of the so-called "fighting knife" type so that it economizes on weight and serves a dual purpose.

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4. (S) Desired Rifle Characteristics. The desired rifle characteristics, based on the discussion in the previous paragraph and other obvious considerations, are:

- a. Reliability. Able to function consistently and with safety to the user.
- b. Durability. Capable of withstanding prolonged use and rough treatment without loss of reliability in all environments.
- c. Lightweight. As light as possible, including ammunition and the accessories that must be carried by the rifleman.
- d. Simplicity. Simple to operate and maintain; no more complex than the present M1 rifle.
- e. Accuracy. Able to engage effectively area and point targets up to 400 meters range.
- f. Flexibility. Capable of use in either automatic or semiautomatic mode.
- g. Lethality. Capable of firing types of ammunition comparable in lethality to that of the standard 7.62mm round and the area rounds now fired by the M79 projector.
- h. Human Engineering. Usable without excess discomfort to the user. Configured for ease of carrying and use under adverse conditions such as dismounting from vehicles, parachute operations, and movement in heavy underbrush.
- i. Position Disclosure. Position disclosing effects should be minimized and should be no greater than those of the M1 rifle.

5. (S) Assessment.

a. A detailed assessment of the characteristics of the M14, M14 (USAIB), AR-15, AK-47, and the Special Purpose Individual Weapon (SPIW) to include their competing attributes and comparative merits are given at Inclosures 1 and 2.

b. The AR-15 represents a marked improvement over the M14 rifle primarily because of lower weapon and ammunition weight. Except for the SPIW, it comes closest to meeting the desired characteristics listed in paragraph 4 above. However it has two characteristics which would have to be corrected before the AR-15

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were considered an acceptable military rifle in any role: its poor rifle-ammunition reliability and its poor night firing characteristics.

c. The M14 (USAIB) is a definite improvement over the M14(M) in the automatic rifle role and in the few tests conducted has shown itself to be superior to the AR-15 in the automatic rifle role at ranges beyond 400 meters.

d. The AK-47 is basically a submachine gun and is inferior to both the M14, M14 (USAIB), and AR-15 in range effectiveness, ammunition lethality and other desired rifle characteristics.

e. The SPIW, if and when developed to design criteria, will come closest to meeting the desired characteristics.

6. (S) The following factors also are pertinent:

a. The round fired by the M14 family has been adopted as NATO standard small arms ammunition. A sampling test by U. S. Army, Europe showed interchangeability of NATO rounds of various national makes.

b. U. S. Army Forces in Europe are completely equipped with the M14 rifle.

c. At the end of Fiscal Year 1962, the U. S. Army had an inventory of about 415,000 M14 rifles. This will increase to about 735,000 M14 rifles by the end of Fiscal Year 1963. The production base approximates 375,000 a year and the current procurement objective is about 2,500,000 M14 rifles by the end of Fiscal Year 1969.

d. There are apparently no significant differences between the costs of the M14 and AR-15 rifles and their ammunition.

e. If achieved, present predictions are that SPIW, as compared with the AR-15, would effect a reduction of approximately 40% in ammunition weight, an increase in automatic rate of fire, improved lethality at ranges over 200 meters but possibly a decrease in lethality at lesser ranges. Flechette ammunition is still under development with a presently predicted type classification in FY 1966 (hence probably not available in quantity until FY 1968 or 1969). The proposed SPIW grenade launching capability, if developed, appears to be adaptable to other rifles.

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7. (S) Conclusions.

a. If the basic decision were to be made now, without reference to the impact resulting from the decisions already made, in my opinion the preferable rifle for world-wide usage would be the AR-15. Even in these circumstances, however, I would not standardize the AR-15 without an expedited improvement program to correct the unreliability of the rifle-ammunition combination and the poor night firing qualities. Both appear correctable.

b. Under present conditions, the AR-15 should be improved as noted in "a" above and then introduced into the U. S. Army as an augmentation of the M14 rifle.

c. For those units retaining the M14, the M14 (USAIB) or a version thereof should be standardized for use by the automatic riflemen in each squad.

8. (S) Recommendations.

a. Continue use of the M14 by U. S. Army Forces in Europe and equip all units earmarked for deployment to Europe with the M14 except airborne and Special Forces units.

b. Correct the AR-15 deficiencies in reliability and night firing capabilities.

c. Equip the following with the AR-15 in priority shown:

- (1) Air Assault units
- (2) Airborne units
- (3) Special Forces units.

d. Slow conversion from M-1 to M-14 in other areas. Final decision with respect to these units can be based on the experience of the units listed in c,

e. In units armed with the M14, replace the M14 with a version of the M14 (USAIB) for automatic riflemen only.

f. Continue the SPIW program looking toward a long-range marked improvement over all other weapons considered.

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9. It should be noted that there is wide disagreement at all levels both as to the worth of the AR-15 and the wisdom of introducing it into the U. S. Army. These conclusions and recommendations are mine as Commanding General, U. S. Army Combat Developments Command.

John P. Daley

JOHN P. DALEY
Lieutenant General, U. S. Army
Commanding

per Mr. Deputy

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1. Physical Characteristics, secret
 2. Summary of Weapons Comparison, secret
 3. Bibliography, uncl
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PHYSICAL CHARACTERISTICS

	AR-15	M14(M)	M14 (USAIB)	AK-47	SPIW*
Overall Length	39 in	44.31 in	44.31 in	34.25 in	38.0-40.0 in
Weight of Rifle	6.55 lbs	9.84 lbs	3.9 lbs	8.44 lbs	9.6-10.0 lbs w/40mm fully loaded ***
Weight of Rifle w/Bipod	7.12 lbs	11.59 lbs	11.69 lbs	No Bipod	No Bipod
Automatic Fire Capability	Yes	Yes	Yes	Yes	Controlled Bursts Yes - Point
Semiautomatic Fire Capability	Yes	Yes	Yes	Yes	Yes - Area
Cyclic Rate	750RPM	700-750RPM	700-750RPM	600RPM	2000-2500RPM
Caliber of Ammunition	.223	7.62mm	7.62mm	7.62mm	Single Flechette .22 cal
Muzzle Velocity	3300FPS	2800FPS	2800FPS	2329FPS	4500-4900FPS Flechette
Weight of Bullet	.126 ounces	.328 ounces	.328 ounces	.282 ounces	.0229 ounces .224-.252 ounces
Weight of Cartridge	.40 ounces 4-13/16x2-7/16x 13/16	.80 ounces	.80 ounces	.59 ounces 9-12/16x2-9/16x 15/16	8 ounces area rd Unknown
Size of Magazine (inches)	.75 lbs**	1.50 lbs**	1.50 lbs**	2.05 lbs***	.8-1.35 lb****
Weight of Loaded Magazine	7.30 lbs	11.34 lbs	11.44 lbs	10.49 lbs	9.6-10.0 lbs
Weight of Rifle w/Bipod and Loaded Magazine	7.87 lbs	13.09 lbs	13.19 lbs	No Bipod	10+ lbs No Bipod

*Based on technical specifications and industry proposals.

**20 round magazine.

***30 round magazine.

****60 rounds point fire and 3 rounds area fire.

*****60 rounds point fire.

S - Superior
 A - Acceptable
 U - Unacceptable

SUMMARY OF WEAPONS COMPARISON

FACTOR	AR-15	M14	M14 (USAIB)	AK-47	SPIW(1)	REMARKS
Length	S	A	A	S	S	Incl 1
Weight w/o Bipod	S	A	A	A	A	Incl 1
Weight w/Bipod	S	U(2)	U(2)	None	None	Incl 1
Reliability	U	S	S	A	Unk	USACDC World-wide Rifle Evaluation, par 2a(1)
Durability	A	S(3)	S(3)	Unk	Unk	USACDC World-wide Rifle Evaluation, par 2a(1) USAIB Project 3008, par 5o USA Arctic Test Bd, Proj No ATB 33-001, Incl 7
Maintenance	A	A	A	A	Unk	USACDC WW Rifle Evaluation, par 2a(2) USAIB Proj 3008, par 5p USA Arctic Test Bd, Proj No ATB 33-001, Incl 7
Position Disclosure Effects	A	A	A	U	Unk	USAIB Proj 3008, par 5l USA Arctic Test Bd, Proj No ATB 33-001, Incl 7
Grenade Launching Capability	U	U	U	None	S	USAIB Proj 3008, par 5g
Ease of Handling	S	A	A	S	A	USACDC World-wide Rifle Evaluation, par 2a(6) USAIB Proj 3008, par 5n

INCLCSURE 2

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SUMMARY OF WEAPONS COMPARISON (continued)

FACTOR	AR-15	M14	M14 (USAIB)	AK-47	SPIW	REMARKS
Provision for Bayonet	A	A	A	A	A	
Combat Firing	A	A	A	A	Unk	USACDC World-wide Rifle Evaluation, par 2a(3)(4)
Automatic Rifle Role (0-100m)	S	U	S	S	Unk	USAIB Proj No 3008, pgs 22-26
(100-400m)	S	U	S	U	Unk	Bibliography Item 48, par 5c(2)
(400-600m)	A	U	S	U	Unk	
Night Firing Capability	U(4)	A	A	Unk	Unk	USACDC World-wide Rifle Evaluation, par 2a(3)
Semiautomatic Fire (0-400m)	S	A	A	U	Unk	USACDC World-wide Evaluation Report, par 2a(3)
(400-600m)	A	S	S	U	Unk	USAIB Proj No 3008, par 5a
Penetration (0-400m) Vests	A	S	S	A	Unk	USAIB Proj No 3008, page 50
(400-600m) Vests	A	S	S	A	Unk	
(400-600m) Helmets	A	S	S	U	Unk	
(400-600m) Helmets	U(5)	S	S	U	Unk	
Ammo Weight	S	A	A	A	S	Incl 1

NOTES: (1) Evaluations on SPIW are based on design criteria and industry proposals.

(2) Acceptable in weight only for automatic rifle role.

(3) Only "Acceptable" in parachute assault.

(4) Apparently correctable by changing slope of carrying handle. Perfected tracer round is also required.

(5) Does not penetrate helmet at 600 meters.

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1. TB 381-1, Department of the Army, July 1958, "Combat Equipment Technical Intelligence Bulletin."
2. Report of United States Army Infantry Board, Project Number 2812 (Cont), "Evaluation of NATO 7.62mm Duplex Ammunition," Headquarters United States Continental Army Command, 24 April 1961.
3. Personnel Research Associates Report 56-3, "A Study of the Infantry Squad IOE," March 1956.
4. Message AJIIS-R 12-14-A, Headquarters United States Army Infantry School, 16 December 1961, reference United States Army Infantry School position pertaining to degree which Infantry should be capable of fighting mounted from armored personnel carrier successor to M113.
5. ORO-T-161 Pamphlet, Operations Research Office, 2 July 1962, "The Effects of Terrain on Battlefield Visibility."
6. Operations Research Office Report by Brigadier General S. L. A. Marshall, "Infantry Operations and Weapons Usage in Korea, Winter 1950-51"
7. "Infantry Reference Data, ROAD," September 1962, United States Army Infantry School.
8. Report, "Rifle Squad and Evaluation Program, 22 May - 31 Jul 1961," United States Army Infantry School.
9. Staff Paper ORO-SP-144, Operations Research Office, July 1960, "Battle Sight Setting,"
10. Staff Paper ORO-SP-102, Operations Research Office, April 1959, "Range Estimation for Infantry Squad Weapons."
11. Report of Project Number 3008, United States Army Infantry Board, 2 December 1962, "Comparative Evaluation of AR-15 (Armalite) and M14 Rifles."
12. Staff Paper RAC-SP-1 (SEA), "Suitability and Effectiveness of Weapons and Equipment Used in US-Supported Operations with the Royal Laos Army (U)," Sept 62.

Incl 3 (Bibliography)

~~CONFIDENTIAL~~

13. Ordnance Technical Intelligence, OIN 13042, 7 May 1956, "Firing Test; Soviet 7.62mm Assault Rifle Kalashnikov (AK), MGN 9864."
14. Report, "A Test of Gun, Light Machine, 7.62mm Model RPE, Soviet and Gun, Light Machine, 7.62mm. Mod 52, Czech," Ordnance Sub-project Number 2142, February 1958.
15. Development and Proof Services, April 1962, Report on "Test of Rifle, Assault, 7.62mm, Model 1958, Czech."
16. Ordnance Technical Intelligence, OITA 3270, April 1959, "Wound Ballistics Tests of the Soviet 7.62mm Bullet, MGN 8300."
17. Industry Briefing Packet, Special Purpose Individual Weapon, United States Army Weapons Command, 11 October 1962.
18. Final Report, United States Army Combat Developments Experimentation Center, 24 June 1959, "Rifle Squad Armed with a Lightweight High Velocity Rifle."
19. FM 7-15, January 1962, "Infantry, Airborne Infantry and Mechanized Infantry Rifle Platoons and Squads."
20. FM 7-11, January 1962, "Rifle Company, Infantry, Airborne Infantry and Mechanized Infantry."
21. Technical Memorandum ORO-T-161, Operations Research Office, 2 July 1962, "The Effects of Terrain on Battlefield Visibility."
22. Staff Paper ORO-SP-158, Operations Research Office, November 1960, "Rifle Accuracies and Hit Probabilities in Combat."
23. Technical Memorandum ORO-T-160, Operations Research Office, 19 June 1952, "Operational Requirements for an Infantry Hand Weapon."
24. Report, Second World-Wide Combat Arms Conference held at Fort Leavenworth, Kansas, June 1962, "Fire Support."
25. Technical Memorandum ORO-T-397, Operations Research Office, May 1961, "SALVO II Rifle Field Experiment."
26. Staff Paper ORO-SP-103, Operations Research Office, April 1959, "Design of Experiment for Effects of Weapon Configuration, Weight, Sights and Recoil on Rifle Accuracy."

27. Staff Paper ORO-SP-46, Operations Research Office, March 1958
"SALVO II Rifle Experiment Preliminary Results."
28. Technical Memorandum ORO-T-378, Operations Research Office
June 1959, "SALVO I Rifle Field Experiment."
29. Department of the Army Pamphlet Number 30-79, 31 March 1959.
"Soviet Tactics, Motorized Rifle Company."
30. Department of the Army Pamphlet Number 30-53, 6 December 1961
"Handbook on the North Vietnamese Armed Forces."
31. Department of the Army Pamphlet Number 30-57, 3 November 1961
"Handbook on the East German Army Line Division Organization."
32. Department of the Army Pamphlet Number 30-50-2, 1 April 1960,
"Handbook on the Satellite Armies."
33. Department of the Army Pamphlet Number 30-50-1, 17 March 1961,
"Handbook on the Soviet Army."
34. Department of the Army Pamphlet Number 30-72, April 1960.
"Soviet Tactics, Motorized Rifle Regiment."
35. Department of the Army Pamphlet Number 30-73, 17 October 1961
"Soviet Tactics, Motorized Rifle Division."
36. Department of the Army Pamphlet Number 30-78, 15 October 1958.
"Soviet Tactics, The Mechanized Division and the Tank Division."
37. Department of the Army Pamphlet Number 30-51, 7 December 1960
"Handbook on the Chinese Communist Army."
38. Department of the Army Pamphlet Number 30-89, March 1957,
"Chinese Communist Tactics."
39. FM 101-10, February 1959, "Staff Officers" Field Manuals,
Organization, Technical and Logistic Data."
40. Report of Board to Review Rifle and Bayonet Problems, Hq
USCONARC, 19 December 1958.

41. Letter, File AGAM-P(M)474(11 Apr 61) DCSOPS, Hq Department of the Army, Subject: "Basis of Issue for the Selector for the 7.62mm, M-14 Rifle," dated 19 April 1961.
42. Report on Comparative Evaluation of AR-15 and M-14 Rifles (Report NO DPS-799), Aberdeen Proving Ground, Dec 62.
43. US Army Arctic Test Board Report of Project Nr ATB 33-001, 1 Dec 62.
44. Technical Note Nr 1482, Dec 62, USA Ballistic Research Laboratories, "Comparative Effectiveness Evaluation of the M-14 and Other Rifle Concepts" (U).
45. US Army Combat Developments Command "Comparative Evaluation AR-15 and M-14 Rifles (C)", 14 Dec 62.
46. STANAG No. 2310, Small Arms Ammunition Used by the Armed Forces of NATO Nations, dated 27 Feb 57.
47. Brochure, The United States Army Infantry Board Presents the M14 (USAIB) Rifle, dated 15 Nov 62.
48. USATEC letter report on Comparative Evaluation of U. S. Army Rifle 7.62mm, M14; Armalite Rifle Caliber..223, AR-15; Soviet Assault Rifle AK-47; 12 Dec 62.

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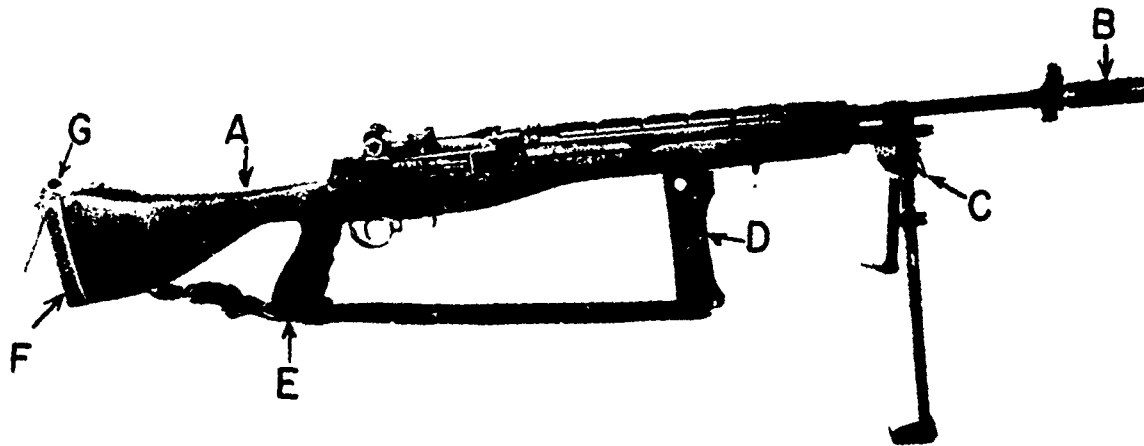
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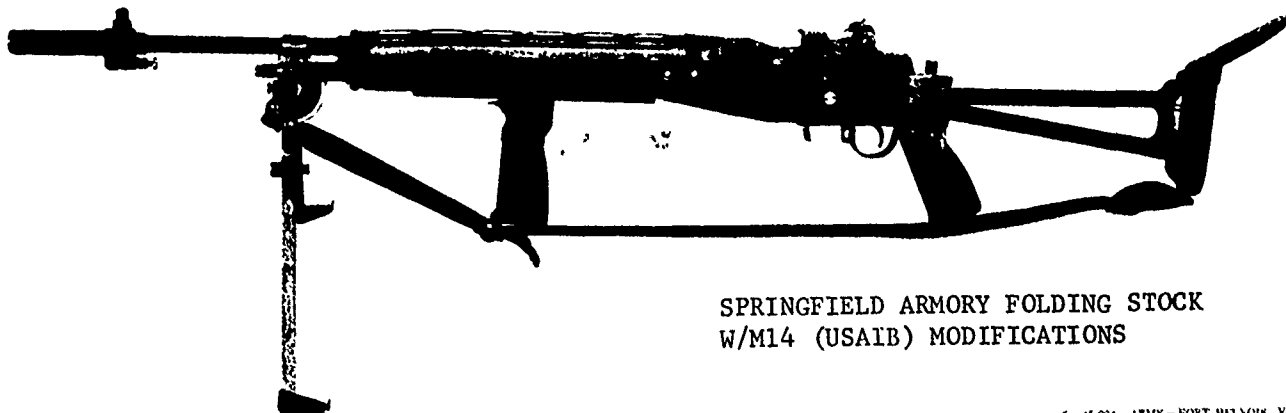
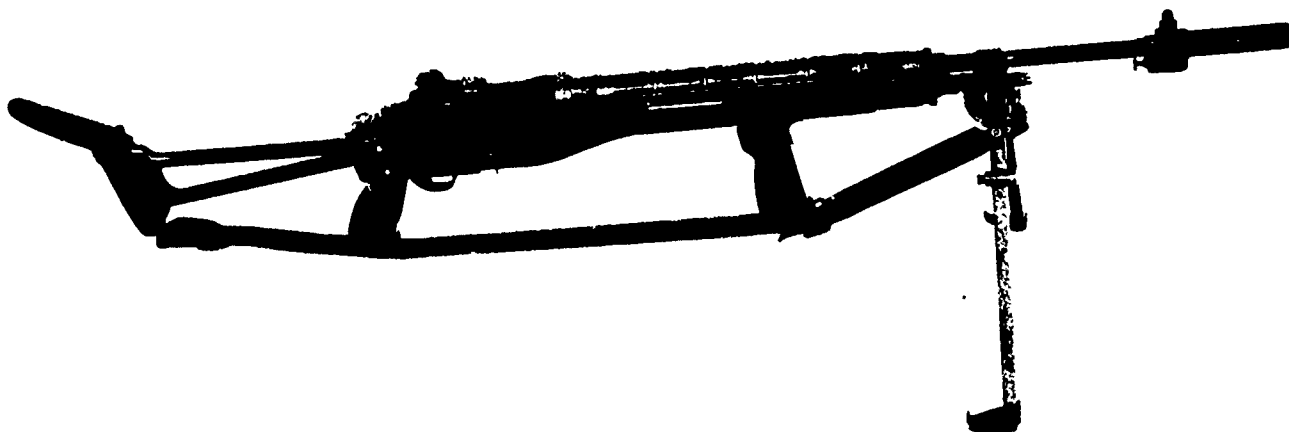
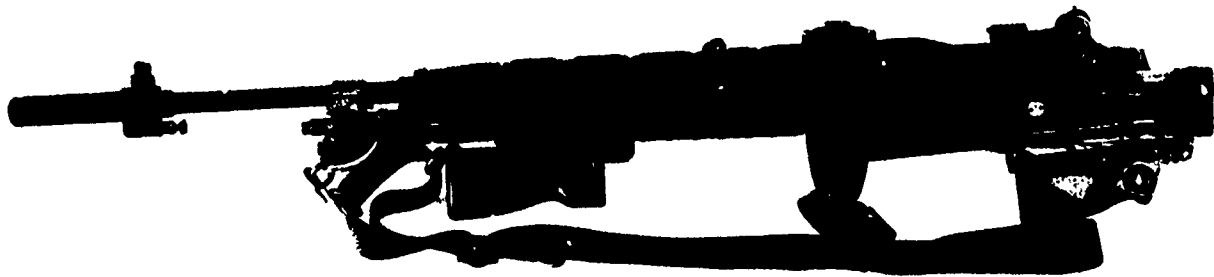
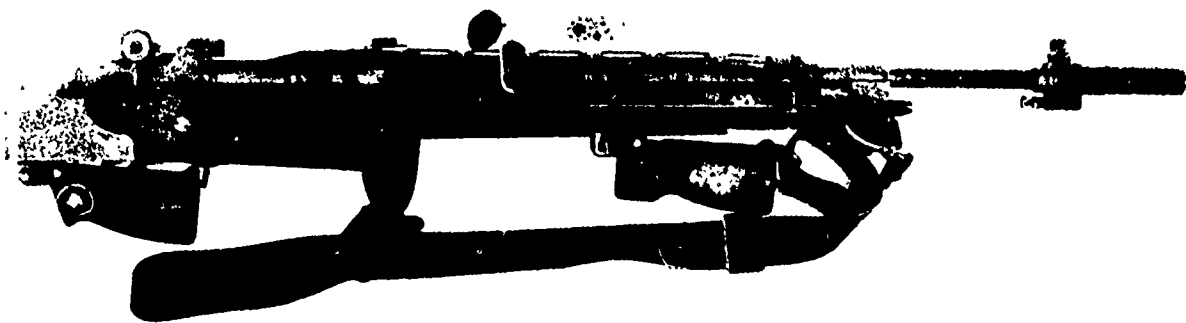
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TOP. The M14 (USAIB) rifle for the automatic rifle role. The stock has been modified to an "in-line" stock (A) with a pistol grip (E), front hand grip (D), rubber recoil pad (F), and an adjustable hinged butt plate (G). A fixed compensator has been added to the muzzle (B). A sling swivel has been attached to the bipod (C).

BOTTOM. The M14 (USAIB) rifle for the automatic rifle role. This shows the use of the sling - bipod swivel - front hand grip combination. Note that when the front hand grip is pulled to the rear by the gunner, a downward force is exerted through the sling-swivel combination on the muzzle of the rifle. This securely anchors the weapon - firer combination and keeps rifle motion to a minimum.

Incl 1



SPRINGFIELD ARMORY FOLDING STOCK
W/M14 (USAIB) MODIFICATIONS