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INTERIM REPORT
ON
TASK TRAINFIRE

EXPERIMENTAL DEVELOPMENT OF TRAINING METHODS
AND PROFICIENCY TESTS FOR IMPROVING THE EFFECTIVENESS
OF COMBAT RIFLEMEN

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A COMPARATIVE TEST OF ACCURACY OF FIRE WITH
THE LOOP SLING, THE COMBAT RIFLE SLING,
THE HASTY SLING, AND WITHOUT A SLING
(PARTS II AND III)

by

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Fort Benning, Georgia
February 1955

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WASHINGTON, D.C. 20310

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Director
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Dear Sir:

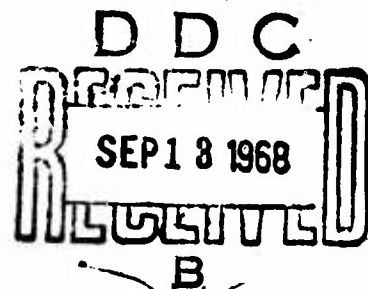
The attached Interim Report entitled "A Comparative Test of Accuracy of Fire with the Loop Sling, the Combat Rifle Sling, the Hasty Sling, and Without a Sling (Parts II and III)" has been cleared for open publication.

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Sincerely,

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JOSEPH A. DAVIS
Colonel, GS
Chief, Behavioral Sciences
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Abstract

One objective of Task TRAINFIRE is the investigation of certain weapon components which may have critical influence upon the effective use of the rifle in combat. The present report comprises Parts II and III of a study to evaluate the effect of a sling on the accuracy of M1 rifle firing.

The purpose of Part II (conducted in October, 1954) was to compare the accuracy of fire with the Combat Rifle Sling, the hasty sling, and without a sling, on a transition-type range with silhouette targets at unknown distances. Test conditions included firing from a standing fox-hole position permitting sandbag support, and from an unsupported kneeling position, at surprise targets appearing at ranges from 50 to 300 yards. Test results indicated no essential differences in accuracy of fire under the various sling conditions.

The ineffectiveness of the slings in improving accuracy of transition-type firing may have been due in part to insufficient training in the use of a sling. Consequently, Part III of the study (conducted in December, 1954) provided two days of practice firing on a known-distance range prior to testing, and in addition, incorporated firing with the loop sling. Practice firing was thus conducted with the loop sling, the Combat Rifle Sling, the hasty sling, and without a sling. Firing was conducted under winter conditions, which included the wearing of heavy field clothing. Test firing was carried out on a transition-type range, using surprise targets requiring rapid detection and engagement. No significant

differences in accuracy of fire among the sling conditions in both known-distance firing and transition-type firing were found.

Results of the entire sling study were evaluated at an informal conference with representatives of Board Nr 3, Headquarters Continental Army Command, and The Infantry School, and the following conclusions were reached.

The discrepancy between the results of Part III, wherein the use of slings in known-distance firing did not improve accuracy of fire, and the results of Part I, wherein the use of slings on the same type of range did contribute to the accuracy of fire, was attributed to variables of weather and clothing. Part I was carried out in the summer under ideal shooting conditions. Part III was conducted in mid-winter, under conditions of freezing weather necessitating heavy winter clothing. Apparently, the sling is useful in firing on known-distance ranges only under ideal conditions.

In regard to transition-type firing, it was concluded, on the basis of results from Parts II and III, that the use of a sling did not improve accuracy of fire.

In summary, it was concluded that the use of a sling does not improve accuracy of fire except under ideal known-distance firing conditions.

Foreword

Part I of the study on the use of a sling in M1 rifle firing presented the results of an experimental evaluation of two new slings (the Improved Loop Sling and the Combat Rifle Sling) proposed for Army use.¹

Accuracy and speed of fire (a) with the Improved Loop Sling, (b) with the Combat Rifle Sling, and (c) without a sling, were measured at ranges of 200 and 300 yards, using the prone position. Analysis of test data resulted in the following conclusions:

1. The improved accuracy of fire obtained by the use of a sling warrants its use during conventional known-distance marksmanship training.
2. The present Improved Loop Sling appears unsuitable for Army use.
3. The Combat Rifle Sling gives the same accuracy of fire as the Improved Loop Sling (prone fire).
4. For practical purposes, firing with the Combat Rifle Sling is as fast as firing without a sling.

On the basis of these results, it was decided to conduct further comparative tests in regard to firing (a) with the Combat Rifle Sling, (b) with the hasty sling, and (c) without a sling. Test conditions were

¹Interim Report, Human Research Unit Nr 3, Office, Chief of Army Field Forces, Fort Benning, Ga., dated 18 August 1954. Subject: "A Comparative Test of Accuracy and Speed of Fire with the Improved Loop Sling, with the Combat Rifle Sling, and without a Sling."

to include firing from different positions upon silhouette targets at unknown distances on a transition-type range.

Results of these tests are presented in this report as Parts II and III of the study.

Part II

A Comparison of Accuracy of Fire With the Combat Rifle Sling, With the Hasty Sling, and Without a Sling, on a Transition-Type Range

I. AUTHORITY

A. Directive

Fifth Indorsement, ATDEV-4, 474 (24 June 1953), Office, Chief of Army Field Forces, 21 June 1954, to Letter, ATING-23, 474, Office, Chief of Army Field Forces, 24 June 1953, Subject: "M-1 Rifle Sling Arrangement - Fort Dix Suggestion No. 1486."

B. Purpose

To compare the accuracy of fire with the Combat Rifle Sling, the hasty sling, and without a sling, on a transition-type range with silhouette targets at unknown distances.

II. REFERENCES

1. Interim Report, Human Research Unit Nr 3, Office, Chief of Army Field Forces,¹ Fort Benning, Ga., 18 August 1954. Subject: "A Comparative Test of Accuracy and Speed of Fire with the Improved Loop Sling, with the Combat Rifle Sling, and without a Sling."

2. Technical Research Proposal, Human Research Unit Nr 3, Fort Benning, Ga., Task TRAINFIRE: "Experimental Development of Training Methods and Proficiency Tests for Improving the Effectiveness of Combat Riflemen."

¹Now Human Research Unit Nr 3, Headquarters Continental Army Command.

3. Short, Melville K., Lieutenant Commander, USCGR. The Combat Rifle Sling. U. S. Naval Institute Proceedings, 76, No. 10, October 1950.

4. Field Manual 23-5. U. S. Rifle, Caliber .30, M1, October 1951.

III. DESCRIPTION OF MATERIEL

A. The Combat Rifle Sling

This sling was designed by Lieutenant Commander Melville K. Short, United States Coast Guard Reserve. The sling consists of two components, one on the rifle and the other on the firer's arm (Figure 1). The latter component is an armband with a metal ring, which is engaged by a suitable hook on the rifle component. The rifle component is the present sling, leather or web, slightly modified by the addition of the hook (Reference 3 and Figure 1). The Combat Rifle Sling was designed for combat use, the claimed advantages being (a) speed of getting in and out of the sling, and (b) retention of the full support of the standard loop sling.

B. The Hasty Sling

The hasty sling is described in Reference 4. Its main advantage is the speed with which it can be adjusted. This sling is used in certain courses of M1 marksmanship training.

IV. BACKGROUND

The historical background of the present study is contained in a previous Interim Report (Reference 1). Human Research Unit Nr 3, Headquarters Continental Army Command, is currently investigating the improvement of M1 rifle marksmanship training (Reference 2) and as part of this Task, planned to test the Combat Rifle Sling. On 21 June 1954, Office,

COMBAT RIFLE SLING

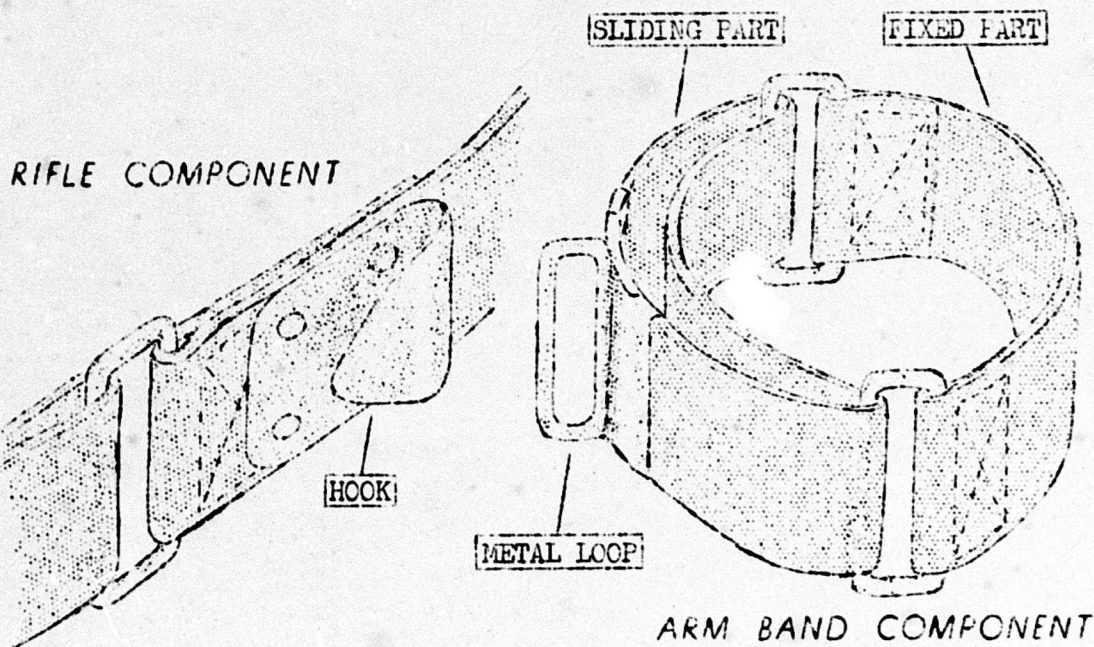


FIGURE 1

Chief of Army Field Forces¹ directed Human Research Unit Nr 3 to conduct a comparative test of the Improved Loop Sling and the Combat Rifle Sling, in coordination with The Infantry School and Board Nr 3, Office, Chief of Army Field Forces.² (See Directive.) The results of this test may be found in detail in Reference 1, and are briefly summarized in the Foreword of the present report. Part II is a report of further comparative tests of accuracy of fire with the Combat Rifle Sling, the hasty sling, and without a sling. This study was conducted in October, 1954, under good weather conditions.

V. SUMMARY OF TESTS

A. Test Firing

Forty-eight subjects chosen at random from the Task TRAINFIRE I experimental troops were test-fired on a transition-type range, with E-type silhouette targets appearing suddenly and momentarily at unknown distances. Each subject fired (a) with the Combat Rifle Sling, (b) with the hasty sling, and (c) without a sling. A standing foxhole position, which permitted use of sandbag support, and an unsupported kneeling position were used under each of the three sling conditions. Targets were exposed at ranges of 100, 200, and 300 yards from the supported foxhole firing position, and at 50, 150, and 250 yards from the supported kneeling firing position.

B. Results

Differences among the three sling conditions, at all ranges, for

¹Now Headquarters Continental Army Command.

²Now Board Nr 3, Headquarters Continental Army Command.

both foxhole and kneeling positions, were negligible.

VI. CONCLUSIONS

Firing without a sling was as effective as firing with a sling on a transition-type range. The ineffectiveness of the slings in improving accuracy of transition-type firing may have been due in part to lack of sufficient training in the use of the Combat Rifle Sling and the hasty sling. It was therefore decided to investigate the effect of training in the use of the slings.³

VII. DETAILS OF THE TEST

A. Purpose

The purpose of Part II was to compare the Combat Rifle Sling, the hasty sling, and the use of no sling, in terms of accuracy of fire. Test conditions included firing from supported and unsupported positions upon silhouette targets at unknown distances.

B. Method

1. Materiel:

The Combat Rifle Sling is presented in Figure 1. The hasty sling is described in Field Manual 23-5, "U. S. Rifle Caliber .30, M1," October 1951.

2. Range and Terrain Conditions:

The testing range was of the transition-type, constructed for the proficiency testing of TRAINFIRE I. The terrain was wooded, sloping

³The results of this investigation are presented in Part III of this report.

downward to a swamp line approximately parallel to and 150 yards from the firing line, then gradually rising to ground covered by brush, trees, and high grass. The firing lanes were 30 yards wide. Pop-up silhouette targets were used at ranges of 100, 200, and 300 yards from the standing fox-hole firing line. This firing line provided sandbag support for wrist and elbows. All targets were emplaced in such a way as to leave natural terrain undisturbed, and the olive drab silhouettes were camouflaged by blending them into the background foliage or brush. The element of surprise was introduced by exposing the targets in a mixed order, and by varying the time intervals between successive exposures. The targets could be raised or lowered electrically from a remote control point and were designed to drop when hit.⁴ Targets within and including 200 yards were exposed for 5 seconds, and those over 200 yards for 10 seconds.

3. Subjects:

Forty-eight subjects were chosen at random from the Task TRAINFIRE I experimental troops.⁵ All subjects received preliminary marksmanship instruction and had fired on the range during TRAINFIRE I, prior to the present sling test. On TRAINFIRE I testing, each subject was given 56 rounds to fire, 40 from the foxhole position and 16 from the kneeling position.

⁴The design of this target is to be described in a forthcoming Staff Memorandum.

⁵The troops were newly inducted or enlisted trainees who received their first four weeks of basic training at Fort Benning during Task TRAINFIRE I. The program included 74 hours of marksmanship training under experimental methods. Details of this program will be found in a forthcoming Technical Report.

C. Procedure

1. Sling Instruction:

Prior to firing, the subjects were instructed in the use of the Combat Rifle Sling. During the instruction, it was referred to as the "Short Sling," to avoid a possible favorable bias induced by use of the other name. Hasty sling instruction had been given during TRAINFIRE I.

2. Test Firing:

The 48 subjects were randomly assigned to six firing orders, and to eight firing points within an order. Each subject fired under each of the three conditions of (a) the Combat Rifle Sling, (b) the hasty sling, and (c) no sling. To control practice effects, the sequence of the three sling conditions was arranged differently for each order (Table 1). Individual differences with respect to firing ability would thus be taken into account in the mean score obtained for each sling condition.

Table 1

SEQUENCE OF SLING CONDITIONS WITHIN EACH FIRING ORDER

Firing Order					
1	2	3	4	5	6
Combat	None	Hasty	Hasty	Combat	None
Hasty	Combat	None	Combat	None	Hasty
None	Hasty	Combat	None	Hasty	Combat

Each firer was issued 48 rounds (6 clips) of M2, ball ammunition, 16 rounds to be fired under each of the three conditions. One

round was to be fired at each of the 48 targets presented. For example, on the first firing order (Table 1) a firer initially fired two clips with the Combat Rifle Sling. The first clip was fired from a standing foxhole position; the firer then moved 50 yards down range, and fired a second clip, using an unsupported kneeling position. He then repeated this procedure a second time, using the hasty sling, and a third time, without a sling. For each clip fired from the foxhole position, two 100-yard targets, three 200-yard targets, and three 300-yard targets were exposed. The same target distribution was used for the kneeling position down range, except that the ranges were then reduced to 50, 150, and 250 yards, respectively. All targets appeared in a random sequence. Firers used their 200-yard zero throughout firing. Scoring was done by personnel trained for that purpose.

3. Scoring:

Scoring was based on a "hit-miss" criterion, inasmuch as a hit anywhere on the target would cause it to fall. After each target was presented, the scorers recorded whether the firer had hit, missed, or failed to fire.

D. Results

The average number of rounds fired and the average number of hits obtained in the foxhole firing position are presented in Table 2. Data are pooled for all targets. Camouflaging the location of targets and allowing brief exposure time made targets difficult to detect and hit; consequently, some firers did not expend all eight rounds.

Average scores for the kneeling position are presented in Table 3.

Since the average number of hits obtained for firing without a

sling was at least as high as the average obtained with either the Combat or the hasty sling, no further statistical analysis was considered necessary.

Data for the targets at various ranges are presented in Table 4 for the foxhole position and Table 5 for the kneeling position. Again, differences among the experimental conditions were negligible.

Table 2

AVERAGE NUMBER OF ROUNDS FIRED AND AVERAGE NUMBER OF HITS
OBTAINED IN TRANSITION-TYPE FIRING USING THE
STANDING FOXHOLE POSITION

	<u>Combat Sling</u>		<u>Hasty Sling</u>		<u>No Sling</u>	
	Average	S.D.**	Average	S.D.	Average	S.D.
Rounds Fired	7.0	1.4	7.2	1.2	7.5	0.8
Hits Obtained*	1.1	0.9	1.3	0.9	1.3	0.9

* Possible score = 8.

** Standard deviation.

Table 3

AVERAGE NUMBER OF ROUNDS FIRED AND AVERAGE NUMBER OF HITS
OBTAINED IN TRANSITION-TYPE FIRING USING THE UNSUPPORTED
KNEELING POSITION

	<u>Combat Sling</u>		<u>Hasty Sling</u>		<u>No Sling</u>	
	Average	S.D.	Average	S.D.	Average	S.D.
Rounds Fired	7.5	1.0	7.4	1.0	7.5	0.8
Hits Obtained*	1.3	0.8	1.4	0.9	1.4	0.9

* Possible score = 8.

Table 4

AVERAGE NUMBER OF HITS AT VARIOUS RANGES
IN TRANSITION-TYPE FIRING USING THE FOXHOLE POSITION

Sling Condition	100 Yds.		200 Yds.		300 Yds.	
	Average No. Hits	S.D.	Average No. Hits	S.D.	Average No. Hits	S.D.
Combat Sling	1.2	0.8	1.2	0.9	0.8	0.9
Hasty Sling	1.4	0.8	1.6	1.0	1.0	0.9
No Sling	1.5	0.7	1.6	1.0	1.0	0.9

Table 5

AVERAGE NUMBER OF HITS AT VARIOUS RANGES
IN TRANSITION-TYPE FIRING USING THE KNEELING POSITION

Sling Condition	50 Yds.		150 Yds.		250 Yds.	
	Average No. Hits	S.D.	Average No. Hits	S.D.	Average No. Hits	S.D.
Combat Sling	1.5	0.7	1.4	0.9	1.0	0.8
Hasty Sling	1.6	0.6	1.5	1.0	1.0	0.8
No Sling	1.6	0.6	1.3	1.0	1.3	0.9

Part III

The Effect of Training Upon Comparative Accuracy of Fire With the Loop Sling, With the Combat Rifle Sling, With the Hasty Sling, and Without a Sling

I. AUTHORITY

A. Directive

See Part II, page 1.

B. Purpose

To measure the effect of training upon relative accuracy of fire
(a) with the loop sling, (b) with the Combat Rifle Sling, (c) with the
hasty sling, and (d) without a sling.

II. SUMMARY OF TESTS

A. Training

Ninety-six subjects previously qualified in known-distance marksmanship were randomly and equally divided into four groups, to represent the Loop Sling, the Combat Rifle Sling, the Hasty Sling and the No Sling Groups, respectively. The groups received instruction in the use of their slings, and then over a period of two days fired 48 rounds under their respective sling conditions on a known-distance range, at 200 and 300 yards. Cold weather necessitated the wearing of heavy winter clothing.

B. Testing

The groups were test-fired on the transition-type range previously described. Twenty-four rounds were fired from the foxhole position at surprise silhouette targets appearing at ranges of 100, 200, and 300 yards.

Twenty-four rounds were fired from the kneeling position at similar targets appearing at ranges of 50, 150, and 250 yards.

C. Results

None of the differences among the four groups in either training or testing performance was found to be statistically significant.

III. CONCLUSIONS

The use of the slings did not improve accuracy of fire in either known-distance firing or in transition-type firing.

Results of the entire sling study were evaluated at an informal conference with representatives of Board Nr 3, Headquarters Continental Army Command, and The Infantry School, and the following conclusions were reached.

The discrepancy between the results of Part III, wherein the use of slings in known-distance firing did not improve accuracy of fire, and the results of Part I, wherein the use of slings on the same type of range did contribute to the accuracy of fire, was attributed to variables of weather and clothing. Part I was carried out in the summer under ideal shooting conditions. Part III was conducted in mid-winter, under conditions of freezing weather necessitating heavy winter clothing. Apparently, the sling is useful in firing on known-distance ranges only under ideal conditions.

In regard to transition-type firing, it was concluded, on the basis of results from Parts II and III, that the use of a sling did not improve accuracy of fire.

In summary, it was concluded that the use of a sling does not improve accuracy of fire except under ideal known-distance firing conditions.

IV. DETAILS OF THE TEST

A. Purpose

The purpose of this test was to compare the effect of training upon relative accuracy of fire (a) with the loop sling, (b) with the Combat Rifle Sling, (c) with the hasty sling, and (d) without a sling.

B. Method

1. Materiel:

The Combat Rifle Sling is described in Part II. The loop sling and hasty sling are described in Field Manual 23-5, October 1951, previously noted.

2. Range Conditions:

Training was carried out on a known-distance range, using standard Ordnance A targets (twelve-inch bull's-eye). Testing was conducted on the transition-type range described in Part II. Surprise silhouette targets were used on the test range.

3. Subjects:

Ninety-six subjects were obtained from the 1st, 2nd, and 3rd Battalions, 29th Infantry, Fort Benning, Ga. The men tested were reported to have qualified on existing marksmanship courses as marksmen or better.

C. Procedure

1. Training:

The 96 experimental subjects were randomly divided into four groups of 24 subjects each, referred to as the Loop Sling Group, the Combat Rifle Sling Group, the Hasty Sling Group, and the No Sling Group. The groups received an hour's instruction and exercises on the use of their slings in the prone and kneeling positions. After the exercises, the

subjects were randomly assigned to firing orders and firing points, so that each group was equally represented in every order.

The groups fired for two days on a known-distance range. On the first day they zeroed their weapons at 200 yards, in four 3-round shot groups. Each subject then fired 24 rounds in six 4-round shot groups, half from the prone position, and half from the kneeling position. The two positions were alternated throughout the firing.

On the second day of training, the groups fired at 300 yards, following the 200-yard procedure. On both days the men wore heavy winter clothing.

2. Testing:

The experimental subjects were test-fired four days later on the transition-type range described in Part II.

A demonstration of the pop-up target was given, so that the men would recognize its appearance when raised, and its disappearance when hit. Firers were randomly assigned to firing orders and firing points. There were two firing periods, one in the morning and the other in the afternoon. During the first period, each firer was issued 24 rounds to fire from a supported standing foxhole position, one round per target, at surprise silhouette targets equally represented at ranges of 100, 200, and 300 yards. During the second period, each firer was to fire 24 rounds from an unsupported kneeling position, at targets appearing in equal numbers at ranges of 50, 150, and 250 yards. Targets at 50-200 yards were exposed for 5 seconds, and those at 250-300 yards for 10 seconds. Targets were exposed in a random order. Firers used their 200-yard zero throughout firing.

3. Scoring:

Training scores on the known-distance range were scored by the conventional 5-4-3 system. Testing scores on the transition-type range were scored on the "hit-miss" criterion described in Part II.

D. Results

1. Training:

The analysis of training performance is presented in Table 6. Differences among the four groups were not statistically significant. (Detailed statistical analyses will be found in Appendix A.)

Table 6

AVERAGE ACCURACY SCORES ON KNOWN-DISTANCE FIRING

Sling Condition	200 Yards				300 Yards			
	Prone*		Kneeling*		Prone*		Kneeling*	
	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.
Loop Sling	47.9	8.9	35.5	11.9	35.1	13.7	26.7	14.5
Combat Sling	43.6	13.2	37.0	10.1	33.3	11.3	27.2	12.0
Hasty Sling	47.4	7.1	38.2	9.7	33.6	12.5	23.3	10.1
No Sling	42.4	6.4	36.4	9.1	32.6	11.6	23.3	12.4

* Possible score = 60.

2. Testing:

Average accuracy scores on supported and unsupported firing, using the "hit-miss" criterion, are presented in Tables 7 and 8. Differences among the four sling conditions were not statistically significant.

Average accuracy scores at the various ranges are presented in Table 9. Again, differences were not statistically significant.

Table 7

AVERAGE NUMBER OF ROUNDS FIRED AND AVERAGE NUMBER OF HITS OBTAINED IN TRANSITION-TYPE FIRING USING THE SUPPORTED STANDING FOXHOLE POSITION

	<u>Loop Sling</u>		<u>Combat Sling</u>		<u>Hasty Sling</u>		<u>No Sling</u>	
	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.
Rounds Fired	17.2	4.9	13.4	4.7	17.6	5.4	17.5	4.6
Hits Obtained*	8.1	3.7	7.1	4.8	8.1	3.5	8.2	5.4

* Possible score = 24.

Table 8

AVERAGE NUMBER OF ROUNDS FIRED AND AVERAGE NUMBER OF HITS OBTAINED IN TRANSITION-TYPE FIRING USING THE UNSUPPORTED KNEELING POSITION

	<u>Loop Sling</u>		<u>Combat Sling</u>		<u>Hasty Sling</u>		<u>No Sling</u>	
	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.
Rounds Fired	21.8	3.1	21.4	2.7	22.1	2.4	21.4	3.0
Hits Obtained*	11.1	3.5	11.0	2.9	12.0	3.6	11.3	4.2

* Possible score = 24.

Table 9

AVERAGE NUMBER OF HITS AT VARIOUS RANGES IN
TRANSITION-TYPE FIRING USING THE FOXHOLE AND KNEELING POSITIONS

Sling Condition	Supported Foxhole*				Unsupported Kneeling*			
	100 Yds.		200 Yds.		300 Yds.		50 Yds.	
	Average	S.D.	Average	S.D.	Average	S.D.	Average	S.D.
Loop Sling	5.0	1.6	1.9	1.5	1.2	1.6	6.0	1.8
Combat Sling	4.6	2.5	1.9	2.2	0.7	1.1	6.2	1.9
Hasty Sling	5.0	1.9	2.0	1.5	1.0	1.1	6.4	1.9
No Sling	4.3	2.5	2.4	2.0	1.5	1.8	6.2	1.9
							3.0	2.4
							3.2	2.2
							2.8	1.6
							3.0	1.7
							2.6	1.1
							2.1	1.6

* Possible hits at each range = 8.

Appendix
Statistical Analyses

Table 10

SUMMARY TABLE FOR ANALYSES OF VARIANCE
 AMONG HITS FOR THE FOUR SLING CONDITIONS
 ON KNOWN-DISTANCE FIRING (PART III)

	<u>Source of Variance</u>	<u>Degrees of Freedom</u>	<u>Mean Square</u>	<u>F</u>	<u>P</u>
200 Yards Prone	Sling Condition Within Groups	3 90	176.46 90.29	1.95	.20 > p > .10
200 Yards Kneeling	Sling Condition Within Groups	3 90	29.33 109.17	<1.00	--
300 Yards Prone	Sling Condition Within Groups	3 88	25.29 151.36	<1.00	--
300 Yards Kneeling	Sling Condition Within Groups	3 88	100.99 152.62	<1.00	--

Table 11

SUMMARY TABLES OF ANALYSES OF VARIANCE
AMONG HITS FOR THE FOUR SLING CONDITIONS
ON TRANSITION-TYPE FIRING (PART III)

	<u>Source of Variance</u>	<u>Degrees of Freedom</u>	<u>Mean Square</u>	<u>F</u>	<u>p</u>
<u>Combined Ranges:</u>					
Foxhole Position	Sling Condition	3	5.38	<1.00	--
	Within Groups	81	19.60		
Kneeling Position	Sling Condition	3	4.22	< 1.00	--
	Within Groups	81	12.77		
<u>Separate Ranges:</u>					
Foxhole Position					
100 Yards	Sling Condition	3	2.64	< 1.00	--
	Within Groups	81	4.59		
200 Yards	Sling Condition	3	1.27	<1.00	--
	Within Groups	81	3.40		
300 Yards	Sling Condition	3	2.38	1.13	>.20
	Within Groups	81	2.11		
Kneeling Position					
50 Yards	Sling Condition	3	0.70	< 1.00	--
	Within Groups	81	3.53		
150 Yards	Sling Condition	3	0.77	< 1.00	--
	Within Groups	81	3.86		
250 Yards	Sling Condition	3	2.19	<1.00	--
	Within Groups	81	2.26		