

Cadet Shooting Syllabus

ACP 18 Manual of Marksmanship Training

Volume 3 (January 2017)

FOREWORD

Any person wishing to propose amendments to this pamphlet is invited to write to HQAC - OC Training Development Team and HQAC – TG5. Such proposal will be given consideration and, if considered necessary, appropriate amendments will be prepared for publication.

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AMENDMENTS

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ASSOCIATED PUBLICATIONS

For the latest edition and/or amendments of each publication, visit BADER.

Publication	Title
ACP18 Vol 1	Manual of Marksmanship Training – Shooting Policy
ACP18 Vol 2	Manual of Marksmanship Training – The Basic Skills
ACP18 Vol 2 Sup	Manual of Marksmanship Training – BSA Scorpion .177 Air Rifle (Single Shot), Air Arms CZ 200 .177 Air Rifle (Single Shot) and Associated Equipment
ACP18 Vol 2 Sup	Manual of Marksmanship Training – WHTs Supplement
72027	Cadet Training – Skill at Arms. The L144A1 Cadet Small Bore Target Rifle
Uncoded	Cadet Training – Skill at Arms. BSA Scorpion Cadet .177 Air Rifle, Air Arms CZ200 .177 Cadet Air Rifle and Associated Equipment
71807-C	Cadet Training – Skill at Arms. The L98A2 Cadet GP Rifle (5.56mm), L86A2 Light Support Weapon and Associated Equipment
71847	The L81A2 Cadet Target Rifle
71855-C	Cadet Training – Ranges. Regulations for Cadets Training with Cadet Weapon Systems and Pyrotechnics

CHAPTER 1

CADET SHOOTING SYLLABUS OVERVIEW

Background

0101. Shooting for cadets is one of the most popular activities the Air Cadet Organisation (ACO) offers, and is second only to flying and gliding.

0102. The aim of shooting in the ACO is to allow cadets to participate safely in Target Rifle, Service Rifle and Clay Target Competitions with small-bore, full-bore, air rifles and shot guns against other cadet units, Services teams, civilian clubs and youth organisations and develop an appreciation of shooting as a sport up to Olympic level. It also supports cadets in their participation of the Duke of Edinburgh's Award Scheme as a "skill".

0103. Shooting helps develop hand/eye co-ordination, concentration, the ability to assess environmental conditions and make appropriate decisions and adjustments. It also requires awareness of the position and safety of others and an ability to follow instructions precisely. In addition, it requires the ability to work with precise resources to an exact time constraint. As a consequence, cadets acquire self-discipline, control and self-confidence.

0104. The purpose of the marksmanship training outlined in this publication is to ensure that our cadets are able to be recognised for their achievements across different disciplines, that a progressive syllabus is provided that is both open to all but also supports those cadets who progress on to represent the organisation in Inter-Services competitions.

Scope of Cadet Shooting Syllabus

0105. The progression for cadet shooting training and testing is a package. Weapon Lessons and Weapon Handling Tests (WHT) are outlined in the appropriate Weapon Pamphlets, this document in turn lays down the Cadet Live Firing (CLF) lessons, as well as the different Marksmanship Tests for all Cadets Weapon Systems. The CLF lessons provide a progressive set of lessons for each Cadet Weapon System that will take a cadet from achieving a grouping at a short distance, all the way through to application of fire (at longer distances for the L98A2, L86A2 and L81A2). Throughout the progression, achievements are recognised via the award of a marksmanship badge.

0106. Within this document, a chapter is dedicated to each of the Cadet Weapon Systems and provides the RCO with the information required to enable a CLF lesson to be planned.

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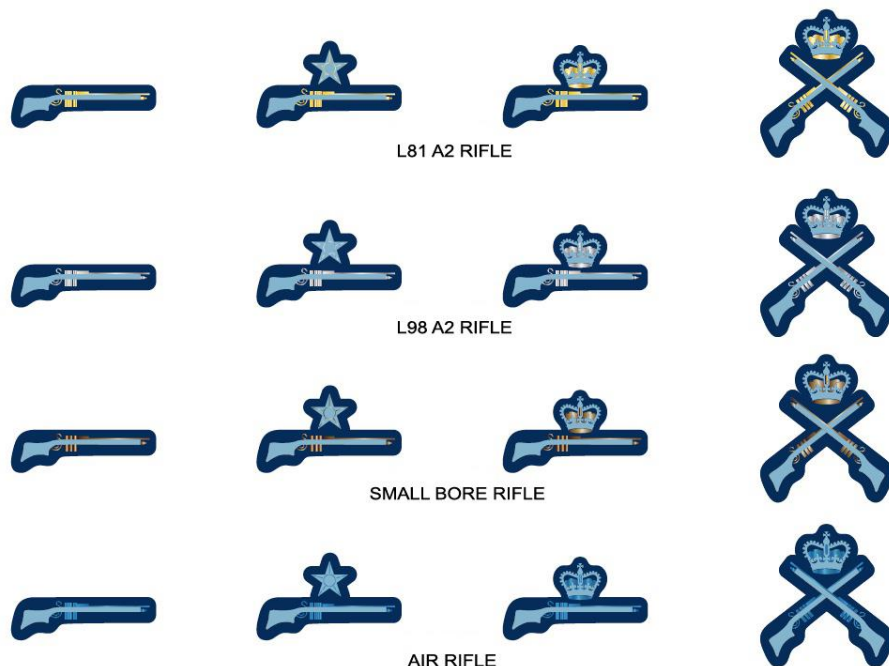
Marksmanship Awards

0107. To recognize and encourage cadets to participate in shooting and to improve their individual marksmanship capabilities, marksmanship awards are available for the core Cadet Weapon Systems¹ as follows:

- a. Air Rifle – Blue Badge
- b. Small Bore Rifle – Bronze Badge
- c. L98A2 Rifle – Silver Badge
- d. L81A2 Rifle – Gold Badge

0108. Marksmanship badges are awarded as follows:

- a. Trained Shot (Single Rifle) – for completion of Initial Weapon Training, passing a WHT and completing the initial required CLF lessons (i.e. being able to hold a group).
- b. Marksman (Rifle with Star) – for completing the Marksmanship Test and achieving the required score.
- c. Advanced Marksman (Rifle with Crown) – for completing the Marksmanship Test and achieving the required score.
- d. Competition Marksman (Crossed Rifles with Crown) – for participation in a recognised Cadet Forces Competition, as listed in Para 0111 of this chapter.



¹ No marksmanship badge is awarded for use of the L86A2

0109. **Precedence.** The precedence of Marksmanship Badges worn is based on the Weapon System they were gained on. As an example, if a cadet has been awarded a blue Advanced Marksman badge (for passing a Marksmanship Test on the Air Rifle) and then goes on to complete IWT, pass a WHT and complete the initial CLF Lessons on the Small Bore Rifle, then they would remove the blue Advanced Marksman badge and replace with a bronze Trained Shot badge.

Competitions

0110. The overall objective of cadet shooting is to continually improve individual marksmanship. To provide further challenge to cadets, active participation in shooting competitions (be it on a unit, between units or inter-services) should be encouraged.

0111. Cadets who participate in the following competitions, having successfully completed the required CLF lessons on the weapon system, will be eligible for the award of the Crossed Rifles with Crown marksmanship badge.

- a. Air Rifle
 - (1) ATC Postal Competitions
 - (2) CCRS Postal Competitions
- b. Small Bore Rifle
 - (1) ATC Postal Competitions
 - (2) CCRS Postal Competitions
- c. L81A2
 - (1) CCRS Postal Competitions
 - (2) ISCRM
- d. L98A2
 - (1) CCRS Postal Competitions
 - (2) CISSAM

0112. Any cadet whose best aggregate score is amongst the top 100 at ISCRM will receive a “Cadet Hundred” badge. Any cadet whose best aggregate score is amongst the top 50 at CISSAM will receive a “Cadet Fifty” badge.

Shooting Records

0113. The following shooting records should be maintained for all cadets:

- a. F3822 – Cadet Record of Service Book
- b. BADER SMS – Shooting Records

Purpose Built Ranges and Their Use

0114. The following purpose built ranges are should be used for Training the Cadet Shot:

Ser	Type of Range	Type of Training
1	5.5m Air Rifle Range	<ol style="list-style-type: none"> 1. All Air Rifle CLF lessons 2. Minimum Qualification Required – SA(SR)07 or SA(AR)12
2	Indoor Range	<ol style="list-style-type: none"> 1. All Small Bore Rifle CLF lessons 2. Minimum Qualification Required – SA(SR)07
3	Dismounted Close Combat Trainer (DCCT)	<ol style="list-style-type: none"> 1. Simulated firing of the L98A2 (by use of the L85-A2) and L86A2 for CLF Lessons 2. Can be used for qualifying shoots of L98A2 LF1 to LF3 3. Minimum Qualification Required – DCCT Basic Operator and SA(SR)07
4	25m Range / 25m Barrack Range	<ol style="list-style-type: none"> 1. All Small Bore Rifle CLF lessons. 2. Introduction to full bore shooting via the initial CLF Lessons (on the L81A2, L86A2 and L98A2) 3. Minimum Qualification Required – SA(SR)07
5	Zero Range	<ol style="list-style-type: none"> 1. All Small Bore Rifle CLF lessons. 2. Introduction to full bore shooting via the initial CLF Lessons (on the L81A2, L86A2 and L98A2) 3. CLF Lessons for the L81A2, L86A2 and L98A2 that require 100m 4. Minimum Qualification Required – SA(LR)07
6	Gallery Range	<ol style="list-style-type: none"> 1. CLF Lessons for the L81A2, L86A2 and L98A2 that require longer distances (typically application of fire) 2. Minimum Qualification Required – SA(LR)07
7	Converted Gallery Range	<ol style="list-style-type: none"> 1. CLF Lessons for the L86A2 and L98A2 that require longer distances (typically application of fire) 2. CLF Lessons for the L81A2 (if the CGR is used in Gallery Mode) 3. Minimum Qualification Required – SA(LR)07

Ser	Type of Range	Type of Training
8	Electric Target Range	1. CLF Lessons for the L86A2 and L98A2 that require longer distances (typically application of fire) 2. Minimum Qualification Required – SA(LR)07

Coaching

0115. **Importance.** The importance of coaching cannot be over emphasised. Comparisons can be made to any other skill or sport – expert tuition and practice are essential.

0116. CFAVs can receive training on coaching via attendance on the Elementary Coaching Course, Cadet Forces Range Management courses or the Cadet Target Rifle Coaching Course. Additional information on Coaching can also be obtained from Cadet Training – Skill at Arms.

0117. **Qualities of the Coach.** Coaches need the following key qualities:

- a. To be a good instructor – to be enthusiastic, convincing and patient.
- b. To be a good shot – with a sound understanding of this publication and the coaching techniques and procedures.

Guidance to Commanders

0118. Commanders at all levels are responsible for ensuring that cadets have the opportunity to participate and progress in shooting across all Cadet Weapon Systems. Whilst it is acknowledged that access to weapons, ranges, ammunition and qualified staff can sometimes be an issue, collaboration and team work between squadrons is key to ensure that the best use of these resources are made to enable this element of the cadet experience.

0119. The aim of this short section is to provide a brief overview of the Integrated Cadet Shooting Policy and to offer guidance to Commanders on what the policy contains and the resources required to deliver the relevant CLF lessons.

0120. Training the Cadet Shot is made up of 3 stages across the Cadet Weapon Systems. These stages are:

- a. Trained – IWT completed, WHT passed and initial CLF lessons completed
- b. Marksman – Additional CLF lessons completed, marksmanship test passed
- c. Discretionary – Additional CLF lessons to further develop the cadet, usually in preparation for participation in competitions

0121. Each stage contains a number of CLF lessons. All are designed to be progressive and developmental. Coaching will improve standards and should be given

to all firers, but will be of specific benefit to those who have difficulty in applying the marksmanship principles to achieve the required standards. Safety is a major factor in shooting training, but it should not be regarded as a restrictive constraint. A lot of productive shooting can be conducted using a SA(SR)07 qualification on a short range. The tables at the end of this chapter detail the shoots and associated qualifications / ranges required.




0122. **Concept in Detail.** The concept of Training the Cadet Shot is founded on inter-dependence. Each stage of training is mutually reinforced. Cadets should not move on to another CLF lesson until they have attained the standards required to “pass” subsequent lessons.

0123. **Trained – Grouping and Zeroing at Short Distances.** Cadets are to be trained to group consistently to the required standard from all approved firing positions. No cadet should zero their weapon until they can achieve the required grouping standard. A cadets’ success in applying fire is directly related to their ability to group consistently.

0124. **Marksman – Elementary Application of Fire.** Cadets will develop their ability to group consistently (looking to improve the group side) as well as being introduced to deliberate practices and elementary application of fire at short distances (i.e. snap practices)




0125. **Discretionary – Advanced Application of Fire.** Where cadets have shown aptitude, or have an interest, they will move on to discretionary CLF lessons that do not count directly for marksmanship awards. These CLF lessons will typically involve advanced application of fire (e.g. snap, rapid practices) at greater distances and in different positions (when supported by the weapon system). These CLF lessons should be used to assist in developing cadets as they progress on to competition shoots.

GUIDE TO COMMANDERS – AIR RIFLE

	Trained		Marksman		Discretionary
Trained		= Minimum trained standard			
Marksman		= The standard to gain marksmanship awards			
Discretionary		= Conducted to support specific training requirements, i.e. competitions			




Practice	Range	Qual	Lesson	Remarks
WHT	Nil	SAAI	WHT	
CLF1 - Grouping 2x 5rnds Grouping (supported) 2x 5rnds Grouping (unsupported)	5.5m	SA(SR)07 or SA(AR)12	CLF1	
CLF2 - Zeroing 2x 5rnds Grouping (supported) 2x 5rnds Grouping (unsupported) 4x 5rnds Grouping (supported) 1x 5rnds Grouping (supported)	5.5m	SA(SR)07 or SA(AR)12	CLF2	If score met, Trained Shot awarded
CLF3 - Marksman Test 5x 5rnds Grouping 2x 10rnds Application	5.5m	SA(SR)07 or SA(AR)12	CLF3	If score met, Marksman or Advanced Marksman awarded
CLF4 - Elementary Application (Kneeling) 2x 5rnds Grouping (Kneeling) 2x 5rnds Application (Kneeling)	5.5m	SA(SR)07 or SA(AR)12	CLF4	
CLF5 - Advanced Application 1x 5rnds Grouping (Prone) 1x 5rnds Grouping (Kneeling) 1x 5rnds Grouping (Standing) 1x 5rnds Application (Prone) 1x 10rnds Snap (Kneeling) 1x 10rnds Snap (Standing)	5.5m	SA(SR)07 or SA(AR)12	CLF5	

GUIDE TO COMMANDERS – SMALL BORE RIFLE

	Trained		Marksman		Discretionary
Trained		= Minimum trained standard			
Marksman		= The standard to gain marksmanship awards			
Discretionary		= Conducted to support specific training requirements, i.e. competitions			

Practice	Range	Qual	Lesson	Remarks
WHT	Nil	SAAI	WHT	
CLF1 – Introduction to Grouping 4x 5rnds Grouping (Unsupported)	25yds	SA(SR)07	CLF1	
CLF2 - Grouping and Zeroing 1x 5rnds Grouping (supported) 3x 3rnds Zero (supported) 1x 3rnds Grouping (supported)	25yds	SA(SR)07	CLF2	If score met, Trained Shot awarded
CLF3 - Application 2x 5rnds Grouping (unsupported) 1x 5rnds Deliberate (unsupported) 1x 5rnds Snap (unsupported) 1x 5rnds Rapid (unsupported)	25yds	SA(SR)07	CLF3	
CLF4 - Marksman Test 1x 5rnds Grouping (unsupported) 1x 5rnds Deliberate (unsupported) 1x 5rnds Rapid (unsupported) 1x 5rnds Snap (unsupported)	25yds	SA(SR)07	CLF4	If score met, Marksman or Advanced Marksman awarded
CLF5 - Advanced Application 2x 5rnds Grouping (unsupported) 2x 10rnds Application (unsupported)	25yds	SA(SR)07	CLF5	

GUIDE TO COMMANDERS – L98A2 RIFLE

	Trained		Marksman		Discretionary
Trained		= Minimum trained standard			
Marksman		= The standard to gain marksmanship awards			
Discretionary		= Conducted to support specific training requirements, i.e. competitions			

Practice	Range	Qual	Lesson	Remarks
WHT	Nil	SAAI	WHT	
CLF1 - Introductory Shoot 4x 5rnds Grouping (prone)	25m or DCCT	SA(SR)07	CLF1	If DCCT used, Basic Op required.
CLF2 - Zeroing at 25m 3x 3rnds Grouping (prone) 1x 3rnds Grouping (prone)	25m	SA(SR)07	CLF2	
CLF3 - Grouping (all positions) 6x 5rnds Grouping (Prone, Sitting, Kneeling)	25m or DCCT	SA(SR)07	CLF3	If score met, Trained Shot awarded
CLF4 – Application of Fire / Marksmanship 2x 5rnds Deliberate (Prone) 2x 5rnds Snap (Prone) 2x 5rnds Rapid (Prone)	25m	SA(SR)07	CLF4	If score met, Marksman awarded
CLF5 - Zeroing at 100m 4x 5rnds Grouping (prone) 1x 5rnds Grouping (prone)	100m	SA(LR)07	CLF5	
CLF6 - Grouping at 100m (all positions) 2x 5rnds Grouping (Prone) 2x 5rnds Grouping (Fire Trench) 2x 5rnds Grouping (Kneeling unsupported) 2x 5rnds Grouping (Sitting unsupported)	100m	SA(LR)07	CLF6	
CLF7 - Application (all positions)/Marksmanship 6x 5rnds Deliberate (prone) 2x 5rnds Deliberate (kneeling unsupported) 2x 5rnds Deliberate (fire trench) 2x 5rnds Deliberate (sitting unsupported)	100m to 300m	SA(LR)07	CLF7	If score met, Advanced Marksman awarded
CLF8 – Advance Application 2x 8rnds Snap (prone) 1x 8rnds Snap (sitting) 1x 8rnds Snap (kneeling) 1x 8rnds Rapid (fire trench) 1x 8rnds Snap (kneeling supported)	100m to 200m	SA(LR)07	CLF8	




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Practice	Range	Qual	Lesson	Remarks
CLF9 – Advanced Application 1x 5rnds Snap (fire trench) 1x 5rnds Snap (Sitting unsupported) 1x 10rnds Snap/Rapid (Prone) 1x 10rnds Snap/Rapid (Kneeling unsupported)	100m to 200m	SA(LR)07	CLF9	

Notes:




LF1 and 3 can be carried out either live or on a DCCT and scores will count.
 All other CLF practices can be practiced on a DCCT.

GUIDE TO COMMANDERS – L81A2 RIFLE

 Trained	 Marksman	 Discretionary
Trained	= Minimum trained standard	
Marksman	= The standard to gain marksmanship awards	
Discretionary	= Conducted to support specific training requirements, i.e. competitions	

Practice	Range	Qual	Lesson	Remarks
WHT	Nil	SAAI	WHT	
CLF1 - Zeroing and Grouping 5x 5rnds Grouping	25m	SA(SR)07	CLF1	
CLF2 - Application at 300yds & 500yds 2x 9rnds Deliberate	300yds and 500yds	SA(LR)07	CLF2	If score met, Trained Shot awarded
CLF3 - Marksmanship 2x 9rnds Deliberate	300yds and 500yds	SA(LR)07	CLF3	If score met, Marksman or Advanced Marksman awarded
CLF4 - Application at 600yds 12rnds Deliberate	600yds	SA(LR)07	CLF4	

GUIDE TO COMMANDERS – L86A2

	Trained		Marksman		Discretionary
Trained		= Minimum trained standard			
Marksman		= The standard to gain marksmanship awards			
Discretionary		= Conducted to support specific training requirements, i.e. competitions			

Practice	Range	Qual	Lesson	Remarks
WHT	Nil	SAAI	WHT	
CLF1 - Introductory Shoot 2x 5rnds Grouping (prone) 4x 3rnds Burst Grouping (prone) 4x 3rnds Burst Grouping (prone)	25m or DCCT	SA(LR)07	CLF1	If DCCT used, Basic Op required.
CLF2 - Zeroing at 25m 3x 3rnds Grouping (prone) 1x 3rnds Grouping (prone)	25m	SA(LR)07	CLF2	
CLF3 - Grouping at 100m 3x 5rnds Grouping (prone) 2x 9rnds Burst Grouping (prone)	100m	SA(LR)07	CLF3	
CLF4 - Elementary Application of Fire 2x 5rnds Deliberate (prone) 2x 5rnds Deliberate (fire trench) 2x 12rnds Deliberate Burst (fire trench)	200m and 300m	SA(LR)07	CLF4	
CLF5 - Advanced Application of Fire 3x 5rnd Snap (Prone) 3x 10rnds Rapid (prone) 3x 12rnds Timed Burst (prone)	100m, 200m and 300m	SA(LR)07	CLF5	

CHAPTER 2

THE AIR RIFLE

Scope

0201. Chapter 2 sets out all Air Rifle Cadet Live Firing (CLF) lessons to be completed in the stages set out in this chapter. It includes the application of CLF lessons to all Air Rifles and frequency with which they are to be fired.

0202. This progression and frequency of firing is essential for preparing cadets for marksmanship qualifications. It is also essential if preparing the firer to shoot under competition conditions.

0203. The Air Rifle is a great asset for Marksmanship training. It can be used for training cadets with no shooting experience, right through to high level competition shooting.

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Training and Firing Sequence

0204. **Air Rifle Training.** The Cadet Live Fire (CLF) lesson's listed below are only to be fired by cadets in the order laid out. They are set as progressive shoots; each lesson must be passed before they can progress onto the next. Marksmanship awards are incorporated into this progression for cadets to work through.

CLF Lesson No	Content	Page No
1	Grouping	2-04
2	Zeroing	2-07
3	Marksmanship Test	2-10
4	Elementary Application of Fire	2-13
5	Advanced Application of Fire	2-16

Safety

0205. It is mandatory for all firers to have completed WHTs prior to their first live firing of any weapon, in order to ensure a minimum standard of safety. Conducting officers **must** confirm that all cadets firing any weapon have completed the relevant WHTs prior to firing.

Conduct of Air Rifle CLF Lessons

0206. **General Requirements.** The general requirements of equipment and outline range procedures, which apply to all ranges are shown below. Any requirements specific to a particular CLF lesson are contained at the start of each lesson.

0207. **Zeroing Rifles.** Once cadets have passed Air Rifle CLF2, it is imperative that before conducting any other Air Rifle LF lesson that the rifle being used is zeroed by the cadet. Air Rifle CLF2 can be used as a standard LF lesson when there is a requirement for weapons to be zeroed.

0208. **Marksmanship Awards.** All CLF Lessons must be completed in the order stated within this chapter. The Cadet must achieve the required pass mark of each CLF Lesson before they may progress to the next. All standards are laid out at the end of each CLF Lesson.

0209. **Targetry.** Air rifle in cadet shooting is carried out at both 5.5metres (6 yards) and 10metres. There are two main targets used for Air Rifle shooting and these are:



NSRA 6 Yards Air 7 5 Target Air Rifle



NSRA 10 Metre Air 3 5 Target Air Rifle

0210. All LFMT practices clearly indicate which targets are required. All targets can be ordered via Wing Headquarters. NSN numbers can be found on individual targets or through inventory catalogues.

0211. **Stores.** The following stores are required:

Air Rifles	1 per cadet
Cleaning material	As required
Issued, serviceable hearing protection	1 per cadet
Issued, serviceable eye protection	1 per cadet
First aid kit	Complete
Spotting Scopes	1 per coach
Score sheets	As required

0212. **Dress.** Due to the nature of the weapon, the wearing of webbing or Cadet Training Vest during Instructional Periods, WHT's or live firing is not permitted. Cadets and CFAVs are however required to wear uniform (i.e. No 2 or 3 Dress or Coveralls) with sleeves rolled down (to protect elbows when laid down).

0213. **Scoring a Group.** To score a grouping practice, the Extreme Spread (ES) needs to be measured. The ES is calculated by measuring the distance between the centres of the two shot holes furthest apart within the group.

0214. **Miscellaneous.** The term 'supported' means that the rifle's weight may be supported by the firers forearm resting on a sand bag. It is there to aid the firer so they can concentrate on mastering aiming and trigger control. Before using a support, the firer should adopt the prone position and the support be put in place against the back of the forearm. The rifle itself should not be resting on the support. The term 'unsupported' means that the above mentioned (or any other) rests may not be used to support the rifle. However, the use of a single point or two point sling is allowed and encouraged.

AIR RIFLE CLF1 - GROUPING AT 5.5 METRES (PRONE)

A. RCO NOTES

0215. **Aim.** To confirm that the cadet can hold, aim and fire the air rifle correctly in the prone position

0216. **Conduct.** This lesson is to be conducted on a 5.5 metre Air rifle range.

0217. **Timings.** Each detail will take approximately 20 minutes to complete all practices.

0218. **Stores.**

Normal range stores
2 x NSRA Air 7 6 Yards 5 Target Air Rifle Card
20 x .177 pellets per firer

0219. **Miscellaneous.** If the MPI of the groups in the prone position are badly misplaced from the CZP, the sights should be adjusted by the coach to avoid the possibility of wasting pellets in Air Rifle CLF 2. (These adjustments should not be discussed with the firer)

B. CONDUCT OF THE LESSON

Preliminaries

0220. **Safety.** Normal safety precautions.

0221. **Preparing the rifle for firing.** Remind the squad of the procedures for cleaning the rifle before firing by imitating the following:

- a. Dry clean the whole rifle and examine it for wear and damage, paying particular attention to all moving parts.
- b. All other components are to be left dry.
- c. Test that the rifle functions correctly.

0222. **Confirmation.** Confirm by practice. Prepare the rifles for firing.

0223. **Range Safety Rules.** Explain and demonstrate as necessary the range safety rules (see Cadet Training – Ranges).

0224. **Firing Practice.** Explain the smaller the size of the group of shots the more accurate the firer will become. They will not obtain a good group unless:

- a. They are determined that each shot will be a good one.
- b. They apply the marksmanship principles.

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- c. They always aim in the same place, i.e. the centre of the aiming mark.
- d. They inform the coach of the sight picture the moment the shot was fired.

0225. **Confirmation.** Confirm by questions

Practice Details

0226. Practice details are as follows:

Practice 1. Grouping	
Range/Positioning	5.5 m Prone (supported)
Ammunition	10rds
Target/Exposure	1x NSRA Air Gun target Air 7-6 Yards 5 Target Air Rifle Card
Instructions	1. Fire a five round group at top Left diagram. 2. Discuss group size with firer and record group size 3. Repeat the practice at top Right diagram.

Practice 2. Grouping	
Range/Positioning	5.5 m Prone (unsupported)
Ammunition	10rds
Target/Exposure	1x NSRA Air Gun target Air 7-6 Yards 5 Target Air Rifle Card
Instructions	Repeat as per practice 1 but with rifle unsupported.

Standards

0227. Each group is to be scored using the values below. Add the four scores together to get the lesson score:

Prone Grouping	(Supported)	----	05mm	-	25
			10mm	-	20
			15mm	-	15
			20mm	-	10
Prone Grouping	(Unsupported)	----	10mm	-	25
			15mm	-	20
			20mm	-	15
			25mm	-	10
Pass mark					60

After Firing Procedure

0228. **Cleaning after Firing.** The rifle is to be cleaned with a lightly oiled cloth after use and prior to storage.

0229. **Care after cleaning.** Explain:

- a. Special attention is to be given to metal surfaces as they can rust easily.
- b. Ensure the rifle is completely dry before being stored away.
- c. NEVER use oils containing SILICON as they can cause damage to metal surfaces.
- d. DO NOT tamper with any of the rifles components at any time as damage may occur rendering the rifle inoperable.
- e. Any damage is to be reported in accordance with the manufacturers after care documentation or unit SOPs.

End of Lesson Procedure

0230. At the end of each CLF lesson the following drills are to be completed once the range is cleared.

- a. Questions from the firers on the range period.
- b. Carry out normal safety precautions and take declaration.
- c. Pack kit.
- d. Summary of standard achieved, specific points relevant to lesson, forecast of next CLF lesson.

AIR RIFLE CLF2 - ZEROING AT 5.5 METRES (PRONE)

A. RCO NOTES

0231. **Aim.** To confirm that the cadet can fire effectively in the prone position and to teach how the rifle is zeroed.

0232. **Conduct.** This lesson is to be conducted on a 5.5 metre Air rifle range.

0233. **Timings.** Each detail will take approximately 45 minutes to complete all practices.

0234. **Stores.**

Normal range stores
4x NSRA Air 7 6 Yards 5 Target Air Rifle Card
45 .177 pellets per firer

0235. **Miscellaneous.** If the MPI of the groups in practice 1 & 2 are badly misplaced from the CZP, the sights should be adjusted by the coach to enable practice 3 to be conducted effectively. (These adjustments should not be discussed with the firer)

B. CONDUCT OF THE LESSON

Preliminaries

0236. **Safety.** Normal safety precautions.

0237. **Preparing the rifle for firing.** Remind the squad of the procedures for cleaning the rifle before firing by imitating the following:

- a. Dry clean the whole rifle and examine it for wear and damage, paying particular attention to all moving parts.
- b. All other components are to be left dry.
- c. Test that the rifle functions correctly.

0238. **Confirmation.** Confirm by practice. Prepare the rifles for firing.

0239. **Range Safety Rules.** Explain and demonstrate as necessary the range safety rules (see Cadet Training – Ranges).

0240. **Firing Practice.** Explain the smaller the size of the group of shots the more accurate the firer will become. They will not obtain a good group unless:

- a. They are determined that each shot will be a good one.
- b. They apply the marksmanship principles.

HANDLING INSTRUCTIONS: FOR MOD CADET FORCES USE ONLY

- c. They always aim in the same place, i.e. the centre of the aiming mark.
- d. They inform the coach of the sight picture the moment the shot was fired.

0241. **Confirmation.** Confirm by questions

Practice Details

0242. Practice details are as follows:

Practice 1. Grouping	
Range/Positioning	5.5 m Prone (unsupported)
Ammunition	10rds
Target/Exposure	1x NSRA Air Gun target Air 7-6 Yards 5 Target Air Rifle Card
Instructions	1. Fire a five round group at top Left diagram. 2. Discuss group size with firer and record group size 3. Repeat the practice at top Right diagram.

Practice 2. Grouping	
Range/Positioning	5.5 m Prone (unsupported)
Ammunition	10rds
Target/Exposure	1x NSRA Air Gun target Air 7-6 Yards 5 Target Air Rifle Card
Instructions	Repeat as per practice 1 but with rifle unsupported.

Practice 3. Zero	
Range/Positioning	5.5 m Prone (unsupported)
Ammunition	20rds
Target/Exposure	1x NSRA Air Gun target Air 7-6 Yards 5 Target Air Rifle Card
Instructions	1. Fire 4x5 round groups in the prone position. One at each corner diagram. 2. The firer is to make the weapon safe, stand up, then re-adopt the prone position between each group. 3. Discuss the groups and measure the group sizes. 4. Identify the MPI and adjust the zero if required.

Practice 4. Check Group	
Range/Positioning	5.5 m Prone (supported)
Ammunition	5rds
Target/Exposure	1x NSRA Air Gun target Air 7-6 Yards 5 Target Air Rifle Card
Instructions	1. Fire a five round check group to confirm zero at centre diagram. 2. If the correct zero is not achieved, repeat Practice 3 using this group plus a further 15 rounds.

Standards

0243. The lesson is passed once the rifle is satisfactorily zeroed. Upon successful completion of this lesson the first Trained Shot badge may be awarded.

After Firing Procedure

0244. **Cleaning after Firing.** The rifle is to be cleaned with a lightly oiled cloth after use and prior to storage.

0245. **Confirmation.** Confirm by practice.

0246. **Care after cleaning.** *Explain:*

- a. Special attention is to be given to metal surfaces as they can rust easily.
- b. Ensure the rifle is completely dry before being stored away.
- c. NEVER use oils containing SILICON as they can cause damage to metal surfaces.
- d. DO NOT tamper with any of the rifles components at any time as damage may occur rendering the rifle inoperable.
- e. Any damage is to be reported in accordance with the manufacturers After Care Documentation or unit SOPs.

End of Lesson Procedure

AIR RIFLE CLF 3 - MARKSMANSHIP TEST

A. RCO NOTES

0247. **Aim.** To confirm training carried out in Air Rifle CLF 1 and 2 by shooting for a marksman award.

0248. **Conduct.** This lesson is to be conducted on a 5.5 metre Air rifle range in the prone position.

0249. **Timings.** Each marksman qualification will take approximately 45 minutes to complete all practices.

0250. **Stores.**

Normal range stores
4x NSRA Air 7 6 Yards 5 Target Air Rifle Card
25 .177 pellets per firer

0251. **Miscellaneous.** If the MPI of the groups in the prone position are badly misplaced from the CZP, CLF 2 (Zeroing) should be carried out.

B. CONDUCT OF THE LESSON

Preliminaries

0252. **Safety.** Normal safety precautions.

0253. **Preparing the rifle for firing.** Remind the squad of the procedures for cleaning the rifle before firing by imitating the following:

- a. Dry clean the whole rifle and examine it for wear and damage, paying particular attention to all moving parts.
- b. All other components are to be left dry.
- c. Test that the rifle functions correctly.

0254. **Confirmation.** Confirm by practice. Prepare the rifles for firing.

0255. **Range Safety Rules.** Explain and demonstrate as necessary the range safety rules (see Cadet Training – Ranges).

0256. **Confirmation.** Confirm by questions

Practice Details

0257. Practice details are as follows:

Practice 1. Sighting Shots	
Range/Positioning	5.5 m Prone (unsupported)
Ammunition	5rds
Target/Exposure	1x NSRA Air Gun target Air 7-6 Yards 5 Target Air Rifle Card
Instructions	1. Fire a five round group at top Left diagram. 2. Discuss group size with firer and record group size.

Practice 2. Application	
Range/Positioning	5.5 m Prone (unsupported)
Ammunition	10rds
Target/Exposure	1x NSRA Air Gun target Air 7-6 Yards 5 Target Air Rifle Card
Instructions	1. Fire two rounds at each diagram. 2. Discuss performance and record the score.

Practice 3. Application	
Range/Positioning	5.5 m Prone (unsupported)
Ammunition	10rds
Target/Exposure	1x NSRA Air Gun target Air 7-6 Yards 5 Target Air Rifle Card
Instructions	As per practice 2

Standards

0258. The cards are to be scored as inward gauging and the scores combined.

Marksman	= 150
Advanced Marksman	= 175
HPS	= 200

Practice 1 (Sighting shots) does not count towards the score.

After Firing Procedure

0259. **Cleaning after Firing.** The rifle is to be cleaned with a lightly oiled cloth after use & prior to storage.

0260. **Confirmation.** Confirm by practice.

0261. **Care after cleaning.** Explain:

- Special attention is to be given to metal surfaces as they can rust easily.
- Ensure the rifle is completely dry before being stored away.
- NEVER use oils containing SILICON as they can cause damage to metal surfaces.

HANDLING INSTRUCTIONS: FOR MOD CADET FORCES USE ONLY

- d. DO NOT tamper with any of the rifles components at any time as damage may occur rendering the rifle inoperable.
- e. Any damage is to be reported in accordance with the manufacturers After Care Documentation or unit SOPs.

End of Lesson Procedure

AIR RIFLE CLF 4 - ELEMENTARY APPLICATION AT 5.5 METRES (KNEELING)

A. RCO NOTES

0262. **Aim.** To confirm that the cadet can hold, aim and fire the air rifle correctly in different positions

0263. **Conduct.** This lesson is to be conducted on a 5.5 metre Air rifle range.

0264. **Timings.** Each detail will take approximately 30 minutes to complete all practices.

0265. **Stores.**

Normal range stores
3x NSRA Air 7 6 Yards 5 Target Air Rifle Card
30 .177 pellets per firer

0266. **Miscellaneous.** The rifle should be zeroed for firing in the prone position before starting this lesson.

B. CONDUCT OF THE LESSON

Preliminaries

0267. **Safety.** Normal safety precautions.

0268. **Preparing the rifle for firing.** Remind the squad of the procedures for cleaning the rifle before firing by imitating the following:

- a. Dry clean the whole rifle and examine it for wear and damage, paying particular attention to all moving parts.
- b. All other components are to be left dry.
- c. Test that the rifle functions correctly.

0269. **Confirmation.** Confirm by practice. Prepare the rifles for firing.

0270. **Range Safety Rules.** Explain and demonstrate as necessary the range safety rules (see Cadet Training - Ranges).

0271. **Firing Practice.** Explain that a cadet who can fire their shots into a small group can become a good shot. They will not group well unless:

- a. They are determined that each shot will be a good one.
- b. They apply the marksmanship principles.
- c. They always aim in the same place, i.e. the centre of the aiming mark.

HANDLING INSTRUCTIONS: FOR MOD CADET FORCES USE ONLY

- d. They tell the coach what the aim picture was like at the moment of firing.

0272. **Confirmation.** Confirm by questions

Practice Details

0273. Practice details are as follows:

Practice 1. Grouping	
Range/Positioning	5.5 m Kneeling
Ammunition	5rds
Target/Exposure	1x NSRA Air Gun target Air 7-6 Yards 5 Target Air Rifle Card
Instructions	1. Fire a five round group in the kneeling position at bottom left diagram 2. Discuss the group and record the group size.

Practice 2. Grouping	
Range/Positioning	5.5 m Kneeling
Ammunition	5rds
Target/Exposure	1x NSRA Air Gun target Air 7-6 Yards 5 Target Air Rifle Card
Instructions	1. Fire a five round group in the kneeling position at bottom right diagram 2. Discuss the group and record the group size.

Practice 3. Application	
Range/Positioning	5.5 m Kneeling
Ammunition	10rds
Target/Exposure	1x NSRA Air Gun target Air 7-6 Yards 5 Target Air Rifle Card
Instructions	1. Fire two rounds at each diagram. 2. Discuss performance and record the score.

Practice 3. Application	
Range/Positioning	5.5 m Kneeling
Ammunition	10rds
Target/Exposure	1x NSRA Air Gun target Air 7-6 Yards 5 Target Air Rifle Card
Instructions	1. Fire two rounds at each diagram. 2. Discuss performance and record the score.

Standards

0274. The group sizes that should be achieved in practice are:

Practice 1	Grouping Kneeling	----	25mm	Pass
Practice 2	Grouping Kneeling	----	25mm	Pass
Practice 3	Application Kneeling	----	50	Pass
Practice 4	Application Kneeling	----	50	Pass

Application Scoring per hit: Scoring rings inward gauging 10,9, 8,7,6,5

After Firing Procedure

0275. **Cleaning after Firing.** The rifle is to be cleaned with a lightly oiled cloth after use & prior to storage.

0276. **Confirmation.** Confirm by practice.

End of Lesson Procedure

AIR RIFLE CLF 5 - ADVANCED APPLICATION AT 5.5 YARDS (PRONE, KNEELING, STANDING)

A. RCO NOTES

0277. **Aim.** To confirm that the cadet can hold, aim and fire the air rifle correctly in different positions

0278. **Conduct.** This lesson is to be conducted on a 5.5 metre Air rifle range.

0279. **Timings.** Each detail will take approximately 30 minutes to complete all practices.

0280. **Stores.**

Normal range stores
4x NSRA Air 7 6 Yards 5 Target Air Rifle Card
40 .177 pellets per firer

0281. **Miscellaneous.** The rifle should be zeroed for firing in the prone position before starting this lesson.

B. CONDUCT OF THE LESSON

Preliminaries

0282. **Safety.** Normal safety precautions.

0283. **Preparing the rifle for firing.** Remind the squad of the procedures for cleaning the rifle before firing by imitating the following:

- a. Dry clean the whole rifle and examine it for wear and damage, paying particular attention to all moving parts.
- b. All other components are to be left dry.
- c. Test that the rifle functions correctly.

0284. **Confirmation.** Confirm by practice. Prepare the rifles for firing.

0285. **Range Safety Rules.** Explain and demonstrate as necessary the range safety rules (see Cadet Training - Ranges).

0286. **Confirmation.** Confirm by questions

Practice Details

0287. Practice details are as follows:

Practice 1. Grouping	
Range/Positioning	5.5 m Prone (unsupported)
Ammunition	5rds
Target/Exposure	1x NSRA Air Gun target Air 7-6 Yards 5 Target Air Rifle Card
Instructions	1. Fire a five round group in the prone position. At centre diagram 2. Discuss the group and record the group size.

Practice 2. Grouping	
Range/Positioning	5.5 m Kneeling
Ammunition	5rds
Target/Exposure	1x NSRA Air Gun target Air 7-6 Yards 5 Target Air Rifle Card
Instructions	1. Fire a five round group in the kneeling position. At bottom left diagram 2. Discuss the group and record the group size.

Practice 3. Grouping	
Range/Positioning	5.5 m Standing
Ammunition	5rds
Target/Exposure	1x NSRA Air Gun target Air 7-6 Yards 5 Target Air Rifle Card
Instructions	1. Fire a five round group in the Standing position. At top left diagram 2. Discuss the group and record the group size.

Practice 4. Application	
Range/Positioning	5.5 m Prone (unsupported)
Ammunition	5rds
Target/Exposure	1x NSRA Air Gun target Air 7-6 Yards 5 Target Air Rifle Card
Instructions	1. Fire a five rounds application in the prone position. At centre diagram 2. Discuss the shoot and record the score.

Practice 5. Snap	
Range/Positioning	5.5 m Kneeling
Ammunition	5rds
Target/Exposure	1. 1x NSRA Air Gun target Air 7-6 Yards 5 Target Air Rifle Card 2. 5 x 8 second exposures with 10 second intervals
Instructions	1. Order "Watch and Shoot". 2. In the kneeling position, Fire two rounds at each exposure

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Practice 6. Snap	
Range/Positioning	5.5 m Standing
Ammunition	5rds
Target/Exposure	1. 1x NSRA Air Gun target Air 7-6 Yards 5 Target Air Rifle Card 2. 5 x 8 second exposures with 10 second intervals
Instructions	1. Order "Watch and Shoot". 2. In the standing position, Fire two rounds at each exposure

Standards

0288. The group sizes that should be achieved are:

Practice 1	Grouping Prone	----	15mm	Pass
Practice 2	Grouping Kneeling	----	25mm	Pass
Practice 3	Grouping Standing	----	35mm	Pass
Practice 4	Application Prone	----	40	Pass
Practice 5	Snap Kneeling	----	30	Pass
Practice 6	Snap Standing	----	20	Pass

Application Scoring per hit: Scoring rings inward gauging 10,9,8,7,6,5

After Firing Procedure

0289. **Cleaning after Firing.** The rifle is to be cleaned with a lightly oiled cloth after use & prior to storage.

0290. **Confirmation.**

End of Lesson Procedure

AIR RIFLE CLF 5 – TIME CHART

Practice	Range/Target	Timings		Remarks
5	5.5m NSRA Air Gun target Air 7-6 Yards 5 Target Air Rifle Card	UP 0:05 0:23 0:41 0:59 1:17	DOWN 0:13 0:31 0:49 1:07 1:25	UP AND HOLD
6	5.5m NSRA Air Gun target Air 7-6 Yards 5 Target Air Rifle Card	UP 0:05 0:23 0:41 0:59 1:17	DOWN 0:13 0:31 0:49 1:07 1:25	UP AND HOLD

CHAPTER 3

THE SMALL BORE RIFLE

Scope

0301. Chapter 3 sets out all Small Bore Rifle (SBR) Cadet Live Firing (CLF) lessons to be completed in LFMT Stages. It includes the application of CLF lessons.

0302. This progression and frequency of firing is essential for preparing cadets for marksmanship qualification. It is also essential if preparing the firer for any competition shoots.

0303. The SBR is a great beginner's rifle that can be used to introduce cadets into non Air Rifle shooting, as well as enable competition participation at all levels.

0304. The SBR may be fired on any 15, 20 or 25 metre range including ITT, Tube and Barrack Ranges.

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Training and Firing Sequence

0305. **SBR Training.** The Cadet Live Fire lessons listed below are only to be fired by cadets in the order laid out. They are set as progression shoots, each lesson must be passed before they can progress any further. Marksmanship awards are incorporated into this progression for cadets to work through.

CLF Lesson No	Content	Page No
1	Introduction to Grouping	3-04
2	Grouping and Zeroing	3-07
3	Application of Fire	3-10
4	Marksman Test	3-14
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Safety

0306. It is mandatory for all firers to have completed WHTs prior to their first live firing of a weapon, in order to ensure a minimum standard of safety. Conducting

officers **must** confirm that all cadets firing any weapon have completed the relevant WHTs prior to firing.

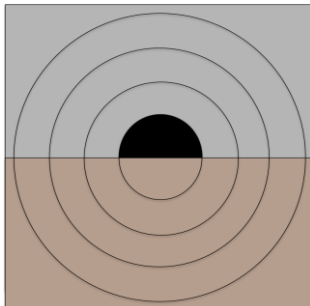
Conduct of CLF Lessons

0307. **General Requirements.** The general requirements of equipment and outline range procedures, which apply to all ranges are shown below. Any requirements specific to a particular CLF lesson are contained at the start of each lesson.

0308. **Zeroing Rifles.** Once cadets have passed Small Bore Rifle CLF2, it is imperative that before conducting any other Small Bore LF lesson that the rifle being used is zeroed by the cadet. Small Bore CLF2 can be used as a standard LF lesson when there is a requirement for weapons to be zeroed.

0309. **Marksmanship Awards.** All SBR CLF Lessons must be completed in the order stated within this chapter. The Cadet must achieve the required pass mark of each CLF Lesson before they may progress to the next. All standards are laid out at the end of each CLF Lesson.

0310. **Targetry** All SBR shooting is carried out at 25 metres. The targetry that should be utilised is illustrated below. This is to help identify correct targets for specific SBR CLF Lessons.



No. 29 Target



NSRA Tin Hat 2505TH 25 Yards
5 Target



NSRA 2510BM 25 Yard 10 Spot Target

HANDLING INSTRUCTIONS: FOR MOD CADET FORCES USE ONLY

0311. **Stores.** The following stores are required:

Small Bore Rifles	1 per cadet
Cleaning material	As required
Issued, serviceable hearing protection	1 per cadet
First aid kit	Complete
Spotting Scopes	1 per coach
Score sheets	As required

0312. **Dress.** Dress for SBR lessons should include full CS 95/PCS uniform including Jacket or Smock. Other dress may be working blue uniform with jersey. The use of webbing is not permitted.

0313. **Scoring a Group.** To score a grouping practice, the Extreme Spread (ES) needs to be measured. The ES is calculated by measuring the distance between the centres of the two shot holes furthest apart within the group.

0314. **Miscellaneous.** The term 'supported' means that the rifle's weight may be supported by the firers forearm resting on a sand bag. It is there to aid the firer so they can concentrate on mastering aiming and trigger control. Before using a support, the firer should adopt the prone position and the support be put in place against the back of the forearm. The rifle itself should not be resting on the support. The term 'unsupported' means that the above mentioned (or any other) rests may not be used to support the rifle. However, the use of a single point or two point sling is allowed and encouraged

SBR RIFLE CLF 1 – INTRODUCTION TO GROUPING

A. RCO'S NOTES

0315. **Aim.** To confirm that the cadet can hold, aim and fire the SBR rifle correctly in the prone position

0316. **Conduct.** The lesson is to be conducted using either an indoor range, tube range or a 25 metre barrack range using .22 rim fire ammunition.

0317. **Timing.** Each detail will take approximately 20 minutes to complete all practices.

0318. **Stores.**

Normal range stores (25m range)
1 x NSRA 5 bull tin hat target
20 rounds .22rf Ball ammunition per firer

0319. **Miscellaneous.** Instructors should be aware that additional time may be required in this lesson to coach firers through the marksmanship principles. Firers are to be trained in the use of a sling where possible as it will aid them.

B. CONDUCT OF THE LESSON

Preliminaries

0320. **Safety.** Normal safety precautions.

0321. **Preparing the Rifle for Firing.** Remind the squad the procedures for cleaning the rifle before firing.

0322. **Confirmation.** Confirm by practice. Prepare the rifles for firing.

0323. **Range Safety Rules.** Explain and demonstrate where necessary the range safety rules (see Cadet Training – Ranges).

Practice Details

0324. Practice details are as follows:

Practice 1. Grouping	
Range/Positioning	25 m Prone (unsupported)
Ammunition	5rds
Target/Exposure	1 x NSRA 5 bull tin hat target.
Instructions	1. Fire a 5 round group at <u>top left</u> aiming mark. 2. Discuss the group and record the group size.

Practice 2. Grouping	
Range/Positioning	25 m Prone (unsupported)
Ammunition	5rds
Target/Exposure	1 x NSRA 5 bull tin hat target.
Instructions	1. Fire a 5 round group at <u>top right</u> aiming mark. 2. Discuss the group and record the group size.

Practice 3. Grouping	
Range/Positioning	25 m Prone (unsupported)
Ammunition	5rds
Target/Exposure	1 x NSRA 5 bull tin hat target.
Instructions	1. Fire a 5 round group at <u>bottom left</u> aiming mark. 2. Discuss the group and record the group size.

Practice 4. Grouping	
Range/Positioning	25 m Prone (unsupported)
Ammunition	5rds
Target/Exposure	1 x NSRA 5 bull tin hat target.
Instructions	1. Fire a 5 round group at <u>bottom right</u> aiming mark. 2. Discuss the group and record the group size.

Standards

0325. The scoring objectives for the above practices are as follows:

Practice 1-4	---	25mm	= 25 points (Per group)
	---	40mm	= 20 points (Per group)
	---	50mm	= 15 points (Per group)
	---	65mm	= 10 points (Per group)

Pass mark = 45

The lesson is passed with a score of 45 or more.

After Firing Procedure

0326. **Cleaning after Firing.** Confirm stripping, cleaning and assembling.

0327. **Confirmation.** Confirm by practice. Rifles are to be inspected and left lightly oiled.

End of Lesson Procedure

0328. Range Close Down:

- a. NSP's
- b. Pack kit
- c. Declaration
- d. Summary
- e. Look forward – CLF02 Grouping and Zeroing

SBR RIFLE CLF 2 - GROUPING & ZEROING

A. RCO'S NOTES

0329. **Aim.** To teach the cadet how to correctly zero the rifle.

0330. **Conduct.** This lesson is to be conducted on any 25 metre range. Rifle may be rested / supported for this rifle lesson

0331. **Timings.** Each detail will take approximately 30 minutes to complete all practices.

0332. **Stores.**

Normal range stores
3 x No.29 Targets per firer
17 .22 rounds rim fire ammunition per firer

0333. **Miscellaneous.** If the MPI of the groups in the prone position are badly misplaced from the CZP, the sights should be adjusted by the coach to avoid the possibility of wasting rounds in CLF 2 (these adjustments should not be discussed with the firer).

B. CONDUCT OF THE LESSON

Preliminaries

0334. **Safety.** Normal safety precautions.

0335. **Preparing the rifle for firing.** Remind the squad of the procedures for cleaning the rifle before firing.

0336. **Confirmation.** Confirm by practice. Prepare the rifles for firing.

0337. **Range Safety Rules.** Explain and demonstrate as necessary the range safety rules (see Cadet Training – Ranges).

0338. **Firing Practice.** Explain that a cadet who can fire their shots into a small group can become a good shot. They will not group well unless:

- a. They are determined that each shot will be a good one.
- b. They apply the marksmanship principles.
- c. They always aim in the same place, i.e. the centre of the aiming mark.

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- d. They tell the coach what the aim picture was like at the moment of firing.

0339. **Confirmation.** Confirm by questions

Practice Details

0340. Practice details are as follows:

Practice 1. Grouping	
Range/Positioning	25 m Prone (unsupported)
Ammunition	5rds
Target/Exposure	No 29 Target
Instructions	1. Five round grouping 2. Coach to talk firer through the marksmanship principles

Practice 2. Zeroing	
Range/Positioning	25 m Prone (unsupported)
Ammunition	9rds
Target/Exposure	No 29 Target
Instructions	1. 3x three rounds groups with rifle at the same aiming mark 2. Under direction of coach, stand up between each 3 round group 3. Coach to talk firer through the marksmanship principles

Practice 3. Check Group	
Range/Positioning	25 m Prone (unsupported)
Ammunition	3rds
Target/Exposure	No 29 Target
Instructions	1. Five round grouping 2. Coach to talk firer through the marksmanship principles

Standards

0341. The group sizes that should be achieved are.

Practice 2 (unsupported)	----	38mm
Practice 3 (unsupported)	----	25mm

If the group sizes above are achieved, the Trained Shot badge may be awarded.

After Firing Procedure

0342. **Cleaning after Firing.** Confirm stripping, cleaning and assembling.

0343. **Confirmation.** Confirm by practice. Rifles are to be inspected and left lightly oiled.

End of Lesson Procedure

SBR RIFLE CLF 3 - APPLICATION OF FIRE

A. INSTRUCTOR'S NOTES

0344. **Aim.** To progress onto application shooting, using the SBR and advance from grouping practices.

0345. **Conduct.** This lesson is to be conducted on any 25 metre range. Rifles may not be rested / supported from this practice forward, however slings may be used.

0346. **Timings.** Each detail will take approximately 30 minutes to complete all practices.

0347. **Stores.**

Normal range stores
5x No.29 Targets per firer
25 .22 rim fire ammunition per firer
1 two point sling per firer

0291. **Miscellaneous.** As the next practices are more advanced, the shoots are unsupported, where possible use two point slings as it will aid the firer and increase scores. **The rifle should be zeroed for firing in the prone position before starting this lesson.**

B. CONDUCT OF THE LESSON

Preliminaries

0348. **Safety.** Normal safety precautions.

0349. **Preparing the rifle for firing.** Remind the squad of the procedures for cleaning the rifle before firing.

0350. **Confirmation.** Confirm by practice. Prepare the rifles for firing.

0351. **Range Safety Rules.** Explain and demonstrate as necessary the range safety rules (see Cadet Training – Ranges).

0352. **Confirmation.** Confirm by questions

Practice Details

0353. Practice details are as follows:

Practice 1. Grouping	
Range/Positioning	25 m Prone (unsupported)
Ammunition	5rds
Target/Exposure	No. 29 Target
Instructions	1. Five round grouping unsupported 2. Coaches to guide through the shoot.

Practice 2. Grouping	
Range/Positioning	25 m Prone (unsupported)
Ammunition	5rds
Target/Exposure	No. 29 Target
Instructions	1. Five round grouping unsupported 3. Coaches to guide through the shoot.

Practice 3. Deliberate	
Range/Positioning	25 m Prone (unsupported)
Ammunition	5rds
Target/Exposure	No. 29 Target 1 x 60 second exposure
Instructions	1. Rifle loaded. 2. On the order ' 5 rounds deliberate - watch and shoot '

Practice 4. Snap	
Range/Positioning	25 m Prone (unsupported)
Ammunition	5rds
Target/Exposure	No. 29 Target 5 x 5 second exposure
Instructions	1. Rifle loaded. 2. On the order ' 5 rounds snap - watch and shoot ' fire one round per exposure

Practice 5. Rapid	
Range/Positioning	25 m Prone (unsupported)
Ammunition	5rds
Target/Exposure	No. 29 Target 1 x 35 second exposure
Instructions	1. Rifle loaded 2. On the order ' 5 rounds rapid – watch and shoot '

Standards

0354. The group sizes that should be achieved the second time all practices are fired are:

Practice 1	----	50mm
Practice 2	----	50mm
Practice 3	----	4 shots within inner scoring ring
Practice 4	----	As per practice 3
Practice 5	----	As per practice 3

After Firing Procedure

0355. **Cleaning after Firing.** Confirm stripping, cleaning and assembling.

0356. **Confirmation.** Confirm by practice. Rifles are to be inspected and left lightly oiled.

End of Lesson Procedure

SBR RIFLE CLF 3 – TIME CHART

Practice	Range/Target	Timings		Remarks
3	25m No 29	UP 0:10	DOWN 1:10	UP AND HOLD
4	25m No 29	UP 0:10 0:25 0:35 0:45 0:55	DOWN 0:15 0:30 0:40 0:50 0:60	UP AND HOLD
5	25m No 29	UP 0:10	DOWN 0:45	UP AND HOLD

SBR RIFLE CLF 4 - MARKSMAN TEST

RCO'S NOTES

0357. **Aim.** To confirm the skills learned in CLF Lesson 3 and achieve a Marksman.

0358. **Conduct.** The lesson is to be conducted using either an indoor range, tube range or a 25 metre barrack range using .22 rim fire ammunition.

0359. **Timing.** Each detail will take approximately 20 minutes to complete all practices.

0360. **Stores.**

Normal range stores (25m range)
4x No. 29 Targets
20 rounds .22rf Ball ammunition per firer

0292. **Miscellaneous.** Instructors should be aware that additional time may be required in this lesson to coach firers through the marksmanship principles. Firers are to be trained in the use of a two point sling where possible as it will aid them.
The rifle should be zeroed for firing in the prone position before starting this lesson.

CONDUCT OF THE LESSON

Preliminaries

0361. **Safety.** Normal safety precautions.

0362. **Preparing the Rifle for Firing.** Remind the squad the procedures for cleaning the rifle before firing.

0363. **Confirmation.** Confirm by practice. Prepare the rifles for firing.

0364. **Range Safety Rules.** Explain and demonstrate where necessary the range safety rules (see Cadet Training – Ranges).

Practice Details

0365. Practice details are as follows:

Practice 1. Grouping	
Range/Positioning	25 m Prone (unsupported)
Ammunition	5rds
Target/Exposure	No. 29 Target
Instructions	1. Five round grouping unsupported 2. Coaches to guide through the shoot.

HANDLING INSTRUCTIONS: FOR MOD CADET FORCES USE ONLY

Practice 2. Deliberate	
Range/Positioning	25 m Prone (unsupported)
Ammunition	5rds
Target/Exposure	No. 29 Target 1 x 60 second exposure
Instructions	1. Rifle loaded. 2. On the order ' 5 rounds deliberate - watch and shoot '

Practice 3. Snap	
Range/Positioning	25 m Prone (unsupported)
Ammunition	5rds
Target/Exposure	No. 29 Target 5 x 5 second exposure
Instructions	1. Rifle loaded. 2. On the order ' 5 rounds snap - watch and shoot ' fire one round per exposure

Practice 4. Rapid	
Range/Positioning	25 m Prone (unsupported)
Ammunition	5rds
Target/Exposure	No. 29 Target 1 x 35 second exposure
Instructions	1. Rifle loaded 2. On the order ' 5 rounds rapid – watch and shoot

Standards

0366. The practices are scored as follows:

Practice 1	---	25mm	= 25 points (Per group)
	---	40mm	= 20 points (Per group)
	---	50mm	= 15 points (Per group)
	---	65mm	= 10 points (Per group)

Practice 2-4	---	Hits inside the bull	= 5 points per hit
		Hits inside inner ring	= 4 points per hit
		Hits inside outer ring	= 3 points per hit

Total the scores for practices 1-4.

Marksman	= 70
Advanced Marksman	= 85
HPS	= 100

After Firing Procedure

0367. **Cleaning after Firing.** Confirm stripping, cleaning and assembling.

0368. **Confirmation.** Confirm by practice. Rifles are to be inspected and left lightly oiled.

End of Lesson Procedure

SBR RIFLE CLF 4 – TIME CHART

Practice	Range/Target	Timings	Remarks
2	25m No 29	UP DOWN 0:10 1:10	UP AND HOLD
3	25m No 29	UP DOWN 0:10 0:15 0:25 0:30 0:35 0:40 0:45 0:50 0:55 0:60	UP AND HOLD
4	25m No 29	UP DOWN 0:10 0:45	UP AND HOLD

SBR RIFLE CLF 5 - ADVANCED APPLICATION OF FIRE AT 25 YARDS

A. RCO'S NOTES

0369. **Aim.** To move forward onto advanced application shooting, using the SBR and develop skills further through competition practices.

0370. **Conduct.** The lesson is to be conducted using either an indoor range tube range or a 25 metre barrack range using .22 rim fire ammunition.

0371. **Timings.** Each detail will take approximately 30 minutes to complete all practices.

0372. **Stores.**

Normal range stores

x2 NSRA Tin Hat 2505TH Tin Hat or x2 NSRA 2510BM 10 Spot

x2 NSRA Tin Hat Sighter Cards or x2 NSRA 10 Spot sighters

30 .22rf ammunition per firer

1 two point sling per firer

0373. **Miscellaneous.** Instructors should be aware that additional time may be required in this lesson to coach firers through the marksmanship principles. Firers are to be trained in the use of a sling where possible as it will aid them. **The rifle should be zeroed for firing in the prone position before starting this lesson.**

B. CONDUCT OF THE LESSON

Preliminaries

0374. **Safety.** Normal safety precautions.

0375. **Preparing the rifle for firing.** Remind the squad of the procedures for cleaning the rifle before firing.

0376. **Confirmation.** Confirm by practice. Prepare the rifles for firing.

0377. **Range Safety Rules.** Explain and demonstrate as necessary the range safety rules (see Cadet Training – Ranges).

Practice Details

0378. Practice details are as follows:

Practice 1. Sighters	
Range/Positioning	25 m Prone (unsupported)
Ammunition	5rds
Target/Exposure	1 x Sighter card (Single NSRA aiming mark)
Instructions	1. Fire 5 rounds group at the aiming mark. 2. Coaches to adjust sights as required.

Practice 2. Application	
Range/Positioning	25 m Prone (unsupported)
Ammunition	10rds
Target/Exposure	1 x NSRA Tin Hat 2505TH 25 Yards 5 Target or 1 x NSRA 2510BM 10 Spot Target
Instructions	1. Fire one or two rounds at each aiming mark. Coaches are to adjust sights when required within NSRA rules.

Practice 3. Sighters	
Range/Positioning	25 m Prone (unsupported)
Ammunition	5rds
Target/Exposure	1 x Sighter card (Single NSRA aiming mark)
Instructions	1. Fire 5 rounds group at the aiming mark. 2. Coaches to adjust sights as required.

Practice 4. Application	
Range/Positioning	25 m Prone (unsupported)
Ammunition	10rds
Target/Exposure	1 x NSRA Tin Hat 2505TH 25 Yards 5 Target or 1 x NSRA 2510BM 10 Spot Target
Instructions	1. Fire one or two rounds at each aiming mark. Coaches are to adjust sights when required within NSRA rules.

Standards

0379. The scoring standards that should be achieved in the repeat practice are:

Practices 1 & 3	----	Not Scored
Practices 2 & 4	----	Scoring 10,9,8,7,6,5.

For Tin Hat Target:

Shots are scored inward gauging (awarding the higher value if the shot touches or breaks the line). Pass Mark is 170 (combined score of both cards)

For Ten Spot Target:

Shots are scored outward gauging (awarding the lower value if the shot touches or breaks the line). Pass Mark is 160 (combined score of both cards)

After Firing Procedure

0380. **Cleaning after Firing.** Confirm stripping, cleaning and assembling.

0381. **Confirmation.** Confirm by practice. Rifles are to be inspected and left lightly oiled.

End of Lesson Procedure

CHAPTER 4

THE L98A2 GP RIFLE

Scope

0401. Chapter 4 sets out all L98A2 GP Rifle Cadet Live Firing lessons to be completed in LFMT Stages. It includes the application of CLF lessons for all of the ACO and the progression and frequency with which they are to be fired.

0402. This progression and frequency of firing is essential for preparing cadets for any competition shoots. As the firers progress and pass the CLF lessons they will be awarded the necessary marksmanship badge as laid out in this chapter.

0403. The L98 A2 rifle may be fired on any Barrack, Zero, Gallery, ETR and CGR range, or where the range is authorised for this weapon type.

Simulation and Technology

0404. **Dismounted Close Combat**

Trainer (DCCT). DCCT LF lessons are set to re-create Live Firing Lessons from the Operational Shooting Policy (OSP) enabling firers to train prior to live firing with the aim to eliminate faults and prevent wasting ammunition. The DCCT holds a programme which analyses the marksmanship capabilities and highlight faults, which will aid the coach to carry out corrective training. As this system of training is not readily available to cadets it is not classed as an essential training aid but is a great resource to utilise when available. The DCCT cannot be used as a substitute for any marksmanship tests.

0405. **Small Arms Range Targetry System (SARTS).** Vital shooting and coaching information can be gained, and time, manpower and ammunition saved, by the correct use of SARTS. It permits Grouping, Zeroing and Application of Fire Lessons to be conducted on Electronic Target Ranges (ETR) and Converted Gallery Ranges (CGR) without using butt markers or screen targets. In Advanced Application of Fire lessons, SARTS can be used to indicate to the firer and coach where shots are hitting or missing the target. RCOs are to ensure their coaches are thoroughly familiar with SARTS before any CLF lesson begins. All LF lessons from the OSP are contained in the SARTS software. Where the targetry differs because of SARTS, the difference is highlighted in the relevant lesson(s).

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Training and Firing Logical Progression

0406. **L98A2 Rifle Training.** The Cadet Live Fire (CLF) lessons listed below are only to be fired by cadets in the order laid out. They are set as progression shoots, each lesson must be passed before they can progress onto the next. Marksmanship awards are incorporated into this progression for cadets to work through.

Lesson No	Content	Page
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Safety

0407. It is mandatory for all firers to have completed WHTs prior to their first live firing of a weapon, in order to ensure a minimum standard of safety. Conducting officers **must** confirm that all cadets firing any weapon have completed the relevant WHTs prior to firing.

Conduct of CLF Lessons

0408. **General Requirements.** The general requirements of equipment and outline of range procedures which apply to all ranges are shown below. Any requirements specific to a particular CLF lesson are contained at the start of each lesson.

0409. **Zeroing Rifles.** Once cadets have passed L98A2 CLF2, it is imperative that before conducting any other L98A2 LF lesson that the rifle being used is zeroed by the cadet. L98A2 CLF2 can be used as a standard LF lesson when there is a requirement for weapons to be zeroed at 25m, or L98A2 CLF5 (once the lesson has been passed by the cadet) can be used to zero weapons on 100m range.

0410. **Targetry.** L98A2 rifle shooting is carried out at various distances. All lessons have the distance stated within the title of the CLF Lesson. The specific targetry is stated within the stores paragraph of each CLF lesson introduction².



Fig 11 with 57x100mm White Patch on witness Screen



Fig 12 59/92



Fig 11 59/92

0411. **Normal Range Stores.** The following stores are required:

L98A2 GP Rifles	1 per cadet
Cleaning material	As required
Issued, serviceable hearing protection	1 per cadet
First aid kit	Complete
Binoculars	1 per coach
Score sheets	As required

² As well as the targets illustrated, Cadet Fig 11 targets can also be used when available. Issues obtaining the correct targetry should be first discussed with the appropriate RAU.

0412. **Dress.** Dress for L98A2 Rifle lessons should include full CS 95 / PCS uniform including Smock. Where webbing is available, it should be used by firers only.

0413. **Scoring a Group.** To score a grouping practice, the Extreme Spread (ES) needs to be measured. The ES is calculated by measuring the distance between the centres of the two shot holes furthest apart within the group.

0414. **SAC.** The Small Arms Collimator (SAC) is to be used to bore sight the rifle prior to firing a grouping practice. Once zeroed, the Personal Zeroing Position (PZP) is to be noted in the firers' shooting record card and the reading is to be checked prior to any future live firing lesson. This is only applicable for an individual personal weapon system, any new weapon system will need to be zeroed to that individual. The SAC cannot be used for lessons fired on DCCT.

L98A2 RIFLE CLF 1 – INTRODUCTORY SHOOT AT 25 METRES (PRONE)

A. RCO'S NOTES

0415. **Aim.** To confirm that the cadet knows how to prepare the rifle for firing. To confirm that they can aim, hold and fire the rifle in the prone position and confirm that they know how to clean the rifle after firing.

0416. **Conduct.** This lesson is to be conducted on a 25 metre barrack range or a DCCT if range is not available.

0417. **Timings.** Each detail will take approximately 20 minutes to complete all practices.

0418. **Stores.**

Normal range stores

20 x 5.56mm ball ammunition per firer

Witness screen with 4 x 25mm aiming marks per firer.

0419. **Miscellaneous.** If the MPI of the groups in the prone position are badly misplaced from the CZP, the sights should be adjusted by the coach to avoid the possibility of wasting rounds in CLF 2 (these adjustments should not be discussed with the firer). **The firer must NOT progress to CLF lesson 2 until they have achieved the pass mark in this lesson.**

B. CONDUCT OF THE LESSON

Preliminaries

0420. **Safety.** Normal safety precautions.

0421. **Preparing the rifle for firing.** Remind the squad of the procedures for cleaning the rifle before firing.

0422. **Confirmation.** Confirm by practice. Prepare the rifles for firing.

0423. **Range Safety Rules.** Explain and demonstrate as necessary the range safety rules (See Cadet Training - Ranges)

0424. **Firing Practice.** Explain that a cadet who can fire their shots into a small group can become a good shot. They will not group well unless:

- a. They are determined each shot will be a good one.
- b. They apply the marksmanship principles.
- c. They always aim in the same place, i.e. the centre of the aiming mark.

- d. They tell the coach what the sight picture was at the time of firing.

0425. **Confirmation.** Confirm by questions

Practice Details

0426. Practice details are as follows:

Practice 1. Grouping	
Range/Positioning	25 m Prone (unsupported)
Ammunition	20rds
Target/Exposure	4 x white patches evenly spaced on a witness screen
Instructions	1. Fire a 5 round group at each white patch. 2. Discuss the groups and record sizes

Standards

0427. Each of the group sizes that should be achieved in the repeat practices are:

Prone - 70mm

After Firing Procedure

0428. **Cleaning after Firing.** Confirm stripping, cleaning and assembling.

0429. **Confirmation.** Confirm by practice. Rifles are to be inspected and left lightly oiled.

0430. **Care after Cleaning.** *Remind:* Under normal circumstances the bore, chamber and other gas affected parts must be thoroughly cleaned, inspected and re-oiled daily for a minimum period of five days after the rifle has been fired.

End of Lesson Procedure

0431. Range Close Down:

- a. NSPs
- b. Pack kit
- c. Declaration
- d. Summary
- e. Look Forward - CLF02 Zeroing at 25m

L98A2 RIFLE CLF 2 – ZEROING AT 25 METRES

A. RCO'S NOTES

0432. **Aim.** To confirm that the cadet can hold, aim and fire the L98A2 rifle in the prone position at 25 metres and to zero the weapon by moving the MPI to the CZP through correct sight adjustments.

0433. **Conduct.** This lesson is to be conducted on a 25m barrack range.

0434. **Timings.** Each detail will take approximately 30 minutes to complete all practices.

0435. **Stores.**

Normal range stores
Witness screen
1 x 25 m zeroing chart for each firer
12 rounds 5.56mm ammunition per firer

0436. **Miscellaneous.**

- a. The firer must achieve a 75mm group with 9 rounds from the prone position at 25 metres before sights are adjusted.
- b. The RCO and Coaches are to be fully conversant with the details within Cadet Skill at Arms relating to zeroing.

B. CONDUCT OF THE LESSON

Preliminaries

0437. **Safety.** Normal safety precautions.

0438. **Preparing the rifle for firing.** Remind the squad of the procedures for cleaning the rifle before firing.

0439. **Confirmation.** Confirm by practice. Prepare the rifles for firing.

0440. **Range Safety Rules.** Explain and demonstrate as necessary the range safety rules (See Cadet Training - Ranges).

Practice Details

0441. Practice details are as follows:

Practice 1. Zeroing	
Range/Positioning	25 m Prone (unsupported)
Ammunition	9rds
Target/Exposure	1x 25m zeroing chart for each firer
Instructions	1. Fire 3 x 3 round groups at the same aiming mark. 2. The firer is to apply his safety catch and stand up after each group – under the control of the safety supervisor 3. Discuss the groups and record group sizes 4. Identify the MPI and adjust for zero if necessary.

Practice 2. Check Group	
Range/Positioning	25 m Prone (unsupported)
Ammunition	3rds
Target/Exposure	1x 25m zeroing chart for each firer
Instructions	1. Fire a 3 round check group to confirm zero. 2. If the correct zero is not achieved, repeat practice.

Standards

0442. Aside from achieving the correct zero (group size of 75mm), the firer should look to achieve the following standard:

Check group - 38mm

After Firing Procedure

0443. **Cleaning after Firing.** Confirm stripping, cleaning and assembling.

0444. **Confirmation.** Confirm by practice. Rifles are to be inspected and left lightly oiled.

End of Lesson Procedure

L98A2 RIFLE CLF 3 – GROUPING AT 25 METRES (ALL POSITIONS)

A. RCO'S NOTES

0445. **Aim.** To introduce the cadet to firing in other positions, confirm that they can aim, hold and fire their rifle in the prone, sitting and kneeling positions and to examine the effect on fall of shot.

0446. **Conduct.** This lesson is to be conducted on a 25 metre barrack range (or DCCT if a range is not available).

0447. **Timings.** Each detail will take approximately 30 minutes to complete all practices.

0448. **Stores.**

Normal range stores

30 x 5.56mm ball ammunition per firer

Witness screen with 3 x 25mm aiming marks per firer.

0449. **Miscellaneous.** The firer must NOT progress to CLF lesson 4 until they have achieved the pass mark in this lesson. Successful completion of this lesson leads to the award of the trained shot badge. Firers are to record in their F3822 or Shooting Record Card any displacement of the MPI from the CZP when firing from positions other than prone. Coaches are to emphasise the importance of this to their firers. **The rifle should be zeroed for firing in the prone position before starting this lesson**

B. CONDUCT OF THE LESSON

Preliminaries

0450. **Safety.** Normal safety precautions.

0451. **Preparing the rifle for firing.** Remind the squad of the procedures for cleaning the rifle before firing.

0452. **Confirmation.** Confirm by practice. Prepare the rifles for firing.

0453. **Range Safety Rules.** Explain and demonstrate as necessary the range safety rules (see Cadet Training – Ranges).

0454. **Confirmation.** Confirm by questions

Practice Details

0455. Practice details are as follows:

Practice 1. Grouping (fired twice)	
Range/Positioning	25 m Prone (unsupported), Sitting Unsupported, Kneeling Unsupported
Ammunition	30rds
Target/Exposure	3 x white patches evenly spaced on target frame
Instructions	1. Fire a 5 round group from each of the nominated positions. 2. Discuss the groups and record sizes 3. Repeat the practice.

Standards

0456. The group sizes that should be achieved are:

Prone	-	50mm
Sitting Unsupported	-	70mm
Kneeling Unsupported	-	100mm

Upon successful completion of this lesson, the trained shot badge is to be awarded.

After Firing Procedure

0457. **Cleaning after Firing.** Confirm stripping, cleaning and assembling.

0458. **Confirmation.** Confirm by practice. Rifles are to be inspected and left lightly oiled.

0459. **Care after Cleaning.** *Remind:* Under normal circumstances the bore, chamber and other gas affected parts must be thoroughly cleaned, inspected and re-oiled daily for a minimum period of five days after the rifle has been fired.

End of Lesson Procedure

L98A2 RIFLE CLF 4 – APPLICATION OF FIRE / MARKSMANSHIP TEST

A. RCO'S NOTES

0460. **Aim.** To introduce cadets to application of fire practices at 25m. Once the lesson has been fired, the cadet is able to qualify for a Marksman badge by re-firing the practices and achieving the require score.

0461. **Conduct.** This lesson is to be conducted on a 25m Barrack range.

0462. **Timings.** Each detail will take approximately 30 minutes to complete all practices.

0463. **Stores.**

Normal range stores
15 rounds 5.56mm ammunition per firer
1 x Figure 11 target with per firer

0293. **Miscellaneous.** Successful completion of this lesson leads to the award of the Marksman badge. **The rifle should be zeroed for firing before starting this lesson.**

B. CONDUCT OF THE LESSON

Preliminaries

0464. **Safety.** Normal safety precautions.

0465. **Preparing the rifle for firing.** Remind the squad of the procedures for cleaning the rifle before firing.

0466. **Confirmation.** Confirm by practice. Prepare the rifles for firing.

0467. **Range Safety Rules.** Explain and demonstrate as necessary the range safety rules (see Cadet Training – Ranges).

Practice Details

0468. Practice details are as follows:

Practice 1. Deliberate	
Range/Positioning	25 m Prone (unsupported)
Ammunition	5rds
Target/Exposure	Figure 11
Instructions	1. Fire 5 rounds application. 2. Record the score and note the appropriate POA on the shooting record card.

HANDLING INSTRUCTIONS: FOR MOD CADET FORCES USE ONLY

Practice 2. Snap	
Range/Positioning	25 m Prone (unsupported)
Ammunition	5rds
Target/Exposure	Figure 11 5 x 6 sec exposure
Instructions	1. Order ' Watch and Shoot ' 2. Fire one round at each exposure. 3. Targets do not fall when hit

Practice 3. Rapid	
Range/Positioning	25 m Prone (unsupported)
Ammunition	5rds
Target/Exposure	Figure 11 1 x 30 sec exposure
Instructions	1. Order ' Watch and Shoot ' 2. Fire five rounds at each exposure. 3. Targets do not fall when hit

Standards

0469. Scores are to be recorded and announced at the conclusion of each practice.

Practices 1 to 3

Hits within the representative 80mm mm circle	= 4 points
Hits within the representative 160mm circle	= 2 points
Hits within the representative 240mm circle	= 1 point

HPS	= 60 Points
-----	-------------

Lesson Pass	= 40 Points
-------------	-------------

Marksman Award	= 50 Points
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Upon successful completion of this lesson the cadet is to be awarded the Marksman Badge.

0470. The practices are to be fired twice. Initially as a lesson, however once the Lesson Pass is achieved, then the practice is to be fired as a Marksman Practice.

After Firing Procedure

0471. **Cleaning after Firing.** Confirm stripping, cleaning and assembling.

0472. **Confirmation.** Confirm by practice. Rifles are to be inspected and left lightly oiled.

End of Lesson Procedure

L98A2 RIFLE CLF 4 – TIME CHART

Practice	Range/Target	Timings		Remarks
2	25m Fig 11	UP 0:04 0:16 0:30 0:42 0:52	DOWN 0:10 0:22 0:36 0:48 0:58	UP AND HOLD
3	25m Fig 11	UP 0:05	DOWN 0:35	UP AND HOLD

L98A2 RIFLE CLF 5 – ZEROING AT 100 METRES

A. RCO'S NOTES

0473. **Aim.** To teach the process of how to zero the rifle, by moving the MPI to the CZP through correct sight adjustments.

0474. **Conduct.** This lesson is to be conducted on a Gallery Range, 100m Zeroing range or on a ETR/CGR with SARTS.

0475. **Timings.** Each detail will take approximately 20 minutes to complete all practices.

0476. **Stores.**

Normal range stores

25 rounds 5.56mm ammunition per firer

Gallery Range / Zeroing Range

1 x Figure 11 target on witness screen with 75x100mm white patch per firer

SARTS on ETR

1 x Figure 12d

SARTS on CGR

2 x Figure 11

B. CONDUCT OF THE LESSON

Preliminaries

0477. **Safety.** Normal safety precautions.

0478. **Range Safety Rules.** Explain and demonstrate as necessary the range safety rules (see Cadet Training – Ranges)

Practice Details

0479. Practice details are as follows:

Practice 1. Zeroing	
Range/Positioning	100 m Prone (unsupported)
Ammunition	20rds
Target/Exposure	Figure 11 with 75x100mm white patch on witness screen Or on SARTS Fig 12d on (ETR) / Fig 11 (CGR)
Instructions	1. Fire a 4 x 5 round groups at the same aiming mark. 2. The firer is to apply his safety catch and stand up after each group – under the control of the safety supervisor 3. Discuss the groups and record group sizes Identify the MPI and adjust for zero if necessary.

Practice 2. Check group	
Range/Positioning	100 m Prone (unsupported)
Ammunition	5rds
Target/Exposure	Figure 11 with 75x100mm white patch on witness screen Or on SARTS Fig 12d on (ETR) / Fig 11 (CGR)
Instructions	1. Fire a 5 round check group to confirm zero. 2. If the correct zero is not achieved, repeat practice 1.

Scoring

0480. Aside from achieving the correct zero, the firer should look to achieve the following standard:

Check group - 200mm

After Firing Procedure

0481. **Cleaning after Firing.** Confirm stripping, cleaning and assembling.

0482. **Confirmation.** Confirm by practice. Rifles are to be inspected and left lightly oiled.

End of Lesson Procedure

L98A2 RIFLE CLF 6 – GROUPING AT 100 METRES (ALL POSITIONS)

A. RCO'S NOTES

0483. **Aim.** To confirm that the cadet can hold, aim and fire the L98A2 rifle in the prone, sitting, kneeling and fire trench positions at 100 metres.

0484. **Conduct.** This lesson is to be conducted on a GR, a CGR/ETR with SARTS.

0485. **Timings.** Each detail will take approximately 40 minutes to complete all practices.

0486. **Stores.**

Normal range stores

40 rounds 5.56mm ammunition per firer

Gallery Range

1 x Figure 11 target with 75x100mm white patch on witness
screen per firer

SARTS Range (ETR)

1 x Figure 12d

SARTS Range (CGR)

1 x Figure 11

0487. **Miscellaneous.** Firers are to record in their F3822 or Shooting Record Card any displacement of the MPI from the CZP when firing from other positions than prone. Coaches are to emphasise the importance of this to their firers. **The rifle should be zeroed for firing before starting this lesson.**

B. CONDUCT OF THE LESSON

Preliminaries

0488. **Safety.** Normal safety precautions.

0489. **Preparing the rifle for firing.** Remind the squad of the procedures for cleaning the rifle before firing.

0490. **Confirmation.** Confirm by practice. Prepare the rifles for firing.

0491. **Range Safety Rules.** Explain and demonstrate as necessary the range safety rules (see Cadet Training – Ranges)

Practice Details

0492. Practice details are as follows:

Practice 1. Grouping	
Range/Positioning	100 m Prone (magazine rested)
Ammunition	10rds
Target/Exposure	Figure 11 with 75x100mm white patch on witness screen Or on SARTS Fig 12d on (ETR) / Fig 11 (CGR)
Instructions	1. Fire a 5 round check group to confirm zero. 2. Discuss the groups and record group sizes 3. Repeat practice

Practice 2. Grouping	
Range/Positioning	100 m fire trench
Ammunition	10rds
Target/Exposure	As above
Instructions	1. Fire a 5 round check group to confirm zero. 2. Discuss the groups and record group sizes 3. Repeat practice

Practice 3. Grouping	
Range/Positioning	100 m kneeling unsupported
Ammunition	10rds
Target/Exposure	As above
Instructions	1. Fire a 5 round check group to confirm zero. 2. Discuss the groups and record group sizes 3. Repeat practice

Practice 4. Grouping	
Range/Positioning	100 m sitting unsupported
Ammunition	10rds
Target/Exposure	As above
Instructions	1. Fire a 5 round check group to confirm zero. 2. Discuss the groups and record group sizes 3. Repeat practice

Standards

0493. The group sizes that should be achieved are:

Prone Magazine Rested	-	250mm
Fire Trench	-	250mm
Kneeling Unsupported	-	375mm
Sitting Unsupported	-	350mm

After Firing Procedure

0494. **Cleaning after Firing.** Confirm stripping, cleaning and assembling.

0495. **Confirmation.** Confirm by practice. Rifles are to be inspected and left lightly oiled.

End of Lesson Procedure

L98A2 RIFLE CLF 7 – APPLICATION OF FIRE (ALL POSITIONS)

A. RCO'S NOTES

0496. **Aim.** To practice the cadet in engaging targets by deliberate shooting from the fire trench, kneeling unsupported, sitting unsupported and prone and apply fire to the centre of the target.

0497. **Conduct.** This lesson is to be conducted on a GR, a CGR/ETR with SARTS.

0498. **Timings.** Each detail will take approximately 60 minutes to complete all practices.

0499. **Stores.**

Normal range stores

60 rounds 5.56mm ammunition per firer

Gallery Range

1 x Figure 12 on a witness screen (for 100m)

1 x Figure 11 on a witness screen (for 200m / 300m)

SARTS Range

1x Figure 12d (for 100m)

1x Figure 11 (for 200m / 300m)

04100. **Miscellaneous.** The rifle should be zeroed for firing in the prone position before starting this lesson.

B. CONDUCT OF THE LESSON

Preliminaries

04101. **Safety.** Normal safety precautions.

04102. **Range Safety Rules.** Explain and demonstrate as necessary the range safety rules (see Cadet Training - Ranges).

Practice Details

04103. Practice details are as follows:

Practice 1. Deliberate	
Range/Positioning	100 m Prone (unsupported)
Ammunition	10rds
Target/Exposure	Figure 12 on a screen Or Figure 12d on ETR/CGR
Instructions	1. Use 5 rounds to identify the MPI. 2. Apply fire with the next 5 rounds. 3. Record the group size, and number of hits and note the appropriate POA on the shooting record card.

Practice 2. Deliberate	
Range/Positioning	100 m kneeling unsupported
Ammunition	10rds
Target/Exposure	As above
Instructions	1. Use 5 rounds to identify the MPI. 2. Apply fire with the next 5 rounds. 3. Record the group size, and number of hits and note the appropriate POA on the shooting record card.

Practice 3. Deliberate	
Range/Positioning	200 m Prone (unsupported)
Ammunition	10rds
Target/Exposure	Figure 11 on a screen Or Figure 11 on ETR/CGR
Instructions	1. Use 5 rounds to identify the MPI. 2. Apply fire with the next 5 rounds. 3. Record the group size, and number of hits and note the appropriate POA on the shooting record card.

Practice 4. Deliberate	
Range/Positioning	200 m fire trench
Ammunition	10rds
Target/Exposure	As above
Instructions	1. Use 5 rounds to identify the MPI. 2. Apply fire with the next 5 rounds. 3. Record the group size, and number of hits and note the appropriate POA on the shooting record card.

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Practice 5. Deliberate	
Range/Positioning	200 m sitting unsupported
Ammunition	10rds
Target/Exposure	As above
Instructions	1. Use 5 rounds to identify the MPI. 2. Apply fire with the next 5 rounds. 3. Record the group size, and number of hits and note the appropriate POA on the shooting record card.

Practice 6. Deliberate	
Range/Positioning	300 m Prone (unsupported)
Ammunition	10rds
Target/Exposure	As above
Instructions	1. Use 5 rounds to identify the MPI. 2. Apply fire with the next 5 rounds. 3. Record the group size, and number of hits and note the appropriate POA on the shooting record card.

Scoring

04104. Scores are to be recorded and announced at the conclusion of each practice.

Practices 1 to 6

One point per hit. First 5 rounds of each practice are not scored.

Pass – 20

HPS – 30

Advanced Marksman - 25

Upon successful completion of this lesson the cadet is to be awarded the Marksman Badge.

04105. The practices are to be fired twice. Initially as a lesson, however once the Lesson Pass is achieved, then the practice is to be fired as a Marksman Practice.

After Firing Procedure

04106. **Cleaning after Firing.** Confirm stripping, cleaning and assembling.

04107. **Confirmation.** Confirm by practice. Rifles are to be inspected and left lightly oiled.

End of Lesson Procedure

L98A2 RIFLE CLF 8 – ADVANCED APPLICATION OF FIRE (ALL POSITIONS)

A. RCO'S NOTES

04108. **Aim.** To practice the cadet in engaging targets by snap and rapid shooting from the fire trench, kneeling unsupported, sitting unsupported and prone.

04109. **Conduct.** This lesson is to be conducted on a GR/CGR/ETR.

04110. **Timings.** Each detail will take approximately 60 minutes to complete all practices.

04111. **Stores.**

Normal range stores

48 rounds 5.56mm ammunition per firer

Gallery Range

1 x Figure 12 at 100m

1 x Figure 11 at 200m

All targets to be on witness screens

SARTS Range

1x Figure 12 at 100m

1x Figure 11 at 200m

04112. **Miscellaneous.** The rifle should be zeroed for firing before starting this lesson

B. CONDUCT OF THE LESSON

Preliminaries

04113. **Safety.** Normal safety precautions.

04114. **Range Safety Rules.** Explain and demonstrate as necessary the range safety rules (see Cadet Training – Ranges).

Practice Details

04115. Practice details are as follows:

Practice 1. Snap	
Range/Positioning	100 m Prone (unsupported)
Ammunition	8rds
Target/Exposure	Figure 12 3 x sighters 5 x 4 second exposure at irregular intervals
Instructions	1. Firers in prone position 2. Fire 3x sighters one round per exposure, targets fall when hit.

HANDLING INSTRUCTIONS: FOR MOD CADET FORCES USE ONLY

	<ol style="list-style-type: none"> 3. Identify corrected POA 4. Fire one round at each exposure, targets fall when hit. 5. Order <i>“Watch and Shoot”</i>
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Practice 2. Snap	
Range/Positioning	100 m sitting unsupported
Ammunition	8rds
Target/Exposure	Figure 12 3 x sighters 5 x 4 second exposure at irregular intervals
Instructions	<ol style="list-style-type: none"> 1. Firers in sitting position 2. Fire 3x sighters one round per exposure, targets fall when hit. 3. Identify corrected POA 4. Fire one round at each exposure, targets fall when hit. 5. Order <i>“Watch and Shoot”</i>

Practice 3. Snap	
Range/Positioning	100 m kneeling unsupported
Ammunition	8rds
Target/Exposure	Figure 12 3 x sighters 5 x 4 second exposure at irregular intervals
Instructions	<ol style="list-style-type: none"> 1. Firers in kneeling position 2. Fire 3x sighters one round per exposure, targets fall when hit. 3. Identify corrected POA 4. Fire one round at each exposure, targets fall when hit. 5. Order <i>“Watch and Shoot”</i>

Practice 4. Snap	
Range/Positioning	200 m Prone (unsupported)
Ammunition	8rds
Target/Exposure	Figure 11 3 x sighters 5 x 5 second exposure at irregular intervals
Instructions	<ol style="list-style-type: none"> 1. Firers in prone position 2. Fire 3x sighters one round per exposure, targets fall when hit. 3. Identify corrected POA 4. Fire one round at each exposure, targets fall when hit. 5. Order <i>“Watch and Shoot”</i>

Practice 5. Rapid	
Range/Positioning	200 m Fire Trench
Ammunition	8rds
Target/Exposure	Figure 11 3 x sighters 1 x 10 second exposure at irregular intervals
Instructions	<ol style="list-style-type: none"> 1. Firers in prone position 2. Fire 3x sighters one round per exposure, targets fall when hit. 3. Identify corrected POA 4. Fire one round at each exposure, targets fall when hit. 5. Order <i>“Watch and Shoot”</i>

Practice 6. Snap	
Range/Positioning	200 m Kneeling supported
Ammunition	8rds
Target/Exposure	Figure 11 3 x sighters (no time limit) 1 x 8 second exposure followed by 4 x 4 second exposure at irregular intervals
Instructions	<ol style="list-style-type: none"> 1. Firers in kneeling supported position 2. Fire 3x sighters one round per exposure, targets fall when hit. 3. Order <i>“Unload”</i> 4. Firers in the standing alert position, 5m behind firing point, loaded. 5. On appearance of the target run on to the firing point, adopt the kneeling supported position, make ready and fire one round at each exposure. 6. Order <i>“Watch Out”</i>

Scoring

04116. Scores are to be recorded and announced at the conclusion of each practice

Practices 1 to 6

One point per hit. Sighters are not scored.

Pass – 25

HPS - 30

After Firing Procedure

04117. **Cleaning after Firing.** Confirm stripping, cleaning and assembling.

04118. **Confirmation.** Confirm by practice. Rifles are to be inspected and left lightly oiled.

End of Lesson Procedure

L98A2 RIFLE CLF 8 – TIME CHART

One extra second has been included for target movement. On certain gallery ranges, this will be insufficient, and additional time for target movement is to be allowed.

Practice	Range/Target	Timings		Remarks
1 - 3	100m Figure 12	UP 0:05 0:17 0:26 0:37 0:47	DOWN 0:10 0:22 0:31 0:42 0:52	FALL WHEN HIT
4	200m Figure 11	UP 0:05 0:19 0:33 0:45 0:58	DOWN 0:11 0:25 0:39 0:51 1:04	FALL WHEN HIT
5	200m Figure 11	UP 0:05	DOWN 0:16	UP AND HOLD
6	200m Figure 11	UP 0:05 0:21 0:35 0:47 1:00	DOWN 0:14 0:26 0:40 0:52 1:05	FALL WHEN HIT

L98A2 RIFLE CLF 9 – ADVANCED APPLICATION OF FIRE

A. RCO'S NOTES

04119. **Aim.** To practice the cadet in advanced application of fire, engaging targets by deliberate, snap and rapid shooting from the prone.

04120. **Conduct.** This lesson is to be conducted on either a CGR,ETR/GR.

04121. **Timings.** Each detail will take approximately 30 minutes to complete all practices.

04122. **Stores.**

Normal range stores

30 rounds 5.56mm ammunition per firer

1 x Figure 11 target

1 x Figure 12 target

04123. **Miscellaneous.** The rifle should be zeroed for firing before starting this lesson.

B. CONDUCT OF THE LESSON

Preliminaries

04124. **Safety.** Normal safety precautions.

04125. **Range Safety Rules.** Explain and demonstrate as necessary the range safety rules (see Cadet Training – Ranges).

Practice Details

04126. Practice details are as follows:

Practice 1. Snap	
Range/Positioning	200 m fire trench
Ammunition	5rds
Target/Exposure	Figure 11 5 x 3 second exposures
Instructions	1. Order ' Watch and Shoot ' 2. Fire one round at each exposure. 3. Targets fall when hit.

HANDLING INSTRUCTIONS: FOR MOD CADET FORCES USE ONLY

Practice 2. Snap	
Range/Positioning	200 m sitting unsupported
Ammunition	5rds
Target/Exposure	Figure 11 5 x 5 second exposures
Instructions	1. Order 'Watch and Shoot' 2. Fire one round at each exposure. 3. Targets fall when hit.

Practice 3. Snap/Rapid	
Range/Positioning	200 m Prone (unsupported)
Ammunition	10rds
Target/Exposure	Figure 11 5 x 4 second exposures followed 15 seconds later by 1 x 10 second exposure
Instructions	1. Order 'Watch and Shoot' 2. Fire one round at each exposure. 3. Targets fall when hit. 4. After the fifth exposure order "STOP, 5 rounds rapid, Watch and Shoot" . 5. Fire 5 rounds at the exposure. 6. Targets Up and Hold

Practice 4. Rapid/Snap	
Range/Positioning	200 m Kneeling unsupported
Ammunition	10rds
Target/Exposure	Figure 11 1 x 15 second exposure followed 15 seconds later by 5 x 4 second exposures followed 15 seconds later
Instructions	1. Firer in the standing alert position 5m to the rear of the firing point, loaded, loaded. 2. Order "Five rounds rapid, Watch out" . 3. The appearance of the target is the signal to run onto the firing point, adopt the Kneeling position, make ready and fire 5 rounds at the exposure. 4. Targets up and hold. 5. After the first exposure order "Stop, Watch and Shoot" . 6. Fire one round at each of remaining exposures. 7. Targets fall when Hit.

Standards

04127. The standards that should be achieved are:

4 points per hit

Ser	Range	Total Rounds	Pass Mark	Highest Possible Score
1	200m	05	12	20
2	200m	05	12	20
3	200m	10	20	40
4	200m	10	20	40
			64	120

After Firing Procedure

04128. **Cleaning after Firing.** Confirm stripping, cleaning and assembling.

04129. **Confirmation.** Confirm by practice. Rifles are to be inspected and left lightly oiled.

End of Lesson Procedure

L98A2 RIFLE CLF 9 – TIME CHART

One extra second has been included for target movement. On certain gallery ranges, this will be insufficient, and additional time for target movement is to be allowed.

Practice	Range/Target	Timings		Remarks
1	200m Figure 11	UP 0:05 0:15 0:25 0:40 0:55	DOWN 0:09 0:19 0:29 0:44 0:59	FALL WHEN HIT
2	200m Figure 11	UP 0:05 0:20 0:32 0:50 1:10	DOWN 0:11 0:26 0:38 0:56 1:16	FALL WHEN HIT
3	200m Figure 11	UP 0:05 0:20 0:32 0:50 1:10 1:30	DOWN 0:10 0:25 0:37 0:55 1:15 1:46	FALL WHEN HIT UP AND HOLD
4	200m Figure 11	UP 0:05 0:36 0:52 1:10 1:20 1:30	DOWN 0:21 0:41 0:57 1:15 1:25 1:35	UP AND HOLD FALL WHEN HIT

CHAPTER 5

THE L81A2 CADET TARGET RIFLE

Scope

0501. Chapter 5 sets out all L81A2 Rifle cadet live firing (CLF) lessons to be completed in LFMT Stages. It includes the application of CLF lessons and the progression with which they are to be fired.

0502. This progression and frequency of firing is essential for preparing cadets for marksmanship qualification. It is also essential if preparing the firer for any Competition shoots.

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0503. The L81A2 Rifle is a long range target rifle for competitive shooting.

0504. The rifle may only be fired on a 25 metre barrack range or a Gallery range. Firing on a barrack range should be restricted to LF1 only.

Training and Firing Sequence

0505. **L81A2 Rifle Training.** In this chapter firers may start from lesson 2, however where possible, start from CLF lesson 1 as it familiarizes the firer to the rifle and correct zeros are gained ready to progress. CLF lessons 2-4 listed below are to be fired by cadets in the order laid out. Marksman awards are incorporated into the CLF lessons and will be awarded at key stages as they are passed.

L81A2 Rifle CLF Lesson No	Content	Page No
1	Grouping and Zeroing	5-03
2	Application at 300 & 500 yards	5-06
3	Marksman Test at 300 & 500 yards	5-08
4	Application at 600 yards	5-10

Safety

0506. It is mandatory for all firers to have completed WHTs prior to their first live firing of a weapon, in order to ensure a minimum standard of safety.

Conducting officers **must** confirm that all cadets firing any weapon have completed the relevant WHTs prior to firing.

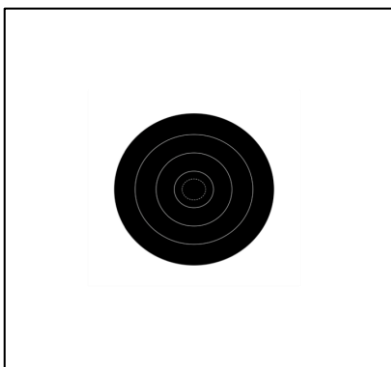
Conduct of CLF Lessons

0507. **General Requirements.** The general requirements of equipment and outline of range procedures which apply to all ranges are shown below. Any requirements specific to a particular CLF lesson are contained at the start of each lesson.

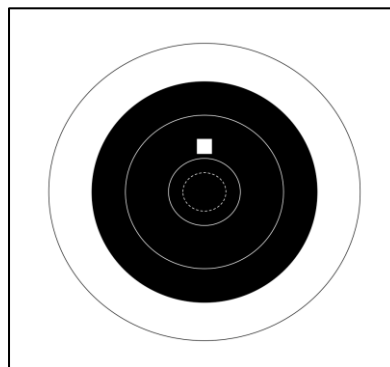
0508. **Marksmanship Awards.** All L81A2 CLF Lessons must be completed in the order stated within this chapter. The Cadet must achieve the required pass mark of each CLF Lesson before they may progress to the next. All standards are laid out at the end of each CLF Lesson.

0509. **Targetry.** All L81A2 shooting is carried out at the distances stated in the CLF lessons listed in this chapter. The targets required are illustrated below. This is to help identify correct targetry for specific L81A2 CLF Lessons.

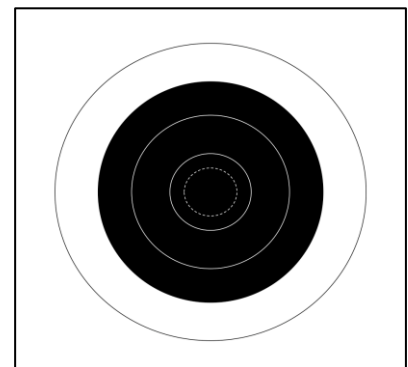
NRA Target Rifle Target Types



NRA 300x Face



NRA 500x Face



NRA 600x Face

0510. **Stores.** The following stores are required:

L81A2 Rifles	1 per cadet
Cleaning material	As required
Issued, serviceable hearing protection	1 per cadet
First aid kit	Complete
Spotting Scopes	1 per coach
Score sheets	As required

0511. **Dress.** Dress for L81A2 Rifle lessons should include full CS 95 / PCS uniform (for specific competitions civilian shooting jackets may be worn as per match conditions). Use of webbing is not permitted.

L81A2 RIFLE CLF 1 - GROUPING AND ZEROING AT 25 METRES

A. RCO'S NOTES

0512. **Aim.** To confirm that the cadet can hold, aim and fire the L81A2 rifle correctly in the prone position & give them the skills & confidence to zero the rifle prior to shooting on a Long Range.

0513. **Conduct.** This lesson is to be conducted on any 25 metre Barrack range where this weapon and ammunition are allowed.

0514. **Timings.** Each detail will take approximately 20 minutes to complete each practice.

0515. **Stores.**

Normal range stores
25 rounds 7.62mm ammunition per firer
L81A2 Rifle per firer.
NRA Zeroing Target

0516. **Miscellaneous.** If the MPI of the groups in the prone position are badly misplaced from the CZP, the sights should be adjusted by the coach to avoid the possibility of wasting rounds in CLF 2. (These adjustments should not be discussed with the firer)

B. CONDUCT OF THE LESSON

Preliminaries

0517. **Safety.** Normal safety precautions.

0518. **Preparing the rifle for firing.** Remind the squad of the procedures for cleaning the rifle before firing.

0519. **Confirmation.** Confirm by practice.

0520. **Range Safety Rules.** Explain and demonstrate as necessary the range safety rules (see Cadet Training - Ranges).

0521. **Firing Practice.** Explain that a cadet who can fire their shots into a small group can become a good shot. They will not group well unless:

- a. They are determined that each shot will be a good one.
- b. They apply the marksmanship principles.
- c. They always aim in the same place, i.e. the centre of the aiming mark.

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- d. They tell the coach what the sight picture was like at the moment of firing.

0522. **Confirmation.** Confirm by questions.

Practice Details

0523. Practice details are as follows:

Practice 1. Grouping/Zeroing	
Range/Positioning	25 m Prone
Ammunition	15rds
Target/Exposure	Single NRA 25yd Zero target attached onto vertical Fig 11 plain witness screen
Instructions	1. Fire one 5 round group with sights set to 4 clicks (1 minute) below 300 yards. 2. Fire one 5 round group with sights set to 500 yards 3. Fire one 5 round group with sights set to 600 yards

Practice 2. Checkgroup	
Range/Positioning	25 m Prone
Ammunition	5rds
Target/Exposure	Single NRA 25yd Zero target attached onto vertical Fig 11 plain witness screen
Instructions	1. Fire one 5 round group with sights set to 300 yards

Practice 3. Checkgroup	
Range/Positioning	25 m Prone
Ammunition	5rds
Target/Exposure	Single NRA 25yd Zero target attached onto vertical Fig 11 plain witness screen
Instructions	1. Fire one 5 round group with sights set to 300 yards

Standards

0524. The group sizes that should be achieved in Practices 2 and 3 are:

Prone (Unsupported) - 50mm
(Slings are to be used as per NRA/ISCRM rules)

After Firing Procedure

0525. **Cleaning after Firing.** Confirm stripping, cleaning and assembling.

0526. **Confirmation.** Confirm by practice. Rifles are to be inspected and left lightly oiled.

0527. **Zero sights.** Once firers have an accurate zero, adjust sight verniers to correct zeros.

End of Lesson Procedure

0528. Range Close Down:

- a. Questions – To and from the class
- b. NSP's
- c. Pack kit
- d. Summary
- e. Look Forward

L81A2 CLF 2 - APPLICATION AT 300 & 500 YARDS

A. RCO'S NOTES

0529. **Aim.** To confirm that the cadet can hold, aim and fire the L81A2 rifle correctly in the prone position

0530. **Conduct.** This lesson is to be conducted on any Gallery range.

0531. **Timings.** Each detail will take approximately 20 minutes to complete each practice.

0532. **Stores.**

Normal range stores

18 rounds 7.62mm ammunition per firer

L81A2 Rifle per firer.

NRA 300 & 500 yard target faces in target frames

B. CONDUCT OF THE LESSON

Preliminaries

0533. **Safety.** Normal safety precautions.

0534. **Preparing the rifle for firing.** Remind the squad of the procedures for cleaning the rifle before firing.

0535. **Confirmation.** Confirm by practice. Prepare the rifles for firing.

0536. **Range Safety Rules.** Explain and demonstrate as necessary the range safety rules (see Cadet Training - Ranges).

Practice Details

0537. Practice details are as follows:

Practice 1. Deliberate	
Range/Positioning	300x Prone
Ammunition	9rds
Target/Exposure	NRA 300 yard Target Face mounted on 4' screen with white back ground.
Instructions	1. Under coaches direction fire 2 sighters and 7 to count at 300 yards

Practice 2. Deliberate	
Range/Positioning	500x Prone
Ammunition	9rds
Target/Exposure	NRA 500 yard Target Face mounted on 6' screen with white back ground.
Instructions	1. Under coaches direction fire 2 sighters and 7 to count at 500 yards

Standards

0538. Shoot to be scored using standard NRA scoring. The scores to be achieved to pass the lesson is (practice 1 & 2 combined):

Pass = 40

HPS = 70

On passing this lesson the trained shot badge may be awarded.

After Firing Procedure

0539. **Cleaning after Firing.** Confirm stripping, cleaning and assembling.

0540. **Confirmation.** Confirm by practice. Rifles are to be inspected and left lightly oiled.

End of Lesson Procedure

L81A2 CLF 3 - MARKSMAN TEST AT 300 & 500 YARDS

A. RCO'S NOTES

0541. **Aim.** To confirm that the cadet can hold, aim and fire the L81 A2 rifle correctly in the prone position

0542. **Conduct.** This lesson is to be conducted on any Gallery range.

0543. **Timings.** Each detail will take approximately 20 minutes to complete each practice.

0544. **Stores.**

0545.

Normal range stores

18 rounds 7.62mm ammunition per firer

L81A2 Rifle per firer.

NRA 300 & 500 yard target faces in target frames

B. CONDUCT OF THE LESSON

Preliminaries

0546. **Safety.** Normal safety precautions.

0547. **Preparing the rifle for firing.** Remind the squad of the procedures for cleaning the rifle before firing.

0548. **Confirmation.** Confirm by practice. Prepare the rifles for firing.

0549. **Range Safety Rules.** Explain and demonstrate as necessary the range safety rules (see Cadet Training – Ranges).

Practice Details

0550. Practice details are as follows:

Practice 1. Deliberate	
Range/Positioning	300x Prone
Ammunition	9rds
Target/Exposure	NRA 300 yard Target Face mounted on 4' screen with white back ground.
Instructions	1. Under coaches direction fire 2 sighters and 7 to count at 300 yards

Practice 2. Deliberate	
Range/Positioning	500x Prone
Ammunition	9rds
Target/Exposure	NRA 500 yard Target Face mounted on 6' screen with white back ground.
Instructions	1. Under coaches direction fire 2 sighters and 7 to count at 500 yards

Standards

0551. Shoot to be scored using standard NRA scoring. The scores for practice 1 & 2 should be added together:

Marksman	= 48
Advanced Marksman	= 55
HPS	= 70

After Firing Procedure

0552. **Cleaning after Firing.** Confirm stripping, cleaning and assembling.

0553. **Confirmation.** Confirm by practice. Rifles are to be inspected and left lightly oiled.

End of Lesson Procedure

L81A2 CLF 4 - APPLICATION AT 600 YARDS

A. RCO'S NOTES

0554. **Introduction.** All levels of marksman for the L81A2 rifle are shot using the same 2 practices. The scores in these practices are what dictate the level of marksman awarded.

0555. **Aim.** To confirm that the cadet can hold, aim and fire his rifle correctly in the prone position.

0556. **Conduct.** The lesson is to be conducted at 600 yards.

0557. **Timing.** Each detail will take approximately 15 minutes to complete each practice.

0558. **Stores.**

Normal range stores (Gallery Range)

L81A2 Rifle per firer.

1 x white witness screen with NRA 600x face mounted in centre.

12 rounds 7.62mm Ball ammunition per firer

0559. **Miscellaneous.** Coaches are to use correct score cards to log fall of shot and score. Sighting shots are convertible.

B. CONDUCT OF THE LESSON

Preliminaries

0560. **Safety.** Normal safety precautions.

0561. **Preparing the Rifle for Firing.** Remind the squad the procedures for cleaning the rifle before firing.

0562. **Confirmation.** Confirm by practice. Prepare the rifles for firing.

0563. **Range Safety Rules.** Explain and demonstrate where necessary the range safety rules (see Cadet Training - Ranges).

Practice Details

0564. Practice details are as follows:

Practice 1. Deliberate	
Range/Positioning	600x Prone
Ammunition	12rds
Target/Exposure	1x NRA 600x Target
Instructions	1. Under coaches direction fire 2 sighters and 10 to count at 600 yards

Standards

0565. Shoot to be scored using standard NRA scoring. The scoring requirement for the above practices is as follows:

Pass = 38

HPS = 50

After Firing Procedure

0566. **Cleaning after Firing.** Confirm stripping, cleaning and assembling.

0567. **Confirmation.** Confirm by practice. Rifles are to be inspected and left lightly oiled.

End of Lesson Procedure

CHAPTER 6

THE L86A2 LIGHT SUPPORT WEAPON

Scope

0601. Chapter 6 sets out all L86A2 Light Support Weapon Cadet Live Firing lessons to be completed in LFMT Stages. It includes the application of CLF lessons to all of the ACO and the progression and frequency with which they are to be fired.

0602. This progression and frequency of firing is essential for preparing cadets for any Competition shoots.

0603. The L86A2 is a great progression for cadets who have completed all of the L98A2 rifle CLF lessons and wish to progress to competition shooting at the CISSAM.

0604. The L86A2 rifle may be fired on any Barrack, Zero, Gallery, ETR or CGR range, that allows this weapon and ammunition. Particular attention should be paid to any limitation on the use of automatic fire.

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Simulation and Technology

0605. **Dismounted Close Combat Trainer (DCCT).** DCCT LF lessons are set to re-create Live Firing Lessons from the Operational Shooting Policy (OSP) enabling firers to train prior to live firing with the aim to eliminate faults and prevent wasting ammunition. The DCCT holds a programme which analyses the marksmanship capabilities and highlights faults, which will aid the coach to carry out corrective training. As this system of training is not readily available to cadets it is not classed as an essential training aid but is a great resource to utilise when available. The DCCT cannot be used as a substitute for any marksmanship tests.

0606. **Small Arms Range Targetry System (SARTS).** Vital shooting and coaching information can be gained, and time, manpower and ammunition saved, by the correct use of SARTS. It permits Grouping, Zeroing and Application of Fire Lessons to be conducted on Electronic Target Ranges (ETR) and Converted Gallery Ranges (CGR) without using butt markers or screen targets. In Advanced Application of Fire lessons, SARTS can be used to indicate to the firer and coach where shots are hitting or missing the target. RCOs are to ensure their coaches are thoroughly familiar with SARTS before any CLF lesson begins. All LF lessons from the OSP are contained in the SARTS software. Where the targetry differs because of SARTS, the difference is highlighted in the relevant lesson(s).

Training and Firing Logical Progression

0607. **L86A2 LSW Training.** The Cadet Live Fire (CLF) lessons listed below are only to be fired by cadets in the order laid out. They are set as progression shoots, each lesson must be passed before they can progress onto the next.

Lesson No	Content	Page
Grouping and Zeroing		
1	Introductory Shoot at 25 metres (Prone)	6-05
2	Zeroing at 25 metres (Prone)	6-08
3	Grouping at 100m	6-10
Application of Fire		
4	Elementary Application of fire at 200m and 300m	6-13
5	Advanced Application of fire at 100m, 200m and 300m	6-17

Safety

0608. It is mandatory for all firers to have completed WHTs prior to their first live firing of a weapon, in order to ensure a minimum standard of safety. Conducting officers **must** confirm that all cadets firing any weapon have completed the relevant WHTs prior to firing.

Conduct of CLF Lessons

04130. **General Requirements.** The general requirements of equipment and outline range procedures which apply to all ranges are shown below. Any requirements specific to a particular CLF lesson are contained at the start of each lesson.

04131. **Zeroing LSW.** Once cadets have passed L86A2 CLF2, it is imperative that before conducting any other L86A2 LF lesson that the LSW being used is zeroed by the cadet. L86A2 CLF2 can be used as a standard LF lesson when there is a requirement for LSWs to be zeroed.

0609. **Targetry.** L86A2 LSW shooting is carried out at various distances. All lessons have the distance stated within the title of the CLF Lesson. The specific targetry is stated within the **Stores** paragraph of each CLF lesson introduction.³

³ As well as the targets illustrated, Cadet Fig 11 targets can also be used when available

HANDLING INSTRUCTIONS: FOR MOD CADET FORCES USE ONLY



Fig 11 with 57x100mm White Patch on witness Screen



Fig 12 59/92



Fig 11 59/92

0610. **Normal Range Stores.** The following stores are required:

L86A2 LSWs	1 per cadet
Cleaning material	As required
Issued, serviceable hearing protection	1 per cadet
First aid kit	Complete
Binos	1 per coach
Score sheets	As required
SAC	If available
GTLS breakage kit (if using SUSAT)	As required

0611. **Dress.** Dress for L86A2 LSW lessons should include full CS 95 / PCS uniform including Smock and belt order webbing (if available – worn only by the firer).

0612. **Scoring a Group.** To score a grouping practice, the Extreme Spread (ES) needs to be measured. The ES is calculated by measuring the distance between the centres of the two shot holes furthest apart within the group.

HANDLING INSTRUCTIONS: FOR MOD CADET FORCES USE ONLY

0613. **SAC.** The SAC is to be used to bore sight the LSW prior to ring a grouping practice. Once zeroed, the Personal Zeroing Position (PZP) is to be noted in the firers' shooting record card and the reading is to be checked prior to any future live firing lesson. This is only applicable for an individual personal weapon system; any new weapon system will need to be zeroed to that individual. The SAC cannot be used for lessons fired on DCCT.

L86A2 LSW CLF 1 – INTRODUCTORY SHOOT AT 25 METRES

A. RCO NOTES

0614. **Aim.** To confirm that the cadet knows how to prepare the LSW for firing. To confirm that he can aim, hold and fire the weapon in the prone position and confirm that he knows how to clean the LSW after firing.

0615. **Conduct.** This lesson is to be conducted on a 25 metre range (or DCCT if range is not available).

0616. **Timings.** Each detail will take approximately 30 minutes to complete all practices.

0617. **Stores.**

Normal range stores

Witness screen with 4 x 25mm aiming marks per firer.

34 rounds 5.56mm Ball ammunition per firer

0618. **Miscellaneous.** If the MPI of the groups in the prone position are badly misplaced from the CZP, the sights should be adjusted by the coach to avoid the possibility of wasting rounds in CLF 2. (These adjustments should not be discussed with the firer). **The firer must NOT progress to LSW Lesson 2 until they have achieved the pass mark in this lesson. Prior to commencing this lesson, the LSW is to be bore sighted.**

B. CONDUCT OF THE LESSON

Preliminaries

0619. **Safety.** Normal safety precautions.

0620. **Preparing the LSW for firing.** Explain that the procedures for preparing the LSW for firing and cleaning after firing are the same as for the rifle.

0621. **Range Safety Rules.** Explain and demonstrate as necessary the range safety rules (see Cadet Training – Ranges).

HANDLING INSTRUCTIONS: FOR MOD CADET FORCES USE ONLY

Practice Details

0622. Practice details are as follows:

Practice 1. Familiarisation Single Rounds	
Range/Positioning	25 m Prone
Ammunition	10rds
Target/Exposure	2 x 25 mm aiming marks on a screen
Instructions	1. Fire a 5 round group at each aiming mark 2. Discuss the groups and record the group sizes

Practice 2. Familiarisation Bursts on Screen	
Range/Positioning	25 m Prone
Ammunition	12rds (4 mags of 3 rounds)
Target/Exposure	4 x 25 mm aiming marks on a screen
Instructions	1. Fire one burst of 3 rounds at each aiming mark 2. Discuss the group, record the group sizes

Practice 3. Confirmation Bursts	
Range/Positioning	25 m Prone
Ammunition	12rds
Target/Exposure	4 x 25 mm aiming marks on a screen
Instructions	1. Fire one burst of 2-3 rounds at each aiming mark 2. Discuss the group, record the group sizes

Standards

0623. Each of the group sizes that should be achieved in the repeat practices are:

Prone - 61 to 85mm

After Firing Procedure

0624. **Cleaning after Firing.** Confirm stripping, cleaning and assembling.

0625. **Confirmation.** Confirm by practice. LSWs are to be inspected and left lightly oiled.

0626. **Care after Cleaning.** *Remind:* Under normal circumstances the bore, chamber and other gas affected parts must be thoroughly cleaned, inspected and re-oiled daily for a minimum period of five days after the LSW has been fired.

End of Lesson Procedure

0627. Range Close Down:

- a. NSP's
- b. Pack kit
- c. Declaration
- d. Summary
- e. Look Forward - CLF02 Zeroing at 25 metres

L86A2 LSW CLF 2. – ZEROING AT 25 METRES

A. RCO NOTES

0628. **Aim.** To zero the weapon by superimposing the firers' MPI onto the CZP.
0629. **Conduct.** This lesson is to be conducted on a 25 metre range.
0630. **Timings.** Each detail will take approximately 15 minutes to complete all practices.
0631. **Stores.**

Normal range stores
Witness screen with 4 x 25mm aiming marks per firer
1x 25m zeroing chart for each firer
12 rounds 5.56mm Ball ammunition per firer

0632. **Miscellaneous.**
- a. Conducting Officers, coaches and firers are to be fully conversant with the details in Cadet Training - Skill at Arms relating to Zeroing.
 - b. Weapons must be bore sighted before live firing commences

B. CONDUCT OF THE LESSON

Preliminaries

0633. **Safety.** Normal safety precautions.
0634. **Preparing the LSW for firing.** Explain that the procedures for preparing the LSW for firing and cleaning after firing are the same as for the rifle.
0635. **Range Safety Rules.** Explain and demonstrate as necessary the range safety rules (see Cadet Training – Ranges).

HANDLING INSTRUCTIONS: FOR MOD CADET FORCES USE ONLY

Practice Details

0636. Practice details are as follows:

Practice 1. Grouping	
Range/Positioning	25 m Prone
Ammunition	9rds
Target/Exposure	1 x 25 m zeroing chart for each firer
Instructions	1. Fire 3 x 3 round groups at the same aiming mark. 2. The firer is to apply their safety catch, stand up, then re-adopt their position between each group. 3. Discuss the group and measure the group size. 4. Identify the MPI and adjust for zero if necessary.

Practice 2. Check Group	
Range/Positioning	25 m Prone
Ammunition	3rds
Target/Exposure	1 x 25 m zeroing chart for each firer
Instructions	1. Fire a 3 round check group to confirm zero. 2. If the correct zero is not achieved, repeat Practice 1 using this group plus a further 6 rounds. 3. Once zero is confirmed record setting using the SAC

Standards

0637. Each of the group sizes that should be achieved in the repeat practices are:

Prone - 50mm

After Firing Procedure

0638. Personal Zeroing Positions (PZPs) are to be recorded once correctly zeroed.

0639. **Cleaning after Firing.** Confirm stripping, cleaning and assembling.

0640. **Confirmation.** Confirm by practice. LSWs are to be inspected and left lightly oiled.

0641. **Care after Cleaning.** *Remind:* Under normal circumstances the bore, chamber and other gas affected parts must be thoroughly cleaned, inspected and re-oiled daily for a minimum period of five days after the LSW has been fired.

End of Lesson Procedure

L86A2 LSW CLF 3 – GROUPING AT 100 METRES

A. RCO NOTES

0642. **Aim.** To confirm that the firer can apply the group to the centre of the target from the prone and fire trench positions

0643. **Conduct.** This lesson is to be conducted on either a CGR (with or without SARTS), an ETR if converted to SARTS, or a Gallery Range

0644. **Timings.** Each detail will take approximately 30 minutes to complete all practices. If SARTS is used it may be possible to reduce the timings.

0645. **Stores.**

Normal range stores

2x 1.220m screens with Figure 11 per firer or 1x Figure 12d per firer
(on SARTS converted range)

33 rounds 5.56mm Ball ammunition per firer

0646. **Miscellaneous.** The rifle should be zeroed for firing before starting this lesson.

B. CONDUCT OF THE LESSON

Preliminaries

0647. **Safety.** Normal safety precautions. The LSW must be zeroed to the firer prior to this practice.

0648. **Range Safety Rules.** Explain and demonstrate as necessary the range safety rules (see Cadet Training – Ranges).

Practice Details

0649. Practice details are as follows:

Practice 1. Grouping Single Rounds	
Range/Positioning	100 m Prone
Ammunition	10rds
Target/Exposure	Figure 11 on a screen or SARTS Figure 12d
Instructions	1. Fire a 5 round group 2. Discuss the group, position of the MPI and note any adjustments needed to the POA. 3. Repeat the practice.

Practice 2. Grouping Bursts	
Range/Positioning	100 m Prone
Ammunition	9rds
Target/Exposure	As above
Instructions	1. Fire 9 rounds in bursts of 2-3 rounds at the same aiming mark 2. Discuss the group, position of the MPI and note any adjustments needed to the POA. 3. Record the group size.

Practice 3. Grouping Single Rounds	
Range/Positioning	100 m fire trench
Ammunition	5rds
Target/Exposure	As above
Instructions	1. Fire a 5 round group 2. Discuss the group, position of the MPI and note any adjustments needed to the POA. 3. Record the group size

Practice 4. Grouping Bursts	
Range/Positioning	100 m fire trench
Ammunition	9rds
Target/Exposure	As above
Instructions	1. Fire 9 rounds in bursts of 2-3 rounds at the same aiming mark 2. Discuss the group, position of the MPI and note any adjustments needed to the POA. 3. Record the group size.

HANDLING INSTRUCTIONS: FOR MOD CADET FORCES USE ONLY

Standards

0650. When on GR, after the required shots the target is lowered and all shot holes are indicated with spotting discs. On SARTS console / coaching will advise shots.

0651. The firer/coach will identify the MPI and establish the new POA

After Firing Procedure

0652. **Cleaning after Firing.** Confirm stripping, cleaning and assembling.

0653. **Confirmation.** Confirm by practice. LSWs are to be inspected and left lightly oiled.

0654. **Care after Cleaning.** *Remind:* Under normal circumstances the bore, chamber and other gas affected parts must be thoroughly cleaned, inspected and re-oiled daily for a minimum period of five days after the LSW has been fired.

End of Lesson Procedure

L86A2 LSW CLF 4 – ELEMENTARY APPLICATION OF FIRE

A. RCO NOTES

0655. **Aim.** To enable the firer to practice in engaging targets by deliberate fire, using single shots and controlled bursts, from the prone and fire trench positions

0656. **Conduct.** This lesson is to be conducted on either a CGR (with or without SARTS), an ETR if converted to SARTS, or a Gallery Range

0657. **Timings.** Each detail will take approximately 55 minutes to complete all practices. If SARTS is being used it may be possible to reduce the timings

0658. **Stores.**

Normal range stores

Gallery Range or CGR without SARTS

- 1x Figure 11 on a 1.220m screen per firer inscribed with a 760mm and a 1.220m circle

SARTS

Figure 11 with scoring area image on monitor (100-200m)

Figure 11 with triple Figure 11 image on monitor (300m)

44 rounds 5.56mm Ball ammunition per firer

0659. **Miscellaneous.** Firers are to be reminded of the need to count rounds fired and to regulate the length of bursts to 2-3 rounds. **The rifle should be zeroed for firing before starting this lesson.**

B. CONDUCT OF THE LESSON

Preliminaries

0660. **Safety.** Normal safety precautions. **The LSW must be zeroed to the firer prior to this practice.**

0661. **Range Safety Rules.** Explain and demonstrate as necessary the range safety rules (see Cadet Training – Ranges).

HANDLING INSTRUCTIONS: FOR MOD CADET FORCES USE ONLY

Practice Details

0662. Practice details are as follows:

Practice 1. Deliberate Single Rounds	
Range/Positioning	200 m fire trench
Ammunition	5rds
Target/Exposure	Figure 11 on a 1.220m screen or SARTS Figure 11
Instructions	1. Fire 5 rounds application 2. All shots are to be signalled 3. Record the score and note the appropriate POA on the shooting record card

Practice 2. Deliberate Single Rounds	
Range/Positioning	200 m Prone
Ammunition	5rds
Target/Exposure	Figure 11 on a 1.220m screen or SARTS Figure 11
Instructions	1. Fire 5 rounds application 2. All shots are to be signalled 3. Record the score and note the appropriate POA on the shooting record card

Practice 3. Deliberate Bursts	
Range/Positioning	200 m fire trench
Ammunition	12rds
Target/Exposure	Figure 11 on a 1.220m screen or SARTS Figure 11
Instructions	1. Fire 4 bursts of 2-3 rounds 2. Fire is judged to be effective if the figure target is hit once in each burst 3. Score 4 points for each effective engagements 4. MPI is to be indicated after each burst

HANDLING INSTRUCTIONS: FOR MOD CADET FORCES USE ONLY

Practice 4. Deliberate Single Rounds	
Range/Positioning	300 m Prone
Ammunition	5rds
Target/Exposure	Figure 11 on a 1.220m screen or SARTS Figure 11
Instructions	<ol style="list-style-type: none"> 1. Fire 5 rounds application 2. All shots are to be signalled 3. Record the score and note the appropriate POA on the shooting record card

Practice 5. Deliberate Single Rounds	
Range/Positioning	300 m fire trench
Ammunition	5rds
Target/Exposure	Figure 11 on a 1.220m screen or SARTS Figure 11
Instructions	<ol style="list-style-type: none"> 1. Fire 5 rounds application 2. All shots are to be signalled 3. Record the score and note the appropriate POA on the shooting record card

Practice 6. Deliberate Bursts	
Range/Positioning	300 m fire trench
Ammunition	9rds
Target/Exposure	Figure 11 on a 1.220m screen or SARTS Figure 11
Instructions	<ol style="list-style-type: none"> 1. Fire 4 bursts of 2-3 rounds 2. Fire is judged to be effective if the figure target is hit once in each burst 3. Score 4 points for each effective engagements 4. MPI is to be indicated after each burst

HANDLING INSTRUCTIONS: FOR MOD CADET FORCES USE ONLY

Standards

0663. Scores are to be recorded and announced at the conclusion of each practice.

Practices 1, 2, 4 and 5

Hits within the representative 760mm circle ON the target - 4 points

Hits within the representative 760mm circle OFF the target - 2 points

Hits within the representative 1.220m circle - 1 point

Practices 3 and 6

For each effective engagement - 4 points (16 points)

HPS - 112 points

0664. To progress to the next CLF, a score of 78 must be achieved.

After Firing Procedure

0665. **Cleaning after Firing.** Confirm stripping, cleaning and assembling.

0666. **Confirmation.** Confirm by practice. LSWs are to be inspected and left lightly oiled.

0667. **Care after Cleaning.** *Remind:* Under normal circumstances the bore, chamber and other gas affected parts must be thoroughly cleaned, inspected and re-oiled daily for a minimum period of five days after the LSW has been fired.

End of Lesson Procedure

L86A2 LSW CLF 5 – ADVANCED APPLICATION OF FIRE

A. RCO NOTES

0668. **Aim.** To enable the firer to practice in engaging targets by snap, rapid and burst fire from the prone and fire trench positions.

0669. **Conduct.** This lesson is to be conducted on either a CGR (with or without SARTS), an ETR if converted to SARTS, or a Gallery Range.

0670. **Time Chart.** A time chart is included after the Practice Details.

0671. **Timings.** Each detail will take approximately 40 minutes to complete all practices. If SARTS is being used it may be possible to reduce the timings

0672. **Stores.**

Normal range stores

Gallery Range

- 1x Figure 11 and 1x Triple Figure 11 per lane

CGR without SARTS

- Left Coffin Triple Figure 11, Right Coffin single Figure 11

SARTS

- Figure 11 (100-300m)

81 rounds 5.56mm Ball ammunition per firer

0673. **Miscellaneous.** The rifle should be zeroed for firing before starting this lesson.

B. CONDUCT OF THE LESSON

Preliminaries

0674. **Safety.** Normal safety precautions. The LSW must be zeroed to the firer prior to this practice.

0675. **Range Safety Rules.** Explain and demonstrate as necessary the range safety rules (see Cadet Training – Ranges).

HANDLING INSTRUCTIONS: FOR MOD CADET FORCES USE ONLY

Practice Details

0676. Practice details are as follows:

Practice 1. Snap Single Rounds	
Range/Positioning	100 m Prone
Ammunition	5rds
Target/Exposure	Figure 11 or SARTS Figure 11 5 x 4 second exposures with irregular intervals
Instructions	<ol style="list-style-type: none"> 1. Firer in the nominated positions 2. Order <i>"Watch and Shoot"</i> 3. Fire one round per exposure 4. Targets will fall when hit

Practice 2. Rapid Single Rounds	
Range/Positioning	100 m Prone
Ammunition	10rds
Target/Exposure	Figure 11 or SARTS Figure 11 1 x 20 second exposure
Instructions	<ol style="list-style-type: none"> 1. Firer in the standing alert position (bipod folded), 5m to the rear of firing point 2. Order <i>"Watch out"</i> 3. On appearance of the target is the signal for the firer to run onto the firing point, adopt the position (bipod down), load, ready and fire 10 rounds at the exposure. 4. Target up and hold

Practice 3. Timed Bursts	
Range/Positioning	100 m fire trench
Ammunition	12rds
Target/Exposure	Figure 11 or SARTS Figure 11 4 x 5 second exposures with intervals of 10 seconds
Instructions	<ol style="list-style-type: none"> 1. Firer in the nominated positions 2. Order <i>"Watch and Shoot"</i> 3. Fire one burst of 2-3 rounds at each exposure 4. Fire is judged to be effective if the target is hit once in each burst 5. Score 2 points for each effective engagement 6. Targets up and hold

Practice 4. Snap Single Rounds	
Range/Positioning	200 m fire trench
Ammunition	12rds
Target/Exposure	Figure 11 or SARTS Figure 11 5 x 4 second exposures with intervals of 10 seconds
Instructions	<ol style="list-style-type: none"> 1. Firer in the nominated positions 2. Order <i>"Watch and Shoot"</i> 3. Fire one round per exposure 4. Targets will fall when hit

HANDLING INSTRUCTIONS: FOR MOD CADET FORCES USE ONLY

Practice 5. Timed Bursts	
Range/Positioning	200 m prone
Ammunition	12rds
Target/Exposure	Figure 11 or SARTS Figure 11 1 x 13 second exposure followed by 3 x 5 second exposures with intervals of 10 seconds
Instructions	<ol style="list-style-type: none"> 1. Firer in the standing alert position (bipod folded), 5m to the rear of firing point 2. Order <i>"Watch out"</i> 3. The appearance of the target is the signal for the firer to run onto the firing point, adopt the position (bipod down), load, ready and fire one burst of 2-3 rounds at each exposure 4. Score 2 points for each engagements 5. Targets up and hold

Practice 6. Rapid Single Rounds	
Range/Positioning	200 m fire trench
Ammunition	10rds
Target/Exposure	Figure 11 or SARTS Figure 11 1 x 12 second exposure
Instructions	<ol style="list-style-type: none"> 1. Firer in the nominated positions 2. Order <i>"Watch and Shoot"</i> 3. Fire 10 rounds at the exposure 4. Targets up and hold

Practice 7. Snap Single Rounds	
Range/Positioning	300 m Prone
Ammunition	5rds
Target/Exposure	Figure 11 or SARTS Figure 11 5 x 4 second exposures with irregular intervals
Instructions	<ol style="list-style-type: none"> 1. Firer in the nominated positions 2. Order <i>"Watch and Shoot"</i> 3. Fire one round per exposure 4. Targets will fall when hit

Practice 8. Rapid Single Rounds	
Range/Positioning	300 m fire trench
Ammunition	10rds
Target/Exposure	Figure 11 or SARTS Figure 11 1 x 12 second exposure
Instructions	<ol style="list-style-type: none"> 1. Firer in the nominated positions 2. Order <i>"Watch and Shoot"</i> 3. Fire 10 rounds at the exposure 4. Targets up and hold

HANDLING INSTRUCTIONS: FOR MOD CADET FORCES USE ONLY

Practice 9. Timed Bursts	
Range/Positioning	300 m fire trench
Ammunition	12rds
Target/Exposure	Figure 11 or SARTS Figure 11 4 x 5 second exposure
Instructions	<ol style="list-style-type: none"> 1. Firer in the nominated positions 2. Order <i>“Watch and Shoot”</i> 3. Fire one burst of 2-3 rounds at each exposure 4. Fire is judged effective if the target is hit once in each burst

Standards

0677. Scores are to be recorded and announced on conclusion of each practice:

Practices 1, 2, 4, 6, 7, 8 - One point per hit

Practices 3, 5, 9 - 2 points per successful engagement

0678. The standard required is:

Prac	Range	Total Rounds	Score Req'd	HPS
1 – 3	100m	27	16	23
4 – 6	200m	27	16	23
7 – 9	300m	27	16	23

After Firing Procedure

0679. **Cleaning after Firing.** Confirm stripping, cleaning and assembling.

0680. **Confirmation.** Confirm by practice. LSWs are to be inspected and left lightly oiled.

0681. **Care after Cleaning.** *Remind:* Under normal circumstances the bore, chamber and other gas affected parts must be thoroughly cleaned, inspected and re-oiled daily for a minimum period of five days after the LSW has been fired.

End of Lesson Procedure

L86A2 LSW CLF 5 – TIME CHART

One extra second has been included for target movement. On certain gallery ranges, this will be insufficient, and additional time for target movement is to be allowed.

Practice	Range/Target	Timings		Remarks
1	100m Figure 11	UP 0:05 0:16 0:25 0:35 0:43	DOWN 0:10 0:21 0:30 0:40 0:48	FALL WHEN HIT
2	100m Figure 11	UP 0:05	DOWN 0:26	UP AND HOLD
3	100m Figure 11	UP 0:05 0:21 0:37 0:53	DOWN 0:11 0:27 0:43 0:59	FALL WHEN HIT
4	200m Figure 11	As for Practice 1		FALL WHEN HIT
5	200m Figure 11	UP 0:05 0:29 0:45 1:01	DOWN 0:19 0:35 0:51 1:07	FALL WHEN HIT
6	200m Figure 11	UP 0:05	DOWN 0:18	UP AND HOLD
7	300m Figure 11	As for Practice 1		FALL WHEN HIT
8	300m Figure 11	UP 0:05	DOWN 0:18	UP AND HOLD
9	300m Figure 11	As for Practice 3		FALL WHEN HIT