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26
Manuals
2235

Notified in
A.C.I. for the
week ending
22nd February
1939



Small Arms Training

Volume I, Pamphlet No. 17

Range Courses—

Territorial Army (less Cav. Armd. C. Regts.,
Cav. Lt. Tk. Regts. and R.T.C. Bns.)
and Supplementary Reserve (less
Infantry)

1939

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1939

By Command of the Army Council,

H. G. Creedy
J. P. L.

THE WAR OFFICE,
22nd February, 1939.

CONTENTS

	PAGE
Distribution	4
SEC.	
1. General.—	
Preliminary weapon training	5
Courses	5
Ranges	5
Ammunition	6
C.O.'s pool	6
Exemptions	6
Repetition	6
Dress and equipment	6
Coaching	7
Permanent staff	7
Officer producing groups	7
Other units	7
Firing position	7
Classification	7
Bounty	8
2. The light machine gun course...	9
3. The miniature rifle course.—	
Preliminary	11
Empire test	11
The rifle course	12
4. The anti-aircraft course	13
5. The pistol course.—	
General	14
Pistol course	15
6. The machine gun course.—	
General	18
Classification and bounty	18
Instructional practices, conduct of	18
Penalties	19
Targets	19
Part I " A "	20
" " B "—1st year men	22
Part II—2nd year men	24

APPENDIX

Targets for annual machine gun course.—	
Part I " A "	28
Part I " B "	29
Part II	29
Table I. Courses to be fired and ammunition allotment for anti-aircraft units.	
Table II. Courses to be fired and ammunition allotment for all units except anti-aircraft units.	

DISTRIBUTION

This pamphlet is intended for units and formations of the Territorial Army and Supplementary Reserve and is issued on a pool basis, the further distribution within units being left to the discretion of commanding officers.

Cavalry.—

Yeomanry and Scout regiments	70
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Artillery.—

All regiments (H.Q.)	8
Anti-aircraft batteries	10
Survey, flash-spotting and sound-ranging batteries	...				8
All other batteries	...	...	...	...	12
Fixed defences and fire commands	...	...	...		*

Engineers.—

Squadrons and companies, field units	...	...	...	...	11
Fortress units	...	...	...	...	6
H.Q. divisional engineers	...	...	...	...	1
Searchlight battalions	...	...	...	...	1
" companies	...	...	...	...	12
Transportation units (S.R.)	...	...	...	...	*
Field units (S.R.)	...	...	...	...	*

Signals.—

G.H.Q. signals (H.Q.)	...	...	...	...	7
" " companies	...	...	...	...	5
Corps, mobile divisional and divisional signals	...				50
Corps signals H.Q. (S.R. only)	...	...	...	...	5
L. of C. signals, H.Q. and companies	...	...	...	...	10
Miscellaneous signal sections	...	...	...	...	4

Infantry.—

All battalions (other than searchlight battalions)	...				85
--	-----	--	--	--	----

R.A.S.C.—

Divisional R.A.S.C.	33
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R.A.M.C.	*
R.A.V.C.	*
R.A.O.S.	*
C.M.P.	*

* One copy to each officer, warrant officer and serjeant, plus one copy for every company, hospital, section, etc.

SECTION 1.—GENERAL

1. In order that weapon efficiency may be maintained, the organization and execution of preliminary weapon training must be thorough, well thought out and systematic.

Too much importance cannot be attached to the systematic carrying out of the Tests of Elementary Training and to ensuring that every soldier has a thorough grounding in the use of his weapons before he fires the annual courses.

2. The courses.—

i. *Tables I and II.*—These show the practices and the personnel who fire them.

ii. The details of the various courses are as under :—

(a) Sec. 2.—The Light Machine Gun Course.

(b) Sec. 3.—The Rifle Course ($\cdot 22$ -in. and $\cdot 303$ -in.).

(c) Sec. 4.—The Anti-Aircraft Course.

(d) Sec. 5.—The Pistol Course.

(e) Sec. 6.—The Annual Machine Gun Course.

iii. *Classification and bounty standards* (where applicable) are shown in paras. 14 and 15 of this Section and in Table I. For M.G. battalions and sub-units *see* Sec. 6, para. 4.

iv. *L.M.G.*—

(a) Automatic practices will be fired in bursts of four to five rounds. A firer who, in any practice, fires more than one burst of less than four rounds will be penalized by the deduction of five points from the score obtained in the practice, for each burst so fired. The last burst fired is exempt from this penalty.

(b) C.Os. may give further training to backward shots, provided that ammunition is available, but there will be no re-classification.

v. *A.A. platoons* only will fire the A.A.L.M.G. Course but, if time, ranges and ammunition are available, such personnel may, in addition, be exercised in "hosepipe" firing, the ammunition being taken from command pools. For the present such firing will not be carried out from the Motley mounting.

vi. The term "1st year man" includes an officer on first appointment.

3. *Ranges.*—Practices with $\cdot 303$ -inch ammunition will be carried out on a classification range, except as laid down in Territorial Army Regulations, 1936, Appendix IV, or where otherwise stated in the conditions of the courses.

4. Ammunition.—Allotments are shown in Tables I and II. Any ammunition not fired will be surrendered at the end of each weapon training year.

5. C.O.'s pool.—The ammunition allotted will be used in accordance with the following priority list :—

- i. For zeroing weapons.
- ii. For giving extra practice to backward shots.
- iii. For giving extra practice to selected men (*see* Table I, note (a)).
- iv. For demonstrations and occasional shots.
- v. For weapon training meetings.
- vi. For practice for competitions.

Pool ammunition is not an individual allotment. The number of rounds available for each weapon should be calculated at the beginning of the weapon training year and allotted by the C.O. for the various purposes for which he wishes it to be expended.

6. Exemptions.—The following personnel will be totally exempted from firing the annual courses as laid down for the various units in Tables I and II :—

Officers above the ranks of subaltern.

All warrant officers.

All N.C.Os. above the rank of serjeant.

Officers' mess serjeants.

Serjeant-master cooks.

Transport serjeants. Pioneer serjeant.

Serjeant for technical stores.

Orderly room serjeants.

Orderly room clerks.

Bandsmen (including serjeant).

Signallers (including serjeant).

Permanent Staff, T.A., with over 18 years' service.

Personnel of officer producing units who have once attained a standard of service shot in their courses (*see* para. 11, below).

7. Repetition.—There will be no repetition but C.Os. may give extra practice to indifferent shots after further training, the ammunition for this being taken from the C.O.'s pool (*see* para. 5, iii, above).

8. Dress and equipment.—Drill order will be worn for all parts of the annual weapon training course (*see* S.A.T., Vol. I, Pamphlet No 1, 1937, Sec. 3, 24).

In the event of weapon training being carried out in plain clothes (*see* Territorial Army Regulations, 1936, para. 563) web equipment will be worn over the clothing.

9. **Coaching.**—All ranks will be coached in all range practices throughout their service.

10. **Permanent staff.**—Permanent staff below the rank of warrant officer, Class II, will fire these courses.

11. **Officer producing units.**—

i. In the case of personnel exempted under para. 6, the ammunition thus saved, including that of the C.O.'s pool, will be expended on field firing, provided that facilities can be found without extra expense. The details of such practices will be arranged by the C.O.

ii. The numbers so exercised and the total expenditure of ammunition will be accounted for annually on A.F. E 569, and on no account must the total allotment of ammunition for the year be exceeded.

iii. Such personnel will be eligible for the award of the weapon training portion of the proficiency grant, on the recommendation of the C.O.

12. **Other units.**—Personnel of the undermentioned units will fire the same courses and receive the same allotment of ammunition as those of corresponding units of their arm of the Service and will be classified on the same standards as the Territorial Army:—

Malta Militia, Royal Engineers,
King's Own Malta Regiment,
Bermuda Volunteer Rifle Corps,
Bermuda Volunteer Engineers.

13. **Firing positions.**—Throughout the rifle course, firing positions are referred to as (a), (b) and (c) and will be as described below (*see* S.A.T. Vol. 1, Pamphlet No. 1, 1937, Sec. 3, 28).

(a) *Wrist or forearm supported.*—Applicable to elementary instructional practices, such as grouping and first application. Sandbags may be adjusted by the coach to suit the firer.

(b) *In the open.*—No support whatever in any position.

(c) *Behind cover.*—The firer will adopt the positions as taught, adapting himself to the cover, firing round it if of an isolated nature, approaching and using the firing points as continuous cover (*see* S.A.T., Vol. I, Pamphlet No. 3, 1937, Lesson 20). In firing from a breach, the procedure in Lesson 22 will be followed.

14. **Classification.**—The light machine gun being the primary infantry weapon, there will be no classification in the rifle (.303-in.), but a standard score has been given as a guide for practices 2 and 3 of the rifle course.

Classification of machine gun units will be based on the Annual Machine Gun Course only.

15. Bounty.—The scores qualifying for bounty for those units affected are shown in Table I. It will be noted that, in the case of 1st year men of infantry battalions, they will qualify in the Empire Test and, in addition, *either* in the L.M.G. *or* the Rifle Course. 2nd and subsequent year men will qualify in the Empire Test and the L.M.G. Course only.

Machine-gunners will qualify in the Annual Machine Gun Course *only*.

SECTION 2.—THE LIGHT MACHINE GUN COURSE

To be fired on the open range or, if such is not available, on a 30-yards range using representative targets.

No.	Practice	Target	Distance in yards	Rds.	Detail	Remarks
1	Ranging	Small	300	15	To be fired in 3 or 4 bursts. The M.P.I. will be signalled after each burst.	<i>Scoring.</i> —Nil.
2	Single rounds.	Small	300	5	The 5 rounds to be fired singly at the same aiming mark. Object.—To test accuracy of aim combined with trigger pressing.	<i>Scoring.</i> —As for rifle. H.P.S. 20.
3	Application	Small	300	10	To be fired in 2 bursts.	<i>Scoring.</i> —Each hit on the scoring surface of the target, 2 points. H.P.S., 20.
4	Action and distribution.	L.M.G. screen	300	20	20 rounds in 2 magazines (12 in one and 8 in the other). The firer and his assistant will be in the lying position about 5 yards in rear of the firing point with the gun, and ammunition in pouch. (Until pouch equipment is issued, the magazines may be placed on the ground beside the gun.) Sights at 200 yards. The order "Prepare for action" will then	<i>Scoring.</i> —Each rectangle containing— 1 shot counts 2 points. 2 shots count 4 points. 3 shots count 6 points. 4 or more shots count 8 points. H.P.S., 40.

No.	Practice	Target	Distance in yards	Rds.	Detail	Remarks
4	Action and distribu- tion— <i>contd.</i>				be given and, as soon as all guns have been reported "Ready", the signal "Ac- tion" will be given. The firer will move to the firing point, mount gun, load, adjust sights and open fire. Fire will be distributed irregularly in bursts as laid down in Pamphlet No. 2, 1937, Lesson 15. 60 seconds will be allowed from the signal "Action".	

CLASSIFIED STANDARD

Practices	H.P.S.	Marksmen		Service shot	
		1st year	2nd year	1st year	2nd year
2	20	15	15	10	10
3	20	13	13	10	10
4	40	—	30	—	20

SECTION 3.—THE MINIATURE RIFLE COURSE

PRELIMINARY

No.	Practice	Target	Distance in yards	Rds.	Detail	Remarks
	Preliminary practices	Representative	Representative	60	Practices at the discretion of the C.O.	For details of targets, see S.A.I., Vol. V, 1931, Sec. 47.
			C.O.'s Pool ...	20		
			Total rounds	80		

EMPIRE TEST

A	Grouping	Small	Representative 200... ..	5	Lying (b)	<p style="text-align: center;">AVERAGE SCORES (as a guide only)</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td style="text-align: left;"><i>Prac- tice</i></td> <td style="text-align: center;"><i>H.P.S.</i></td> <td style="text-align: center;"><i>1st Class</i></td> <td style="text-align: center;"><i>2nd Class</i></td> </tr> <tr> <td style="text-align: center;">A</td> <td style="text-align: center;">25</td> <td style="text-align: center;">20</td> <td style="text-align: center;">15</td> </tr> <tr> <td style="text-align: center;">B</td> <td style="text-align: center;">20</td> <td style="text-align: center;">15</td> <td style="text-align: center;">11</td> </tr> <tr> <td style="text-align: center;">C</td> <td style="text-align: center;">20</td> <td style="text-align: center;">8</td> <td style="text-align: center;">5</td> </tr> <tr> <td style="text-align: center;">D</td> <td style="text-align: center;">15</td> <td style="text-align: center;">12</td> <td style="text-align: center;">9</td> </tr> <tr> <td colspan="2"></td> <td style="text-align: center;">Total</td> <td style="text-align: center;">80</td> <td style="text-align: center;">55</td> <td style="text-align: center;">40</td> </tr> </table> <p>* If a trench cannot be built or improvised, this practice may be fired lying behind cover with rifle rested.</p>	<i>Prac- tice</i>	<i>H.P.S.</i>	<i>1st Class</i>	<i>2nd Class</i>	A	25	20	15	B	20	15	11	C	20	8	5	D	15	12	9			Total	80	55	40
<i>Prac- tice</i>	<i>H.P.S.</i>	<i>1st Class</i>	<i>2nd Class</i>																													
A	25	20	15																													
B	20	15	11																													
C	20	8	5																													
D	15	12	9																													
		Total	80	55	40																											
B	Slow	Small	200... ..	5	Lying (b).																											
C	Slow	Large convertible bull's-eye	500... ..	5	Lying (b).																											
D	Snapshotting.	Large snapshotting.	100... ..	5	Standing in a trench (c). [*] 5 seconds each exposure with 5 seconds interval. The rifle may be in the aim before the target appears.																											
			Total rounds	20																												

Total rounds 100

THE RIFLE COURSE

To be fired on the open range or, if such is not available, on a 30-yards range with representative targets.

No.	Practice	Target	Distance in yards	Rds.	Detail	Remarks
1	Grouping	Grouping	100	5	Lying (a).	The man's rifle should be zeroed in his presence before these practices are fired.
2	Application	Small	200	5	Lying (a).	
3	Snapshooting.	Large snapshooting.	200	5	Lying (a). Rifle loaded, sights adjusted and safety catch forward. Butt to be touching the ground before each exposure. Exposure — 5 seconds for each shot.	An inscribed circle of 12 inches diameter will be drawn on the target. Shots in the inscribed circle will count 3 points each, and shots on the remainder of the target will count 1 point each.
4	Application	Small	300	5	Lying (a). Bayonet fixed.	Classification—NIL. Service shot—19.

* See Table I, note (a).

SECTION 4.—THE ANTI-AIRCRAFT COURSE

A.A.—LIGHT MACHINE GUN

(Fired by all A.A.L.M. gunners according to the instructions given in Table I. There is no classification.)

No.	Practice	Target	Distance in yards	Rds.	Detail	Remarks
1	A.A.L.M.G.	A.A. attacker	10	5	Firer standing behind L.M.G. mounted on tripod or A.A. mounting. The instructor orders "Load"—"500"—then indicates the target and orders "Aircraft front—Rapid fire". The firer fires one burst of 5 rounds.	<ol style="list-style-type: none"> 1. The time limit will be 10 seconds from the command "Aircraft front—Rapid fire". 2. At the conclusion of the practice the instructor will criticize the result. 3. With the centre of the grouping ring on the centre of the target, all shots should be in an 8-inch circle. 4. <i>Scoring</i>.—None.
2	A.A.L.M.G.	A.A. crossing	10	10	Firer standing behind L.M.G. mounted on tripod or A.A. mounting—5 rounds in each of two magazines. The instructor orders "Load"—"500"—"Aircraft action". When the target starts to move, the order "Aircraft front—Rapid fire" will be given. The firer will fire a burst of 5 rounds at the first run, after which his results will be criticized. He will then fire another burst of 5 rounds at the second run.	<ol style="list-style-type: none"> 1. The time limit will be 3 seconds for each run. 2. The instructor will indicate when each run should begin. 3. On the command "Aircraft front", the firer will direct his gun on the 12 degree lead and swing along the line of flight as the target moves. 4. The instructor will criticize the result of the first shoot before the second is begun. 5. <i>Scoring</i>.—None.
Total rounds				15		

N.B.—See Sec. 1, para. 2 (v), *re* "hosepipe" shooting.

SECTION 5.—THE PISTOL COURSE

General

1. The course is designed to practise individuals in delivering fire instantly by sense of direction. The speed at which one or more effective shots can be fired is more important than the close grouping of the shots.

2. To obtain full value from this course, a period of about one week should be devoted to preliminary practice in holding and snapping with an empty pistol before firing with live ammunition.

Range discipline and safety precautions

3. See Pamphlet No. 1, 1937, Sec. 3, and Pamphlet No. 11, 1937, Lesson 1.

Grouping practices

4. If faults are revealed in the first grouping practice, the second one will not be fired until these faults have been corrected by further instruction. Before men are allowed to shoot by sense of direction only, their individual ability in trigger pressing and holding must be ascertained. For this reason, sights will be used in firing the grouping practices.

Misfires and jams

5. See Pamphlet No. 1, 1937, Sec. 3, para. 27.

Personnel to fire and qualification

6. This course will be fired by personnel of the Corps of Military Police (S.R.). 1st year men will fire Parts I and II only, but 2nd and subsequent year men will fire all three parts.

7. There will be no qualifying score for 1st year men. The qualifying score for 2nd and subsequent year men is laid down in Part III of the course.

PISTOL COURSE

Part I.—PRELIMINARY (using sights)

No.	Practice	Detail	No. of rounds	Range, yards	Target	Score and H.P.S.	Remarks
1.	Grouping	Single action, using sights. Firer to return to "Ready" position after each shot.	4 either hand	10	4-foot with two 2-inch aiming marks.	No score— Faults to be carefully noted.	i. Target for Practices 1 and 2 is shown in Vol. V, 1931, Plate 109, page 216. ii. Scoring: 4 shots within 8×4-in. rectangle=20 points. 4 shots within 12×8-in. rectangle=16 points. 4 shots within 16×12-in. rectangle=12 points.
2.	"	"	4 either hand	10	"	H.P.S. 20. Standard required, 12	
		Total Part I	8 rds.				<i>Note.</i> —The pistol grouping rectangle (Vol. V, 1931, Plate 116) will be applied, the centre to the bottom of the aiming mark.

Part II.—INSTRUCTIONAL (without using sights)

3.	Application	Single action, without use of sights. Firer to return to "Ready" position after each shot. Time 1 second for each shot. No standard interval between shots.	3 either hand	10	1 Fig. 2	15	i. Fig. targets 2 and 3 will be marked with a rectangle as shown in Vol. V, Plates 111 and 112A. ii. Practice 6: Two Fig. 2 targets on sledge (Vol. V, Plate 110) capable of movement. Two Fig. 3 targets. On the command "Fire", one
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Part II.—INSTRUCTIONAL TRAINING (without using sights)—*continued*

No.	Practice	Detail	No. of rounds	Range, yards	Target	Score and H.P.S.	Remarks
4.	Application	Double action. 3 seconds for 3 shots.	3 either hand	10	1 Fig. 2	15	of the two Fig. 2 targets (as indicated by the conducting officer) will charge. The firer will first fire at the charging target, then advance 5 yards and fire at the remaining three. Where several firers are firing in one detail, the conducting officer will ensure, as far as possible, that all firers advance together.
5.	"	Single or double action. 1 shot at each target. Time, 6 seconds for practice.	4 either hand	10	4 Figs. 2	20	
6.	Attack	Single or double action. Firer advancing 5 yards. Time, 6 seconds.	4 either hand	20 to 15	2 Figs. 2 (one charging) 2 Figs. 3	20	iii. <i>Scoring.</i> — <i>Practices 3 to 11.</i> Each shot within 16 x 12-inch rectangle = 5 points. Each shot on remainder of target = 3 points.
7.	Defence	Single or double action. Drawing loaded pistol from case. Time, 4 seconds.	2 either hand	15 to 5	2 Figs. 2, (both charging)	10	
8.	Surprise and disappearing (gas)	Single and double action. For each exposure 2 rounds to be fired, the first by single action. Time for each exposure, 2 seconds. Respirators will be worn.	4 either hand	10	Fig. 2 to be exposed and moved with- in a frontage of 3 yards 2 shots to be fired during each run of the target.	20	
					Total Part II		20 rds.

Part III.—QUALIFICATION (without using sights)

No.	Practice	Detail	No. of rounds	Range, yards	Target	Score and H.P.S.	Remarks
9.	Attack	Single or double action, firer advancing 5 yards. Time, 5 seconds.	4 either hand	15 to 10	2 Figs. 2 (one charging); 2 Figs. 3	20	Scoring and method of conducting as for Practice 6, Part II.
10.	Defence	Single or double action. Drawing loaded pistol from case. Time for practice, 4 seconds.	2 either hand	15 to 10	2 Figs. 2 (both charging).	10	
11.	Surprise and disappearing (gas)	Single and double action. 2 seconds for each exposure in which 2 shots will be fired. First shot to be fired by single action, firer to return to "Ready" position after each exposure. Interval of 2 seconds between each exposure. Respirators will be worn.	4 either hand	10	1 Fig. 2. Each exposure will be at a different point on a front of 3 yards.	20	
Total Part III			10 rds.				

QUALIFYING STANDARD,
PART III
H.P.S. 50
Qualified, 25 and over.
Fail, under 25.

Total ammunition, Parts I, II and III = 38 rounds.

SECTION 6.—THE MACHINE GUN COURSE

General

1. Recruits will pass the appropriate tests of elementary drill before firing any particular practice.

2. *1st year men* will fire Parts I, "A" and "B".

Practices 1-5 are instructional and there is no scoring. The *1st year man* will "qualify" in practices 6 and 7.

3. *2nd year men* will fire Part II.

Practices 8 and 9 are instructional.

Practices 10, 11 and 12 are for classification.

4. Classification and bounty.—

1st year men, to be eligible for bounty, must "qualify" in Practices 6 and 7.

2nd year men.—For the purpose of determining classification and bounty.

For each Standard A = 12 points.

" " " B = 9 "

" " " C = 6 "

Marksman, a total of = 33 points or over.

Service gunner " " = 27 " " "

Bounty qualification " = 21 " " "

5. Instructional practices should be carried out by:—

(a) Explaining the practice to each man before he fires. A rehearsal without ammunition is the best method of doing this and ensures that time and ammunition are not wasted on the range.

(b) Commenting on the practice while in progress, stopping the firer for the purpose, rather than by waiting until the practice is finished before starting to comment.

(c) On conclusion of the practice, using the results on the target to emphasize the instructional points.

(d) Summarizing the lessons learnt in the practice.

The instructor at the firing point should watch the firer, not the target, in order that he may see that all points of elementary gun drill are carried out correctly.

The shots on the target will bear witness to any faults that the firer may have committed while firing.

Instructors must realize that the greatest care must be taken to eradicate such faults during the firing of instructional

practices, so that the machine gunner shall not acquire faulty actions during his elementary training. This applies equally to the action of the No. 2 at the gun.

The following are the points to which particular attention must be paid :—

The No. 1 :—

Correct firing position and holding.

Quick and accurate loading and laying.

Correct pressure on the thumb piece on the signal " Fire ".

Eyes on the target, not looking along the sights or down at the thumb piece when firing.

Attention to " points during firing ".

Correct I.A. when applicable.

The No. 2 :—

Inspection of ammunition and belts.

Correct service position (lying or kneeling).

Attention given to control signals and to feeding the gun (not watching the target).

Correct and rapid transmission of signals " Fire " and " Stop ".

Correct I.A. when applicable.

When range safety precautions and local restrictions do not permit of firing by night on 30-yards ranges, darkness may be simulated by using dark glasses or blindfolding the firer, but the gun will not be knocked off as each stoppage occurs.

6. Penalties.—

(a) Service bursts will be fired in all practices except single shot traverse.

(b) A firer will lose his score for any practice in which he fires after the time limit laid down.

7. Targets.—Appendix I shows the targets required and method of construction.

8. Part III, Annual course.—

Part III consists of five control exercises and demonstrations fired on a field firing range.

All personnel of M.G. coys. who have qualified as 1st year gunners may be exercised in Part III according to their appointments in sections and platoons. The objects and methods of conducting this Part are given in Sections VI and VII of Pamphlet 15, to which reference should be made.

PART I, "A"—INSTRUCTIONAL FOR 1ST YEAR MEN

At the beginning of each practice the sights will be set at 450 yards (or corrected range).
All practices are fired at a range of 25 yards.

No. (1)	Practice (2)	Target Ref. App. I (3)	Rounds (4)	Detail (5)	Remarks (6)
1	Introductory	(Series of bull's-eyes) serial No. 1.	20 Spaced in groups of 10 rounds each.	<p>(i) Object.—To give the recruit the feel of the smallest service burst and to show the effect of a correction in range.</p> <p>(ii) The firer is ordered to lay on an isolated bull. The aim is checked and the order "Fire" given. At the end of the first burst the order "Stop" is given followed by "Load"—Up 400—Go On.</p>	<p>(i) The instructor determines from the action of the firer whether the correct procedure has been carried out.</p> <p>(ii) The second group should be approximately 8 inches above the first.</p>
2	Single shot traverse.	Horizontal and oblique lines on a white screen Serial No. 2.	20 Spaced in groups of five rounds each.	<p>(i) Object : To practise the firer in traversing a horizontal and an oblique target.</p> <p>(ii) The firer is ordered to traverse from one end of the black line, the order "Stop" being given after 5 rounds have been fired. He is then ordered to traverse from the other end to test the tap of the other hand.</p> <p>(iii) The procedure is carried out first on the horizontal and then on the oblique lines.</p>	<p>(i) Before beginning this practice the instructor will ensure that the firer has tested and is satisfied with his clamp.</p> <p>(ii) The firer must keep the thumb piece pressed as for service bursts.</p> <p>(iii) The lateral distance between shots should be 4 inches.</p> <p>(iv) With the aid of a measuring frame, marked off in 4-inch intervals, the firer's traverse will be criticized at the target.</p>

3	Immediate ac- tion (day).	M.G. stoppage target. Serial No. 3.	40	<p>(i) Object : To practise rectifica- tion of stoppages by day.</p> <p>(ii) The belts will be prepared beforehand with a series of stoppages (e.g. misfire, bad fault in feed, damaged round, empty pockets).</p> <p>(iii) The aiming mark will be indicated and the order "Fire" will be given.</p> <p>(iv) The gun will be knocked off by the instructor as each stoppage occurs.</p>	Accuracy in relaying will be judged from the size of the complete group.
*4	Immediate ac- tion (night).	Plain white screen. Serial No. 4.	20	<p>(i) Object: To practise rectifica- tion of stoppages by night.</p> <p>(ii) The dial sight will be affixed to the gun, the night aiming box put out, and belts pre- pared as in 3 (ii) above.</p> <p>(iii) The gun will be laid using the tangent sight on a torch held on the centre of the screen.</p> <p>(iv) The range drum will be set at 450 yards and the bubble levelled by means of the angle sight drum.</p> <p>(v) The firer will then align the collimator on the aiming lamp.</p> <p>(vi) The order "Fire" will be given.</p> <p>(vii) The gun will be knocked off by the instructor as each stoppage occurs.</p>	Accuracy in relaying will be judged from the size of the complete group.

* Dependent on issue of a dial sight.

PART I, "B",—1ST YEAR MEN

N.B.—To be fired at 600* or, if this is not possible, at 500* or 400* yards.

No. (1)	Practice (2)	Target Ref. App. I (3)	Rounds (4)	Detail (5)	Remarks (6)
5	Registration (instructional)	Prepared patch on stop butts. serial No. 6.	30	<p>(i) Object : To register elevation and direction before applying fire.</p> <p>(ii) On the order being given for the practice to begin, the firer will register the range and wind allowance.</p> <p>(iii) The position of the M.P.I. of each burst with reference to the centre of the patch will be signalled from the butts on the target already hoisted for the next practice.</p>	<p>(i) The patch should be prepared with cinders or sand.</p> <p>(ii) Having registered, the firer will proceed immediately to carry out Practices 6 and 7.</p>
6	Application (qualification).	Large convertible landscape with aiming mark. Serial. No. 7a.	20	<p>(i) Object : To practise correctness in aiming, making allowance for side wind, and maintaining aim.</p> <p>(ii) The gun will be mounted and loaded.</p> <p>(iii) The order "Fire" will be given, when the firer will engage the target.</p> <p>(iv) On conclusion of the practices, the position of the centre of the group on the target will be signalled from the butts.</p>	<p>(i) The target will be hoisted before the start of Practice 5.</p> <p>(ii) <i>Scoring.</i>— Qualify : 7 hits or more. Fail : under 7 hits.</p>

Tapping right and left (qualification).

Convertible screen with aiming mark. Serial No. 8a.

- (i) Object: To practise the practical application of fire on a target with little width.
- (ii) The gun will be mounted and loaded.
- (iii) The firer will lay the gun (checked by the coach) for direction and elevation to hit the central aiming mark.
- (iv) The order "Fire" will then be given.
- (v) Four bursts in all will be fired, the firer engaging the target by "tapping right and left one tap correctly".
- (vi) There is no time limit.
- (vii) Having completed the firing, he will relay. The coach will check the aim.

- (i) Before beginning the practice the coach will ensure that the firer has tested, and is satisfied with, his clamp.
- (ii) *Scoring*: For each hit on centre section up to 10 hits—3 points. For each hit on each flank section up to 5 hits—5 points. H.P.S.: 80 points.
- (iii) *Deductions*: For more than 4 bursts—10 points.
- (iv) Qualify, 40 points or over, Fail, under 40 points.

PART II.—2ND YEAR MEN

No. (1)	Practice (2)	Target Ref. App. I (3)	Rounds (4)	Detail (5)	Remarks (6)
8	Registration (instru- ctional).	Prepared patch on stop butt. Serial No. 6.	60	<p>(i) Object: To register elevation and direction before applying fire.</p> <p>(ii) On the order being given for the practice to begin, the firer will register the range and wind allowance.</p> <p>(iii) There is no time limit or scoring.</p> <p>(iv) The position of the M.P.I. of each burst with reference to the centre of the patch will be signalled from the butts on the target already hoisted for the next practice.</p>	<p>(i) The patch can be prepared with cinders or sand.</p> <p>(ii) Having registered, the firer should proceed immediately to carry out the remaining practices of this part. The ammunition should allow for two registrations if the firer is unable to fire all the other practices, immediately after his first registration.</p>
9	Application (instru- ctional).	Large convert- ible) land- scape. Serial No. 7a.	20	<p>(i) Object: To test correctness in aiming, making allowance for the wind, and maintaining aim.</p> <p>(ii) The gun will be mounted and loaded.</p> <p>(iii) The order "Fire" will be given, when the firer will engage the target.</p>	<p>(i) The target will be hoisted before the start of Practice 8.</p> <p>(ii) Standard score, from 7 to 12 hits.</p>

(iv) On the conclusion of the practice the position of the centre of the group on the target will be signalled from the butts.

Tapping right and left (classification).

Convertible screen coloured. Serial No. 8b. If firing at 500 yds., size of screens to be reduced by $\frac{1}{4}$ th. At 400 yds. by $\frac{1}{3}$ rd.

50

(i) Object: To test the practical application of fire on a target with little width.

(ii) The gun will be mounted and loaded.

(iii) The firer, having tested his clamp, will lay for direction and elevation to hit the centre of the centre section.

(iv) The order "Rapid Fire" will be given.

(v) The firer will engage the target by "Tapping right left one tap" correctly.

(vi) He will fire five bursts.

(vii) He may check his aim and relay, if necessary, twice only—immediately before the third and fifth bursts.

(viii) Time allowed from the order "Fire", 30 seconds.

(i) Scoring: For each hit on centre section up to 15 hits—2 points. For each hit on each flank section up to 5 hits—5 points. H.P.S. 80 points.

(ii) Deductions: For firing more than 5 bursts—10 points. For checking aim more than twice or at incorrect time—10 points.

(iii) Standard A, 50 points or over. Standard B, 40 points or over. Standard C, less than 40 and 30 points or over. Fail, under 30.

PART II.—2ND YEAR MEN—continued

No. (1)	Practice (2)	Target Ref. App. I (3)	Rounds (4)	Detail (5)	Remarks (6)
11	Service (application (flexibility) (classification)).	Two groups of falling plates. Serial No. 9. One large (convertible) landscape. Serial No. 7a. (Groups of plates and targets to be placed at intervals of 15 yards with centre group at a different elevation.)	70	<p>(i) Object: To test the quick engagement of targets.</p> <p>(ii) The gun will be mounted, loaded and ready to fire, not laid on either group of plates.</p> <p>(iii) The target will be exposed and timed from the butts.</p> <p>(iv) As soon as the target appears, the firer will engage the left group of plates. When a plate is hit, a black and white marking disc will be shown in the butts immediately below the group. The next group will then be engaged and, when a hit is signalled, the remaining rounds will be fired on the landscape target.</p> <p>(v) Time allowed, 90 seconds.</p>	<p>Scoring: Standard A, both groups of plates hit and more than 5 hits on target. Standard B, both groups of plates hit. Standard C, only one group of plates hit. Fail, no groups hit.</p>

Service application (engagement) (classification).

Large convertible landscape. Serial No. 7b.

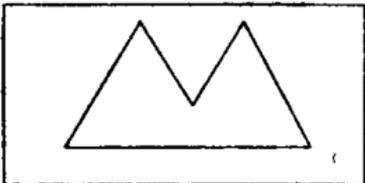
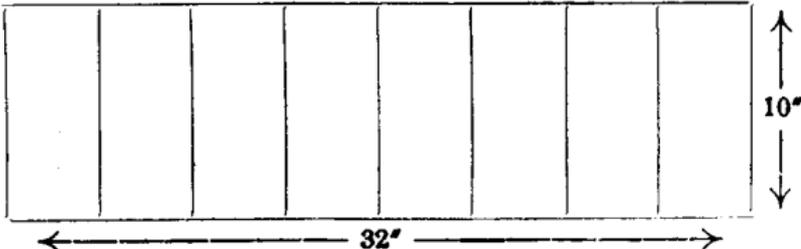
- (i) Object: To test the engagement of a fleeting target.
- (ii) The gun and tripod will be laid on the ground about three paces in rear of the spot on which the gun will be mounted. Tripod on left with legs set for sitting position. Sights at zero.
- Ammunition box and condenser can be in a convenient position on the firing point. No. 2 will be required to assist the firer.
- (iii) The position at which the firer's target will appear must be indicated to him.
- (iv) The target will be hoisted on a signal from the firing point, the exposure will be timed from the butts.
- (v) On the appearance of the target the firer and his No. 2 will bring the gun into action without further word of command and engage the target.
- (vi) Time allowed, 110 seconds.

Scoring: Standard A, 10 or more hits. Standard B, 5-9 hits. Standard C, 1-4 hits. Fail, no hits.

APPENDIX I

1. The following targets and equipment are required in order to carry out Parts I and II of the Annual Medium Machine Gun Course:—

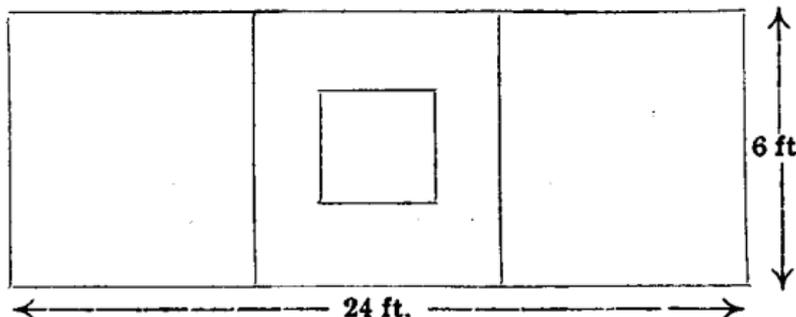
PART I, 'A'

Serial No. (1)	Particulars of targets		Practices for which required (4)	Remarks (5)
	Name (2)	Details (3)		
1	M.G. target	See Plate 66, S.A.T., Vol. V, 1931.	1	
2	Plain white screen on which are marked thick black lines as follows:—	Dimensions as Plate 66, S.A.T., Vol. V, 1931.	2	Serial No. 5 Measuring frame is also required for this practice.
				
3	M.G. stop-pages target.	Plate 67, S.A.T., Vol. V, 1931.	3	
4	Plain white screen.		4	
5	Measuring frame of cast iron with wire uprights of dimensions as follows:—		2	For checking lateral distance between shots.
	4-inch spacings.			
				

PART I, ' B '

Serial No. (1)	Particulars of targets		Practices for which required (4)	Remarks (5)
	Name (2)	Details (3)		
6	Prepared patch on stop butts.	4 feet square, with one metal plate in centre as an aiming mark. Patch prepared with cinders or sand to give observation of strike.	5 & 8	
7	Large (8-ft.) convertible landscape (a) with aiming mark. (b) without aiming mark.	As given in War Office letter No. 118/Gen./1994 (Q.M.G. 7) dated 24th March, 1937. For 7 (a) with central black semi-circular aiming mark. Diameter, 24 inches.	6 9, 11 & 12.	Also two groups of plates for Practice 11 (see Serial 10).

8	Convertible screen. To be used either— (a) with aiming mark.	PART II 24 feet long and 6 feet high divided into 3 equal sections of 8 feet. Flank sections white. Centre section white with black aiming mark 2 foot square in centre.	7	
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Serial No. (1)	Particulars of targets		Practices for which required (4)	Remarks (5)
	Name (2)	Details (3)		
	(b) to represent a camouflaged position.	Centre section coloured, to represent camouflaged position, as given below.	10	This target can be produced with four large convertible frames. If fired at 500 yards, reduce by $\frac{1}{4}$ th. If fired at 400 yards, reduce by $\frac{1}{3}$ rd.
	<p style="text-align: center;">←-----24 ft-----→</p>			
9	Metal plates	A group of plates will consist of 9 plates placed in a 4-foot square as follows :—	11	
	<p style="text-align: center;">←-----4'-----→</p>			

ANTI-AIRCRAFT UNITS, A.A.

	Rifle .22-in.		L.M.G. Course Ground .303-in. 3 men per L.M.G. on W.E. per man (a).	Units attending A.A. Gunnery Camp (c).		Units not attending A.A. Gunnery Camp (d).	
	Preliminary C.O.'s pool per man.	Empire Test per man.		.303-in. Ball.	.303-in. Tracer.	.303-in. Ball.	.303-in. Tracer.
TERRITORIAL ARMY.							
<i>Field Force units.</i>							
Light A.A. regt. Recruits ...	50	20	}	(b)	(b)	—	—
Trained men	40	—		—	—	—	—
Regt. H.Q. { Recruits ...	50	20	}	75	75	30	30
S/L bty. or coy. { Trained men	40	—		—	—	—	—
<i>A.D.G.B. units.</i>							
A.A. bty. All personnel	80	20	—	75	75	—	—
S/L bty. or coy. (e) All personnel	80	20	—	71	70	24	23
SUPPLEMENTARY RESERVE.							
<i>Field Force units.</i>							
Regt. H.Q. and { Recruits ...	50	20	}	75	75	—	—
A.A. bty. { Trained men	40	—		—	—	—	—
Light A.A. bty. Recruits ...	50	20	}	(b)	(b)	—	—
Trained men	40	—		—	—	—	—
Regt. H.Q. and { Recruits ...	50	20	}	75	75	30	30
S/L bty. or coy. { Trained men	40	—		—	—	—	—

Notes.—(a) Practices 1, 2 and 3 of the L.M.G. course will be fired, the ammunition for Practice 1 being reduced to 10 rounds.

(b) These units will fire special practices at Light A.A. camps.

(c) One magazine preliminary at balloon targets, remainder at targets towed by aircraft.

(d) If arrangements can be made they will fire hosepipe practices at towed drogues or balloons on a small arms range passed as suitable or on a coast defence artillery range; otherwise they will not fire A.A. practices. Magazines will be filled alternate rounds ball and tracer. The direction of the wind must be ascertained before firing and the balloons released so as to give suitable crossing targets. The limits of the permissible arcs of fire must be clearly marked and an officer detailed to each gun to stop firing when the target passes the limit.

(e) Armed with Lewis guns.

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