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CLOSE COMBAT - LETHALITY

SNIPING - PART 2
FIELDCRAFT & BATTLE EXERCISES

2017

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Amendments					
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Distribution

As directed by Head of Capability Ground Manoeuvre.

Contact details

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Any person wishing to propose amendments to this pamphlet is invited to by filling in this Amendment Form. Such proposals will be given consideration and, if considered necessary appropriate amendments will be prepared and published.

Chapter 2

Practice Periods

Sniping - Part 2 Fieldcraft & Battle Exercises

Introduction

1. The aim of this pamphlet is to provide the instructional material on Sniper fieldcraft to enable unit instructors to teach tactics techniques and procedures to the operational standard required.

2. For ease of reference the weapon will be referred to as the Sniper Rifle throughout the remainder of this publication.

Layout of the Pamphlet

3. This pamphlet contains the information and details required by the instructor in training selected soldiers to fire the Sniper Rifle. It is laid out as follows:

   a. Chapter 1 — Fieldcraft Lessons.

   b. Chapter 2 — Practice Periods.

4. Each lesson is divided into two parts:

   a. Part A — Instructor's Notes. This contains the information required by the instructor to enable him to prepare for the lesson.

   b. Part B — Conduct of the Lesson. This contains the matter to be taught and is laid out in a proven sequence.

5. Words of command and instructions to the instructor are printed in italics.

Instructional Techniques

6. Skill at Arms Instructors are taught how to deliver lessons on a qualifying course. They will have an understanding of those basic instructional techniques required to deliver SAA training. However, very rarely will a squad of soldiers all have the same learning style. It is therefore essential that the instructor has the skills and experience to be able to adapt his instructional methods to cater for the needs of those being trained. The guiding principle is that **all subject matter** must be delivered regardless of the level of experience and/or previous knowledge of the student.

7. There is of course latitude in the methods which can be employed by the instructor to deliver this matter, but ultimately the lesson must deliver and practice the students on the detail contained within the lesson in accordance with the Learning Specifications (LSPECs) for that lesson.

8. Instructors are **not** permitted to omit detail or adapt drills to save time. Instructors should always consult the chain of command if there is any doubt as to what is required.

Safety Precautions

9. Before every lesson all weapons, spare barrels, ammunition containers and drill cartridges must be inspected to ensure that no live ammunition is present.

10. Prior to the use of Infantry Weapons, AFVs or Pyrotechnics for Live or Blank firing Pamphlet 21, Regulations for Training with Armoured Fighting Vehicles, Infantry Weapon Systems and Pyrotechnics is to also be consulted. The user must also ensure they have the most up to date version of this publication by consulting the British Army Electronic Battle Box.

Risk to Hearing.

11. Issued hearing protection is required by firers, supervisors and others in the close vicinity of the firing point or area during all firing.

References and Associated Publications

For the latest edition and/or amendments of each publication see 'Catalogue of Army Publications' Parts 1 and 2, Army Code No. 12123.

References	Code No.	Title
A	71855	Pamphlet No. 21, Regulations for Training with Armoured Fighting Vehicles, Infantry Weapons and Pyrotechnics.

Chapter 1
Sniper Fieldcraft Lessons

Lesson 1. Sniper Employment

1-01 ***Aim.*** *An overview of sniper Employment.*

1-02 ***Timings.*** *One 40 minute period.*

1-03 ***Method.*** *Basic lesson indoors.*

1-04 ***Stores.***

Note book and pencil.

1-05 ***Preparation.***

a. *Power Point.*

b. *Reference from the CDC DCC Vol 2, Tactical Employment of IWS Snipers*

Introduction

1-06 *Explain:* It is essential as a potential sniper that you have an understanding of the role and tasks and the tactical employment of snipers.

Roles of a Sniper

1-07 **"***The role of the sniper is to locate, observe and destroy key enemy personnel and equipment with indirect and direct precision fire"*

1-08 **Shooter (Sniper Number One).** The number one is equipped with the Sniper Rifle and engages targets designated by the number two. He should be capable of achieving a first round hit up to and including 900 metres and providing harassing fire up to 1500 metres.

1-09 **Pair Commander (Number Two).** The number two is equipped with the SA80 and is to command the pair, prioritise the targets and provide the firing solution for the number one. He is responsible for the close protection of the pair and also must be in a position to engage opportunity targets at less than optimum range of the Sniper Rifle. The number two is the link to the chain of command and is likely to be senior in rank to the number one and must be more experienced.

Sniper Employment

1-10 **Tasks.** Snipers have the following tasks in all operations:

a. Disrupt enemy command and control by engaging selected enemy targets with either direct or indirect fire.

b. Neutralise the enemy by preventing movement and use of weapons by using either direct or indirect fire.

c. Conduct surveillance from observation posts or temporary positions in order to gather and report timely and accurate information.

d. Control indirect fire in support of a wider offensive support (OS) template or fire plan.

e. Neutralise enemy snipers by advising on counter-sniper measures and by conducting counter-sniper tasks/ operations.

Principles of Employment

1-11 **Grouping.**

a. The minimum grouping should be a sniper pair

b. Mutual support can be provided by other snipers or from manoeuvre sub units.

c. Six-man sniper section consisting of three pairs is favoured.

1-12 **Endurance.** As a planning figure, a sniper pair should be able to provide observation with an ability to deliver a precision strike onto a target for 48hrs without resupply. A number of factors can affect this:

a. Weather conditions.

b. Manning and the physical degradation of the sniper pair.

c. G4 considerations including Bowman battery management, water consumption etc.

1-13 **Coordination.**

a. The ISTAR officer will coordinate snipers with other Company and Battle Group assets.

b. This will reduce the risk of fratricide and prevent duplication of effort.

c. The sniper section commander on the ground will command and coordinate the deployed pairs.

d. Each sniper section commander must have an understanding of the higher commander's intent in order to exercise mission command.

e. As a direct fire asset, snipers must be integrated into the fire plan in all operations. To ensure:

(1) Correct briefing.

(2) All activities are coordinated.

(3) Suitable tasks are allocated.

1-14 **Tasks.** Commanders must be aware of the capabilities of snipers and ensure that they are appropriately tasked on missions that maximise the sniper's effectiveness and survivability.

1-15 **Mobility.** Snipers must be swiftly deployable if they are to be effectively used. Depending on the unit's specific role the sniper platoon is scaled for a variety of vehicles, thus allowing snipers to deploy quickly to support key phases or points in a battle.

Phases Of War

1-16 The following lists the role of the sniper during the phases of war:

1-17 **Offensive Operations.**

a. Fire Support.
b. Counter Sniping.
c. Surveillance.
d. Flank Protection.
e. Cut off's.
f. Defeat of Enemy Counter attacks.
g. Recce/Strike.

1-18 **Defensive Operations**

a. Fire Support.
b. Counter Sniping.
c. Flank protection.
d. Gaps and Obstacles.

1-19 **Delay Operations.**

a. Disrupt & delay.
b. Fire support.
c. Flank protection.
d. Reserve.
e. Guard force.

1-20 **Enabling operations.**

a. Advance to contact.
b. Relief of troops in contact.

c. Link up operations.
d. Withdrawal.
e. Meeting engagement.

1-21 **Stability operations.**

a. Crowd control.
b. Cordons.
c. Route security.
d. Base security.
e. Overt op's.
f. Close observation/static.

1-22 **Counter sniping operations.**

1-23 **Passive control measures**

a. Active control measures.
b. Identification of enemy snipers.
c. Information necessary to eliminate enemy sniper threat.
d. Conduct platoon counter sniper operation.

1-24 **Counter Insurgency Operations**

a. Route clearance/convoy resupply.
b. Key point defence/base security.
c. Sweep operations.
d. Compound assault.
e. Heli operations.
f. Counter sniping.
g. Ambush.

1-25 **Other operational tasks.**

a. Patrolling.
b. Raids.
c. Ambush.
d. Observation post's.
e. Crossing and breaching obstacles.
f. FIBUA.
g. FIWAF.
h. Jungle
i. Conditions limited visibility.

j. Mountain.

k. Arctic/Cold weather.

l. Desert/Extremely hot conditions.

Sniper Platoon Structure

1-26 The Sniper Platoon forms part of the Intelligence Surveillance Target Acquisition and Reconnaissance (ISTAR) group and the organisation of the Sniper Platoon may vary dependent on role. However, each platoon is divided into three groups which are organised into a headquarters team of two sniper pairs, and two sniper sections, each of three sniper pairs. Snipers operate as a pair in order to allow the sniper to concentrate on engagement of the target whilst the spotter provides information on current and future targets and any corrections needed. Six-man sections increase mutual support, survivability and endurance.

1-27 The Sniper Orbat currently consists of 0+16, which is traditionally broken down into 1x 4 man Pl HQ and 2x 6 man Sections.

SNIPER SECTION		
SNIPER PAIR 1	**SNIPER PAIR 2**	**SNIPER PAIR 3**
Number 1 1x Sniper Rifle 1x SA80 1x CWS/SIMRAD STIC 1x Pistol 1x PRR 1x HMNVS 1x Ghillie Shroud 1x PRC 355/TACSAT	**Number 1** 1x Sniper Rifle 1x SA80 1x CWS/SIMRAD STIC 1x Pistol 1x PRR 1x HMNVS 1x Ghillie Shroud	**Number 1** 1x Sniper Rifle 1x SA80 1x CWS/SIMRAD STIC 1x Pistol 1x PRR 1x HMNVS 1x Ghillie Shroud
Number 2 1x SA80 1x CWS 1x Pistol 1x Spotting Scope 1x Kestrel 1x Binoculars Mk 6 1x PLRF 15c 1x PRC 354 1x HMNVS 1x Ghillie Shroud	**Number 2** 1x SA80 1x CWS 1x Pistol 1x Spotting Scope 1x Kestrel 1x Binoculars Mk 6 1x PLRF 15c 1x PRC 354 1x HMNVS 1x Ghillie Shroud	**Number 2** 1x SA80 1x CWS 1x Pistol 1x Spotting Scope 1x Kestrel 1x Binoculars Mk 6 1x PLRF 15c 1x PRC 354 1x HMNVS 1x Ghillie Shroud

Sniper Orders of Dress

1-29 **Sniper CEFO.** Snipers have 2 CEFO either for the pair Commander and the shooter.

On Person

ITEM	REMARKS	ITEM	REMARKS
Note book, pencil Rubber	Waterproofed	ASATS	Easily accessible
Light weight Compass	Attached to top left pocket in a protective case	FFD & CAT	As per unit SOP's
Protractor 6"		Cam Cream	
Map/Air Photo & Map Case	Left Map Pocket Attached	Lumocolor Pens (Perm)	Blue, Red, Green, Black
Route Card	Not located with map	Whistle	Attached top right pocket
Knife		IPE	Gloves, Eye Pro, Knee Pads
Map Torch	Spare batteries, minimum light for Tac night Nav	CEI	Pair Comd

1-30 **Patrol Order.** No helmet and ECBA, Ghillie packed away and sniper rifle concealed in valise.

1-31 **Stalk Order.** Ghillie donned in either the FRV or Section release point and the sniper rifle in valise until last safe moment.

Sniper (No.1) CEFO (Deployable for 48hrs)

ITEM	REMARKS	ITEM	REMARKS
SA80	6x 5.56mm Mags	STIC Weapon	AA Lithium Spare Batteries
Sniper Rifle	5x 8.59mm Mags	KN 203 (Simrad)	AA Lithium Spare Batteries
GSP	3x 9mm Mags	HMNVGS/LUCI	AA Lithium Spare Batteries
150 5.56mm Rounds (bandolier)		LLM	Spare Batteries
60 Rounds 8.59mm		Ghillie	
1x L109 HE Gren		Durable Gloves	
1x L84 Gren		Secateurs	

ITEM	REMARKS	ITEM	REMARKS
2 Litters Water		48 hrs Rations	24 Emergency
Rifle Cleaning Kit & Oil	Striped for both weapons	Shooting Sticks	
Rice Sock		Drag Line	
Gortex Jacket		Small war clothing	
1x Spare Socks	With Gortex Socks	Warm Hat	
PRR Single		Pocket Book	
Head torch	With filters		

Pair Commander (No.2) CEFO (Deployable for 48hrs)

ITEM	REMARKS	ITEM	REMARKS
SA80	6x 5.56mm Mags	STIC spotting scope	Spare Batteries
GSP	3x 9mm Mags	CWS/VIPER/ MUNNS	Spare Batteries
150 Rounds (bandolier)		HMNVGS/LUCI	Spare Batteries
60 Rounds 8.59mm		LLM	Spare Batteries
1x L109 HE Gren		PLRF-15C	
1x L84 Gren		Leupold Spotting Scope	
2 Litters Water		Ghillie	
Rifle Cleaning Kit & Oil	Striped for both weapons	Durable Gloves	
Rice Sock		Secateurs	
Gortex Jacket		48 hrs Rations	24 Emergency
1x Spare Socks	With Gortex Socks	Tri Pod	
PRR Double		Drag Line	
WSW		Small warm clothing	
Additional Kit for Shooter		Warm Hat	
PRC 349	48 hours	Pocket Book	
1x Claymore		Pair Med Pack	
Light weight Stretcher	1 per section	Cooking Equipment	
Head torch	With filters	TAM & Pocket Book	

Sniper CEMO

ITEM	REMARKS	ITEM	REMARKS
Sleeping & Bivi Bag	Prepped	Boot Cleaning Kit	
Warm Kit		Sleeping Mat	
House Wife		Washing & Shaving Kit	
Spare Socks	4 Pairs	Poncho	1 per pair
Spare trousers		Shovel or Pick	Covered with sand bag
Spare Top		Spare footwear	
Sand bags	Rubbish	Rations	
2 liters of water			
Mission Specific			
OP Equipment		**Body Armor and Helmet**	
CBRN			

Conclusion

1-32 **End of Lesson Drill.**

a. *Questions from the squad on the entire lesson.*

b. *Confirm by questions and practice if time permits.*

c. *Safety precautions.*

d. *Pack kit.*

e. *Summary. To include the following:*

(1) Sniper Employment.

(2) Principles Of Employment.

(3) A forecast of the squad's next lesson in this subject.

1-33 – 39. *Reserved.*

Lesson 2. Kit Construction

1-40 ***Aim.*** *To teach the construction of:*

a. *Constructs of a ghillie shroud.*

b. *Construct tripod.*

c. *Prepare Sniper CEFO.*

1-41 ***Timings.*** *Two 40 minute periods.*

1-42 ***Method.*** *Basic lessons indoors.*

1-43 ***Stores.***

Ghillie
Tripod
Obs Folder
Rice Sock
CBRN Repair Tape
Sniper Rifle
Valise

Introduction

1-44 *Explain:* It is essential that the snipers equipment is constructed/prepared correctly so that the mission can be achieved by adopting a stable final fire position (FFP) without compromise. When preparing equipment the sniper must ensure during taping or spraying of weapons and equipment that all Serial numbers are visible.

Construction of the Tri-Pod

1-45 *Explain:* The tripod is an important aid to shooting from positions other than prone. It can be used to fire from above cover and acts as a stable support to the rifle.

Description

1-46 On initial issue the tripod consists of three long metal legs and a multi-directional hinge that allows for a stable platform for the rifle to rest on. Each leg has a pre-drilled hole that a length of para cord can be threaded through during fitting. A cord grip is also provided to secure the para cord at a pre determined length. A soft pad can also be used to place between the tripod and the rifle for additional stability.

1-47 In the event of the issued shooting sticks either breaking or loosening the sniper will be required to construct an improvised tripod.

Construction

1-48 *Explain and demonstrate, the squad imitating:* Because each firer is of a different build the tripod is initially issued at a length of approximately 5 feet. The sniper needs to place the tripod upside down and hold it along his side. Another person should then mark each leg at the sniper's waist belt. Once complete the legs should be cut to size, ensuring that the cut is at a 45-degree angle. This will ensure the legs sit correctly on the ground when opened.

1-49 Constructing an improvised tripod uses the same principles as the issued shooting stick, 3 sticks of approximately 30mm in diameter strong enough to support the sniper rife are required. To secure the sticks to make the tripod use either bungee cord or para cord.

1-50 Once the tripod has been tested for fit by the sniper a length of para cord should be threaded through the hole on each leg and secured with the cord grip. This will ensure it is not possible for the tripod to collapse during firing.

1-51 *Confirm by practice.*

Use of the Tripod

1-52 *Explain* (*see* Fig 1-1)*:* To use the tripod, open up the legs to the required width then draw the cord grip on the para cord until it is tight enough to stop the legs accidentally collapsing. Once the tripod is no longer required for use it can be folded away and secured in place by tightening the cord grip. The tripod can then be camouflaged as required.

Description of a Rice Sock

1-53 *Explain* (see Fig 1-2): The use of the rice sock supports a number of different uses the most common being used in conjunction with the Tripod. The rice sock removes the furniture of the weapon from the hard base of the tripod, can be used with all fire positions and provide support for spotting.

Construction of a Rice Sock

1-54 *Explain and demonstrate, the squad imitating:* Constructing the rice sock will require*:*

a. One Sock (preferably green).

b. A durable water proof bag.

c. Dry long grain rice.

1-55 Its consistency should be sufficient enough to absorb the weight of the rifle.

Fig 1-1. Use of the Tripod

Fig 1-2. Rice Sock

Description of a Ghillie Shroud

1-56 *Explain* (*see* Fig 1-3)*:*The ghillie shroud is an aid to camouflage and concealment its main advantage is disrupting the outline of the body, enhanced with natural vegetation to be able to survive a 10m walk past and disrupt the heat signature of the body. The head and shoulders are the most important part of the ghillie which is constitutes around 60-70% of the shroud. The rural ghillie must always be used with the correct vegetation taken from the area of the operation.

Construction of a Rural Ghillie Shroud

1-57 *Explain and demonstrate, the squad imitating:* Making the Rural ghillie requires minimal resources. It comprises of issued ghillie shroud and approximately 5 sand bags and a lot of work. Other materials can be used depending on the environment.

1-58 *Confirm by practice.*

Description of a Observation Board

1-59 *Explain* (*see* Fig 1-4)*:* The Observation board is generally deployed in an OP and is used to produce a panoramic of the arc to enhance higher situation awareness. It is also an aid to logging and reporting.

Construction of a Observation Board

1-60 *Explain and demonstrate, the squad imitating:* there are many ways to construct a suitable Observation board. A home made version can be constructed from plywood and Perspex or a cheap folder modified to suit the individual taped up using green/tan tape to remove the shine.

1-61 *Confirm by practice.*

Description of the Valise

1-62 *Explain* (*see* Fig 1-5)*:* The modern sniper is required to achieve a first round kill at 900 meters. The sniper must look after their weapon as any small knock could affect the zero. The drag bag offers protection to the complete weapon system and prevents any ingress of dirt and dust getting into the rifle and sight. In addition, it provides the following:

a. **Deception.** It allows the sniper rifle to be concealed during movement around the battlefield. It helps disguise the fact that the soldier is a sniper, and therefore preventing them becoming a high priority target.

b. **Security.** The use of the bag allows the sniper pair to patrol with a rifle, therefore, giving them a semi or fully automatic capability to defend themselves.

c. **Drag Line.** There is a need for a strop to be attached to the belt. This can vary in length and its position on the belt is dependent on the sniper's preference. As a general rule the shorter the strop the more control the sniper has over the bag.

Fig 1-3. Ghillie Shroud

Fig 1-4. Obs Board

Preparation of the valise

1-63 *Explain and demonstrate, the squad imitating:* The valise needs to be prepared either for patrol or stalk order. A common mistake in battle preparation is that the valise gets neglected, key preparation points are:

a. A form ghillie is required to disrupt the shape and constructed to accommodate natural camouflage.

b. A drag line must be prepared and attached to the nose of the drag bag ready to be attached to the webbing belt when required

1-64 *Confirm by practice.*

The Rifle and Optics

1-65 *Explain* (*see* Fig 1-6)*:* Camouflage and concealment is paramount when moving around, in a static position or occupying an final firing position. Disrupting the signature of weapons and equipment will reduce the, shine, surface, glint and shape. This can be achieved using green/tan Tape, weapon spay paints, cam cream etc.

1-66 *Confirm by practice.*

Preparation of The Rifle and Optics

1-67 *Explain and demonstrate, the squad imitating:* Key points to consider when preparing equipment:

a. Do not over tape.

b. Spray paints.

(1) Ensure scope has been correctly prepared.

(2) Bolt is removed.

(3) No paint gets into either the chamber, barrel or the ejection port of the rifle.

(4) The barrel of the rifle is prominent and therefore must be taped.

c. Camouflage requires changing throughout different seasons and environments.

Fig 1-5. The Valise

Fig 1-6. Rifle and Optics

Conclusion

1-68 **End of Lesson Drill.**

a. *Questions from the squad on the entire lesson.*

b. *Confirm by questions and practice if time permits.*

c. *Safety precautions.*

d. *Pack kit.*

e. *Summary. To include the following:*

(1) The need to ensure the tripod is cut to the correct length.

(2) The importance of using the para cord to secure the tripod legs before firing.

(3) A forecast of the squad's next lesson in this subject.

1-69 – 79. *Reserved.*

Lesson 3. Movement with the Sniper Rifle and the Drag Bag

1-80 ***Aim.*** *To teach the methods of moving across country with the sniper rifle.*

1-81 ***Timings.*** *One 40 minute period.*

1-82 ***Method.*** *A basic instructional outdoor period.*

1-83 ***Stores.***

Sniper Rifles Telescopic sights fitted Slings fitted
Drag bag *1 per soldier*

1-84 ***Preparation.*** *Reconnoitre the training area and select ground on which the various movements in the lesson can be fully demonstrated. Fit slings and telescopic sights to the rifle.*

1-85 ***Miscellaneous.*** *This lesson contains revision on the methods of movement taught in Reference A, and also certain points applicable to snipers. The instructor should avoid teaching skills already taught and should get a member of the squad to demonstrate where possible.*

Preliminaries

1-86 ***Safety Precautions.*** *Normal.*

1-87 ***Revision.*** *Nil.*

Introduction

1-88 *Explain:* Whenever the infantry soldier is required to move, every effort is made to provide covering fire or a smoke screen to conceal his movement from the enemy. The sniper will rarely have the benefit of such cover so it is essential that the sniper develops the ability to move without being heard or seen. Without training, the sniper's movements are likely to be both clumsy and tiring, practice should therefore be carried out in as wide a variety of circumstances as possible.

Movement with the Sniper Rifle

1-89 **Principles Affecting Movement.** *Explain*: There are certain basic methods of movement that the sniper can employ, most of which can be modified to suit the build of individual snipers and the requirements of particular pieces of cover. Whichever method of movement is employed.

1-90 **Safety.** When the Sniper Rifle is made ready the safety catch must be in position 2 (fully rear) during all methods of movement.

1-91 **Walking.** (see Fig 1-7). *Explain and demonstrate where necessary*: Care is essential as to where the feet are placed on the ground to avoid making unnecessary noises. Balance is essential to silent movement and this is often easier to maintain if the knees are slightly bent and the arms are carried low. From this position it is easy to drop to cover if necessary. The safety catch may be applied or released as circumstances dictate. The setting of the sight drum should be checked after each move.

1-92 **Monkey Run.** (see Fig 1-8). *Explain and demonstrate, where necessary*:

a. **Method.** The method laid down in Reference A, is not entirely suitable when the sight is fitted to the rifle because of the possibility of damage to it.

b. **Propulsion.** Propulsion is obtained by using the right elbow and left hand.

c. **Sling.** If a form of 'Hawkins' position is used habitually, movement, handling and speed will be improved by holding the sling securely by the left hand, otherwise the sling should be adjusted on to the left arm.

1-93 *Confirm by questions and practice.*

1-94 **Leopard Crawl.**(see Fig 1-9). *Explain and demonstrate where necessary*:

a. **Method.** This method of movement is the same as that taught in basic training.

b. **Rifle Carriage.** The rifle may be carried either in both hands using an underhand grip and keeping the deflection drum on the sight uppermost, or by gripping the front sling swivel and resting the rifle on the outside of the arm.

c. **Width Restrictions.** The latter hold is most suited to crawling along culverts or ditches, etc., when width is restricted the sight drums are more liable to be disturbed and, since the sling cannot be fitted during movement, it takes longer to adopt a firing position.

1-95 **Stomach Crawl.**

a. **Method.** This method of movement requires the whole body to be pressed as close to the ground as possible.

b. **Propulsion.** Propulsion is obtained by pulling with the forearms and at the same time pushing with the insides of the feet while the heels are kept on the ground.

c. **Sling.** If a form of 'Hawkins' position is used habitually, movement, handling and speed will be improved by holding the sling securely by the left hand, otherwise the sling should be adjusted on to the left arm.

d. **Observation.** When using this crawl, it is natural to look down consequently frequent pauses must be made for observation.

Fig 1-7. Walking

Fig 1-8. Monkey Run

Fig 1-9. Leopard Crawl

e. **Limited Use.** Progress with the stomach crawl is both slow and tiring; it should only be used when extreme caution is needed, when using low cover or crossing the open.

1-96 *Confirm by questions and practice.*

1-97 **Turning.** *Explain and demonstrate*: It is often necessary to change direction when crawling or even to turn completely around to withdraw from an observation or fire position. Extreme care is essential, first ease the body as far to the right as possible but keep the legs together. The left leg is then moved as far to the left as possible and the right leg then closed to it. This will effect a turn to the right and should be repeated until facing the required new direction. The procedure should be reversed to effect a move to the left.

1-98 **Moving Backwards.** It may be sometimes necessary to withdraw without turning and this can be achieved by doing the stomach crawl in reverse: pushing instead of pulling with the arms.

1-99 *Confirm by questions and practice.*

Drag Bag System

1-100 *Explain:* The modern sniper is required to achieve a first round kill at 900 meters. Care must be taken with the weapon as any small knock could affect the zero. The drag bag offers protection to the complete weapon system and prevents any ingress of dirt and dust getting into the rifle and sight. In addition, it provides the following:

a. **Deception.** It allows the sniper rifle to be concealed during movement around the battlefield. It helps disguise the fact that the soldier is a sniper, and therefore preventing them becoming a high priority target.

b. **Security.** The use of the bag allows the sniper pair to patrol with a rifle, therefore, giving them a semi or fully automatic capability to defend themselves.

Movement with the Drag Bag

1-101 There is a need for a strop to be attached to the belt. This can vary in length and position on the belt dependent on the sniper's preference. The shorter the strop the more control the sniper has over the bag.

1-102 **Walking.** *Explain and demonstrate where necessary:* The bag can be carried as a day sack using the straps or slung over one shoulder using the sling. The shorter sniper will prefer the sling as it prevents the bag catching their heels as they move along. The bag can be carried by the carrying handle if the sniper is moving shorter distances or moving in the crouched position.

1-103 **Monkey Run.** *Explain and demonstrate where necessary:* For short movement the sniper can drag the bag by the carrying handle or the krab loop using the rifle in his other hand. For longer distances the sniper can attach it to the strop on the belt and drag it behind with his rifle in their hand. This second method will ensure the sniper has a smaller width as they move through close cover.

1-104 **Leopard Crawl.** *Explain and demonstrate where necessary*: The options are the same as for the monkey run.

1-105 *Confirm by questions and practice.*

Conclusion

1-106 **End of Lesson Drill.**

a. *Questions from the squad on the entire lesson.*

b. *Confirm by questions and practice as time permits.*

c. *Safety precautions.*

d. *Pack kit.*

e. *Summary. To include the following:*

(1) The need for stealth when moving and choosing the correct method of movement for the ground being covered.

(2) A forecast of the squad's next lesson in this subject.

1-107 - 109. *Reserved.*

Lesson 4. Sniper Target Acquisition

1-110 ***Aim.*** *To teach Sniper target acquisition.*

a. *Target selection.*

b. *Indexing of targets.*

c. *Target indication and fire control order.*

1-111 ***Timings.*** *One 40 minute period.*

1-112 ***Method.*** *A basic indoor period.*

1-113 ***Stores.***

Note Book and Pen	*1 per soldier*

1-114 ***Preparation.*** *Power Point*

Preliminaries

1-115 ***Revision.*** *Nil.*

Introduction

1-116 *Explain:* Its imperative that a sniper can indicate, priorities, select, index and issue/receive quick effective fire control orders.

Target Selection

1-117 *Explain:* The Snipers Role is **"***To locate, observe and destroy key enemy personnel and equipment with indirect and direct precision fire***".** The Sniper Pl Commander will receive the High Value Target List (HVTL) from the BG Int Officer, this is generally key personnel or anything that the enemy may effect larger operations.

1-118 The sniper sections/pairs identify all enemy targets within arcs in order to start indexing and prioritising all targets. The sniper platoon commander will then prioritise all targets using the sniper high priority target list (HPTL) and index all targets to the sections/pairs.

1-119 The Sniper Section selects targets according to their value. Certain enemy personnel and equipment can be justifiable listed as key targets although their real worth must be decided by the Platoon/Section Commander in relation to the circumstances in which they are located. Target selection will depend on the nature of the Mission.

1-120 *Confirm by questions.*

Considerations for Target Selection

1-121 *Explain:* The choice of targets may be forced onto Snipers. They may lose a rapidly moving target if they wait to identify it in detail and must consider any enemy threatening their position as an extremely HVT When forced to choose a target the Section will consider several factors.

a. **Distance.** Normally, a target over 1000 metres away will NOT be engaged unless its destruction is urgent. However, the accuracy of the rifle is such that a skilled shot can destroy, suppress and harass targets out to 1500 metres. Firing at such a range should be balanced against the amount of ammunition carried. Targets should only be engaged at such ranges if absolutely necessary.

b. **Equipment Targets.** A well placed shot can disable crew-served weapons, radios and vehicles. At times this may be of more value than killing a crew member. Crew members are easier to replace than equipment.

c. **Information Collection.** At times, if the soldier holds his fire he can report on an activity which, as it develops, may prove to have great intelligence value. An example of this is the building of a bridge across a river. As the construction progresses it becomes apparent that it will handle medium or heavy traffic such as armoured vehicles etc.

d. **Multiple Targets.** Snipers should carefully weigh the possible consequences of shooting at one target out of a large group, such as a fighting patrol. This is especially true when the target cannot be Positively Identified (PID) in detail. **Only when a sniper is positively sure his position will not be exposed or detected will he fire more than three shots from any one position.** The Sniper section may trade their lives for an unimportant target by putting themselves in a position where they must fire repeatedly in self-defence.

2-122 *Con irm by questions.*

Sniper Priority Target List

a. Enemy C2 (Officers, SNCO's & JNCO).

b. Snipers.

c. Signallers/Specialists.

d. Crew Served Weapons.

e. Equipment.

f. Optics.

g. Helicopters (Ground or Hover).

Indexing Targets

1-123 *Explain:* Targets are indexed into the following categories:

a. A-Building.

b. B-Male.

c. C-Vehicle.

d. E-Female.

e. F-Foot.

Reasons For Indexing Targets

a. Indexing targets prevents confusion and provides a quick reference guide for locating targets.

b. Prevents indiscriminate firing.

c. Indiscriminate firing may alert more valuable and close targets.

d. Indiscriminate firing at a distant targets may result in disclosure of the FFP to closer Enemy personnel.

e. Since several Targets may be observed at the same time. Indexing will help the shooter remember Target locations.

Reasons For Indexing Multiple Targets

f. **Exposure Time.** Moving Targets may expose themselves for only a short time. The Sniper Section must be alert to index points of disappearance of as many Targets as possible before engaging any one of them. This will be extremely important when considering an ambush point and lead for a specific location.

g. **Number Of Targets.** When the number of targets is such that a Section is unable to remember all locations, **they must concentrate on the most important and exposed Targets** or they may become confused and fail to effectively locate and engage any.

h. **Spacing/Distance Between Targets.** The greater the distance between Targets, the more difficult it is to note their movement. In such case the Section should accurately locate and engage the nearest target unless a key selected target is to be reduced.

i. **Evaluating Aiming Points.** Targets which disappear behind aiming points are easily lost. When 2 Targets of the same value, that are equally dangerous, present themselves, the Sniper should engage the poorest aiming point first.

1-124 *Confirm by questions.*

Sniper Target Indication/Fire Control Order

1-125 *Explain:* Professional soldiers train for combat action by practising battle drills. These drills are thought out carefully, so each action happens in the correct sequence and contributes to the overall success of the battle. Snipers, working in pairs, must communicate their thoughts once a target has been identified. Their battle drill for indication combines field craft and marksmanship skills and uses a sequence**.** The engagement sequence must be practiced over and over until it can be achieved in the correct order, automatically.

a. **Range.** Both No.1 and 2 work out the range to target if time permits however the No.2 will generally work out the range whilst the No.1 is setting up the firing position. The No.2 has many aides to judge the distance either the PLRF-15c depending on conditions, Map, Bino's, spotting scope etc.

(1) There are two ways the elevation can be set either the No.2 sets the scales and the No. 1 confirms or the most common way is the No.1 sets the scales and the No.2 confirms that they are set correctly.

b. **Indication.** The No.2 will indicate which target will be engaged or the priority they will be engaged in.

c. **Deflection.** Predominately the No.2s job is to call the wind speed either using WSM depending on the FFP, or using the observation method. Once the No.2 has called the wind speed and direction the No.1 will then set the scales with the No.2 confirming they are set correctly.

d. **Actual Aiming Point.** The No.1 will always call the actual aiming point as they know their capabilities, the No.2 can call any corrections if required.

e. **Confirmation.** Reconfirm all DATA has not changed i.e. is the target moving if so, is the target still moving at the same speed and same direction.

f. **Time To Fire.** The No.2 will coordinate time to fire with either the Pl Comd/Sec Comd or the pair.

g. **Stop.** If any of the DATA changes.

1-126 *Confirm by questions.*

1-127 *Explain:* It may be difficult to pinpoint the exact location of the fall of shot if the sniper misses. The observer has to use one of the following to assist them locate where the sniper's round has gone:

a. **Swirl.** This is the displacement of air by the bullet as it travels to the target. Swirl is seen at the culminating point of the trajectory, which with the rifle is approximately two thirds of the distance to the target and is the culminating point or Vertex Height for the current 8.59 mm ball and API ammunition. An experienced observer will be able to track the swirl from culminating point to where the bullet has landed. Unless the observer is directly behind the firer this will be difficult to locate.

b. **Strike.** This is the visible impact of the bullet hitting either the ground or a solid object near the target, or the target itself. The API round produces a distinctive flash if hitting a solid object. Strike can be misleading if the bullet ricochets from the target or the angle from the firing position to target is not appreciated.

1-128 *Confirm by questions.*

After Action

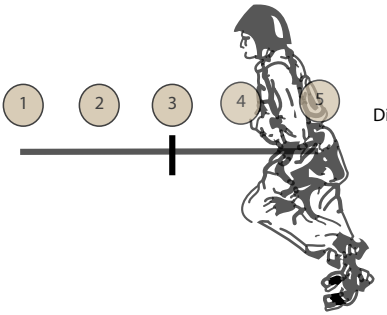
1-129 *Explain:* Once the shot has been released the pair must continue to concentrate and follow out the following drills:

a. **Follow Through.** Follow through the shot without disturbing the sight and with no movement, no change in body or mind. The No.1 will re-cock the weapon as soon as the shot has been released. The No.2 watches the target and observes where the bullet impacts. If the target is missed, the spotter will give immediate corrections, there might not be enough time to readjust the scales but to hold off straight away.

b. **Engage Other Targets.** If there are multiple Targets all ranges would have been worked out before the initial shot. Targets will now be engaged in priority order, this may change if re-enforcements arrive.

c. **Withdraw.** Once the mission is complete, withdraw to prevent a follow up Action. Always consider the likelihood of effective En fire i.e. Fire into likely En positions call for Indirect fire etc.

1-130 *Confirm by questions.*



Difficult Wind/ Moving Target Conditions

Difficult Range/Angle Conditions

X Method

Parallel
Method

Fig 1-10. Indexing Targets

Conclusion

1-131 **End of Lesson Drill.**

a. *Questions from the squad on the entire lesson.*

b. *Confirm by questions and practice as time permits.*

c. *Safety precautions.*

d. *Pack kit.*

e. *Summary. To include the following:*

(1) The need for stealth when moving and choosing the correct method of movement for the ground being covered.

(2) A forecast of the squad's next lesson in this subject.

1-132 - 139. *Reserved.*

Lesson 5. Judging Distance Methods and Techniques

1-140 ***Aim.*** *To teach judging distance.*

a. *Methods.*

b. *Techniques.*

1-141 ***Timings.*** *One 40 minute period.*

1-142 ***Method.*** *A basic indoor period.*

1-143 ***Stores.***

Note Book and Pen	*1 per soldier*

1-144 ***Preparation.*** *Power Point.*

Preliminaries

1-145 ***Revision.*** *Nil.*

Introduction

1-146 *Explain:* It's essential that a sniper can judge distance accurately in order to engage the enemy with direct precision fire.

Basic Methods Of Judging Distance

1-147 **The Unit Of Measure.** *Explain and demonstrate where necessary*:

a. Providing all the ground between the sniper and the object is visible, the sniper can use 100 metres as a unit of measure and estimate how many of these units can fit in between them and the object.

b. This method is not very accurate for estimating distances over 400 metres.

Appearance Method

1-148 *Explain and demonstrate where necessary*: The amount of visible detail of a soldier at various ranges gives a good indication of the distance they are away.

a. *At 100 metres - clear in all detail.*

b. *At 200 metres - clear in all detail, colour of skin and equipment identifiable.*

c. *At 300 metres - clear body outline, face colour good remaining detail blurred.*

d. *At 400 metres - body outline clear, remaining detail blurred.*

e. *At 500 metres - body begins to taper, head becomes indistinct.*

f. *At 600 metres* - body now wedge shaped, no head apparent.

Conditions Affecting Appearance

1-149 Objects seem closer than they are when:

a. The light is bright or the sun is shining from behind the observer.

b. They are bigger than the other objects around them.

c. There is dead ground between them and the observer.

d. They are higher up than the observer.

1-150 Objects seem further away than they are when:

a. The light is bad or sun is in the observer's eyes.

b. They are smaller than the other objects around them.

c. Looking across a valley or down a street.

d. The observer is lying down.

Aids To Judging Distance

1-151 **Key Ranges.** *Explain*: If the range to any area or object in an arc is known, it is possible to use that known range to judge the distance to nearby areas or objects. Key ranges may have been obtained using either of the methods of judging distance, by laser range finder, by maps or from targets that have been successfully engaged with specific sight setting.

1-152 **Bracketing.** The bracketing technique is a useful aid under most conditions. It requires the sniper to use the Appearance or Unit of Measure method to estimate the maximum feasible distance to the object and then the minimum possible distance. The estimate of the actual distance should be set midway between the two extremes e.g. maximum distance 800 metres; minimum distance 500 metres. Estimated distance = 650 metres.

1-153 **Halving.** For distances of about 1000 metres it should be possible to select an area, or object about midway between the position and the target and in direct line with it. Since it is generally easier to judge distance to closer objects, use the Appearance or Unit of Measure method to judge the distance to the midway area or object. Doubling this estimation produces a reasonably accurate judgement of range to the intended target. Care must be taken when judging the distance to the halfway point as any error at this stage will be doubled in the final solution.

1-154 **Unit Average.** When in a group, get each sniper individually, to judge the distance to an object using either the Appearance or Unit of Measure method. They can use any of the aids to judging distance that they are familiar with, but the judged distance must be an individual effort, because some will over estimate and others underestimate, their errors will cancel out. Taking an average of the estimates, an accurate range can often be produced.

1-155 *Confirm by questions.*

1-156 **Other Devices.** Other devices which can be used to assist to judging distance are:

a. **Binoculars.** The reticule pattern of the binoculars can be used in much the same way as the sight picture of the iron sight or the SUSAT, to compare the appearance of objects or targets at various distances. Practise is needed to understand and relate the size of the lines in relation to objects at different distances.

b. **Ranging Fire.** When the tactical situation allows, advantage should be taken to fire at specific objects within the arc. Adjusting the strike until fire is correctly applied, then make a note of the sight setting used.

c. **Laser Range Finders.** The PLRF-15C has multiple functions. It can measure the range, distance between 2 points, work out the angle range and take an azimuth bearing.

d. **Mil Dot System.** The Mil Dot system allows quick and accurate estimations of ranges without having to break fire positions. This is only effective out to 750m.

e. **Range Finding Stadia Lines.** Allows a quick and accurate range estimation using the weapons sighting system.

f. **CWS.** CWS Is a good way for a No.2 to measure distance at night. It is not as accurate as using Mil Dot or Bino's.

g. **GPS.** By changing a waypoint to the Grid of the En and pressing Go to will give an accurate range to the target. The accuracy of this method is dependant on the GPS signal strength and the grid chosen as the way point.

h. **Map.** Use of a map for measuring distances is an accurate way to determine Short, Mid and Long Range distances. **Aides required to assist in judging distances on a map are:**

(1) Ruler.

(2) Compass.

(3) Protractor.

(4) Paper.

(5) Watch.

1-157 Range estimations using the Binoculars and the Mil Dot system require two pieces of information: Known height of target in Metres (Accurate to .25 of a Metre) and the estimated height of the target in Mils.

1-158 Once the two pieces of information are available a simple formula is applied to acquire the Range to Target.

Known height of Target in cms x 1000 Divided by

Reticule measurement in Mils = Range in Metres

Mil Dot System

1-159 **Stadia Lines.** (*see* Figs 1-11 & 1-12) Mid to Long Range using the bottom line and the top of the Stadia lines to determine approximate range. At short range place the bottom line on the shoulders and the top line on top of head, which ever stadia line it fills will be the approximate range.

The Binocular Reticule Pattern

1-160 If an average man is approximately 1.75mts tall. Place Mildot picture on to man and gauge the Mildot reading. Mildot reading is 5 mils Known height is 1.75mts x 1000 = 1750 1750 :- 5mils = 350. Range to target 350 metres

Judging Distance Using PLRF-15

1-161 The PLRF-15 is issued to Snipers primarily to enable them to determine the range to any target accurately. It is in fact a number instruments in one:

a. A x6 powered monocular with a field of view of 106 mils.

b. A magnetic compass capable of displaying grid or magnetic bearings in mils or degrees to an accuracy of ± 10mils.

c. A class 1, eye-safe laser range finder capable of measuring distances from 5 metres to 3000 metres to an accuracy of ±2 m (>50m to <1500m) or ±5 m (<50m / >1500m).

d. An inclinometer capable of displaying vertical angles to an accuracy of ± 3 mils / -0.2°.

e. The maximum angle for measurement is ± 800 mils.

f. It will function between -35°C to +63°C. It weighs less than 670g.

g. It can be immersed in water to a depth of 1 metre for up to 30 minutes.

1-162 **Description**

a. A removable, neck cord**.**

b. A single eyepiece which is adjustable for focus.

c. A distance key.

d. A bearing key.

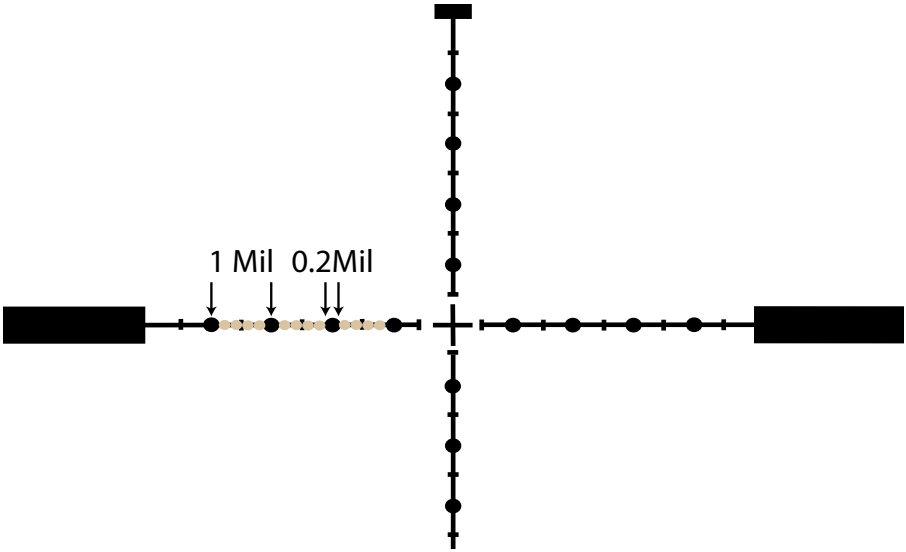


Fig 1-11. Mil Dot System

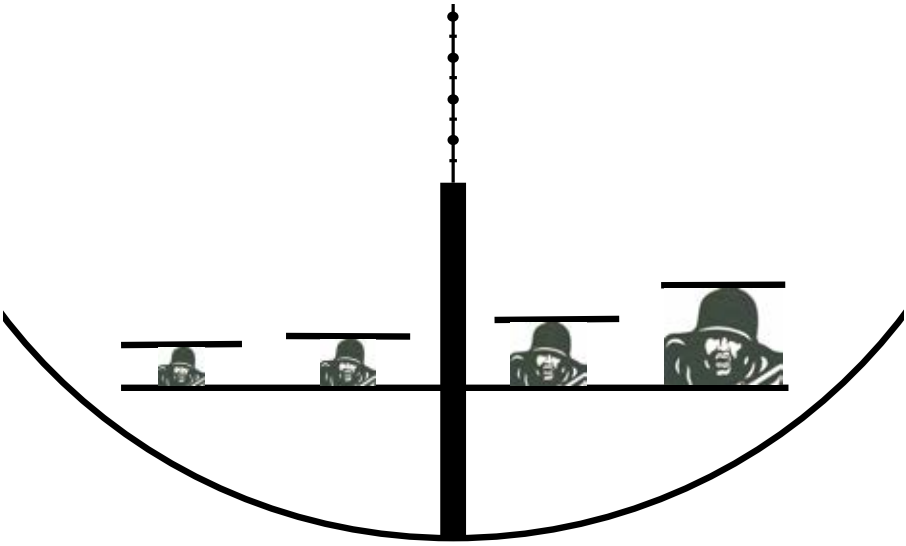


Fig 1-12. Stadia Lines

e. A mounting plate (for attachment to a camera tripod).

f. A battery compartment with a removable cover (remove cover) inside which 2x 3V lithium battery, types CR123A are used (replace cover).

The Reticule

1-163 There are 2 reticules that can be used. An engraved reticule or an electronic one:

a. The engraved reticule can be used in place of the electronic aiming mark. It consists of the following:

b. A crosshair with lines spaced at 10 mils apart up to 50 mils in elevation and deflection.

c. Line-point spacing of 5 mils apart.

d. 1 mil corresponds to 1 metre spacing at a distance of 1 km.

e. The electronic reticule is identical to the engraved reticule with the addition of an illuminated aiming mark that can be activated for use under poor lighting conditions.

Factors Affecting Measurements

1-164 Although the PLRF-15c will provide measurements, there are certain factors that should be taken into consideration when using, as follows:

a. A better reading will be obtained from a solid, flat, reflective surface, i.e., a building, a vehicle rather than an angled or non-solid surface. The size of the area will affect measurements. The bigger the surface area the better chance of an accurate reading.

b. Atmospheric conditions will affect measurements. Snow, heavy rain or low cloud will interfere with the beam.

Factors Affecting Readings

1-165 The PLRF-15c contains a magnetic compass, consequently metal objects and magnetic fields can interfere with readings. To avoid this, calibrate the compass after every battery change and observe the minimum safe distances.

Conclusion

1-166 **End of Lesson Drill.**

a. *Questions from the squad on the entire lesson.*

b. *Confirm by questions and practice as time permits.*

c. *Safety precautions.*

d. *Pack kit.*

e. *Summary. To include the following:*

(1) The need for stealth when moving and choosing the correct method of movement for the ground being covered.

(2) A forecast of the squad's next lesson in this subject.

1-167 - 169. *Reserved.*

Lesson 6. Sniper Observation and Target Detection

1-170 ***Aim.*** *To teach Observation techniques.*

a. *Observation.*

b. *Target detection.*

1-171 ***Timings.*** *One 40 minute period.*

1-172 ***Method.*** *A basic indoor period.*

1-173 ***Stores.***

Note Book and Pen	*1 per soldier*

1-174 ***Preparation.*** *Power Point.*

Preliminaries

1-175 ***Revision.*** *Nil.*

Introduction

1-176 *Explain:* Observation plays a big part in the role of the sniper operating within the FIND and FIX functions. Being able to detect and observe the enemy enhances the battle picture of the enemies movements and intentions.

Why Things Are Seen

1-177 *Explain*: Whether an object is easy or difficult to see with either the naked eye or binoculars depends upon several factors.

a. **Shape.** Some things can be recognized instantly by their shape, particularly if they contrast with their surroundings. Two easily distinguished shapes which require disguise for concealment are:

(1) The clear shape of a soldier's outline.

(2) The smooth round top of a combat helmet.

b. **Silhouette.** Any object silhouetted against a contrasting background is clearly visible. Smooth flat backgrounds such as water, a field, or worst of all the sky, should be considered dangerous. An object may also be silhouetted if it is against the background of another colour. For concealment, choose an uneven background such as a hedge, bush, trees or broken ground.

c. **Shine.** If an object has a texture that contrasts with its surroundings it is clearly visible. The surface of the combat helmet and white skin contrast violently with most backgrounds and need to be disguised to assist concealment. Be aware of items that glint in sunlight which can be seen from long distances.

d. **Shadow.** In sunlight, an object casts a shadow which gives away its presence. For concealment, keep in the shade if possible. Shade affords cover and there are no 'telltale' shadows. As the sun moves, so do the shadows.

e. **Spacing.** Natural objects are never regularly spaced. Regular spacing means man-made objects. For concealment avoid regular spacing.

f. **Sudden Movement.** The eye is attracted to any movement but especially sudden movement. For concealment movement should be slow and cautious.

g. **Signature.** People, vehicles and equipment all have a Thermal Signature. While camouflaged in every other way, it is possible to see heat sources such as an engine block, a hot gun barrel, stove and a human body when using a Thermal Imager. Equipment and dress also have different levels of Infra-Red reflectivity. Issued equipment has all been tested to minimise such signatures.

(1) Biological Night Vision and why Red Torches are used. Humans have a natural capability to see at night and it takes from roughly 10 to 30 minutes to full adapt. This is why red filtered torches are used at night to help preserve natural night vision. While even a flash of white light will ruin night vision and cause the adapting process to start again, red light has much less of an effect.

(2) Thermal Imagery.

(3) Image Intensification.

(4) Active illumination technologies work on the principle of coupling imaging intensification technology with an active source of illumination in the near Infra-Red (NIR) or shortwave Infra-Red (SWIR) band.

1-178 *Confirm by questions.*

Target Detection

1-179 *Explain*: The purpose of observation is to penetrate the enemy's concealment. To do this a highly developed sense of sight is essential, not only for the sniper to locate his quarry but also for his own survival.

Training The Eye

a. 20/20 vision perfect eyesight.

b. The eye is a muscle.

c. It can be exercised by observing over distances outdoors.

Mental Alertness

1-180 The sniper must be alert to his natural surroundings and what is happening around him: He must be aware of indicators that would normally defeat the casual observer:

a. Wildlife indicators.

b. Ground study.

c. Suspicious mind.

d. Keep an active mind.

Light

a. The light will constantly change.

b. A change in light conditions may reveal an object or position.

c. Position of the sun.

d. Exposed equipment may reflect light.

e. Clear light before and after rain showers.

f. Dawn/Dusk.

Observation Position

a. Not obvious.

b. Not near easily identifiable positions (corner of wood).

c. Maximum fields of fire.

d. Maximum concealment.

1-181 *Confirm by questions.*

Observation Procedures

1-182 *Explain*: As soon as the sniper arrives at the observation position they should commence to search the chosen area. To check for immediate danger a hasty search is carried out, followed by a detailed search. A range card should then be made out.

1-183 **Hasty Search.** A rapid search conducted when a sniper arrives in position and looks for likely enemy positions.

1-184 **Detailed Search.** A systematic examination of the sniper's arc of responsibility broken down into a logical sequence i.e. near, centre, middle and far. Maintaining observation (work in pairs to reduce eye fatigue).

1-185 **Maintaining Observation.** After completing a detailed search and range card, the sniper must continue to keep the area under observation. To do this, use a method similar to the hasty search but examine specific features in a sequence. This will ensure that all features are covered. A detailed search should periodically be repeated. As snipers will almost always work in pairs, they will take turns maintaining observation in order to reduce eye fatigue.

1-186 *Confirm by questions.*

Scanning and Searching

1-187 *Explain*: Scanning is a general and systematic examination of an area, to detect any unusual or significant object or movement. Searching is a thorough examination of certain features in the area? Both require complete concentration, combined with knowledge of why things are seen and the principles of camouflage and concealment:

1-188 **Scanning.** (*See* Figs 1-13 & 1-14)

a. Divide the area into foreground, middle distance and distance.

b. Scan each area horizontally starting with the foreground. To obtain maximum efficiency, move the eyes in short overlapping movements. Moving the head will minimize eye fatigue. The speed at which scanning is carried out will depend upon the type of country being observed and the amount of cover it affords to possible targets.

c. When horizontal scanning is completed, scan along the line of any features which are angled away from the observation position.

1-189 **Searching.** *Explain and demonstrate*:(*see* Fig 1-15)

a. Searching may take place at any stage during scanning i.e., if the soldier's position is dominated by a piece of ground, he should search that area thoroughly before continuing with scanning. Furthermore, any significant movement or object, suspected camouflage, etc, spotted during scanning requires an immediate search of that area. The **use of** SUSAT/Bino's are a useful aid when searching ground in general, likewise the Leuplod Spotting scope when used for detailed identification. Other Aids to searching are the `family' of Thermal Imaging (TI) equipment held by the specialist platoons. Dead ground can be covered using remote control sensors.

(1) Search for each of the factors of why things are seen in turn. The weather may assist, i.e., frost will reveal tracks made during the night or a hot sun will alter the tone and colour of foliage used for camouflage by the withering of its leaves.

(2) Search across hedgerows or a row of trees, not along them.

1-190 *Confirm by questions and practice.*

Night Observation

1-191 *Explain*: It takes the eye about 30 minutes to adapt itself to darkness. When a sniper moves to a place of observation at night he must give his eyes at least this much time to adapt before he can commence his move. Red goggles worn while in lighted areas will minimise the time needed for night adaptation.

a. **Off-Centre Vision.** (see Fig 1-16) Off-centre vision is the technique of focusing attention on an object without looking directly at it. An object under direct gaze in dim light will blur, and appear to change shape, and fade. If the eyes are focused at different points around the object and about 100 to 150 mils away from it, off centre vision will provide a true picture of the object).

Fig 1-13. Scanning (1)

Fig 1-14. Scanning (2)

Fig 1-15. Searching

b. **Night Observation Aids.** The following aids to night observation will assist the soldier in finding targets:

c. **Binoculars and Spotting Scopes.** Both instruments have some light gathering capability and will increase the range of observation. Lower magnification settings will draw in more light.

d. **Image Intensification Devices.** These devices greatly assist night observation and can extend the range of the rifle to near daytime ranges.

e. **Illumination.** Artillery and mortar flares, searchlights, even those of the enemy can aid the soldier, provided his night vision is guarded.

f. **Thermal Imaging Devices.** These devices can greatly assist night observation of thermal images created by heat signatures of people.

1-192 *Confirm by questions*

1-193 **Target Detection.** *Explain*: The following are methods that may lead to detection for both the sniper and the enemy:

a. **Movement.** They hasty search provides the best means for picking out movement.

b. **Sound.** Can be used to detect an enemy position and an alert sniper will hear anything that sounds out of the ordinary for the environment he is working in.

c. **Incorrect Camouflage.** Most targets on the battlefield are detected due to poor camouflage. However, many times an observation post or enemy firing position will blend almost perfectly with the natural background even with poor camouflage. Only through extremely careful, detailed searching will these positions be revealed. There are numerous factors that can give away positions and these are:

d. **Surface/Shine/Glint.** These may come from many sources, such as eyeglasses, reflective metal, optical devices, pools of water and even the natural oils from the skin. Shine may only last for a second, so the sniper must be alert to observe it.

e. **Outline.** Most enemy soldiers will use camouflage on themselves, their equipment and positions. The sniper must be able to identify objects, even if he can only see parts of them or see them from unusual angles.

f. **Contrast.** Unusual colour stands out against its background, as does a piece of improper camouflage, e.g., a small patch of fresh soil or an unburied communication wire. While observing, anything that looks out of place or unusual should be studied in minute detail by the sniper. Curiosity will greatly increase the chances of spotting the hidden enemy.

1-194 *Confirm by questions*

The Crack Thump Method.

1-195 *Explain*: When using the crack thump method, the sniper team is listening for the crack of the round passing overhead at supersonic speed and the thump of the discharge of the weapon being fired. This method will indicate both distance and direction to the target.

a. *Distance to the Firer*. The time difference between the crack and the thump can be converted into an approximate range. A one second lapse between the two constitutes a distance of about 600 metres with most calibre weapons. Following this formula, a half second would be about 300 metres.

b. *Determining Direction*. It is natural to look in the direction of the crack. Instead, this should be a signal to prepare the senses to pick up the softer and less distinct thump, in order to determine its origin.

c. *Locating the Firer*. By observing in the direction of the thump and near the predetermined range, the sniper may be able to see the muzzle flash or blast of the enemy's weapon from a second or third shot.

1-196 *Confirm by questions*

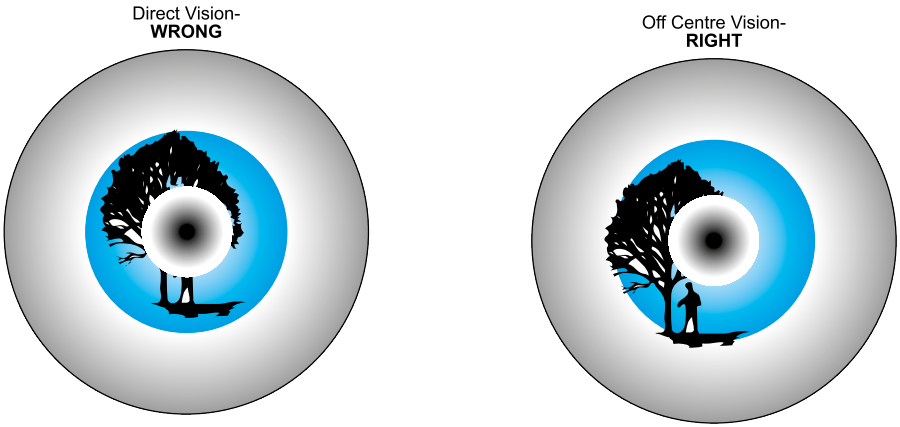


Fig 1-16. Off-Centre Vision

Dummy Targets

1-197 *Explain*: During WW1, snipers made use of cardboard heads to lure opposing snipers into engaging. If the head was hit, the sniper would place a pencil into the bullet hole, face the head in its original direction and from the direction the pencil was pointing, determine the direction to the firer. Today, the sniper can use this technique by using a Styrofoam head (as used to store fashion wigs on) and camouflaging it to look like a real soldier. The sniper can put the head on a stick and slowly raise it into the enemy's view, as if it were an observer trying to peek over a berm or window sill. While one team member is doing this, another team member should be observing the area to catch sight of a muzzle blast or flash.

Periscopes

1-198 In a static situation, periscope type devices can be safely used to observe the surrounding area. The sniper should not use these devices in an area in which they will be attempting to return fire, because it can draw attention to their final firing position (FFP).

Shot Analysis

1-199 If the sniper can locate two or more bullet impact holes in trees, walls, dummy heads, etc., it may be possible to determine the direction the shots came from by using the dummy head pencil method and triangulating in on the shooter's position. Of course, for this method to be accurate, all shots must be coming from the same position.

STIC (Sniper Thermal Image Capability)

1-200 The STIC Weapon and Spotting can be used day and night to identify heat sources on the battle field making it easier to detect the enemy.

1-201 *Confirm by questions*

Conclusion

1-202 **End of Lesson Drill.**

a. *Questions from the squad on the entire lesson.*

b. *Confirm by questions and practice as time permits.*

c. *Safety precautions.*

d. *Pack kit.*

e. *Summary. To include the following:*

(1) The need for stealth when moving and choosing the correct method of movement for the ground being covered.

(2) A forecast of the squad's next lesson in this subject.

1-203 - 209. *Reserved.*

Lesson 7. Panoramic, Pocket Book Techniques

1-210 ***Aim.*** *To teach sketching techniques*

a. *Panoramic*

b. *Pocket book sketch*

c. *Range card*

1-211 ***Timings.*** *Two 40 minute period.*

1-212 ***Method.*** *A basic indoor and outdoor period.*

1-213 ***Stores.***

Protractor or ruler	*1 per student*
Stationary	*as required*
Pencil (H)	*1 per student*
Panoramic sketch sheet	*1 per student*
Log sheets	*1 per student*
Table and chair	*1 per student*
Demonstration Troops	*as required*
Foreign weapons and uniforms	*as required*
Radios	*as required for serials*

1-214 ***Preparation****. Visual aids should be prepared to demonstrate the various principles of panorama sketching. Demonstration troops can be used to conduct serials to be logged and recorded in conjunction with the panoramic sketches when moving onto the outside practical period of this lesson and will have to be rehearsed.*

Preliminaries

1-215 ***Revision.*** *Ask students to give examples of information that can be gathered by snipers.*

Introduction

1-216 *Explain:* A panoramic, pocket book sketch in essence is a detailed rang card, panoramic can aid in logging and reporting and situation awareness for higher. The pocket book sketch is used once occupied an FFP and used within the pair target indication, reference points, key ranges and fire missions. Highly developed ability of observation is essential to the sniper. The sniper is an important source of information and intelligence whose reports may influence future operations and upon which many lives may depend.

Log Sheets

1-217 *Explain:* Using a pre prepared log sheet and panorama sketch the procedure for filling in a log book and how it relates to the panorama sketch is to be explained. Since reliance may be placed upon the log, the information in such logs should be accurate and factual on what has physically been observed by the sniper. Deductions and opinions should be clearly recorded and reported as such to avoid confusion and bad information being passed on.

Panorama Sketching

1-218 *Explain and demonstrate:* A panorama sketch is a drawn reproduction of a view obtained from a given point. It provides excellent support for a sniper's log or report. It is an excellent briefing aid and enables a quick and precise method of indication.

1-219 **Equipment.** When producing a panorama sketch a sniper should have the following items:

a. A waterproof observation folder to protect, provide a platform for sketching and hold sketching equipment.

b. Protractor or ruler.

c. A pencil capable of producing both fine and firm blank lines. H is recommended.

d. Coloured pencils to add contrast and definition.

e. Pencil sharpener and eraser.

f. Silva/ prismatic compass for north pointer and arcs.

g. Panoramic sketch sheets.

h. A cardboard / plastic rectangle drawing aid complete with length of string.

1-220 **Principles.** A panorama being a drawing of a view seen from a given point can be of the greatest value in illustrating a report. As is the case for all drawings, artistic ability is an asset but satisfactory panoramas can be produced by anyone, whatever the sketcher lacks in artistic skill. Practice is however essential and the following principles must be observed:

a. Work from the whole to the part. Study the ground carefully first, both with the naked eye and through binoculars before putting pencil to paper. Decide the extent of the ground to be included in the drawing. Select the major features which will form the framework of the sketch.

b. Do not attempt to put too much detail into the drawing. Minor features should be omitted, unless they are of tactical importance, or are required to aid recognition or to lead the eye onto an adjacent feature or tactical importance. Only practice will teach how much detail should be included in the sketch and what should be left out.

c. Draw everything in perspective as far as possible.

1-221 **Perspective.** The general principles of perspective are:

a. The further away an object is in nature, the smaller it should appear in the drawing.

b. Parallel lines receding from the observer appear to converge; if prolonged they will meet in a point called the vanishing point. The vanishing point may be assumed to be always on the same plane as that on which the parallel lines rest. Thus railing lines on a perfectly horizontal surface, receding from the observer, will appear to meet at a point infinitely far away on the horizon, which is the eye level of the observer. If the plane on which the railway lines lay is tilted, either up or down, the vanishing point appears to be similarly raised or lowered. Thus the edges of a road running uphill and away from the observer will appear to converge to a vanishing point above the horizon, and if running downhill, the vanishing point will appear to be below the horizon.

1-222 **Conventional Shapes.** Roads and all natural objects such as trees and hedges should be shown by conventional outline, except where peculiarities of shape make them useful landmarks and suitable as reference points. This means that the instinct to show the actual shapes seen should be suppressed, and conventional shapes used, as these are easy to draw and convey the required impression. Buildings should normally be shown by conventional outline only, but actual shapes may be shown when this is necessary to ensure recognition or to emphasize a feature of the building which is of tactical importance. The filling in of outlines with shading should generally be avoided but light shading can be used to distinguish wooded areas from fields. Lines must be firm and continuous.

1-223 **Extent of Ground to be Included.** The following points are a guide in deciding how much of the ground to include in the panorama sketch and are:

a. **Scope.** Before beginning a panorama sketch the extent of ground to be included must be decided. Military conditions and requirements will usually provide the answer. The arc that you have to observe should be used as a parameter.

b. **Area.** A convenient method of making a decision as to the extent of ground to be included in the sketch is to hold a protractor about 300mm from your eye, close one eye and consider the section of ground covered by the protractor to be the area sketched. The extent of this area may be increased or diminished by moving the protractor nearer to or further from eye. Once the most satisfactory distance has been chosen it can be kept constant by means of a piece of string attached to the protractor and held between the teeth.

1-224 **Framework and Scale.** The following points are to be used as a guide and are:

a. **Fixing Relative Positions.** The next step is to fix on the paper all outstanding points in the landscape in their correct relative positions. This is done by denoting the horizontal distances of such points from the edge of the area to be drawn, and their vertical distances above the bottom line of this area, or below the horizon. If the size of the sketch is limited in the horizontal direction to the length of the protractor the horizontal distances in the picture may be got by lowering or raising the protractor and noting which graduations on its straight edge coincide with the feature to be plotted. The protractor can then be laid on the paper and the position of the feature marked against the graduation noted. If the sketch is longer horizontally than the length of the protractor, the horizontal readings must be increased proportionally when plotting. Vertical distances may be similarly got by turning the protractor with its straight edge vertical. This, the exact position of any piece of detail, may be plotted accurately on the paper.

b. **Scale.** The eye appears to exaggerate the vertical scale of what it sees, relative to the horizontal scale. It is preferable therefore in panorama sketching to use a larger scale for vertical distances than for horizontal in order to preserve the aspect of things as they appear to the observer. A suitable exaggeration of vertical scale relative to the horizontal is 2.1 which mean that every vertical measurement taken to fix the outstanding points in the landscape should be included, while the horizontal measurements of the same points are plotted as read.

1-225 **Adding Detail.** When all the important features have been plotted on the paper in their correct relative positions, the intermediate detail is added, either by eye or by further measurements from these plotted points. In this way the panorama will be built up on a framework. All the original lines should be drawn in lightly. When the work is completed it must be examined carefully and compared with the landscape to make sure that no detail of military significance has been omitted. The work may now be drawn in more firmly with darker line, bearing in mind that the pencil lines should become darker and firmer as they approach the foreground.

1-226 **Conventional Representation of Features.** The following methods of representing natural objects in a conventional manner should be borne in mind when making the sketch:

a. **Outstanding Points.** The actual shape of all outstanding points which may readily be selected as reference points when describing targets, such as oddly shaped trees, outstanding buildings, towers etc. should be shown if possible. They must be accentuated with an arrow and a line with a description e.g. outstanding tree with large withered branch or square embattled tower and the map reference given where possible.

b. **Rivers.** Two lines diminishing in width as they recede should be used.

c. **Trees.** Trees should be represented by outline only. Some attempt should be made to show the characteristic shape of individual trees in the foreground.

d. **Woods.** Woods in the distance should be shown in outline only. In the foreground the tops of individual trees may be indicated. Woods may be shaded, the depth of shading becoming less with distance.

e. **Roads.** Roads should be shown by a double continuous line, diminishing in width as it recedes.

f. **Railways.** In the foreground railways should be shown by a double line with small cross lines (which represent the sleepers) to distinguish them from roads; in the distance they will be indicated by a single line with vertical ticks to represent the sleepers.

g. **Churches.** Churches are shown in outline only, but care should be taken to denote whether they have a tower or spire.

h. **Towns and Villages.** Definite rectangular shapes denote houses, towers, factory chimneys and outstanding buildings should be indicated where they occur.

i. **Cuttings and Embankments.** These may be shown by the usual map symbols, ticks diminishing in thickness from top to bottom and with a firm line running along the top of the slope for a cutting.

j. **Moorland or Heath.** These areas may also be shown by the usual map conventional sign, groups of short upright ticks.

1-227 *Confirm by questions and practice*

1-228 **Other Methods.** *Explain*: Other methods to aid in drawing a panorama are:

a. A simple device that will aid panorama sketching can be made by taking a piece of cardboard and cutting out the centre of it into a rectangle 150 x 50 mm. A piece of clear talc is then pasted over the rectangle. A grid of squares of 10mm sides is drawn in firm lines on the talc. The effect is that of a ruled window in a cardboard frame, through which you can view the landscape. The paper on which you are sketching can also be ruled with a similar grid pattern. If the frame is kept at a fixed distance from the eye by a piece of string, the detail seen can be transferred to the paper square by square.

b. Another method is to divide the paper into strips by drawing vertical lines denoting a fixed number of mils of arc and plotting the position of important features by taking compass bearings to them. This method is accurate but slow.

1-229 *Confirm by questions.*

1-230 **Other Sketching.** *Explain*: In addition to the panoramic sketch, other types can be used to support information:

a. Vertical sketches such as road/route sketches and general area sketches showing relative positions of features, direction and rough scale.

b. Sketches of particular buildings for example can be used to show detail of particular buildings and features.

c. Range cards should also be incorporated into or used in conjunction with the observation post/hide panorama.

1-231 *Confirm by questions*

Conclusion

1-232 **End of Lesson Drill.**

a. *Questions to and from the squad on the entire exercise.*

b. *Normal safety precautions.*

c. *Pack kit.*

d. *Summary. To include the following:*

(1) The overall standard achieved and any weak points noted.

(2) A forecast of the squad's next period in this subject.

1-233 - 239. *Reserved,*

Lesson 8. Logging and Reporting

1-240 ***Aim.*** *To teach logging and reporting.*

1-241 **Timings.** One 40 minute period.

1-242 **Method.** A basic indoor period.

1-243 **Stores.**

Note Book and Pen	*1 per soldier*

1-244 ***Preparation.*** *Power Point*

Preliminaries

1-245 ***Revision.*** *Nil.*

Introduction

1-246 A Snipers big role in gaining information on the enemy's activity and movements, the information that he gleans must be passed non timely and accurate information.

The Op Log

1-247 *Explain:* A Sniper Section/Pair should always keep a log of all observations made during OP's/FFPs or other tasks to provide the chain of command with timely and accurate information. Information in the logs is to be as accurate as possible, any opinions or unconfirmed information should be clearly marked in the log. The log should be written clearly in capitals using a pencil similar to radio logs and should be as neat as possible. It should always be crossed referenced and clearly labelled with panoramic sketches, range cards and radio logs. Information that may be used by the enemy should be left blank until the section has returned to a safe location. If working at night a Dictaphone can be used to record information and report completed when more convenient. Current information must be reported quickly (Live Reporting).

Report Formats

1-248 *Explain:* A Sniper section must ensure they all have report formats available. These come in many forms and can be found in TAMS and the sniper pocket book. Reports are a quick and easy way to pass information to higher formations in a timely and accurate manor.

1-249 **Sighting/Contact Report.** Initial sightings are no different than any other grouping within the battle group to maintain situation awareness.

a. Warning order (*Sighting Wait out*).

b. Sighting report (Needs to be sent as soon as possible.

c. *When* (Time from warning order).

d. *Where* (Enemy location 6 fig grid minimum or reference point).

e. *What it is* (Example-Enemy Section on foot).

f. *What's it doing* (example-On patrol).

g. *What your doing about it* (example-observing).

1-250 **Detailed Sniper Sighting Report.** This is used to record detailed information about the enemy, this can be remembered by the mnemonic *SALUTE*:

a. **Size.** The size of a group or unit that is being reported on.

b. **Activity.** What is happening?

c. **Location.** Given as a Grid reference, spot code, compound No. etc.

d. **Uniform/Unit.** If the actual unit cannot be identified, then a detailed description must be obtained.

e. **Time.** Given as DTG.

f. **Equipment.** Any specialist equipment that may indicate a various task or specialist vehicles.

1-251 **Individual Reporting.** When reporting individuals, the A-H format is used

a. **Age.** The approximate age of the person between 5 year range i.E. 30-35.

b. **Build.** Exp stocky, thin, fat.

c. **Clothing.** Type, colour.

d. **Distinguishing marks.** Unusual marks/scars.

e. **Elevation.** Height.

f. **Facial features.** A broad description of facial features.

g. **Gait.** The manner in which a person walks/stands.

h. **Hair.** Colour, Style and Length.

i. **Sex.** Male/Female.

1-252 **Weapon Report.** An easy format for the reporting of weapon details is the mnemonic *TACS/CATS*

a. **Type.** Rifle, MG, pistol etc

b. **Ammunition.** How fed i.e. belt, mag, hand.

c. **Carriage.** Sling, wheels, tracks.

d. **Sights.** Telescopic, iron etc.

1-253 **Vehicle Report**

a. **Shape.** A general description i.e. 4x4.

b. **Colour.**

c. **Registration.** Full or Partial.

d. **Identity.** Any distinguishing marks i.e. writing, dents etc.

e. **Make/Model.** As much information as possible.

1-254 *Confirm by questions.*

Panoramic Range Card

1-255 *Explain:* The panoramic range card should be clearly crossed referenced with the log with the use of vertical lines onto reference points or where the sighting took place. Three sketches must be produced for the main OP 1 as a working sketch, 1 for Pl HQ and1 for BG. These can be extracted by either Live or Dead letter box, this will cut down the use of voice procedure and aid in timely and accurate information being reported back.

a. Ref points that need to added onto panoramic in the information box:

b. By adding the information into the boxes will aid affective reaction engage the enemy with either direct or indirect fire?

c. 8 Fig Grid.

d. Magnetic bearing.

e. Distance in meters.

f. Elevation.

1-256 *Confirm by questions.*

Logging During Darkness

1-257 *Explain:* During the hours of darkness, it may be necessary to use slightly different methods of logging. The following aides can be used.

a. Dictaphone. Then after first light transfer all information into the log.

b. Exercise book.

c. Large writing.

d. Pocket memo.

1-258 *Confirm by questions.*

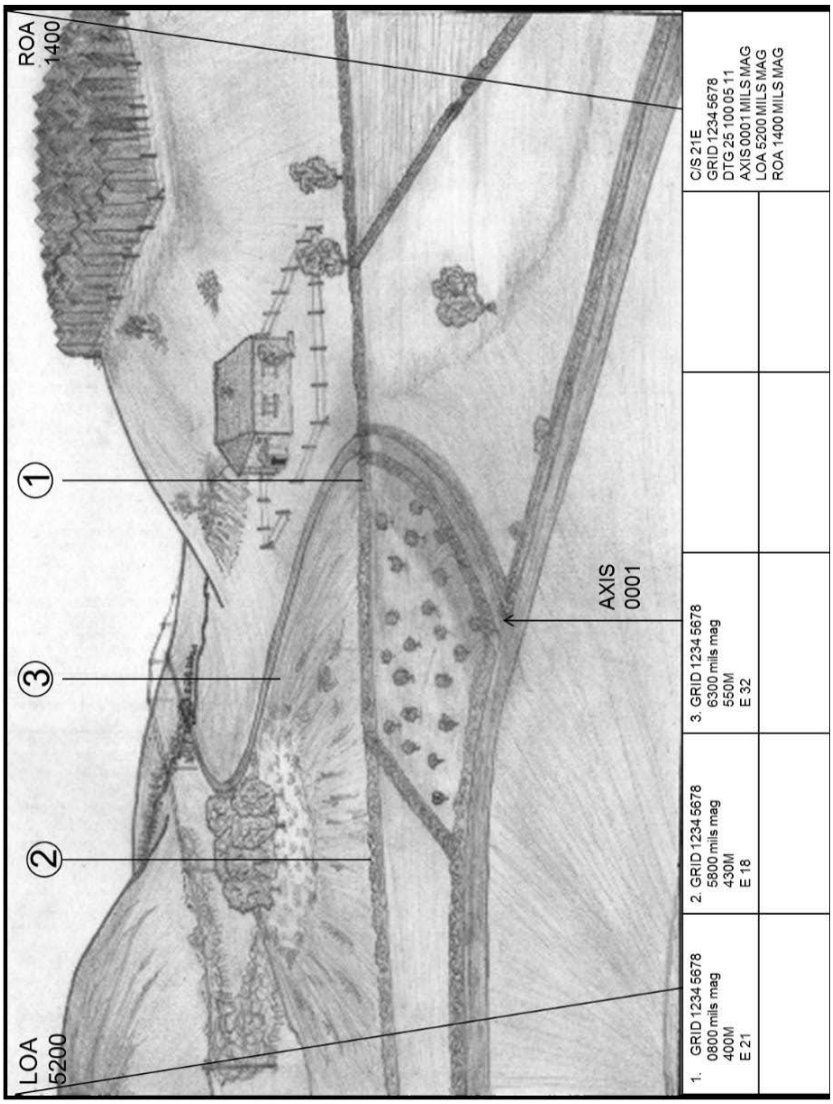


Fig 1-17. Panoramic Range Card

Conclusion

1-259 **End of Lesson Drill.**

a. *Questions from the squad on the entire lesson.*

b. *Confirm by questions and practice as time permits.*

c. *Safety precautions.*

d. *Pack kit.*

e. *Summary. To include the following:*

(1) The importance of correct and accurate reporting and denial of information to the enemy.

(2) A forecast of the squad's next lesson in this subject.

1-260 - 269. *Reserved.*

Lesson 9. Air Photography

1-270 ***Aim.*** *To teach the uses and interpretation of air photography.*

1-271 ***Timings.*** *One 40 minute period.*

1-272 ***Method.*** *A basic indoor period.*

1-273 ***Stores.***

Note Book and Pen	*1 per soldier*

1-274 ***Preparation.*** *Power Point*

Preliminaries

1-275 ***Revision.*** *Nil.*

Introduction

1-276 *Explain:* To enable snipers to make use of air imagery to supplement the map and assist with the tasks of reconnaissance on the ground prior to deployment in the area of operations.

Uses of Air Photography

1-277 *Explain*: Air photography is an essential planning tool for the sniper this can be remembered be the mnemonic RIBON:

a. R – Reconnaissance.

b. I – Intelligence.

c. B – Briefing.

d. I – Identifications of targets.

e. N – Navigation.

1-278 **Tactical use of air photography.**

a. Non-accessible ground.

b. Dead ground study.

c. Topographical Features.

d. Operational Planning.

e. Studied in a favourable environment.

f. Speeds up execution of the operation.

g. Allows accurate mental picture.

1-279 **Important aspects of photography reading.**

a. Extract only relevant information.

b. Investigate aspects fully.

c. Associated objects scrutinized.

d. Assess enemy intent.

e. Always look for escape routes.

f. Carry out primary and secondary dead ground study.

Types of Air Photography Reconnaissance.

1-280 **Strategic**

a. Areas and targets of future intentions to the land commander.

b. Requested by JFHQ or theatre command element.

1-281 **Tactical**

a. Small areas of interest.

b. Linear searches.

c. Pinpoint targets.

d. Current tactical operations.

e. Fast response too immediate.

f. Lightweight attack or recce assets used.

1-282 **Survey/Cartographic**

a. This work is carried out to very exacting standards using the full spectrum of equipment.

b. It maybe tactical or strategic.

1-283 *Confirm by questions*

1-284 **Map and Air Photo Comparisons** *Explain*:

Event	Map	Photograph
Handling	Quick appreciation	Less easily read but detailed
Orientation	True North, Gridded and References	Map comparison
Height	Contours, spot heights, comparative heights	Heights not shown, no relief shown
Date	Possible out of date, no new changes	Always correct at time of exposure
Detail	Depends on scale, still guess work	Larger scale, greater detail
Accuracy	Symbols are not an exact measurement	Roads and bridges ext. are exact measurement
Height of objects	Just on ground level, guess work	Objects can be determined
Seasonal changes	Not identified	Easily identifiable
Inter-visibility	Accurate results quickly	Takes time not accurate

1-285 **Advantages**

a. Information up to date at time of sortie.

b. Show effect of seasonal change.

c. Information of tactical importance.

d. No dead ground.

1-286 **Disadvantages**

a. No ready scale available.

b. Not gridded.

c. Determination of relief difficult.

1-287 **Factors that effect tone of an image**

a. Weather condition.

b. Seasons.

c. Surface nature of the object.

d. Relative positions.

1-288 **Types of sensory collation equipment**

a. Satellites.

b. Handheld.

c. Fixed cameras.

Types of air photography

1-289 **Vertical**

a. Fan.

b. True.

1-290 **Oblique**

a. High angle.

b. Low angle.

c. Fan.

d. Panoramic.

1-291 **Scaling air photography.**

a. **Distances** (roads, bridges, ditches etc).

b. **Sizes** (craters, equip, unidentified objects).

c. **Illustrate** weapon ranges & surveillance devices capabilities.

d. **Enemy** command post locations.

Scale Definition

1-292 Scale is the relationship between the actual size of an object and its equivalent size on a represented medium, e.g. map, sketch, drawing, photograph or model.

Variations of scale in imagery

1-293 Variation in Photo Scale Due to Two Main Factors;

a. Movement of The Camera Away from Its True Vertical Axis(Altitude).

b. Variations of Ground Unevenness Over the Aircraft Path of Flight.

c. Despite Limitations Still Fairly Accurate.

1-294 **Scale Determination**

a. Aircraft Height/Focal Length.

b. Recognition Method.

c. Photo/Map Comparison Method.

d. Comparison Method.

Aircraft Height/Focal Length (P)

1-295 This is the direct relationship between the aircraft height (ASL) & the focal length of the camera. These are found in the titling strip:

Height/Focal Length Method (P)

PSR- H- H (ft) x 12
F f (ins)

PSR- H- H (ft) x 304.8
F f(mm)

PSR - H- H(m) x 1000
F f (mm)

Example

Aircraft ht (H)	Focal ht (F)	Formula	Scale
1000ft	6ins	1000ft x12 ins 6ins	1:2000 (P)
6000ft	12ins	6000 ft x12 ins 12 ins	1:6000 (P)
12000ft	152.55mm	12000 ft x 304.8 mm 152.55 mm	1:24000 (P)
20000ft	48ins	20000 ft x 12 ins 48 ins	1:5000 (P)

Recognition Method (R)

Potentially very accurate formula;

PSR = ACTUAL SIZE divided by IMAGE SIZE.

Example

a. ACTUAL SIZE = 30 m (98.4ft).

b. IMAGE SIZE = 2.5 mm.

c. 30M x 1000mm divided by 2.5 mm.

d. 98.4ft x 304.8mm divided by 2.5 mm.

e. = 12000 (R).

Actual size D	Image size d	Formula	Scale
10m	10.0mm	10m x 1000 10mm	1:1000 ®
66m	5.5mm	66m x 1000 5.5mm	1:12000®
240ft	7.3mm	240ft x .3048m x 1000 7.3mm	1:10020®

1-296 **Photo/Map Comparison (M)**

a. Gives average scale of print.

b. Similar to recognition method.

c. Three measurements required.

d. If 4 or more mosaics are used take an average of two calculations.

1-297 **Procedure**

a. Select 3 clear points on the map & print. (well spread out!)

b. Ring points, annotate A, B, C.

c. Measure between all points.

d. Compile a table.

1-298 *Confirm by questions.*

Formula Table Construction: Map scale 1:50000

Points	Map Dist mm	Phot Dist mm	Formula	PSR
A-B	32	189	32mm X 50000 189mm	8466
B-C	29.4	175	29.4mm x 50000 175mm	8400
C-A	27	161	27mm x 50000 161mm	8385
			TOTAL	25251
			Divided by 3	8417

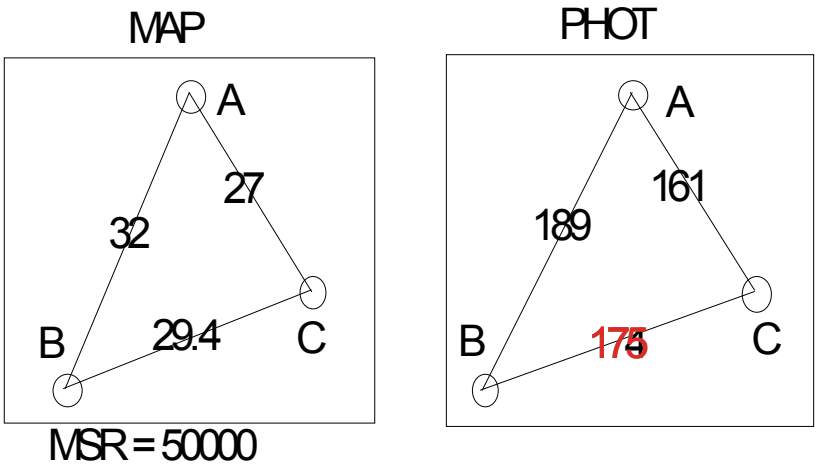
1-299 **Vertical Scaling Summary**

a. Aircraft ht / focal length.

(1) Least accurate (use as confirmation).

b. Recognition method.

(1) Very accurate (only in tgt. Vicinity).



c. Photo/map comparison.

d. Average scale over whole print.

Stereoscopy

1-300 *Explain*: The term applied to the science of dealing with an appreciation of the third dimension obtained when two images of the same object, taken from differing viewpoints, are observed with the aid of a specialist instrument called a stereoscope.

1-301 **Advantages**

a. Height comparison of various objects.

b. Ascertain the gradients of slopes.

c. Determine inter-visibility.

d. Enhance detailed target analysis.

1-302 *Confirm by questions.*

Parallax

1-303 *Explain*: The apparent change in the position of an object, seen against a more distant background, when the viewpoint is changed.

1-304 **Stereo Viewing**

a. The object must be viewed on two photographs taken from differing viewpoints.

b. Parallax must be present.

c. Both eyes must be open.

1-305 **Reverse Stereoscopy**

a. Caused by swapping two prints over from the order in which they were taken.

b. Objects with height will appear to be holes in the ground and vice-versa.

1-306 **False Parallax**

a. The effect of floating above or being buried below the surface on which an object is moving.

b. Objects moving in the same direction as the platform will appear to sink and those travelling in the opposite direction will appear to float.

c. Height Exaggeration.

d. The apparent increase in the height of objects viewed stereoscopically on vertical photography.

e. This will occur if alternate frames are viewed or the camera operates too slowly.

Non-Stereo

1-307 When two identical images are viewed.

1-308 *Confirm by questions.*

Conclusion

1-309 **End of Lesson Drill.**

a. *Questions from the squad on the entire lesson.*

b. *Confirm by questions and practice as time permits.*

c. *Safety precautions.*

d. *Pack kit.*

e. *Summary. To include the following:*

(1) Interpretation of photographic data.

(2) Map comparison and scaling procedures.

(3) A forecast of the squad's next lesson in this subject.

1-310 - 319. *Reserved.*

Lesson 10. Sniper Tactical Application of Navigation

1-320 ***Aim.*** *To teach tactical application of navigation by day and night including.*

a. *Route selection.*

b. *Re-section.*

c. *Intersection.*

d. *Inter-visibility.*

e. *Time/Distance/Speed.*

f. *Route Cards.*

1-321 **Timings.** One 120 minute period.

1-322 **Method.** An outdoor period.

1-323 **Stores.**

Sniper CEFO *1 per soldier*

1-324 ***Preparation.*** *Recce and plan a suitable area where stands are to be located to include:*

a. *Pacing lane.*

b. *Map orientation.*

c. *Restricted visibility.*

Preliminaries

1-325 ***Revision.*** *Air Photograph.*

Introduction

1-326 *Explain:* A sniper must be able to tacitly navigate by day and night. Use the ground to advantage and to remain undetected either on the insertion or the execution of a task or mission.

Route Selection

1-327 **Factors Affecting Distance.** *Explain*:

a. **Natural Obstacles.** Can the team physically cope with crossing any obstacles; this could include rivers, lakes, cliffs or deserts. Natural obstacles may force a detour.

b. *Restricted Access***.** Are there man-made restrictions on access, this could include Private Land, Out of Bounds areas (minefield) or even Enemy Held Ground.

c. **Seasonal Access.** Access may be restricted at certain times of year due to seasonal change. Will the weather close in during winter or is there a possibility of avalanche or flooding?

1-328 **Factors Affecting Time.**

a. **Health/Fitness.** Personal fitness will directly affect how fast and how far you can safely walk. Always consider the weakest team member or individuals that are injured.

b. **Experience.** Are the team experienced enough to cover the distance or capable of navigating the route in the climatic conditions.

c. **Terrain.** Different terrain will allow progress at different rates. Can the team cope with the terrain? Have you got the correct clothing and equipment for the terrain such as ropes or ice axes?

d. **Going.** The condition of the ground, or the 'going', is a key factor in the speed that a team can walk across wild country. Can the route be covered in the planned time frame?

e. **Equipment.** The weights that the team can carry will determine the speed that the terrain is covered.

1-329 *Confirm by questions.*

Land Navigation On Foot 'Pacing'

1-330 *Explain and demonstrate:* The compass provides the means of maintaining direction, and distances travelled are estimated by any of the following methods:

a. **Speed and Elapsed Time.** The method is suitable for moves over relatively open or otherwise easy terrain. If movement is on foot and v is the estimated speed over an elapsed time **t**, the distance travelled, **d** is given at once by **d** = v x t.

Example, if the average speed of 3.5 kph was maintained over six hours then; Distance travelled = 3.5 x 6 = 21 Kms

b. **Pacing.** Counting paces is a relatively more accurate method of measuring distances travelled provided that the pacer has calibrated his step relative to the terrain and that the terrain is firm and even. This is a basic guide to marching and pacing. Remember the number of paces will increase if you are travelling up or down hill. Pacing is very effective in close country such as the jungle.

1-331 **Planning Factors.** *Explain*:

a. **Information.** Always plan a route on a map before you start, use all available up to date information. This includes local knowledge as well as tactical intelligence such as old patrol reports and even weather reports.

b. **Factors.** Consider all the factors when selecting a route, time, distance, altitude, equipment, food, water, radio ranges and enemy activity.

c. **Distance.** Break it down into legs that can be managed easily with checkpoints. With practice you will know if the steep but direct route or the long but gentle route is best for you.

d. **Legs.** A leg should be on the same path or bearing and end at a checkpoint ideally a reference point.

e. **Checkpoints.** These should be permanent, easily identifiable and capable of confirmation on the ground both day and night.

f. **Foul Weather.** In wild country, also plan alternative and escape routes for use in foul weather. If the weather closes in or you have a casualty, you must have a plan to extract them to a RV for extraction.

g. **Command.** When a route has been selected and approved do not deviate from the route unless essential for safety reasons. If you do change routes, then inform someone by whatever means. Any rescue or casualty extraction will be worked out using your planned route.

1-332 *Confirm by questions.*

Route Cards

1-333 *Explain and demonstrate*: A route card is a document containing the key details of the intended route. For a simple lowland route by day, marking the route on a map may suffice. When walking in wild country it is necessary to produce a proper route card for each aspect of a route.

1-334 **The Benefits of Making a Route Card are:**

a. It concentrates your mind on the route and aids sensible planning.

b. It is a safety requirement that you leave your intentions with somebody.

c. It acts as a log and provides useful data during and after the journey.

d. Tactically it allows other patrols to know your location and duration of your patrol.

1-335 **Developing a Route Card.**

a. Calculate legs using reference points and calculate the distances in between.

b. Calculate bearing from leg to leg, both grid and magnetic bearings.

c. Estimate time to travel the route considering terrain, distance and prevailing weather.

Route Following Skills

1-336 To march efficiently you need to:

a. Be constantly aware of your surroundings.

b. Continually relate map to ground to know your position on the map.

c. Know how to estimate distances by eye.

d. Know how to calculate distances travelled and still to be marched.

e. Develop a “Sense of Direction”.

f. Competently use a compass to march on a bearing, check position and direction.

g. Trust your compass.

h. Estimating speed and distance travelled. Using this formula allows you to calculate an approximate time it would take to move across country uphill carrying a load.

Following A Planned Route Checklist

1-337 Here is a checklist to use at the start of each leg:

a. Set / orientate map.

b. Locate position on map.

c. Read route card.

d. Identify route on map.

e. Identify start direction on ground.

f. Note direction of travel.

g. Set the compass.

h. Pick markers.

i. Bound ground.

j. Note start time on route card.

k. Estimate checkpoint ETA.

l. Is everyone OK?

m. Left any equipment?

n. Always nominate a check navigator where possible and confirm direction and location.

1-338 *Confirm by questions and practice.*

Route Following in Restricted Visibility

1-339 *Explain and demonstrate*: Practice and experience will give confidence when travelling in restricted visibility. Before entering restricted visibility:

a. Think: “Do I need to enter?”

b. Confirm locations and take bearings whilst you still can.

c. Move to a safer route if possible (but be aware of time and distance changes).

d. Have the confidence to follow the compass.

e. Carefully monitor distance and direction travelled.

f. Increase awareness and precision of route following.

g. Mountains make their own weather.

h. At night retain night vision and make full use of any lights and the stars for direction.

i. The leading marker method may help when walking on a bearing in very restricted visibility. This is for extreme weather conditions where you rope each other together and the lead man is guided by the navigator on a set bearing. Send a soldier out to the limit of visibility and aligned with the compass bearing. March to him and continue to repeat this method. Don’t forget to pace your route, as this will help you estimate your position.

1-340 *Confirm by questions and practice.*

What To Do If You Are Lost

1-341 *Explain and demonstrate*: At some point everyone will become navigationallly challenged (lost). As a navigator you will have an idea of where you are by simple navigational reference points. There will usually be a reference point not too far away, buildings, roads or natural feature such as hills or rivers. There will be something around you to allow you to orientate yourself, use all available assistance and equipment to help you.

1-342 **Don't panic: Remember STOP!** Note the time. Maintain morale and confidence.

1-343 **Confirm that you are lost.** If confirmed, ask yourself:

a. "How did I get lost? Wrong path, wrong valley?

b. "When was I last certain of my location?"

c. "What general direction have I been moving in?

d. "Where is the sun?

e. "How long have I been travelling since then?"

f. "How far could I have come?"

g. Scrutinise map and ground again if still lost.

1-344 **Select the safest option from:**

a. Retrace your steps. Head on a bearing towards a 'known feature' such as one of your 'bounds'. When you have moved to a safe reference point then re-plot your route and check your navigation as often as required.

b. Do not charge off or attempt to guess, you will often increase the error in your navigation and make the situation worse.

Location

1-345 Setting or orientating the map means turning the map until all the symbols on the map are in the same direction as the ground features is from the observer's location. A handy mnemonic that you can use to remember how to do this is:

a. **D** The direction of features must always coincide.

b. **D** The distance to a feature will help to identify it on the map.

c. **C** Conventional symbols on the map to the features on the ground.

d. **R** Relief may be the only recognisable feature in wild country.

e. **A** The linear features will assist in confirming direction and identification.

f. **P** A pattern is recognisable.

g. **P** The proximity of features to each other will help to identify it on the map.

h. **S** The shape of a feature will help to identify it on the map.

1-346 Using the map, observe the ground and orientate yourself using visible land marks or reference points.

Using A Compass to Set A Map And Find Location

1-347 To set a map using a compass:

a. Hold the map horizontally in front of you and place the compass on it with the lubber lines parallel with the eastings.

b. Turn your body until the compass needle is parallel with the North-South grid lines.

c. Look up and relate the symbols on the map to the features on the ground.

Note that the Magnetic Variation is too small to consider when setting the map.

1-348 **To find your location on a line feature:**

a. Identify a ground feature that you can pinpoint on the map.

b. Take a magnetic bearing to it with your compass.

c. Change the magnetic bearing to a back bearing as previously described. Then plot it as a grid bearing onto your map.

d. Your position is where the compass edge, or a line extended from it crosses the line symbol. This method can be applied to any line feature such as a stream, track or edge of a wood.

1-349 To find your position when not on a line feature, repeat the previous procedure for at least two, but ideally, three points. Your position is within the area where the lines intersect, i.e. a resection.

a. Intersection is applying a bearing from yours and known positions to an unknown object.

b. Resection is applying a bearing from known positions to your unknown position.

1-350 *Confirm by questions and practice.*

Conclusion

1-351 **End of Lesson Drill.**

a. *Questions from the squad on the entire lesson.*

b. *Confirm by questions and practice as time permits.*

c. *Safety precautions.*

d. *Pack kit.*

e. *Summary. To include the following:*

(1) Correct ground orientation.

(2) Preparation of a detailed and accurate route card.

(3) Lost procedure.

(4) A forecast of the squad's next lesson in this subject.

1-352 - 359. *Reserved.*

Lesson 11. Sniper Intelligence Preparation of the Battlefield (ipb)

1-360 ***Aim.*** *To teach fundamentals of IPB:*

a. *Ground analysis.*

b. *IPE.*

c. *Sniper IPB.*

1-361 ***Timings.*** *One 40 minute period.*

1-362 ***Method.*** *An indoor period.*

1-363 ***Stores.***

Power Point.

1-364 ***Preparation.*** *N/A.*

Preliminaries

1-365 ***Revision.*** *N/A.*

Introduction

1-366 *Explain:* Its essential that the sniper has full understanding of ground, the enemy's intentions and capability. He can use the principles to enhance his movement within the battle space identifying high risks of detection, observation points and lines of advance. This will aid in the sniper to move and occupy an FFP maximising the capability of the sniper.

Ground Analysis

1-367 *Explain and demonstrate:* By doing a detailed ground analysis before any operation will enhance the sniper, this can be done using the mnemonic GROUND (*see* Fig 1-18):

a. G – General Relief & Grain.

b. R – Ridges, Re-entrants & Roads.

c. O – Observation Points.

d. U – Undergrowth & Cover.

e. N – No Go & Slow Go (Restricted & Unrestricted). This can also can be used as High & Low risk areas of Detection.

f. D – Dead Ground / Darkness / Limited Visibility.

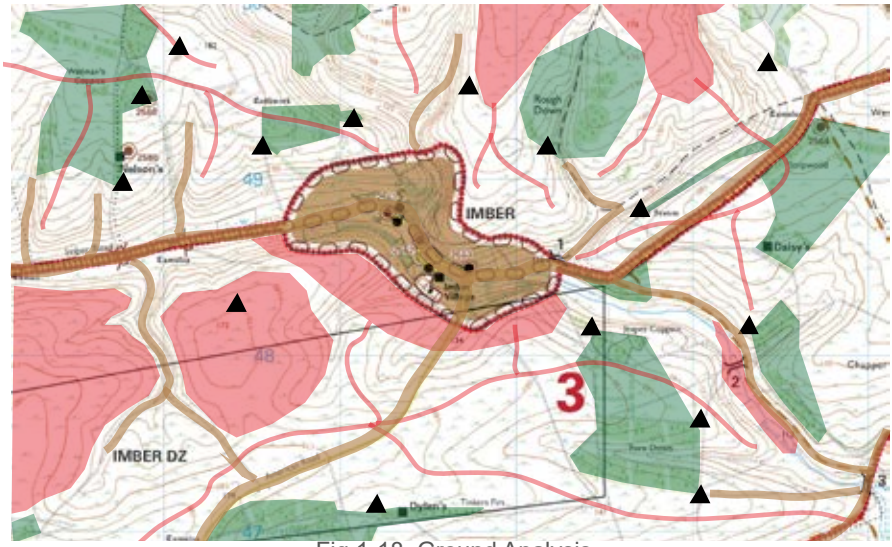


Fig 1-18. Ground Analysis

Stage 1: Battlefield Area Evaluation (BAE)

1-368 *Explain*: Focus on the effect the Battle space will have on operations. Include mobility of ground/air assets, cover, concealment & weapon effects (also ethnic / religious / political make-up of an area).

a. Areas of terrain through which manoeuvre will be limited are shaded.

b. Areas of unrestricted manoeuvre are hence enemy's likely Mobility Corridors (MCs).

c. Mobility Corridors are grouped together to show likely Avenues of Approach (AAs).

1-369 Severely restricted (No Go) and restricted (Slow Go) apply to manoeuvre **not** transit.

1-370 OPs may well be located in areas severely restricted to manoeuvre elements.

1-371 **Battlefield Area Evaluation.** The mnemonic *OCOKA*:

a. **O** Observation.

b. **C** Cover & Concealment.

c. **O** Obstacles.

d. **K** Key Terrain.

e. **An** Avenues of Approach.

1-372 *Confirm by questions.*

Stage 2: Threat Evaluation (& threat overlay).

1-373 *Explain*: The enemy's doctrinal overlay showing distributions without geographical constraints is applied. Shows where different parts of the enemy are likely to be in time and space – this allows Phase Lines to be assigned.

a. The IO must be able to link enemy actions to intentions.

b. High value assets to the enemy commander are termed High Value Targets.

Stage 3: Threat Integration.

1-374 *Explain*: Threat Integration is the bringing together of the BAE and the Threat Evaluation.

a. The Situational Overlay is obtained by placing the doctrinal overlay over the MC & AA overlay (BAE).

b. Timelines are added to the situational overlay to provide a snap-shot of the various elements of the enemy at a given time – this is known as the Event Overlay.

c. The Event Overlay provides planners with the best guess of where the enemy will be, when and in what strength. This allows planners to identify where to look, NAIs.

d. The IO completes the Threat Integration to the NAIs – the STAP coordinator will then add TAIs and DPs.

e. The event overlay is further developed to become the **DSO/DSM**, which is the key link between IPB and STAP.

1-375 **Terminology:** *Explain***:**

a. **CCIR.** Comd's Critical Information Requirement.

b. **PIR.** Priority Information Requirement .

c. **FFIR.** Friendly Forces Information Requirement.

d. **EEFI.** Essential Elements of Friendly Intention.

e. **HVT.** High Value Target - Loss of which significantly damages the enemy's capability to achieve his intentions.

f. **HPTL.** High Priority Target List - Those HVTs the loss of which would contribute most to the enemy's defeat & which can be attacked given the ISTAR and attack systems available.

1-376 **Decision Support Overlay.** (*see* Fig 1-19)

a. **NAI.** Named Areas of Interest - Area/Point along a particular AA through which an enemy activity is expected to occur. Activity/lack of activity will help to confirm/deny a particular COA.

b. **TAI.** Target Area of Interest - Points/Lines were a commander intends to target the threat in order to achieve a specified effect.

c. **DP/DL.** Decision Point/Line - Points in time & space at which the commander has to make a decision to trigger an action in a particular TAI. Allowance must be made for the reaction time of the systems to achieve the required effect.

1-377 *Confirm by questions.*

Conclusion

1-378 **End of Lesson Drill.**

a. *Questions from the squad on the entire lesson.*

b. *Confirm by questions and practice as time permits.*

c. *Safety precautions.*

d. *Pack kit.*

e. *Summary. To include the following:*

(1) Detailed ground analysis.

(2) Threat evaluation and integration.

(3) Identifying decision points and target areas of interest.

(4) A forecast of the squad's next lesson in this subject.

1-379 - 389. *Reserved.*

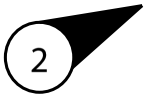
Named Areas of Interest (NAI)

An area or point, from which surveillance can confirm or deny enemy intentions.

The focus on areas where the enemy will make a choice.

Shown as

Point NAIs



Area NAIs

Decision Points (DP)

Each DP relates to one or more TAI.

They indicate when adecision must be made and exploited on the DSM.

Shown as

Decision Point

Decision Line

Target Areas of Interest

An area where the commander wishes to have a specific effect on the enemy.

G3 Staff identify the TAIs, using the event overlay.

Shown as

Point TAIs

Area TAIs

Fig 1-19. Decision Support Overlay

Lesson 12. Sniper Memory Training

1-390 ***Aim.*** *The aim is to practice the sniper at observing and mentally recording a number of objects.*

1-391 ***Timings.*** *One 40 minute period.*

1-392 ***Method.*** *An indoor or outdoor practical period.*

1-393 ***Stores.***

Table	*1 per lesson*
Poncho	*1 per lesson*
Objects	*as required*
Notebook and pencils	*1 per student*

1-394 ***Preparation.*** *This lesson can last only 15 minutes in duration and requires minimum preparation for the instructor. It can be fitted into the training programme at anytime of the day. Objects can be placed randomly onto a table with no uniformity and covered with a poncho. The objects used can be the objects used in observation lessons. This will aid the students in identifying these objects during observation exercises. These objects should be identified and scored as they would be in an observation lesson which is:*

a. *Designation of object (1 point).*

b. *Colour of object (1 point).*

c. *Country of origin (1 point).*

d. *Each object is worth 3 points.*

1-395 *These objects can also be placed out during the day and students will have to identify them and write them down with no prompting from the instructors with students being tested on them at the end of the days training. Objects can also be used in conjunction with navigational exercises with objects placed at check points with students having to identify the objects and record them on their route card and handed in at the finish point to go towards their overall score for the exercise.*

Introduction

1-396 *Explain:* A sniper requires a good memory so that he can report facts accurately, even though they may not have the means by which to record the details at the time. A sniper can be practiced in improving memory retention by being asked to record observations.

1-397 **Suggested Methods.** *Explain and demonstrate*: There are two methods to aid the sniper in basic memory retention:

a. **The Story Method.** Each object is used to formulate a story. The sniper recalls the story to remember the objects.

b. **The Association Method.** Objects are linked both to each other and by location. The sniper recalls the associations to remember the objects.

1-398 **Suggested Practices.** The poncho or cover is to be removed and students are allowed to study the objects for a period of two minutes. The objects are not allowed to be handled by the students. The objects are then covered up and students have two minutes to write down the objects they can remember. Answer sheets are collected in by the instructor at the end of the two minutes and a debrief of all objects is to be conducted so students can see which objects they identified and objects they did not identify.

1-399 Successive games can be increased in difficulty by:

a. Increasing the number of objects displayed and recognition silhouettes and pictures such as AFV and weapons.

b. Changing the colour of the back ground upon which the objects are placed.

c. Arranging for distractions to occur while the squad are compiling their lists.

d. Sending the squad on a short run or giving each individual a job to do between the end of the viewing time and the end time allowed to write down the answers.

e. Reducing the time to view the objects.

1-400 *Confirm by questions and practice.*

Conclusion

1-401 **End of Lesson Drill.**

a. *Questions to and from the squad on the entire exercise.*

b. *Normal safety precautions.*

c. *Pack kit.*

d. *Summary. To include the following:*

(1) The overall standard achieved and any weak points noted.

(2) A forecast of the squad's next period in this subject

1-402 - 409. *Reserved.*

Lesson 13. Sniper Observation Posts

1-410 ***Aim.*** *To teach Sniper OP's to include:*

a. *Definition.*

b. *Types.*

c. *Tasks.*

d. *Key elements of an OP/Hide/FFP.*

e. *Construction.*

f. *Routine.*

1-411 ***Timings.*** *Two 40 minute periods.*

1-412 ***Method.*** *An indoor period.*

1-413 ***Stores.***

Power Point

Preliminaries

1-414 ***Revision.*** *Why things are seen and target detection.*

Introduction

1-415 *Explain:* Battle Group Commanders expect the maximum possible information on enemy strengths, movements, positions and intentions. This is gained by means of surveillance achieved by observation posts from relatively close range. To be successful and remain undetected requires sound planning and preparation at all levels and a high standard of professionalism and determination from the OP team.

Definition of A Sniper Observation Post

1-416 *Explain:* A position of observation that affords good concealment from enemy view and fire and allows the use of Sniper Systems to maximum effect.

Observation Post Environments

1-417 *Explain:* A part of the role of the Sniper Section is to act as an OP and produce additional battlefield information with the ability to direct indirect fire as necessary. There are two types of OP's for working both rural and urban environments they are:

a. **Overt.** Mainly utilised in the rural areas of south Armagh and in more recent times over in the former republic of Yugoslavia.

b. **Covert.** Placed into any environment and used for all intelligence gathering about the enemy routines from close proximity.

c. Tasking and co-ordination of observation posts will vary from unit to unit but the procedure for setting up the OP should be as standard as possible throughout all Sniper Sections. They should be employed to support the CO's plan, specifically the CO's assessment of enemy approach routes. An OP screen may consist of a combination of the following:

1-418 **Tasks.**

a. Close Target Observation Post.

b. Observation of a specific target, i.e. Bridges, junctions or buildings.

c. Area Observation Posts.

d. Observation of an area of enemy advance, withdrawal or infiltration.

1-419 The following are Sniper Section Tasks:

a. Cover gaps in defences, mainly carried out when the company has moved into a long term defence location, now this is more than likely to be as part of a standing patrol task.

b. Early warning of attack, this task is carried out as jointly at section level whilst the section has gone firm in a harbour position. The Op gets placed out to the area of the main enemy threat.

c. Establishing daily patterns of life, enemy movement and dispositions. Used in both the overt and covert scenarios, in the overt role mainly on internal security operations. These types of OP will be able to pick up quickly on anything out of place, thereby preventing any type of terrorist attack. In the covert role it is used to help establish the daily habits of the enemy in and around their encamped locations and build up the intelligence needed to mount any form of attack onto the target.

d. Adjust indirect fire assets. In conventional operations, the OP has to be able to support any attack onto the target, support is through indirect and direct fire, a sniper must taught the procedure for indirect fire and how to adjust any fire onto a target area.

1-420 *Confirm by questions.*

Duration

1-421 *Explain*: During planning observation post selection the following points must be applied, without them there is a high possibility of aggressive compromise.

1-422 **Considerations are the same for OP's, Hides and FFP's.**

a. Communications between team and base.

b. Observation – of the target area.

c. Concealment – from the enemy from ground and air.

d. Sustainability.

e. Survivability.

1-423 To enhance the selected position, the following **should have** and must be considered:

a. **Cover From Fire.** Applying the principles of concealment, will defeat the enemy from viewing the position, however if by some chance the enemy locates the OP they will immediately start to engage with at least small arms fire and at the worst mortars. Digging will help to counter this and by using the spoil in sand bags and placing them around the observation, sentry and rest area will add to protection.

b. **Observation Of Approach Routes.** If the sentry is located either within the confines of the OP or out of it, they must be placed in a position so they can cover the teams approach and any possible enemy approach towards the OP site. The front approach will be scanned from the observation area.

c. **Covered Approach Routes And Exits.** The approach from the FRV is the dangerous part of the occupation, getting compromised at this stage will render the mission untenable. To avoid this, make sure route selection is of the highest order right up to the last moment remain in dead ground or out of sight of the enemy.

d. **Observation.** Over all likely enemy fire positions. Observation should be sufficient to encompass the whole of the target area as well as the surrounding area.

e. **Alternative Position.** To be selected in the event of compromise or restricted views of the target area. Use the cover of the night and move forward to a new position moving back before first light.

f. **Escape Route.**

1-424 *Confirm by questions.*

Observation Post Locations

1-425 *Explain*: Observation Posts can be sited in the following locations:

a. **Buildings.** Barns, derelicts, rubble, houses and built up areas in general.

b. **Advantages.**

(1) Ability to move undetected.

(2) Comfort from the elements.

(3) Protection from small arms fire.

(4) Ability to stay longer (e.g. less hardship).

c. **Disadvantages.**

(1) Obvious location.

(2) The best way for any OP to give.

(3) No escape route.

(4) Unable to see approaches.

(5) Extra manpower required to cover flanks.

d. **Woods.** Use the denser parts to give good cover, site well back to give depth. Avoid corners as they may be used as navigational points by enemy and friendly forces.

e. **Ditches.** Provide good cover from fire if not overlooked by high ground. They may require a platform, as they are prone to flooding.

f. **Hedgerows.** The most commonly selected location. They do not often offer good observation over all enemy avenues of approach.

g. **Brambles.** Often an isolated location. Difficult to conceal and usually a seasonal choice. Once occupied foliage is likely to deteriorate within 24hrs.

h. **Rubbish Heaps.** This will offer plenty of cover due to the ability to use pieces of rubbish to shoot through. It is unlikely to offer good cover from fire.

i. **Vehicles.** Vehicle mounted positions are likely to be an exception: they are likely to be used in the short term and contemplated only in circumstances of minimal threat.

(1) **Advantages:**

(a) Movement between positions is quicker.

(b) Communication from vehicles is better.

(c) Quicker withdrawal.

(d) Direct fire weapons readily available.

(2) **Disadvantages:**

(a) Limited variety of positions.

(b) Difficult to conceal against ti.

(c) Lowers senses.

(d) Undetected withdrawal difficult.

j. Areas to avoid are as follows:

(1) A position that looks ideal to the sniper will also look the same to the enemy looking in your direction.

(2) Stay away from any cover that is going to stand out as obvious to any enemy and used as a reference point straight onto your location.

(3) Isolated cover should be avoided as obvious locations to the enemy. Approach and withdrawal routes can easily be compromised.

1-426 *Confirm by questions.*

Battle Procedure

1-427 *Explain*: Sniper OP battle procedure has five phases and is broken down as follows.

a. Planning and preparation.

b. Move to FRV.

c. Reconnaissance and occupation (Establish OP)

d. Operation. (Routine in the OP)

e. Extraction.

Phase 1 - Planning And Preparation

1-428 The Platoon or Company Commander will issue a **warning order** to the team commander to start battle procedure. The information received will include the following:

a. Basic outline of task, it will then be up to the team commander to build up the task by calling upon their experience.

b. Rough duration, this is important to work out how many troops will be needed to successfully complete the task and any relief in place if the task is to extend over a longer period.

c. Any specialist kit required, such as thermal imagers or ground sensor equipment, to aid in security.

1-429 The team commander will consider what kit will be required by the patrol to help complete the task. This will include the following:

a. Communications equipment, Maps and Air photographs will need to be up to date if they are not then consider recent patrol reports giving up to date topographical information.

b. Personal camouflage, OP camouflage, this equipment will take up a lot of room within the stores but the OP will not be successfully concealed without them. The stores may consist of back drops, chicken wire, head and shoulders, front screens for the observation area. It is important that on the observation bay Range cards are provided, Panoramic sketches to help give a picture to what the log say's and finally the Logs, should always be a cross referenced to the panoramic.

c. Prismatic Compass/PLRF-15C and protractor to help in the possibility of using any indirect fire support. An Observation kit including binos for scanning over the area, telescopes for the more detailed search and night sights. Internal security operations may require the use of photographic equipment.

d. Personal equipment. - When choosing equipment points to consider are:

(1) Scope of operations.

(2) Feeding.

(3) Sanitation.

(4) Clothing, bedding.

(5) Communications.

1-430 The team commander is to gather as much up to date info on the area of operations as possible.

a. Exact location of target and/or arc of observation.

(1) Approximate area for OP.

(2) Duration of operation.

(3) Supporting agencies available – fire plan, QRF.

(4) Procedure for Infill/Ex-fill.

(5) Patrol boundaries and other friendly activity.

1-431 **Sniper Commanders Orders.** The Sniper Commander planning the operation is required to conduct a careful estimate, resulting in a final plan, which will be the main framework for his orders.

1-432 **Rehearsals.** There should always be rehearsals of all the techniques and actions to be employed by the Sniper OP party. The following should be practiced:

a. Occupation of RVs and FRV.

(1) Initial Recce –from FRV.

(2) Move forward and positioning of sentries, RGS etc.

(3) Construction and layout if possible.

(4) Routine and Admin (if time permits).

(5) Actions on contact – all types and phases:

(a) Route in/out.

(b) In FRV.

(c) During Recce.

(d) In location.

b. Rehears any teams acting as mutual support on the ground.

1-433 *Confirm by questions.*

Phase 2 - Move To FRV

1-434 *Explain*: The Initial move should consider the following:

a. Deception can be achieved in many ways, Dummy drop off by Helo's or boats, moving in with other patrols that will return but leaving the patrol on route or under the umbrella of a small attack maybe onto an enemy location.

b. Escort patrols are a good asset as with all your OP's equipment you will be heavily laden down so having the advantage of a patrol to escort you out is a good asset.

c. Ideally the final move into the FRV should be carried out after last light to give as much time as possible on the Recce. (Also reduces tracks in early morning dew.).

d. The FRV may become an LUP if you are unable to occupy the OP before first light. Try to make it concealed and dependable, at this stage you will need to nominate an ERV in case of enemy contact and it must be easy Identifiable by everybody within the team.

1-435 *Confirm by questions.*

Phase 3 - Recce And Occupation

1-436 *Explain*: The OP site should be observed form the FRV prior to the Recce, for as long as tactically viable. Do not rush to get into the location take the time for the teams own security.

a. Team Commander and signaller move forward either covered by the remainder of the patrol or acting as sentries while the site is chosen and communications established.

b. Position is cleared, one to make sure there is no local enemy movement around your intended position and if you are working in the internal security operational theatre to make sure they are no terrorist booby traps.

c. The team commander and the signaller will make Positive ID of the target and carry out a communications check.

d. Remainder of patrol is then brought in. The team commander will give a confirmatory brief and orientate the team to the area.

e. Sentries are to be posted out of ear shot making sure that they have a method of raising the alarm.

f. Communications established.

(1) Selection of positions: Rest, Cooking, Admin, and Sentry etc.

(2) OP construction.

(3) Sentry brought into OP position.

(4) OP set, send to HQ.

1-437 *Confirm by questions.*

Phase 4 - Operation (Routine In The Op)

1-438 *Explain*: The team commander is responsible for the successful running of the OP the checklist should include:

a. A continuous watch is maintained and all info recorded and sent to HQ if real time reporting.

b. 24 hour radio watch is maintained.

c. Everyone is familiar with the whole of the observation arc and up to date information.

(1) Exact grids of OP, ERV etc. sent to HQ.

(2) All kit not used is to be packed away.

(3) All essential kit i.e. Radio, radio logs, OP info to be placed in a "Grab bag".

(4) Interpret all worthwhile intelligence.

(5) Report all hostile monitoring or shelling.

d. Knowledge of ARTY fire control. Panoramic range cards etc completed.

e. Whole patrol must be aware of:

(1) Change over routine

(2) Stand-to signal - hot extraction drill.

(3) Position of alarms and protection devices.

(4) Comms procedure and lost Comms procedure.

(5) ERV position.

(6) Ensure all team know alarm system and emergency RV.

1-439 *Confirm by questions.*

Phase 5 - The Extraction

1-440 *Explain*: The Sniper OP Commander will issue a warning order to enable the team to prepare their equipment. The following sequence should then be applied:

(1) Sentry posted out to limit of noise.

(2) OP dismantled, kit stowed, ground sign disguised.

(3) Alarms/protection devices brought in.

(4) HQ informed.

(5) Sentry brought in.

(6) Team move off to RV.

(7) Halt in RV, listening watch maintained. Observe OP site for follow up if possible.

(8) Ex-filtration/Route out as directed by Sniper Commander.

1-441 *Confirm by questions.*

Routine For Hot Extraction

1-442 *Explain*: The following is a guide to hot extraction which should be covered during the Sniper Commander's orders and rehearsals:

a. Compromised - not under fire:

(1) Pack up all vital kit.

(2) Report to HQ if possible.

(3) Move off.

(4) Be prepared for engaging enemy.

b. Compromised - under fire:

(1) Engage CDM.

(2) Send contact report if possible.

(3) Pack all vital kit (Quick decision on leaving Bergen's etc.).

(4) Withdraw under fire.

(5) Contact Drill - Withdraw through rally point and RV system.

(6) Establish comms with HQ - SITREP.

(7) If no comms go through lost comms procedure.

1-443 *Confirm by questions.*

Types Of Construction

1-444 *Explain*: The ground and cover available will dictate which type of construction will be adopted for the observation post. There are 2 types:

a. Surface (Short Term)

b. Sub-surface (Long Term)

Elements Of The Sniper Observation Post

1-445 *Explain*: Elements specific to the construction of Sniper OPs are as follows:

a. **Loopholes.** A loophole is an aperture made in the hide for the observation and firing under concealment. Loopholes should be constructed to give the snipers good fields of view and a good field of fire. They should be constructed so that they are narrow to the front and wide at the rear and have a cover to stop light from entering the hide when entry or an exit is made.

b. **Elbow Rests.** Sand bag to the rear of the loopholes will give the observer and firer good enough elbow rests.

c. **Cover.** The location should be situated in such a position so as to give the sniper as much natural cover to the front as possible, however this may not always be the case, so the cover should be made up of the dugout spoil, logs that are around the area, ponchos to help water proofing and any de-turned sods.

d. **Front And Rear Appearances.** The rear and front of the location being constructed should not be altered at all, and defiantly no movement should be made to the front of the hide during any stage of construction, so as to avoid any detection by the enemy. The enemy should in theory be able to pass right over the hide without any suspicion.

e. **Entry and Exit Points.** These are the same point in the location and should only be large enough to fit a man. Once inside the position they should always be covered. You should never exit the hide without first making sure that the loopholes are covered over.

1-446 *Confirm by questions.*

Surface Observation Posts

1-447 *Explain*: This method is suitable for occupation in brambles, gorse ferns and other areas of adequate cover (*see* Fig 1-20):

a. Equipment:

(1) Cutting - secateurs, knives.

(2) Digging – shovel, pick.

(3) Supporting – chicken wire, ponchos, camouflage nets.

b. The suggested sequence of construction:

(1) Poncho placed at OP entrance to reduce sign and remove soil.

(2) Construction party wear protective clothing if the OP is to be in brambles or gorse. Gortex suit is ideal.

(3) Entry man lies on back and lifts hanging foliage and pushes into the bush.

(4) Once inside, the tunnel is cut, ensuring that all the cuttings are kept inside.

(5) Entrance will require a dog leg cut into it to ensure that an obvious tunnel effect is avoided.

(6) Once cutting is complete, location should be concealed using chicken wire, ponchos and cam nets.

(7) Thermal threat will indicate the need to dig down at least a foot and a wall of sand bags built with the spoil.

(8) The spare spoil must be removed and hidden.

(9) All equipment must be stowed inside OP.

1-448 *Confirm by questions.*

Sub-Surface Op

1-449 *Explain*: When there is not enough cover to construct a surface OP or the sighting of the location is on a forward slope or linear feature; especially if there is a danger from indirect fires the OP may have to be dug in (*see* Fig 1-21). The following should be considered:

a. What is to be done with the left over spoil?

b. What equipment is available for supporting overhead cover? (Ponchos, timber, IPK).

c. Time available for digging.

d. The suggested construction sequence:

(1) Ponchos placed down to collect turf and top spoil.

(2) Spoil is disposed of where it cannot be seen, i.e. stream or ditch.

(3) Cross members placed across trench.

(4) Top soil and turf replaced and area re-camed.

e. Elements specific to the construction of Sniper Sub-Surface OPs are as follows:

(1) Advantages

(a) Can be occupied for long periods at a time, due to the size and comfort it offers.

(b) Easily constructed by modifying an existing fire trench.

(c) Provides good protection from indirect fire.

(2) Construction:

(a) The firing bay part of the trench is the part we need to construct this hide. The back part of the firing bay needs to be enlarged to the rear.

(b) Do not dig down as deep as the remainder of the trench as you want to cut out your sleeping shelf. This will only be big enough for one man. You must remember to also cut out your loopholes and your elbow rests, and the entry and exit point to the rear of the hide.

(c) The overhead cover goes on in the same way as the belly hide, except more spoil will be placed on the cover, up to 2 feet of spoil and rocks can be used making it blend in with the rest of the fire trenches cover.

1-450 *Confirm by questions.*

Conclusion

1-451 **End of Lesson Drill.**

a. *Questions from the squad on the entire lesson.*

b. *Confirm by questions and practice as time permits.*

c. *Safety precautions.*

d. *Pack kit.*

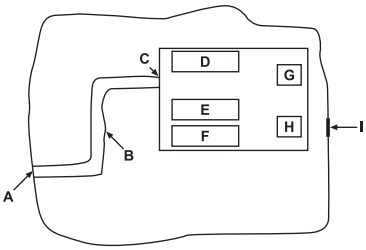
e. *Summary. To include the following:*

(1) Correct battle procedure and good rehearsals.

(2) Selection, sighting and construction of the OP.

(3) A forecast of the squad's next lesson in this subject.

1-452 - 459. *Reserved.*



A. Concealed Entrance/Exit
B. Dog Leg
C. Entrance/Exit (Rear Drop)
D. Sentry
E. Rest
F. Packed Kit and Equipment
G. Logger and Reporter
H. Observer
I. Aperture

A. Pre-Constructed Roof Section (Chicken Wire, Poncho, Hessian)
B. Retractable Poles for Support
C. Rear Drop Entrance
D. Front Drop
E. Aperture

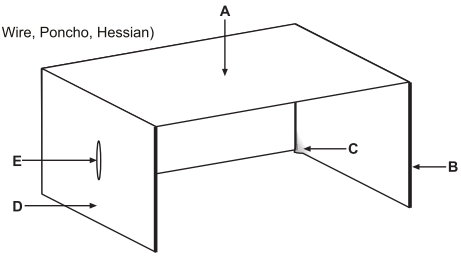
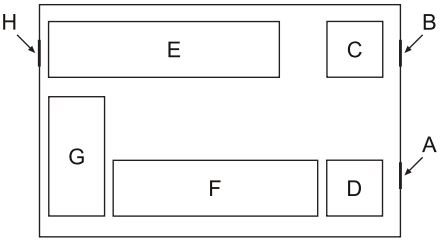
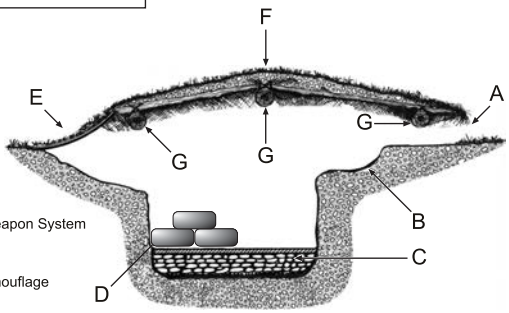


Fig 1-20. Surface Observation Posts



A. Primary Aperture
B. Secondary Aperture
C. Logger and Reporter
D. Observer
E. Sentry
F. Rest
G. Packed Equipment
H. Entry/Exit



A. Aperture
B. Supporting Shelf for Optics or Weapon System
C. Rest
D. Packed Equipment
E. Entrance/Exit
F. Waterproof Cover, Spoil and Camouflage
G. Supports

Fig 1-21. Sub-Surface Op

Lesson 14. Sniper Hides

1-460 ***Aim.*** *To teach sniper hides.*

a. *Advantages and disadvantages of hides.*

b. *Belly hides.*

c. *Enlarged fire trench.*

d. *Semi permanent hide.*

1-461 ***Timings.*** *One 40 minute period.*

1-462 ***Method.*** *An indoor period.*

1-463 ***Stores.***

Sniper CEFO

Preliminaries

1-464 ***Revision.*** *Why things are seen and target detection.*

Introduction

1-465 *Explain:* The use of hides provide a position of observation that affords good concealment from enemy view and fire and allows the use of Sniper Systems to maximum effect.

The Belly Hide

1-466 *Explain:* This type of hide is best used in a mobile scenario, or when the sniper pair do not intend to be in position for any more than 24hrs (*see* Fig 1-22).

a. Advantages.

(1) Due to the small amount of preparation involved the hide is easy and fairly quick to construct.

(2) This offers a mobility factor depending on the scenario as a pre dug position can be used ready to fall back into on delaying tasks.

b. Disadvantages.

(1) Limited space within the hide renders the hide very uncomfortable and should only be occupied for no more than 24hrs at a time.

(2) The hide provides limited protection from the natural elements. De-turf the shaped area marking out loopholes, an old tin can be a good piece of equipment to use for this. Make sure that the turf is kept as close to their natural shape as possible and placed down grass to grass spoil to spoil.

c. Construction.

(1) Once the area has been chosen avoid any movement to the front of the hide, this will prevent disturbance of the natural foliage. Place out a sentry for local protection, as these sort of hides at times will be constructed under the enemy's noses.

(2) Dig one foot below the surface level and long enough for the longest man in the pair with good entry and exit point at the rear. The spoil must be placed onto a poncho away from the area of the hide to avoid any ground sign and can be recycled later in the process.

(3) Overhead cover will be built from old bits of wood that may be lying around the area to act as the main weight support. Place a poncho over the bits of wood, peg down the poncho and replace the spoil and the natural foliage.

(4) Make both the entry and exit point at the rear of the hide, covered over with a screen and natural foliage.

1-467 *Confirm by questions.*

Sub-Surface Hide's

1-468 *Explain:* When there is not enough cover to construct a surface OP, the sighting of the location is on a forward slope or linear feature or if there is a danger from indirect fire, the OP may have to be dug in (*see* Fig 1-23). The following should be considered:

a. What is to be done with the left over spoil?

b. What equipment is available for supporting overhead cover? (Ponchos, timber, IPK).

c. Time available for digging. (Modified belly hide or fire trench require approximately 3 hours digging).

d. The suggested construction sequence:

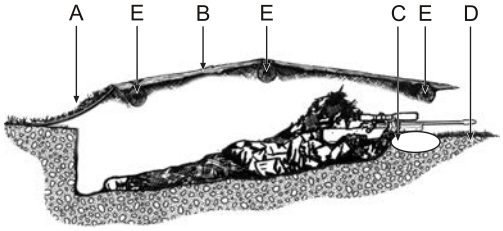
(1) Ponchos placed down to collect turf and top spoil.

(2) Spoil is disposed of where it cannot be seen, i.e. stream or ditch.

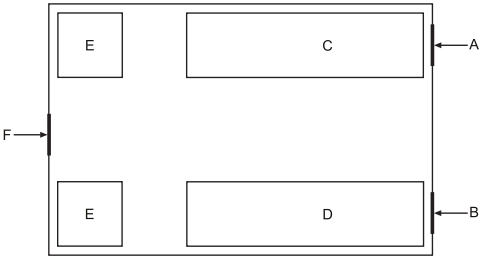
(3) Cross members placed across trench.

(4) Top soil and turf replaced and area re-camouflaged.

1-469 *Confirm by questions.*

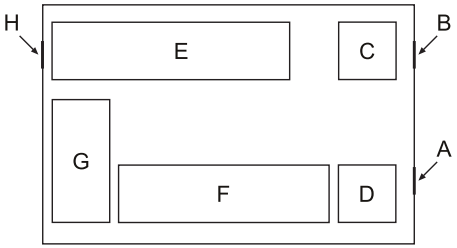


A. Concealed Entrance/Exit
B. Camouflaged Poncho
C. Support for Optics or Weapon System
D. Aperture
E. Supports (Tree Branches or Retractable Poles)

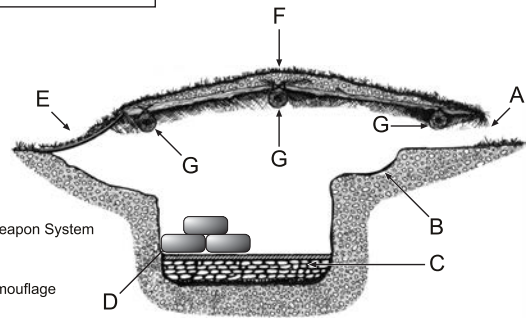


A. Secondary Aperture
B. Primary Observation Aperture
C. Logger Reporter/Rest Number One
D. Observer Number Two
E. Packed Equipment
F. Concealed Entrance/Exit

Fig 1-22. The Belly Hide



A. Primary Aperture
B. Secondary Aperture
C. Logger and Reporter
D. Observer
E. Sentry
F. Rest
G. Packed Equipment
H. Entry/Exit



A. Aperture
B. Supporting Shelf for Optics or Weapon System
C. Rest
D. Packed Equipment
E. Entrance/Exit
F. Waterproof Cover, Spoil and Camouflage
G. Supports

Fig 1-23. Sub-Surface Hide's

Enlarged Fire Trench

1-470 *Explain*: This a quick position to construct as half of the work has already been carried out by using an old fire trench.

a. Advantages

(1) Can be occupied for long periods at a time, due to the size and comfort it offers.

(2) Easily constructed by modifying an existing fire trench.

(3) Provides good protection from indirect fire.

b. Construction:

(1) The firing bay part of the trench is the part we need to construct this hide. The back part of the firing bay needs to be enlarged to the rear.

(2) Do not dig down as deep as the remainder of the trench as you want to cut out your sleeping shelf. This will only be big enough for one man. You must remember to also cut out your loopholes and your elbow rests, and the entry and exit point to the rear of the hide.

(3) The overhead cover goes on in the same way as the belly hide, except more spoil will be placed on the cover, up to 2 feet of spoil and rocks can be used making it blend in with the rest of the fire trenches cover.

1-471 *Confirm by questions.*

Semi-Permanent Hide

1-472 *Explain*: This is the penthouse of locations; it is a well-fortified bunker which can only be built as part of the defensive plan, i.e. 48hrs minimum.

a. Advantages:

(1) Allows the sniper pair a great deal of comfort, thereby allowing the pair to occupy the location for longer periods at a time.

(2) Time spent in the construction will give good cover from enemy fire.

(3) Constructed with movement in mind it allows the occupants to move freely inside without fear of detection.

b. Disadvantages:

(1) The hide is occupied for long periods at a time and possibly used as part of the defensive plan it is going to take a lot of time and effort to construct.

(2) With the amount of construction needed specialist equipment will be needed such as picks, chain saws and axes.

1-473 *Confirm by questions.*

Conclusion

1-474 **End of Lesson Drill.**

a. *Questions from the squad on the entire lesson.*

b. *Confirm by questions and practice as time permits.*

c. *Safety precautions.*

d. *Pack kit.*

e. *Summary. To include the following:*.

(1) Selection, sighting and construction of the hide.

(2) A forecast of the squad's next lesson in this subject.

1-475 - 479. *Reserved.*

Lesson 15. Urban Observation Posts

1-480 ***Aim.*** *To teach urban OP's.*

a. *Firing procedure.*

b. *Advantages and disadvantages.*

c. *Firing Platforms.*

d. *OP Layout.*

1-481 ***Timings.*** *One 40 minute periods.*

1-482 ***Method.*** *An Indoor period.*

1-483 ***Stores.***

Sniper CEFO

1-484 ***Preparation.*** *Power Point.*

Preliminaries

1-485 ***Revision.*** *What must an OP/Hide/FFP Have and should have?*

Introduction

1-486 *Explain:* During Urban Operations it may be necessary to site Ops in buildings. There are two things to be considered:

a. Viewing/Firing Aperture. The aperture required in order to cover the field of view required?

b. Viewing/Firing Platform. Is there a floor for the position to be operated from or will it require building up?

Firing From Urban Locations

1-487 *Explain:* The position should be kept for locating and observing targets, until such point that a specific target appears, as any hap hazard firing from the position will quickly lead to the enemy locating your position. When firing from the hide should take note of the following points to aid in the position staying unseen.

a. Flash can be seen at night, dawn and dusk, so care must be taken to hide this. This however should not be a problem if you construct your loopholes correctly and fire from the back of the loophole, which will keep your flash inside the hide.

b. Smoke works in the same way as the flash, however smoke from your rifle will be detected on cold frosty days, so again take care in constructing your loopholes and make sure you are well back into your hide when taking a shot.

c. Dust one of the main places were dust will give away your position is when you are using a building as a hide, to counter act this you must dampen down your immediate surroundings by either pouring water everywhere or placing out wet pieces of cloth, especially underneath your weapon. This will also apply whilst inside your hide, mainly for the fact that once you've taken the shot the dust could engulf your hide rendering you useless for that point of time.

d. Finally, signature, this is the disturbance of the natural foliage to your front when firing, and really should only affect you if you get yourself into a happy hazard spell of firing.

1-488 *Confirm by questions.*

1-489 **Disadvantages.** *Explain*: Due to the nature of urban warfare, it could be possible that the enemies attention will be drawn to buildings making them objects of note. This in turn could lead to the enemy turning artillery onto them even if the sniper has not been detected.

a. **Preparation.** The building should be prepared in the same as a normal hide. The same attitude should be taken towards concealment as you would place towards rural hides. Take care not to alter the outward appearance of the building, i.e. not drawing the curtains, closing doors that are open, etc.

b. **Fire Positions.** The firing position must be set up so that it is kept back into the room with a screen set up to help place the firer into shadow. Loopholes are to be made large at the rear and smaller to the front. These can be placed anywhere inside the house using such things as broken windows, shell damage to walls, from behind foliage that grows up the outside walls of the building.

c. **Observation Rests.** Some sort of observation rest for the firer and the observer will have to be constructed in order for them to gain more accurate results. These can be constructed from old furniture found lying about the house.

d. **Deception Measures.** In an ideal situation there should be a series of hides set up. They should be occupied under strict guidance, to aid in confusion to the enemy.

(1) A dummy hide, set off to the flank to help draw the enemies attention away from your area and force them to give the position away. Use of induced movement working the same way the dummy hide. A piece of wire or strong string can be tied to some obvious cover again away from the position and pulled at frequent intervals to draw out any enemy snipers and to force them to make a mistake.

(2) Always assume you could be under observation of the enemy.

(3) Think about what you are doing before you do anything.

e. Never be satisfied with the position if you think you can improve upon it.

1-490 *Confirm by questions.*

1-491 **Viewing & Firing Aperture.** *Explain***:** The following are suggested aperture locations and methods of construction:

a. Gable Ends:

(1) Keep the hole small. Consider SYMRAD and ambient light required to gain an image?

(2) As close to the eaves as possible in order to take advantage of the shadow given.

(3) Scrape any mess forward.

(4) If possible, check area below for telltale signs of fallen debris.

(5) If in Defensive Phase, consider tasking a friendly patrol to carry out a check on the concealment of the location.

b. Slate Roof:

(1) Use a coat hanger or piece of wire to secure tile from falling.

(2) Large gap would be noticed during daylight hour.

c. Drilling Aperture:

(1) Noise will be a problem.

(2) Hole must be large enough for the observer to see and use his weapon.

(3) Good if task is to produce imagery only using cameras.

(4) Hand drill is very slow.

(5) Unlikely to have a power sauce for electrical appliances.

d. Car Jack:

(1) It is sometimes possible to jack up eaves of a house to make a small hole.

(2) A normal car jack will do.

(3) Place boards under jack to stop pressure collapsing the ceiling under the jack.

1-492 *Confirm by questions.*

1-493 **Viewing & Firing Platforms.** *Explain*: Due to damage the flooring of the room being occupied could be missing or unsafe and will need to be replaced or repaired. The following must be considered:

a. Use existing boards that have fallen to the ground below.

b. Make area large enough to move comfortably.

1-494 To eliminate the dead spot below the OP it may be possible to raise the height of the viewing platform, this would allow observation of the forward arc as well as the ability to look down.

1-495 *Confirm by questions.*

Back Drop

1-496 *Explain:* It may be necessary to consider the use of drops to reduce silhouette against the rear wall. If necessary they can be hung in front of to hide movement, giving a false impression of a rear wall.

Observation Post Layout

1-497 *Explain:* There are many possibilities as to the actual layout within the OP, the 'STAR' and 'BOX' being two of them. Do not get blinkered into thinking the OP must contain all 6 members of the team. A split OP is a perfectly feasible option so long as both parts are mutually supporting. No two OPs will ever be the same and the Sniper Commander must be flexible enough in his planning to be able to change his OP sighting once on the ground, if a more suitable location is found.

1-498 The observation post location can be broken down into four locations which are:

a. **Observers Position.** Dressed in fighting order and camouflaged correctly fitted the observer would have the following:

b. **Sentry Position.** Dressed in fighting order and camouflaged correctly fitted the sentry would have the following equipment:

(1) Weapon (IW/ 9mm if issued).

(2) RGS monitors.

(3) Claymore firing device.

(4) Binos if required (all around observation).

(5) 100% alert.

c. **Sleeping Area.** Fully dressed, boots on, webbing and weapon within arm's length, this area would be set up as follows:

(1) Overhead cover/bivvy bag.

(2) Kit packed RTM.

(3) Weapon to hand.

(4) Hot bag system to be considered if weather permits.

(5) Sleeping bags should not be zipped up, but laid as a quilt to reduce noise.

d. **Admin Area.**

1-499 Only remove what is required from bergans, replace when finished. Cooking routine will depend on the situation and weather conditions. Flasks of hot water are a good idea as the water can be used to produce a number of items, but the commander must take into consideration the smell as well as the heat source produced by cooking.

1-500 Living and working from the OP is very hard, both physically and mentally. When fighting the elements and fatigue, you must remain alert at all times, especially when the target area seems unproductive and quiet. Negative information can also be relevant and important to the IO. The OP is the eyes and ears of the parent unit; any piece of intelligence could be the vital ingredient to success or failure to the operation. Use the principles and drills shown in the chapter and you will be well on your way to a successful operation. By enhancing security of the OP securing doors and windows with screws, wedges etc. to keep out inquisitive locals/enemy.

1-501 *Confirm by questions.*

Conclusion

1-502 **End of Lesson Drill.**

a. *Questions from the squad on the entire lesson.*

b. *Confirm by questions and practice as time permits.*

c. *Safety precautions.*

d. *Pack kit.*

e. *Summary. To include the following:*

(1) Selection, sighting and construction of the hide.

(2) A forecast of the squad's next lesson in this subject.

1-503 - 509. *Reserved.*

Lesson 16. Sniper Camouflage and Concealment

1-510 ***Aim.*** *To teach camouflage and concealment:*

a. *Considerations.*

b. *Guidelines.*

c. *FFP construction.*

d. *Considerations before engagement.*

e. *After shot procedure.*

1-511 ***Timings.*** *Two 40 minute periods.*

1-512 ***Method.*** *An outdoor period.*

1-513 ***Stores.***

Sniper CEFO

Preliminaries

1-514 ***Revision.*** *Why things are seen and target detection.*

Introduction

1-515 *Explain:* All snipers should be masters of camouflage and concealment and master being undetectable from the ground, air and within the thermal IR spectrum.

Camouflage

1-516 *Explain:* The aim of camouflage is to blend with the environment, disguise distinctive shapes and break the engagement cycle as early as possible. In order to kill you, an enemy goes through the process of detecting a person, identifying that person as their opponent, acquiring a sight picture and finally pulling the trigger. The best solution is to prevent detection; if that isn't possible then making it difficult to identify and acquire you will push the odds back in your favor. Camouflage can be seen as working in four different ways:

a. Blending with the Background.

b. Breaking up Distinctive Shapes.

c. Effective camouflage.

d. Reducing Signature.

Concealment the Guidelines

a. Don't expose your head over cover.

b. Stay in the shadows.

c. Avoid sky lining.

d. Avoid isolated cover.

e. Crossing a wall or fence.

f. Movement around corners.

g. Movement past windows.

h. Use of doorways.

i. Moving parallel to buildings.

j. Crossing open areas.

(1) Preparation before moving.

(2) Least exposure.

k. Moving as a pair/section.

Final Fire Position (FFP)

1-517 On arriving at the stop short before confirming FFP:

a. Confirm location.

b. Re apply cam cream.

c. Re apply cam.

d. Recce FFP Must have**:**

e. **C-**Communications – When operating as a pair/section.

f. **O-**Observation – Confirm target and ensure clear lines of fire.

g. **C**-Concealment – from the enemy from ground and air.

h. **S**-Sustainability – ensure position is sustainable for the duration of the mission.

i. **S**-Survivability – actions on are considered, position supports the enemy threat.

1-518 To enhance the selected position, the following **should have** and must be considered:

a. **C**-Cover from fire.

b. **O**-Observation of approach routes.

c. **C**-Covered approach routes and exits.

d. **O** – Observation.

e. **A** - Alternative position.

f. **E –** Escape route.

1-519 Once FFP has been confirmed:

a. Send initial SITREP.

(1) 6 fig grid of you location.

(2) eyes on target (if sighting report is required send as per SOP's).

1-520 If required pull back to stop short to conduct any battle prep.

1-521 Preparation of FFP.

a. Back Drop.

b. Front Drop.

c. Trap shadow.

d. Effective cam.

e. Loop hole if required.

f. Appropriate fire position.

g. Position of the sun.

h. Not an obvious position.

1-522 FFP report to Section/Platoon Commander:

a. Location 8 Fig Grid.

b. LOA.

c. ROA.

d. Axis (Bearing to target).

e. Range.

f. Dead Ground.

g. ERV (if not given by Sec/Pl Comd).

1-523 **Considerations before Engagement:**

a. Distance.

b. Multiple targets.

c. Equipment as targets.

d. Information collection.

1-524 **After the Shot:**

a. Follow through.

b. Engage other targets.

c. Withdraw.

d. No more than 3 shots from 1 position.

1-525 *Confirm by questions.*

The Crack Thump Method

1-526 *Explain:* When using the crack thump method, the sniper team is listening for the crack of the round passing overhead at supersonic speed and the thump of the discharge of the weapon being fired. This method will indicate both distance and direction to the target.

a. **Distance to the Firer.** The time difference between the crack and the thump can be converted into an approximate range. A one second lapse between the two constitutes a distance of about 600 meters with most caliber weapons. Following this formula, a half second would be about 300 meters.

b. **Determining Direction.** It is natural to look in the direction of the crack. Instead, this should be a signal to prepare the senses to pick up the softer and less distinct thump, in order to determine its origin. Locating the Firer. By observing in the direction of the thump and near the predetermined range, the sniper may be able to see the muzzle flash or blast of the enemy's weapon from a second or third shot.

1-527 *Confirm by questions.*

Limitations

1-528 *Explain*: Some conditions are not conducive to the use of the crack thump method:

a. Isolating a particular crack and thump is difficult in a situation where there are numerous shots being fired. Areas with mountains, tall buildings, etc., will cause echoes rendering this method ineffective.

b. Mechanical means of target detection.

c. Dummy targets.

d. Periscopes.

e. Shot analysis.

f. Shot detection electronic systems.

1-529 *Confirm by questions.*

Conclusion

1-530 **End of Lesson Drill.**

a. *Questions from the squad on the entire lesson.*

b. *Confirm by questions and practice as time permits.*

c. *Safety precautions.*

d. *Pack kit.*

e. *Summary. To include the following:*

(1) The need for stealth when moving and choosing the correct method of movement for the ground being covered.

(2) A forecast of the squad's next lesson in this subject.

1-531 - 539. *Reserved.*

Lesson 17. Sniper Pair Tactics

1-540 ***Aim.*** *To teach Sniper tactics:*

a. *Patrol procedures.*

b. *Actions on.*

c. *RV procedures.*

d. *Live and dead letter box.*

e. *LUP.*

f. *Pair and section contact drills.*

g. *CASEVAC.*

1-541 ***Timings.*** *Three 40 minute periods.*

1-542 ***Method.*** *An outdoor period.*

1-543 ***Stores.***

Sniper CEFO

Preliminaries

1-544 ***Revision.*** *Why things are seen and target detection*

Introduction

1-545 *Explain:* The sniper must be able to manoeuvre around the battle space effectively whether its a preliminary move, on patrol or on a stalk. The sniper must be prepared for all eventualities by understanding and practicing unit SOP's, actions on and contact drills to be able to break contact and survive.

Sniper Patrolling

1-546 **Principles.** *Explain*:

a. Command and Control.

b. Communications.

c. Mutual support.

d. Stealth.

e. Route Selection.

f. Sign Awareness.

g. Minimize Noise.

h. Unit Sop's.

1-547 **Patrol Considerations:**

a. Report lines.

b. Nicknumbers.

c. Code words.

d. Contingencies.

e. Security.

f. Fire support.

g. OS.

h. Simple plan and Execution.

1-548 **Briefing at Base:**

a. Patrol Operation / Task.

b. Infil / Exfil.

c. OOB / LOE.

d. Patrol Comms Scheds / Lost Comms Drills.

e. Rv. System.

f. Detailed Map Study.

1-549 **Patrol Daily Breif:**

a. Intended route.

b. Rv's to be used.

c. Patrol intention.

d. Daily Password/Number.

e. The Area Of The Next LUP.

f. Actions On.

1-550 **Daily Routine:**

a. Comms / Breakfast Halt(Short).

b. Mid-Day Meal Halt (If Required).

c. Comms Main Meal Halt(Long).

d. Recce Establish Lup.

e. Stand Too.

f. Night Routine/Exit Drills.

g. Patrol Procedure.

1-551 **Types of Halt:**

a. Tactical Pause.

b. Obstacle Crossing.

c. Short Halt.

d. Long Halt.

e. LUP.

Tactical Pause

1-552 **Types:**

a. Herrin Bone.

b. All-round Defence.

Obstacle Crossing

1-553 **Types:**

1-554 **Minor obstacle**

a. Major.

b. Leapfrog.

c. Open Gate.

1-555 **Actions on**

a. Meeting engagements.

b. Action on a pre-seen enemy.

c. Action on being ambushed.

d. Action on coming under indirect fire e.g., artillery and mortars.

e. Action on contact with mines or booby traps.

Rv Procedure

1-556 **Rally Point.** *Explain*:

a. Given immediately after a contact.

b. Nominated by anyone in the patrol.

c. Must give cover from view and fire.

d. Actions in:

(1) Change magazines if not already done (50-50)

(2) Head check. (2i/c)

(3) Navigation check.(Comd)

(4) Medical treatment.

(5) Distribution of any kit.

e. **Remains open for 2 to 3 minutes.**

1-557 **ERV**

a. Remains open for 2 hours from contact.

b. If separated on contact you must head for the ERV.

c. If nominated for a static position such as an OP or harbour the following must apply:

(1) Everyone must know the bearing to it.

(2) Everyone must know the distance to it.

d. Must have the following:

(1) Must be easy to find day or night.

(2) Must not be on an obvious feature.

(3) All the patrol must have visited it.

1-558 **Patrol RV**

a. Remains open for 24hrs from contact.

b. Ideally previous night's LUP.

c. Following should apply:

(1) Easily identifiable to the Patrol.

(2) Not on or near an obvious feature.

1-559 **Entry RV**

a. Remains open until end of the conflict or until everybody is accounted for.

b. A recovery plan should be implemented once the command element realize that a patrol is in difficulty.

c. Possible Entry RV:

(1) Winch/Abseil Point.

(2) Insertion LP/LZ.

(3) River DOP.

(4) Border Crossing Point.

(5) Landing Strip.

1-560 **War RV**

a. Required when total exfiltration is required.

b. Remains open for duration of hostilities.

1-561 *Confirm by questions.*

LUP

1-562 **Drill.** *Explain*:

a. Pre-select from map.

b. Double fish hook.

c. Move into all round defence .

d. Stand too claymore deployed.

e. Commander nominate lup areas/ basha sites.

1-563 **Routine**

a. No cutting.
b. Erect poncho's.
c. Dry kit on , wet kit packed.
d. No lights , smoking or noise.
e. Weapons and webbing close.
f. Sleep.
g. Sentry.

1-564 **Exit Drills:**

a. Reveille 30 mins before first light/ before colour's seen.

b. Poncho and all kit packed away.

c. Cam up, webbing on.

d. Stand too. Weapons in hand .Safety catches at fire.

e. Compass set to ERV.

f. Grab bags on top of bergans.

g. No noise / movement.

h. After stand too claymores in.

i. Check of area.

j. Patrol briefing.

k. Move off on deception leg.

l. Commence daily routine.

1-565 **Methods Of Deception:**

a. Loop the track.

b. Angle.

c. Cross a stream.

d. Move over rocky ground.

e. Fade out.

1-566 *Confirm by questions.*

1-567 **Pair And Section Contact Drills.** The aim is to avoid contact you do not have the men and or the firepower to sustain a firefight, the enemy may have the advantage. However if you do come under contact robust rehearsal and drills to break contact.

1-568 **Principles:**

a. Speed.

b. Aggression.

c. Determination.

d. Command and control.

e. Maximum use of fire.

f. Regain the imitative.

g. Inflict maximum casualties.

h. Break contact.

1-569 **Considerations**

a. Initial rate of fire.

b. Initial contact report.

c. Rate of fire.

d. No movement without fire.

e. Stoppages.

f. Magazine changes.

Conclusion

1-570 **End of Lesson Drill.**

a. *Questions from the squad on the entire lesson.*

b. *Confirm by questions and practice as time permits.*

c. *Safety precautions.*

d. *Pack kit.*

e. *Summary. To include the following:*

(1) The need for stealth when moving and choosing the correct method of movement for the ground being covered.

(2) A forecast of the squad's next lesson in this subject.

1-571 - 579. *Reserved.*

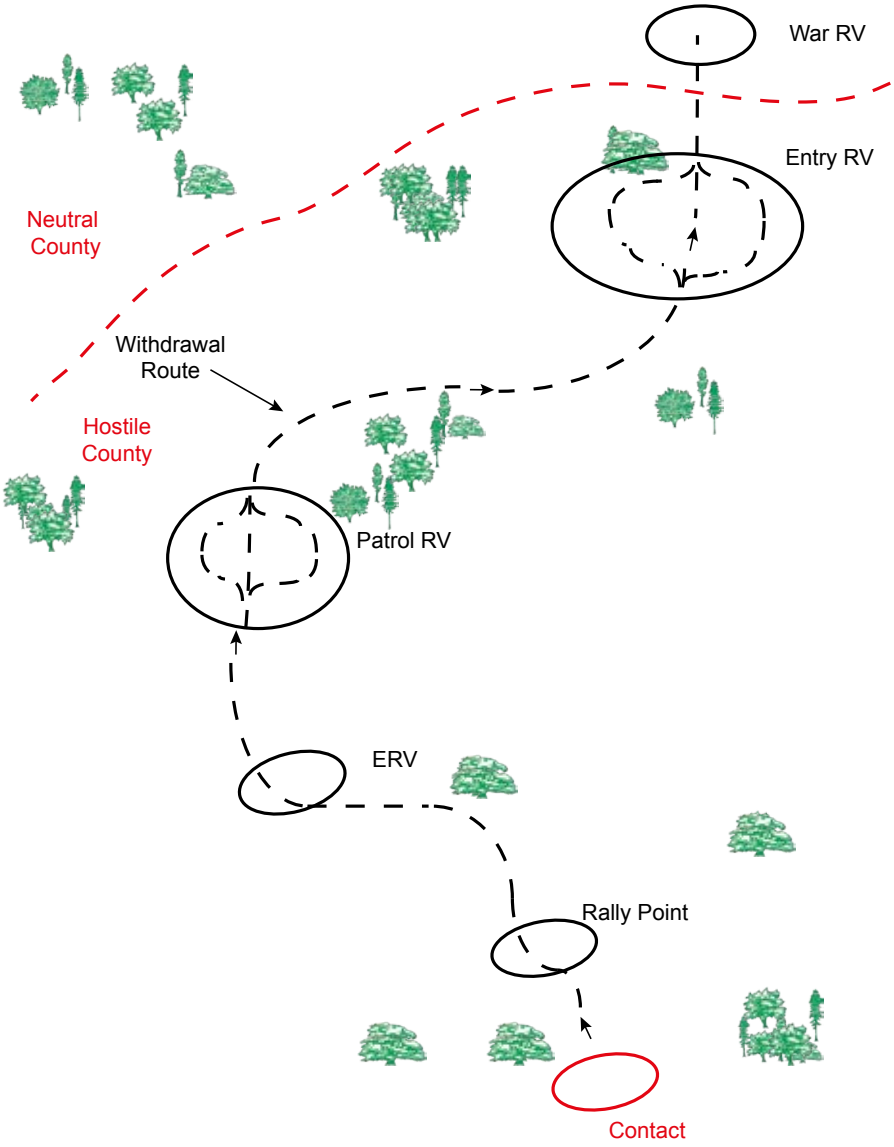


Fig 1-24. RV Procedure

Lesson 18. Sniper Stalk

1-580 ***Aim.*** *To teach Stalking:*

a. *Considerations before a stalk.*

b. *Considerations during a stalk.*

c. *Actions in FFP.*

d. *Extraction.*

1-581 ***Timings.*** *Two 40 minute periods.*

1-582 ***Method.*** *An indoor or outdoor period.*

1-583 ***Stores.***

Sniper CEFO

1-584 ***Preparation.*** *Power point*

Preliminaries

1-585 ***Revision.*** *Why things are seen and target detection.*

Introduction

1-586 *Explain:* Movement violates a principle of concealment – but a sniper must get within range of his target. Skilled stalking enables a sniper to move unseen.

a. A sniper is at his most venerable whilst moving.

b. Where possible a sniper moves in Darkness, fog, smoke or haze but if none of the above are available the sniper will still need to achieve the mission.

c. Deploying as a 6 man section will increase survivability and sustainability.

Aim of Stalking

1-587 *Explain:* To be able to get to the target without being detected, engaging the enemy and extracting undetected.

1-588 **Principles.** *Explain:*

a. Intelligence.

b. Surprise.

c. Concentration of combat power.

d. Maintain momentum.

e. Security.

f. Manoeuvre.

g. Deception.

h. Terrain.

1-589 **Types of Stalk.** *Explain:*

a. Quick/Hasty.

b. Deliberate.

1-590 **Pair/Section Stalk Considerations.** *Explain:*

a. Communications.

b. Command and control.

c. Mutual support.

d. All round protection.

e. Situation awareness.

f. Stealth deception.

g. Actions on.

h. Camouflage and concealment.

i. OS.

j. Timely and accurate information.

k. Maximum use of fire power.

1-591 *Confirm by questions.*

1-592 **Before the Stalk.** *Explain*: Before conducting a stalk the sniper must plan and identify:

a. **Enemy position.** Consider and consult:

(1) G2/J2.

(2) ISTAR.

(3) IPB.

(4) Likely/Known firing points.

b. **Line Of Advance/Withdrawal.** Conduct and plan:

(1) Ground Analysis.

(2) The route taken including & RV locations,taking into consideration bounds, dead ground, obstacles, observation points, locations & methods of movement.

(a) Availability of natural cover, and in particular, dead ground.

(b) The position and frequency of any obstacles, whether natural or artificial.

(c) Likely observation points where you can confirm enemy position.

(d) The location of any known or possible enemy locations.

(e) General IPB study of AO between you and the Tgt.

(f) Freedom of movement corridors.

(g) Dead ground to the enemy.

(h) Restrictive cover.

(i) Open areas.

(3) Observation point to identify enemy position.

c. **Final Fire Position.** The position the sniper will move to enable aquisition of the target & shoot. This position will rarely be pinpointed in advance.

(1) C-Cover from fire.

(2) O-Observation of approach routes.

(3) C-Covered approach routes and exits.

(4) O-Observation over all likely enemy fire positions.

(5) A-Alternative position.

(6) E-Escape route.

d. **Stop Short**

(1) Dog leg.

(2) Snap ambush.

(3) Soak period.

(4) Nav check.

(5) Check Cam.

(6) Prep kit.

(7) Are you going forward with sniper rifle deployed.

e. **Recce.**

(1) Confirm Tgt.

(2) Check Coms.

(3) Confirm fire position.

(4) Confirm Cam.

(5) Any additional Battle prep done in stop short.

f. **Concealment within FFP's/Hides.**

(1) Concealed approaches.

(2) Screens.

(3) Loopholes.

(4) Urban areas.

(5) Shadow.

(6) Blend with background.

(7) Avoid breaking natural straight lines and skylines.

(8) When using soft cover observe and shoot through cover.

(9) Avoid isolated cover.

1-593 *Confirm buy questions.*

1-594 **During A Stalk.** *Explain*: During the stalk consider>

a. **R-Risks.**

(1) Only once enemy have been identified.

(2) Planned.

(3) Slow.

(4) Deliberate.

b. **E-Exposure.**
   (1) Concealment.
   (2) Sustainability.
   (3) Compromise.
   (4) Fight or flight.

c. **D-Disturbed wildlife.**
   (1) Avoid.
   (2) Actions on.
   (3) Reaction.
   (4) Wild or Domestic.

d. **S-Sense of direction.**
   (1) Detailed map RECCE.
   (2) Using air photo.
   (3) Assault bearing.
   (4) Landmarks.
   (5) Knowing where you are at all times.
   (6) Regular map check (In cover).
   (7) Disorientation while crawling.

e. O-Observation.
   (1) Planned.
   (2) Eyes onto enemy as early as possible.
   (3) Concealment.
   (4) Look through cover.
   (5) Telegraphing.
   (6) Backdrop.

f. **A-Alertness.**
   (1) Situation awareness.
   (2) Stealth.

(3) Actions on all SOP's.

g. **P-Personal Camouflage.**

(1) Check cam regularly.

(2) Change cam different environment.

1-595 *Confirm by questions.*

1-596 **Stalking at Night.** *Explain*: When conducting a stalk at night consider the following additional points:

a. **M-Maintain direction.**

(1) Map.

(2) Compass.

(3) Stars.

(4) Landmarks.

b. **A-Aimed Fire.**

(1) Flash.

(2) Judging distance.

(3) target acquisition becomes a lot more difficult.

(4) Double edge weapon.

(5) Difficult for the enemy to acquire you with accurate fire.

c. **S-Silhouette.**

(1) Cover is less important than backdrop.

(2) so crests and skylines should be avoided.

(3) TI.

(4) II.

(5) IR.

d. **S-Silence.**

(1) Hearing becomes the primary sense at night.

(2) Be aware of the sound of your own movement.

(3) Stealth.

(4) Battle discipline.

1-597 *Confirm by questions.*

Conclusion

1-598 **End of Lesson Drill.**

a. *Questions from the squad on the entire lesson.*

b. *Confirm by questions and practice as time permits.*

c. *Safety precautions.*

d. *Pack kit.*

e. *Summary. To include the following:*

(1) The need for stealth when moving and choosing the correct method of movement for the ground being covered.

(2) A forecast of the squad's next lesson in this subject.

1-599 - 609. *Reserved.*

Lesson 19. Patrol Report

1-610 ***Aim.*** *To teach the Patrol Report:*

a. *Compile a patrol report.*

b. *Format of the patrol report.*

c. *Options.*

1-611 ***Timings.*** *One 40 minute period.*

1-612 ***Method.*** *An indoor period.*

1-613 ***Stores.***

Sniper CEFO

1-614 ***Preparation.*** *Power point.*

Preliminaries

1-615 ***Revision.*** *N/A*

Introduction

1-616 *Explain:* Recording of information on a patrol report is a vital skill that must be mastered by the sniper. The information must be accurate and easily understood.

Recording Information

1-617 **Sketch Maps.** *Explain*:

a. Avoid possible misunderstanding.

b. Complement patrol report.

c. Present a lot of detail.

d. Enhance hard information to be understood.

e. Information not found on a map.

1-618 *Confirm by questions.*

SLAMMAG Card

1-619 *Explain*: To ensure no information is overlooked the use of a SLAMMAG Card should be utilised whilst on patrol. The information on the card can be filled in whilst on patrol then transferred onto the patrol report.

a. S – Strength, Size, Dress.

b. L – Location, Description, Grid.

c. A – Aim (Ie Defensive Position).

d. M – Method, Routine, Tactics.

e. M – Moral, Attitude, Professionalism.

f. A – Aides, Equipment, Weapons, Vehicles Etc.

g. G – Ground, FUP, FSG, RV's etc.

1-620 *Confirm by questions.*

Patrol Report Format

1-621 *Explain:* The patrol report will contain the following format:

1-622 **Preliminaries:**

a. Copy No, Patrol C/S, DTG.

b. Map Co-Ords.

c. References (Map, Air Photo, Ptl Reports).

d. Weather.

e. First Light/Last Light.

f. Moon State.

g. Composition.

h. Mission/Tasks.

i. DTG Of Time Out/In.

1-623 **Routes Taken Out /In.**

a. Legs.

b. From/To.

c. Bearing (Magnetic).

d. Distance.

e. Description Of Ground.

f. Features manmade/Natural.

(1) The Going.

(2) Obstacles/Choke points.

(3) Cover from view/fire.

(4) Animal Activity.

(5) Roads/Tracks.

(6) Habitation.

1-624 **GROUND.** General Description

a. Natural features. Within patrol area/route.

b. Key terrain. Grid, brief description.

c. Habitation. Main areas of habitation.

d. Communications (roads, railways etc). Lines of communications.

e. Routes taken. Should refer to the route card and also trace of route.

f. Problem spots. What, where and grids.

1-625 **Enemy Details**

a. Positions and strength.

b. Weapons, vehicles & equipment.

c. Obstacles.

d. Mg posts / sentry posts.

e. Routine and habits.

f. Dress.

g. Morale.

h. Tactics & reaction times.

i. Enemy routes in/out.

j. Any other info.

1-626 **Misc info.**

a. Habitation.

b. Own comms.

c. Problem spots.

d. Other info.

1-627 **Enemy encounters.**

a. Location.

b. Strengths, compositions.

c. Route.
d. Weapons.
e. En casualties.
f. Own casualties.
g. Cpers.
h. Any other info.

1-628 **Condition of patrol**

a. State of equipment.
b. Equipment loss.
c. State of optics.
d. State of radios.
e. Fatigue.
f. Injuries / casualties.
g. Fit to deploy.

1-629 **Summary And Recommendations**

a. LUPs.
b. RVs / FRVs.
c. Approaches & Withdrawals.
d. Positions for FSP, Support weapons, DFs.
e. Assault & Cut Offs.
f. Options or COA,s if applicable.
g. Any Other Info.

1-630 **Annexes**

a. Annex A : Patrol Trace (to include map corrections).
b. Objective area.
c. Panoramic view of Obj.
d. Any other relevant details i.e Attack options, track.
e. Reports.

1-631 **Patrol Reports should be:**

a. Neat and Tidy.

b. Systematic.

c. Logical.

d. Readable.

e. Truthful.

1-632 **Things That Can Go Wrong:**

a. Wrong map references.

b. Composition card filled out incorrectly, ie; wpns, kit, tasks.

c. Lack of detail on routes out/in, wrong grids and bearings.

d. Lack of detail on things on or around objective area

e. Lack of detail on your findings.

f. Need to draw sketches not maps, use traces instead of maps.

1-633 *Confirm by questions.*

Conclusion

1-634 **End of Lesson Drill.**

a. *Questions from the squad on the entire lesson.*

b. *Confirm by questions and practice as time permits.*

c. *Safety precautions.*

d. *Pack kit.*

e. *Summary. To include the following:*

(1) The need for stealth when moving and choosing the correct method of movement for the ground being covered.

(2) A forecast of the squad's next lesson in this subject.

1-635 - 639. *Reserved.*

Lesson 20. Sniper Target reconnaissance

1-640 ***Aim.*** *To teach sniper target reconnaissance.*

a. *Sequence of planning.*

b. *Factors for consideration.*

c. *Options.*

1-641 ***Timings.*** *One 40 minute period.*

1-642 ***Method.*** *An indoor period.*

1-643 ***Stores.***

Sniper CEFO

1-644 ***Preparation.*** *Power point.*

Preliminaries

1-645 ***Revision.*** *SLAMMAG Card*

Introduction

1-646 One of the main roles of a sniper is information gathering and reconnaissance. The planning process for target reconnaissance is similar to that of a stalk. Remember a target recce is a stalk from one position to another.

Planning Considerations

1-647 *Explain:* The following planning considerations should be carried out before each mission:

a. Map and Air photo study.

b. Dead ground study.

c. Pinpoint likely enemy positions using map/air photo.

d. Look for places where you would go.

e. Use previous patrol reports.

f. Weather considerations for patrol duration.

g. First light, last light, visibility levels.

h. Ground conditions.

i. Cache and FRV areas.

j. Routes in and out.

k. Timings, duration of task.

l. Day sacks or Bergans.

m. Specialist equipment.

n. CASEVAC procedure.

o. SOP variations.

1-648 *Confirm by questions.*

1-649 **Enemy Force Locations.**

a. Strengths.

b. Type of unit.

c. Support weapons.

d. Doctrine.

e. Use of minefields/IED's.

f. Habits.

g. Moral.

h. Patrol activity.

i. Radio capabilities.

j. Viewing aids and surveillance devices.

k. Tactics.

1-650 *Confirm by questions.*

1-651 **Friendly Forces Considerations.**

a. De-confliction with friendly forces units.

b. Identify boundaries.

c. Location of own obstacles.

d. Location of own forward troops (FLOT).

e. Support fire plan.

f. DF's.

g. Air/Heli support.

h. Ranges of weapons.

i. Passwords/codes to be learnt.

j. Cooms plan.

1-652 *Confirm by questions.*

1-653 **Pair/Section Commander Must Know The Following:**

a. Mission.

b. Time available.

c. Size of force required.

d. Size of area to search.

e. Strength of enemy.

f. Location of friendly forces and supporting weapons.

1-654 *Confirm by questions.*

1-655 **Actions On Locating The Enemy Or Target Area**

a. Finding the enemy, reporting the enemy location, observe report and leave.

b. Compromise by the enemy.

c. Compromise by local nationals.

d. Sick or wounded man.

e. No comms.

f. Target not located.

g. Mission complete.

1-656 *Confirm by questions.*

1-657 **O's and Rehearsals.**

a. Method of movement.

b. Action on objective.

c. Action on contact, light, obstacles, CASEVAC, lost etc.

d. Method of target recce.

e. How many or size of group need for task.

f. Lost Comms.

g. Retrieval of information.

h. Maintaining eyes on target.

1-658 *Confirm by questions.*

1-659 **Methods of Recce.**

a. Right angle traverse.

b. Natural traverse.

c. Single point.

d. Static FRV, multi point.

e. Split Pair.

1-660 *Confirm by questions.*

Conclusion

1-661 **End of Lesson Drill.**

a. *Questions from the squad on the entire lesson.*

b. *Confirm by questions and practice as time permits.*

c. *Safety precautions.*

d. *Pack kit.*

e. *Summary. To include the following:*

(1) The need for stealth when moving and choosing the correct method of movement for the ground being covered.

(2) A forecast of the squad's next lesson in this subject.

1-662 - 669. *Reserved.*

Lesson 21. Sniper Resupply and Cache

1-670 ***Aim.*** *An overview of resupply and cache procedures.*

1-671 ***Timings.*** *One 40 minute period.*

1-672 ***Method.*** *Basic lesson indoors.*

1-673 ***Stores.***

Précis

1-674 ***Preparation.***

a. *Power Point*.

b. *Reference from the CDC DCC Vol 2, Tactical Employment of IWS Snipers.*

Introduction

1-675 *Explain:* Re-supply within the Battle Group is usually quite a simple affair with the CQMS usually readily available to replenish the fighting troops. However within the Sniper Pl it will normally be a much more involved affair as there is normally no dedicated administrative support. The nature of sniper operations and their duration will often be a necessity for the platoon to be re-supplied in the field. If this is the case a great deal of thought should be put into how it is carried out.

1-676 The platoon 2IC should prepare and plan not just for the operation at hand but also subsequent operations so that all equipment needed is available when re-tasked. This can significantly reduce the time it takes to re-deploy the Sniper Pl. All equipment that is not being deployed in the current operation is to be stored and logged at BG Main so that it can be identified by the RQMS and sent to forward / supporting companies as required.

1-677 The Pl 2IC should ensure that the most appropriate appointments are tasked with the G4 Sp of the sniper Pl. Re-supply timelines will differ dependent on whether equipment is coming from the BG, a CQMS or needs to be moved forward from the RQMS to a CQMS for subsequent re-supply. Timelines will be further extended if sniper patrols are working in various OPs as the Pl 2IC will need to consolidate a Pl request prior to his submission. All re-supply must be considered as pre-deployment and where possible, kit, rations, batteries etc should be broken down, efficiently packaged and marked.

Essential Items

1-678 *Explain:* Items that could be considered to be essential will normally be anything that would critically affect the sustainability and effectiveness of the patrol. Essential items may include the following:

a. Radio batteries/spare parts.

b. Rations.

c. Water.

d. Ammo.

e. Spares/batteries for surveillance devices.

f. CBRN equipment. (If required).

1-679 *Confirm by questions.*

Possible Methods

1-680 *Explain:* There are various methods that could be used to resupply the platoon on patrol. All have advantages and disadvantages and these should be considered before deciding which method is chosen. The normal methods used are the following:

a. Live Letter Box (LLB).

b. Dead Letter Box (DLB).

c. Hides.

d. Caches.

1-681 *Confirm by questions.*

Live Letter Box

1-682 *Explain:* This method involves the patrol on operation being resupplied by another patrol at a prearranged location where equipment and information can be exchanged.

a. *The advantages are:*

(1) The re-supply patrol can bring whatever is required.

(2) Any intelligence will be handed over directly.

(3) Waste can be extracted without leaving sign.

b. *The disadvantages are:*

(1) The movement of 2 patrols could compromise the operation.

(2) Planning and control measures must mitigate the risk of “Blue on Blue”.

(3) More chance of compromise with infill and exfill of replen callsign.

1-683 *Confirm by questions.*

Dead Letter Box

1-684 *Explain:* This method involves the re-supply patrol depositing the equipment at a set place for the other patrol to pick up at another time.

a. The advantages are:

(1) Less concurrent movement.

(2) No danger of “Blue on Blue”.

b. The disadvantages are:

(1) Grids must be exact as the pick up will be conducted in darkness.

(2) The DLB may be discovered and ambushed by an enemy patrol.

(3) More ground sign left by replen callsign.

1-685 *Confirm by questions.*

Hides

1-686 *Explain:* A hide is a dump of equipment, which is put in by the same patrol as will pick it up. These are most commonly used when a C/S leaves CEMO in order to patrol in CEFO but by misnomer this is often referred to as a bergan ‘cache’.

a. Where possible the hide should be visible only to the ‘hiding’ patrol.

b. It should ideally be dug in but depending on the situation could be surface laid.

Caches

1-687 Caches are rarely used by anyone other than Special Forces as it is unlikely that patrols will have been inserted sufficiently early to enable them to have been placed. Caches are pre-placed by a different C/S to the intended ‘user’.

a. Caches are always dug in and a cache report is kept containing all details regarding the cache.

b. The main advantage is that a cache can contain anything, from rations to vehicles.

c. The main disadvantage is that a cache holds set equipment with no flexibility if it does not contain the stores you actually require.

1-688 *Confirm by questions.*

Re-Supply Co-ordination

1-689 *Explain:* Re-supply requests should always be sent as early as possible to enable appropriate planning and the preparation and movement of equipment, often a laborious process The exact timeline will vary depending on unit and situation. Other points to consider are as follows:

a. The man who co-ordinates the re-supply within the platoon is the platoon 2IC and he must know exactly what he holds and what is required before he can send off an accurate re-supply request.

b. The patrol commanders must use foresight so that they are able to plan far enough in advance to enable them to order the correct equipment from the platoon 2IC and give him time to get it together.

c. At all levels, only exactly what was requested will be supplied so requests must be specific.

d. Things like exchanges for broken equipment or radio batteries will always be done on a ‘one for one’ basis. Broken kit must be returned or it does not get repaired and spares are always in demand.

e. Troops sent back to meet the re-supply must have some means to carry the equipment away with them. For example, water bottles will be needed to collect water etc.

f. The re-supply must be done in a secure area, so thought must be put into deciding how the RV will be protected and where it will be in relation to the enemy.

g. The RV will most probably be done at night so a sensible RV should be chosen to enable all concerned to find it in the dark.

h. Timings will be critical as the CQMS on the re-supply patrol will not want to be forward of the FEBA any longer than is necessary.

i. If the same process will be employed for multiple re-supplies or the extraction of product, planning should consider pattern setting and not exhausting favoured re-supply options.

j. The platoon/ section 2IC (or whoever is conducting the re-supply-it may vary situation dependent) needs to think how he will distribute the equipment. There are several ways:

(1) He could go round to each patrol with the equipment.

(2) The patrols could all pass through on their way to their next task.

(3) The patrols could send 2 men back to meet the platoon 2IC.

(4) He could dump the equipment in hides or DLBs.

1-690 *Confirm by questions.*

LLB Re-Supply

1-691 *Explain:* Prior to the re-supply happening the 2IC has moved into the briefed area and secured it with suitable manning and firepower. Suitable communications and night vision should be dictated in orders so that all are equipped correctly for the re-supply including the PL 2IC/CQMS party. PL 2IC/CQMS stopped short via communications he is called forward to a human guide. This will be marked by a dictated cylume stated in orders. The guide has a map of the re-supply route and explains actions on entering the re-supply area also what to do if a critical situation arises. As soon as the Vehicle is stationary the engine is turned off and a soak period is conducted. Once content, the re-supply can take place. When the re-supply has been completed the PL 2IC/CQMS is guided out to release point and released.

1-692 *Confirm by questions.*

Conclusion

1-693 **End of Lesson Drill.**

a. *Questions from the squad on the entire lesson.*

b. *Confirm by questions and practice as time permits.*

c. *Safety precautions.*

d. *Pack kit.*

e. *Summary. To include the following:*

(1) The need for stealth when moving and choosing the correct method of movement for the ground being covered.

Chapter 2
Practice Periods

General

2-01 All training must be progressive; unnecessary repetition is bad instructional practice. Soldiers learn skills and facts in the basic lessons which should be taught only once during their service. Soldiers then need lots of practice in which to speed up their actions and establish the facts firmly in the mind.

2-02 The proposed sequence for each stage of a practice period is:

a. REMIND — By explanation.

b. ASSESS WEAKNESSES — By practice or test.

c. IMPROVE ON WEAKNESSES — By practice.

d. PROGRESSIVE PRACTICE — By competitions.

2-03 The practice periods in this pamphlet are intended as a guide to the best way of exercising soldiers during their basic training. The instructor should plan the period on an assessment of the soldiers' weak points.

2-04 Faults should be immediately brought to the notice of the soldiers and corrected, otherwise they will go on making the same mistakes.

2-05 It may become obvious during a practice period that the soldiers have failed to grasp a particular skill or fact. The instructor will, therefore, have to teach that part of the basic lesson again.

Competition

2-06 The incentive of competition will always help to make practice more interesting. The whole of a practice period can be based on competitions if the instructor so wishes. Some points on framing competitions are:

a. They may be on an individual or on a team basis.

b. If run on a team basis the instructor must ensure that the selected teams are all fairly equal as regards performance. The more advanced members of the team will help along the weaker members.

c. Marks can be awarded up to a given total, or a total started with and marks deducted for mistakes as the competition progresses.

d. A chart drawn on a chalkboard or a sheet of paper on which to mark up results should always be used.

e. Further interest can always be attained by making one team or individual watch another, criticising and awarding or deducting marks.

f. Above all the instructor must make certain that competitions are simple and realistic, i.e., that they exercise the soldiers in the facts and skills concerning their training.

Master and Pupil

2-07 The master and pupil method of practice in its simplest form is for one soldier (the pupil) to work under the supervision of another (the master); the instructor supervises both.

2-08 It stimulates interest, keenness and attention to detail at all stages of training. It is particularly useful with large squads and in competitions. Used regularly, it also develops initiative and leadership and potential leaders may well be discovered by watching the masters at work.

Night and CBRN Training

2-09 Practice periods may be repeated at night or in darkness. They may also be carried out by trained soldiers in CBRN Conditions.

Practice 1. Lessons Night Navigation

2-10 ***Aim.*** *To practice practical application of Night Navigation.*

a. *Producing a detailed route card.*

b. *Accurately navigate at night to 8 figure grid.*

c. *Patrol at a speed of 3kph (ground and weather depending).*

d. *Visit all check points in allocated time.*

2-11 ***Timings.*** *One 3 hour period.*

2-12 ***Method.*** *Outdoor practice period.*

2-13 ***Stores.***

Safety Vehicle	
Sniper CEFO	*1 Per Student*
PRR	*1 Per Student*
Radio	*1 Per Safety*
Check Point Markers and Cylumes	*1 Per Checkpoint*

2-14 ***Preparation.*** *Training area suitable to conduct night navigation, route recce to ensure timings are achievable.*

2-15 ***Miscellaneous.***

a. *All check points should be manned if possible.*

b. *A thorough kit check conducted to ensure all students have the correct equipment as per kit list and no GPS.*

c. *Robust lost procedure and actions on casualty.*

Preliminaries

2-16 ***Safety Precautions.*** *Normal.*

2-17 ***Revision.*** *Nil.*

Introduction

2-18 Explain: it is essential that a sniper can accurately navigate by day or night in any weather condition.

Suggested Practices

2-19 The night navigation exercise should be conducted on either Military training area or private land (POTL with authorization to conduct military training) suitable to assess the snipers ability to navigate accurately. None of the checkpoints should be put on easy navigation features ie track junction or corner of a wood etc.

a. Individual assessment.

(1) Minimum of 10 minutes apart from being released from the start point.

(2) Safety to check route card and map is correct before stepping off.

(3) Safety to ensure sniper is happy with:

(a) Lost procedure.

(b) Casualty.

(4) Weapon must be attached to the body with the sling.

b. Start the night navigation 20 minutes after last light.

c. Navigation exercise should be between 6-10km.

d. Minimum of 6 check points (ideally manned).

e. All check points must be visited.

(1) Either the manned check point records time.

(2) If unmanned.

(a) Orienteering marker.

(b) Signing procedure.

(c) Or a mixture of the above.

2-20 A 10 minute penalty will be awarded for the following:

a. Movement on tracks.

b. Moving with light i.e. running with head torch on.

c. Tactical error (Map check not in cover/white light shielded).

d. In possession of a GPS.

e. Conferring on the ground.

f. Weapon not slung around the body after leaving the start point, until you finish at the finish point.

Conclusion

2-21 **End of Lesson Drill.**

a. *Questions from the squad on the entire lesson.*

b. *Safety precautions.*

c. *Pack kit.*

d. *Summary. To include the following:*

(1) The overall standard achieved and any weak points.

(2) A forecast of the squad's next lesson in this subject.

2-22 - 29. *Reserved.*

Practice 2. Lessons Judging Distance

2-30 ***Aim.*** *To practice practical application of judging distance using:*

a. *Methods.*

b. *Aides.*

c. *Bino's reticules.*

d. *Stadia Lines.*

e. *Mil Dot.*

f. *STIC Weapon/Spotting Scope.*

g. *Night Sight.*

h. *PLRF-15C.*

i. *Map.*

2-31 ***Timings.*** *7 hour period.*

2-32 ***Method.*** *Outdoor practice period.*

2-33 ***Stores.***

Safety Vehicle	
Sniper CEFO	*1 Per Student*
Targets (Fig 11, 12, 14, Human, vehicle, Known heights)	
Radio	*1 Per Instructor*

2-34 ***Preparation.*** *Enough targets to support the lesson with the aid of a walker to put the targets out.*

2-35 ***Miscellaneous.***

a. *Initial lesson should cover the methods with a demo troop at 100-900m points so that the snipers can practices the methods and aids at a known range.*

b. *All targets to be put out as square as possible to ensure correct judging distance techniques can be employed.*

c. *Implied judging distance takes place every day on LFMT.*

Preliminaries

2-36 ***Safety Precautions.*** *Normal.*

2-37 ***Revision.*** *Nil.*

Introduction

2-38 *Explain:* it is essential that a sniper can accurately judge distance by day or night.

2-39 **Allowances:**

a. 0-400m 30m error

b. 401m + 50m error

Suggested Practices

2-40 Best practice is to run a tactical exercise relevant to the role.

a. Produce a pocket book sketch of the arc.

(1) Sketch the core ranges brackets.

(a) 300m

(b) 600m

(c) 900m

(d) 1200m

b. Key range indicated of 600m.

c. Enough targets to achieve the aim.

(1) Vary styles of targets.

(a) Standard targets.

(b) Live targets.

(c) Thermal.

(d) Known height targets.

(e) Day and night targets.

Conclusion

2-41 **End of Lesson Drill.**

a. *Questions from the squad on the entire lesson.*

b. *Safety precautions.*

c. *Pack kit.*

d. *Summary. To include the following:*

(1) The overall standard achieved and any weak points.

(2) A forecast of the squad's next lesson in this subject.

2-42 - 49. *Reserved.*

Practice 3. Lessons Static Map

2-50 ***Aim.*** *To practice practical application of static map reading including:*

a. *Resection.*

b. *Intersection.*

c. *Inter-visibility.*

d. *Magnetic Bearings.*

e. *Range.*

f. *Air photography.*

g. *Day and Night.*

2-51 ***Timings.*** *7 hour period.*

2-52 ***Method.*** *Outdoor practice period.*

2-53 ***Stores.***

Safety Vehicle	
Sniper CEFO	*1 Per Student*
Radio	*1 Per Instructor*
Staff pointer	*1 Per Instructor*

2-54 ***Preparation.***

2-55 *A suitable arc to practice accuracy from a vantage point to observe a large enough area to cover all aspects.*

2-56 ***Miscellaneous****.*

a. *All questions to be double checked.*

b. *Easily identifiable locations to be chosen, but not on easy reference points ie track junction etc.*

Preliminaries

2-57 ***Safety Precautions.*** *Normal.*

2-58 ***Revision.*** *Nil.*

Introduction

2-59 *Explain:* Its essential that a sniper can quickly and accurately map to ground within in his areas of operations. By having a good understanding of map to ground will enhance sighting reports, firing solutions and fire control missions.

2-60 **Allowances:**

a. 20 mils either side for bearings.

b. 20 meters either side for distance.

c. 6 fig grid no error.

d. 8 fig grid 20 meters either side.

Suggested Practices

2-61 Best practice is run a tactical exercise relevant to the role.

2-62 Conduct the lesson as if the sniper has occupied their FFP.

a. Can either be conducted on a patrol.

b. Can be done on a static line.

2-63 To be done day and night.

a. Either DS lead to a pre designated point/vehicle drop off.

(1) 10 minutes to conduct and accurate 8 fig grid.

(a) Indicate on the air photograph.

(2) Give the students 8 figure grid.

(a) Show on the orientated map.

(b) Magnetic bearing.

(c) Distance.

(d) Identify on the ground (using staff pointer).

(e) Show on the air photograph orientated.

(3) Indicate to the student on the ground with the staff pointer.

(a) 8 fig grid.

(b) Magnetic Bearing.

(c) Distance.

(d) Show on Air Phot (orientated).

(e) Show on map (orientated).

(4) Indivisibility.

(a) 50/50 question.

(b) Sniper to explain and answer.

Conclusion

2-64 **End of Lesson Drill.**

a. *Questions from the squad on the entire lesson.*

b. *Safety precautions.*

c. *Pack kit.*

d. *Summary. To include the following:*

(1) The overall standard achieved and any weak points.

(2) A forecast of the squad's next lesson in this subject.

2-65 - 69. *Reserved.*

Practice 4. Lessons Observation

2-70 ***Aim.*** *To practice practical observation including:*

a. *Training the eye.*

b. *Scanning techniques.*

c. *Produce a detailed panoramic.*

d. *Day and night.*

2-71 ***Timings.*** *7 hour period.*

2-72 ***Method.*** *Outdoor practice period.*

2-73 ***Stores.***

Safety Vehicle	
Sniper CEFO	*1 Per Student*
Obs Sheets	*1 Per Student*
Radio	*1 Per Instructor*
Bino's	*1 Per Instructor*
Leuplod	*1 Per Instructor*
STIC Spotting	*1 Per Instructor*

2-74 ***Preparation.***

2-75 *A suitable arc to conduct lesson.*

2-76 ***Miscellaneous.***

a. *All 40 objects have to be used throughout the practice period.*

b. *All objects in arc must be able to be observed from either the left or right observing line.*

Preliminaries

2-77 ***Safety Precautions.*** *Normal.*

2-78 ***Revision.*** *Nil.*

Introduction

2-79 *Explain:* A sniper must effectively observe, detect and accurately report on the enemy; by conducting observation lanes/lines, this will train the snipers eye effectively to detect and accurately report on the disputations and equipment.

2-80 **Scoring:**

a. HPS Total 50.

b. HC 40.

c. C 35.

Suggested Practices

2-81 Best practice is to run a tactical exercise relevant to the role.

2-82 Conduct the lesson as if the sniper has occupied his FFP.

a. Patrol lane with 10 objects within arc.

(1) To enhance practice incorporate a kims game at the end of the patrol.

(a) Log as many objects identified.

(b) Produce a sketch map of patrol lane and indicate where objects were observed.

(2) Best practice is a static lane to train the eye and practice scanning procedures.

(a) 10 objects within arc.

(b) 10 Marks for the panoramic & information.

(c) 40 Marks for observation.

2-83 **Format of practice**

a. Given Arcs.

b. 20 mins to draw panoramic sketch.

c. 40 mins to observe (20 mins in each Arc).

2-84 **Panoramic Sketch & Information**

a. 4 Marks for information (name, date, grid/ location of observer LOA/Axis/ ROA/Key range).

b. 3 Marks for perspective, i.e. how closely does the drawing look like the area of observation.

c. 3 Marks for the detail of the drawing.

2-85 **Observation**

a. 3 objects to be detectable by the eye and Identifiable with optics.

b. 4 objects to be detectable with issued binos and clearly identifiable by with spotting scope.

c. 3 objects to be difficult to detect with issued binos and identifiable by spotting scope.

d. 4 marks allocated for each object & awarded as follows:

e. 2 marks – correct plot with no identification

f. 3 marks – correct plot with general identification & good description e.g. a long barrelled weapon with magazine attached AK variant

g. 4 marks allocated for each object & awarded as follows:

(1) 2 marks – correct plot with no identification

(2) 3 marks – correct plot with general identification & good description e.g. a long barrelled weapon with magazine attached AK variant

(3) 4 marks – correct plot with correct identification e.g. AK47 – 7.62mm short CI.

Conclusion

2-86 **End of Lesson Drill.**

a. *Questions from the squad on the entire lesson.*

b. *Safety precautions.*

c. *Pack kit.*

d. *Summary. To include the following:*

(1) The overall standard achieved and any weak points.

(2) A forecast of the squad's next lesson in this subject.

2-87 – 89. *Reserved.*

Practice 5. Camouflage and Concealment

2-90 ***Aim.*** *To practice practical application of camouflage and concealment*

a. *Guidelines.*

b. *Considerations.*

c. *FFP.*

d. *Shooting procedure.*

2-91 ***Timings.*** *Four 2 hour periods.*

2-92 ***Method.*** *Outdoor practice period.*

2-93 ***Stores.***

Sniper CEFO	*1 per Student*
PRR	*1 per student & walker*
1:25 000 Map	*1 per sniper and instructor*
Air photography	*1 per sniper*
Radio	*1 per instructor*
Bino's	*1 per instructer*
Chairs	*2 per stand*
Stalk briefing board	*1 per stand*
Fig 14 letter board	*10 per stand*
Luminous vests	*1 per walker*
Result marking board	*1 per stand*
Luminous pointer card	*1 per walker*
Pass/Fail standard sheet	*1 per instructor*
PLRF15C	*1 for observation post*
Blank ammunition	*2 per sniper*
Live ammunition (for live stalk)	*2 per sniper*

2-94 ***Preparation.*** *A suitable arc to practice with enough vegetation and folds to aid the sniper.*

2-95 ***Miscellaneous***. *Battle prep must be conducted prior to practice and inspected.*

Preliminaries

2-96 ***Safety Precautions.*** *Normal.*

2-97 ***Revision.*** *Movement with the drag bag.*

Introduction

2-98 *Explain:* The aim of camouflage is to make the sniper blend with the environment, disguise distinctive shapes and break the engagement cycle as early as possible. In order to defeat a sniper the enemy goes through the process of detecting a person, identifying that person as his opponent, acquiring a sight picture and finally pulling the trigger.

2-99 **Scoring:**

a. 10% Collaborating or working as part of a team. Out of arc.

b. 20% Seen at any time after the timed concealment period.

c. 30% Identification of the letter boards/movement is in correct.

d. 40% Incorrect range.

e. 50% Sight setting, muzzle clearance or fire position errors.

f. 60% Seen when walker moves within 10 meters or when walker points sniper direction.

g. 70% Seen after shot.

h. 80% Seen hand on head.

i. 90% **Score not used.**

j. 100% Unseen after hand on head.

Suggested Practices

2-100 Best practice is to run a tactical exercise relevant to the role.

2-101 Conduct the lesson as if the sniper has occupied his FFP.

a. Can either be conducted on a patrol.

b. Can be done on a static line.

c. To be done day and night.

(1) Either DS lead to a pre designated point/vehicle drop off.

(a) 10 minutes to conduct and accurate 8 fig grid. Indicate on the air photograph.

(2) Give the students 8 figure grid.

(a) Show on the map orientated.

(b) Magnetic bearing.

(c) Distance.

(d) Identify on the ground (using staff pointer).

(e) Show on the air photograph orientated.

(3) Indicate to the student on the ground with the staff pointer.

(a) 8 fig grid.

(b) Magnetic Bearing.

(c) Distance.

(d) Show on Air Phot (orientated).

(e) Show on map (orientated).

Conclusion

2-102 **End of Lesson Drill.**

a. *Questions from the squad on the entire lesson.*

b. *Safety precautions.*

c. *Pack kit.*

d. *Summary. To include the following:*

(1) The overall standard achieved and any weak points.

(2) A forecast of the squad's next lesson in this subject.

2-103 - 109. *Reserved.*

Practice 6. Sniper Stalk

2-110 ***Aim.*** *To practice stalking including:*

a. *Planning.*

b. *Insert undetected.*

c. *Camouflage and concealment.*

d. *Lines of advance.*

e. *Occupation of an FFP.*

f. *Destroy the enemy with direct precision fire.*

g. *Extract undetected.*

h. *Rural.*

(1) *Dry.*

(2) *Live.*

i. *Urban.*

j. *Thermal.*

k. *Day.*

l. *Night .*

2-111 ***Timings.*** *Ten 3 hour periods.*

2-112 ***Method.*** *Outdoor practice period.*

2-113 ***Stores.***

Sniper CEFO	*1 per Student*
PRR	*1 per student & walker*
1:25 000 Map	*1 per sniper and instructor*
Air photography	*1 per sniper*
Radio	*1 per instructor*
Bino's	*1 per instructor*
Chairs	*2 per stand*
Stalk briefing board	*1 per stand*
Fig 14 letter board	*10 per stand*
Luminous vests	*1 per walker*
Result marking board	*1 per stand*
Luminous pointer card	*1 per walker*

Pass/Fail standard sheet	*1 per instructor*
PLRF15C	*1 for observation post*
Blank ammunition	*2 per sniper*
Live ammunition (for live stalk)	*2 per sniper*

2-114 ***Preparation.***

a. *Stalk area must be suitable to support the practice.*

(1) *Must be 1rd dead ground 2rd's with enough cover to stalk.*

(2) *Shooting bracket:*

(a) *Dry 200-500m.*

(b) *Live 400-900m.*

(3) *OP must be in dead ground to release point.*

(4) *ERV dead ground to OP.*

(5) *At least 2km long and wide enough to fit all snipers in.*

(6) *Planning times:*

(a) *Stalkers 1kph to insert.*

(b) *Extraction to ERV 30 mins.*

(7) *Must have 3 entry points.*

(8) *Time of year must be taken into consideration.*

b. *When selecting a stalk area major obstacles are to be avoided such as:*

(1) *Cliffs.*

(2) *Roads.*

(3) *Out of bounds areas.*

(4) *Civilians.*

(5) *Other exercising troops.*

(6) *Rivers.*

c. *The ideal manning requirements, dependant on number of students to conduct a stalk are:*

(1) *Exercise conducting officer.*

(2) *Two instructors to act as walkers.*

(3) *Two instructors to man observation post.*

(4) *One instructor to man friendly rendezvous.*

d. *Battle prep area must be relevant to arc.*

Preliminaries

2-115 ***Safety Precautions.*** *Normal.*

2-116 ***Revision.*** *Revision can include:*

a. *Movement with the sniper rifle and the drag bag system.*

b. *Judging distance.*

c. *Map reading.*

d. *Factors to consider when selecting a route.*

Introduction

2-117 *Explain:* Movement violates a principle of concealment – but a sniper must get within range of his target. Skilled stalking enables a sniper to move unseen.

a. A sniper is at his most venerable whilst moving.

b. Where possible a sniper moves in Darkness, fog, smoke or haze but if none of the above are available you still need achieve your mission.

c. By deploying a 6 man section will increase survivability and sustainability.

Aim of Stalking

2-118 To be able to get to the target without being detected, engaging the enemy & extracting undetected by using good map to ground and intelligence.

2-119 **Conduct of the exercise.** On arrival of the exercising troops they are to be held in an administration area where they are to conduct battle procedure. On completion of initial safety briefs and administration students are to move to the stalk briefing area.

2-120 **Stalk brief.** The students are to be told at this point that as soon as the stalk board is open then there is to be no conferring and interaction between students as stalking is an individual effort. The stalk brief can be given as a set of orders as part of a battle picture. The stalk board should now be opened and contain the following information:

a. A map and air photography.

(1) The map and air photography should be marked with the following: areas

(2) Boundaries.

(a) Inclusive.

(b) Exclusive.

(3) Out of bounds areas.

b. Key information **(Not to be plotted on the map).**

(1) A six figure grid of the FRV/Release point.

(2) A Six figure grid of enemy position.

(3) A six figure grid ERV/Section RV.

(a) Shooting bracket 200-500m.

c. Map folds.

d. Timings:

(1) Start time.

(2) FFP Set.

e. Actions on FFP set.

(1) FFP has to be reported with PRR to walker.

(2) Once sniper has reported FFP set he has to maintain a fix on the enemy.

(a) OP will show a letter board confirming acquired correct target.

(3) Actions on not in FFP on time.

(a) Report to walker not in FFP.

(b) Return to FRV.

(4) If detected at any time or out of time.

(a) Remove head and shoulders.

(b) Pick up all kit and equipment.

(c) Move out of arc as directed from the walker.

f. Additional points to be covered as part of the stalk brief are:

(1) Scoring and standards.

(2) Dress and equipment to be carried.

(3) Moving out of bounds.

(4) Conferring with other students.

(5) Following other students.

g. After the stalk brief snipers have 30 minutes to:

(1) Conduct battle prep.

(2) Planning.

h. When stalkers step off OP is to be informed.

2-121 **Walkers.** Walkers have the following tasks during a stalk:

a. They are to follow the students at a discreet distance ensuring the exercising troops:

b. Not conferring.

c. Not following another sniper.

d. They remain with the stalking area.

e. Professional conduct (if the sniper receives the following he will be given a tactical error).

(1) No cam.

(2) Map check not in cover.

(a) Patrol skills.

(b) Caught on tracks.

(c) Poor battlefield discipline.

f. They are to react to the OP:

(1) Be in a position to react if needed.

(2) Walk onto potential areas directed from the OP.

(3) If a sniper has been potentially detected.

(a) Will walk the walker on using a flash card. If card is not on sniper but on for line then the sniper has been detected

i. May be a depth problem.

ii. If the walker isn't happy he is to inform the OP to be more accurate.

iii. If the walker is happy line but out on depth he can confirm sniper detected.

(4) If the OP directs the Walker to an area that it takes time to get to:

(a) The OP can request to search the immediate area.

(b) May require a steer from OP.

(c) if someone is in the immediate area then he's been detected.

(5) If walker gets walked onto an area where there is a group snipers:

(a) Walker can not confirm which one.

(b) OP will describe sniper.

(c) Direction of travel when seen.

(d) If no one owns up all will be marked down as detected.

g. Walking procedure at the end of time:

(1) Account for all snipers.

(2) Move to within 10m of a sniper.

(a) Position himself randomly every time within 10m.

(b) Don't step over sniper.

(c) Position himself not to make snipers position obvious.

(3) If sniper hasn't been detected:

(a) The OP will direct him to take his 2nd shot.

(b) If seen on second shot the sniper can still potentially pass.

(c) The OP will then dictate what they want the walker to check as per scoring sheet.

(4) After OP have finished the will then ask the walker on any other points (The following will result in a tactical error).

(a) If the sniper is easily seen within 10m.

(b) If valise and primary weapon are not to hand.

2-122 **OP.** The role of the OP is to detect any snipers within boundaries.

2-123 The OP only uses the relevant optics dependant on the type of stalk:

a. Day
   (1) Issued Bino's.
b. Thermal.
   (1) STIC.
c. Night.
   (1) CWS.
   (2) LUCIE/HNVGS.
d. OP sniper detected.
   (1) To walk the walker onto the sniper.
      (a) Ideal position to confirm sniper detected is card on head/barrel etc.
      (b) If there is a depth problem and the walker is not happy with position. Move the walker back/forward on the line and be as close as possible so that the walker can confirm.
   (2) OP only has 2 attempts.
   (3) If the walker is not in immediate position to walk onto area.
      (a) Put him onto last know position.
      (b) Describe what was seen.
      (c) Give direction.
      (d) Walker will search immediate area.
   (4) If there are a group of sniper within the area.
      (a) Walk walker on last position seen.
      (b) Descried what was seen.
      (c) If no one owns up all will fail.
e. OP sniper set:
   (1) Once sniper has radioed in confirming FFP is set.
      (a) Walker will request OP to Show letter board.
      (b) Sniper will report to walker what was on the letter board. Sniper has 2 attempts.

f. OP walking procedure after time has finished.

(1) Once all snipers are accounted.

(2) Walker will move within 10m.

(3) If undetected instruct walker for sniper to take 2nd shot

(a) If seen sniper can still pass.

i. If its acceptable smoke or flash disregard.

ii. If excessive can be used to walk on.

(b) Walker to go card on head.

(c) Walker card on muzzle.

i. If card is obscured possible stick shot.

ii. Walker to confirm.

(4) OP to log and confirm:

(a) Snipers range. Use PLRF-15C to confirm range.

(b) Elevation.

(c) Deflection.

(d) Fire position.

(e) Walkers addition remarks.

Scoring Dry

ABBREVIATION	ALL STALKERS START ON 100%	% DEDUCTION	REMARKS
TE	TACTICAL ERROR	-10%	As Accumulated
SOB	SEEN OUT OF BRACKET	-60%	As Accumulated
SIB	SEEN INSIDE BRACKET	-40%	-10% Per Additional Fault
TO	OUT OF TIME	-60%	-10% Per Additional Fault
ID	INCORRECT DATA	-50%	-10% Per Additional Fault
BP	BAD POSITION	-50%	-10% Per Additional Fault
LB	LETTER BOARD NOT IDENTIFIED	-40%	-10% Per Additional Fault
SS	STICK SHOT	-40%	-10% Per Additional Fault
1ST	SEEN AFTER FIRST SHOT	-40%	-10% Per Additional Fault
2ND	SEEN AFTER SECOND SHOT	-30%	-10% Per Additional Fault
HOH	SEEN HAND ON HEAD	-10%	-10% Per Additional Fault
EXT	SEEN ON EXTRACTION	-10%	-10% Per Additional Fault
SCORE	FINAL SCORE		70% Pass

2-124 **Scoring Live.**

a. RCO will order OP to collapse and move to safe area.

b. All snipers if they have fired a blank round.

(1) RCO will order all snipers to remove BFA.

(a) Non tactically.

(2) RCO will order all snipers to fit Suppressor.

c. RCO will account for all snipers.

d. RCO will start from the closet sniper and work backwards.

(1) Confirm BFA is removed.

(2) Suppressor fitted.

e. RCO will issue sniper with 2 live rounds in a magazine.

f. RCO will order sniper to engage target.

(1) 1st engagement 30 sec to release the shot.

(2) If missed 2nd shot will only receive 5 seconds to reengage.

g. Scoring

(1) 1st round hit HC.

(2) 2nd round hit C.

(3) Miss NC.

Conclusion

2-125 **End of Lesson Drill.**

a. *Questions from the squad on the entire lesson.*

b. *Safety precautions.*

c. *Pack kit.*

d. *Summary. To include the following:*

(1) The overall standard achieved and any weak points.

(2) A forecast of the squad's next lesson in this subject.

2-126 - 129. *Reserved.*

Practice 7. Sniper Knowledge Assessment

2-130 ***Aim.*** *This is a verbal and/or written test to cover general knowledge of sniping and associated skills. These tests should be introduced as progress tests at relevant points throughout continuation training to gauge the retention of information by individual snipers culminating in a final written test.*

2-131 ***Timings.*** *Four 40 to 60 minute period*

2-132 ***Method.*** *To be conducted indoors or outdoors, dependent on resources.*

2-133 ***Stores.***

Projector and screen	
Visual Aids	
Tables and Chairs	*1 per sniper*
Question Paper	*1 per sniper*
Mapping	*1 per sniper*
Protractor	*1 per sniper*
Silva Compass	*1 per sniper*
Calculator	*1 per sniper*
Stationary	*As appropriate*
Answer Sheet	*1 per instructor*

2-134 ***Preparation.*** *A series of questions should be prepared in advance relevant to the stage of training that the snipers are at. Visual aids whether for questions relating to the identification of weapon systems and AFV recognition should also be prepared. Images to represent identification of man size targets and vehicles using the STIC sight should also be prepared to train snipers in the identification of targets using thermal image capabilities. Improvised explosive device components and unexploded ordinance can also be used. These can take the form of a power point presentation or photographs. The instructor should Endeavour to select a number of different images for each weapon or vehicle to be identified from. This will give the snipers different angles and images to identify objects preventing the test from becoming an image identification process as opposed to the correct identification of a weapon system or vehicle in varied images.*

2-135 ***Miscellaneous.*** *The tests should be conducted in an area large enough to enable snipers to spread out and not confer with each other.*

2-136 ***Conduct of the Test.*** *Questions are to be relevant and set to cover the subjects taught previously. An example of a badge test question set is included in Chapter 2 the Sniper Badge Tests, Section 2 Sniper Knowledge.*

2-137 **Standards.** There is no set number of tests or questions and this decision is left to each individual instructor due to the varying length of individual courses. Although the pass mark for each test is 70%. Any final mark below 70% is a fail.

Conclusion

2-138 **End of Lesson Drill.**

a. *Questions from the squad on the entire lesson.*

b. *Safety precautions.*

c. *Pack kit.*

d. *Summary. To include the following:*

(1) The overall standard achieved and any weak points.

(2) A forecast of the squad's next lesson in this subject.

2-139 - 149. *Reserved.*

Practice 8. Sniper Hide

2-150 ***Aim.*** *To practice sniper hides including:*

a. *Planning.*

b. *Selecting.*

c. *Constructing.*

d. *Hide Report.*

e. *Routine.*

f. *Logging and reporting.*

g. *Camouflage and concealment.*

2-151 ***Timings.*** *One 12 hour period.*

2-152 ***Method.*** *Outdoor practice period.*

2-153 ***Stores.***

Sniper CEFO	*1 per Student*
PRR	*1 per student & walker*
PRC 354	*1 per pair & instructor*
1:25 000 Map	*1 per sniper and instructor*
Air photography	*1 per sniper*
Radio	*1 per instructor*
Bino's	*1 per instructor*
Chairs	*2 per stand*
Fig 14 letter board	*10 per stand*
Luminous vests	*1 per walker*
Result marking board	*1 per stand*
Luminous pointer card	*1 per walker*
Pass/Fail standard sheet	*1 per instructor*
PLRF15C	*1 for observation post*
Blank ammunition	*2 per sniper*

2-154 ***Preparation.***

a. *Hide area must be suitable to support the practice.*

(1) *Must be within effective range of the sniper rifle.*

(2) *Shooting bracket:*

(a) *400-900m.*

(3) *Fig 11 to mark the point target area of interest (PTAI) where OP will be situated.*

(4) *OP will occupy target area after first light FL.*

(5) *Time of year must be taken into consideration.*

b. *When selecting a hide area major obstacles are to be avoided such as:*

(1) *Cliffs.*

(2) *Roads.*

(3) *Out of bounds areas.*

(4) *Civilians.*

(5) *Other exercising troops.*

(6) *Rivers.*

c. *The ideal manning requirements, dependant on number of students to conduct a stalk are:*

(1) *Exercise conducting officer.*

(2) *Two instructors to act as walkers.*

(3) *Two instructors to man observation post.*

(4) *One instructor to man friendly rendezvous.*

Preliminaries

2-155 ***Safety Precautions.*** *Normal.*

2-156 ***Revision.*** *Revision:*

a. *What must and should an Hide have.*

Introduction

2-157 *Explain:* It is essential if the sniper is fixing the enemy position or supporting the screen and is remaining in position between 12-48hrs the sniper pair must consider a sniper hide for sustainability and survivability depending on the threat.

Suggested Practice

2-158 Run the practice the same as a camouflage and concealment lesson with the following changes.

2-159 **Set up of the stance.**

a. A large enough arc to fit all sniper pairs in.

b. OP not to stay in exercise area (not seen the arc where hides will be constructed).

c. Walkers to stay and advice snipers on construction.

d. Give snipers the conditions of the exercise.

(1) 6 fig grid of the PTAI.

(a) Mark target with a Fig 11.

(2) Arcs and boundaries where to site hides.

(3) Shooting bracket.

(a) 400-900m.

(4) What type of hide they have to construct.

(a) Belly hide.

(b) Semi permanent.

(c) Enlarged fire trench.

(d) Permanent.

(5) Battle picture.

(6) Timings.

(a) 12 hours to:

i. Select.

ii. Construct.

iii. Occupy.

(b) Timings to be set.

(c) Firing window.

e. Cam & Con phase

(1) OP and Walkers as per walking procedure.

(a) OP occupy after first light.

(b) OP 20 minutes scanning.

(2) If snipers are detected.

(a) OP to walk walkers on.

(3) If snipers not detected.

(a) Walkers to move within 10m.

(4) Additional points.

(a) Two letter boards to be shown 1 for shooter one for spotter.

Conclusion

2-160 **End of Lesson Drill.**

a. *Questions from the squad on the entire lesson.*

b. *Safety precautions.*

c. *Pack kit.*

d. *Summary. To include the following:*

(1) The overall standard achieved and any weak points.

(2) A forecast of the squad's next lesson in this subject.

2-161 - 169. *Reserved.*

Practice 9. Sniper Rural Op

2-170 ***Aim.*** *To practice sniper hides including:*

a. *Construction.*

b. *Occupation.*

c. *Routine.*

d. *Establish FFP.*

e. *FFP Report.*

f. *Logging and reporting.*

g. *Camouflage and concealment.*

2-171 ***Timings.*** *One 12 hour period.*

2-172 ***Method.*** *Outdoor practice period.*

2-173 ***Stores.***

Sniper CEFO	*1 per Student*
PRR	*1 per student & walker*
PRC 354	*1 per pair & instructor*
1:25 000 Map	*1 per sniper and instructor*
Air photography	*1 per sniper*
Radio	*1 per instructor*
Bino's	*1 per instructor*
Chairs	*2 per stand*
Fig 14 letter board	*10 per stand*
Luminous vests	*1 per walker*
Result marking board	*1 per stand*
Luminous pointer card	*1 per walker*
Pass/Fail standard sheet	*1 per instructor*
PLRF15C	*1 for observation post*
Blank ammunition	*2 per sniper*

2-174 ***Preparation***

a. *OP area must be suitable to support the practice.*

(1) *Must be within effective range of the sniper rifle.*

(2) *Shooting bracket:*

(a) *400-900m.*

(3) *Fig 11 to mark the point target area of interest (PTAI) where OP will be situated.*

(4) *OP will occupy target area after first light FL.*

(5) *Time of year must be taken into consideration.*

b. *When selecting a OP area major obstacles are to be avoided such as:*

(1) *Cliffs.*

(2) *Roads.*

(3) *Out of bounds areas.*

(4) *Civilians.*

(5) *Other exercising troops.*

(6) *Rivers.*

c. *The ideal manning requirements, dependant on number of students to conduct a stalk are:*

(1) *Exercise conducting officer.*

(2) *Two instructors to act as walkers.*

(3) *Two instructors to man observation post.*

(4) *One instructor to man friendly rendezvous.*

Miscellaneous

d. *Sniper instructor is to select OP location*

e. *Sniper Instructor is to issue goose eggs for the fighting pairs FFP for coordinated shoot.*

Preliminaries

2-175 ***Safety Precautions.*** *Normal.*

2-176 ***Revision.*** *Revision:*

a. *What must and should an Hide have.*

Introduction

2-177 *Explain:* It is essential if the sniper is fixing the enemies position or supporting the screen and is remaining in position between 48hrs the sniper section must consider a sniper OP for sustainability and survivability depending on the threat.

Suggested practice

2-178 Is to run the practice the same as a camouflage and concealment lesson with a few changes.

2-179 **Set up of the stance.**

a. A large enough arc to fit all sniper pairs in.

b. OP not to stay in exercise area (not seen the arc where hides will be constructed).

c. Walkers to stay and advice snipers on construction.

d. Give snipers the conditions of the exercise.

(1) 6 fig grid of the PTAI.

(a) Mark target with a Fig 11.

(2) Arcs and boundaries where to site OP's.

(3) Shooting bracket.

(a) 400-900m.

(b) Construct a sub surface 6 man OP.

(4) Battle picture.

(5) Timings.

(a) 12 hours to:

i. Construct.

ii. Occupy.

(b) Timings to be set.

(c) Firing window.

e. Cam & Con phase.

(1) OP and Walkers as per walking procedure.

(a) OP occupy after first light.

(b) OP 20 minutes scanning.

(2) If snipers are detected.

(a) OP to walk walkers on.

(3) If snipers not detected.

(a) Walkers to move within 10m.

(4) Additional points.

(a) Two letter boards to be shown 1 for shooter one for spotter.

Conclusion

2-180 **End of Lesson Drill.**

a. *Questions from the squad on the entire lesson.*

b. *Safety precautions.*

c. *Pack kit.*

d. *Summary. To include the following:*

(1) The overall standard achieved and any weak points.

(2) A forecast of the squad's next lesson in this subject.

2-181 - 189. *Reserved.*

Practice 10. Sniper Pair Tactics

2-190 ***Aim.*** *To practice Sniper Pair Tactics.*

a. *Patrol procedures.*

b. *Actions on.*

c. *Pairs stalk.*

d. *Introduction to section contact drills.*

2-191 ***Timings.*** *Five periods.*

2-192 ***Method.*** *Outdoor practice period.*

2-193 ***Stores.***

Sniper CEFO	*1 per Student*
PRR	*1 per student & walker*
PRC 354	*1 per pair & instructor*
1:25 000 Map	*1 per sniper and instructor*
Air photography	*1 per sniper*
Radio	*1 per instructor*
Bino's	*1 per instructor*
Result marking board	*1 per stand*
Pass/Fail standard sheet	*1 per instructor*
Blank ammunition	*1 per sniper*
Enemy	*Occupy target area*

2-194 ***Preparation***

a. *Large enough area to be able to conduct pratice*

b. *Enemy briefed on lesson*

Preliminaries

2-195 ***Safety Precautions.*** *Normal.*

2-196 ***Revision.*** *RV Procedure*

Introduction

2-197 *Explain*: Snipers operate as a minimum pair and it is essential that all SOP's and drills are proficient to achieve the mission.

Suggested practice

2-198 **Patrol procedures to include:**

a. Patrolling.

b. Halts.

c. Obstacle crossing.

d. RV link up.

e. DLB & LLB drills.

f. Section LUP.

2-199 **Actions On**

a. Enemy pre seen.

b. Meeting Engagements.

c. Contact drills.

(1) Front.

(2) Flank.

(3) Rear.

(4) Casualty.

2-200 **Pairs Stalk**

a. Actions on occupying FRV/Section release point.

b. Stalking.

c. FFP drills.

(1) Stop short.

(2) Recce.

(3) Construction.

(4) Occupation.

(5) FFP reports.

(6) Actions on.

d. Extraction.

2-201 **Introduction Section SOP's.**

a. Patrol procedures.

b. Actions on.

c. Platoon link up operations.

d. Platoon LUP.

Conclusion

2-202 **End of Lesson Drill.**

a. *Questions from the squad on the entire lesson.*

b. *Safety precautions.*

c. *Pack kit.*

d. *Summary. To include the following:*

(1) The overall standard achieved and any weak points.

(2) A forecast of the squad's next lesson in this subject.

2-203 - 209. *Reserved.*

Practice 11. Counter Sniper Stalk

2-210 ***Aim.*** *The aim of this stand is to practice sniper's ability as individuals, pairs and sections to select a line of advance using cover, to locate and occupy a final fire position from which to locate and observe opposing snipers killing them whilst gaining information from an opposing force and extracting to a secure area.*

2-211 ***Timings.*** *One 3 hour period.*

2-212 ***Method.*** *A practical period, conducted outdoors.*

2-213 ***Stores.***

Sniper CEFO	*1 per sniper*
1:25000 Map	*1 per sniper and instructor*
Air photography	*1 per sniper*
Radio	*1 per instructor and sniper/ pair*
Stalk briefing board	*1 per start point*
Code on Fig 14 letter board	*1 per start point*
Luminous vests	*1 per walker*
Result marking board	*1 per stand*
Luminous pointer card	*1 per walker*
Pass/Fail standard sheet	*1 per instructor*
PLRF15C	*1 per walker*
Blank ammunition	*as applicable*

2-214 ***Preparation.*** *Considerations to take into account when selecting an area for a stalk are:*

a. *Number of students to attend lesson.*

b. *Standard of student. This will affect the distance and difficulty of the stalking ground to be chosen.*

c. *Size of training area and time constraints on training.*

d. *When selecting a stalk area major obstacles are to be avoided such as:*

(1) *Cliffs.*

(2) *Roads.*

(3) *Out of bounds areas.*

(4) *Civilians.*

(5) *Other exercising troops.*

(6) *Rivers.*

2-215 *The stalk exercise area should include:*

a. *Stalk area. The stalk area should have physical boundaries if possible such as roads or tracks. It must have more than one line of advance from the start point to the observation post area. Dependant on the level of student, stage of training and training area the stalk area can range from a maximum of 4 km to a minimum of 2 km. The time allowance for the stalk will also vary dependant on the distance and difficulty of stalk, weather, standard of student, level of training and the ground selected. As a maximum the stalk time allowance should be 3-4 hours from the start to the end of the exercise.*

b. *Start points. Both start points should be located out of sight to each other and not over looking the exercise area. The initial briefings and stalk brief will be conducted in these areas.*

c. *Firing bracket. Firing brackets are dictated by individual engagements between opposing snipers.*

d. *Observation bracket. A board (Fig 14/12/11) should be placed at each start point with a code (sequence of numbers and letters) clearly identifiable on it. The board should be seen out to 300 metres and the code readable out to 150 metres with the highest magnification that the exercising troops have available to them.*

e. *Rendezvous. The rendezvous for dead snipers should be positioned at the half way point of the stalk area between the two start points and positioned outside the stalk area.*

2-216 *The ideal manning requirements, dependant on number of students to conduct the exercise are:*

a. *Exercise conducting officer.*

b. *Four instructors to act as walkers.*

c. *One instructor to man rendezvous for dead snipers.*

Preliminaries

2-217 ***Safety Precautions.*** *Normal.*

2-218 ***Revision.*** *Revision can include:*

a. *Movement with the sniper rifle and the drag bag system.*

b. *Judging distance.*

c. *Basic map reading.*

d. *Factors to consider when selecting a* route.

2-219 **Introduction.** *Explain*: The object of the exercise is to gain the information from the opposition's board at their start point and then return it to the friendly start point. At the same time the sniper grouping is to locate, engage and eliminate enemy snipers.

2-220 The end state of the exercise is that snipers will practice working as individuals, pairs, sections in all aspects of stalking, counter sniping in defensive and offensive roles in a 360 degree environment.

2-221 **Conduct of the lesson.** Exercising troops are to start the exercise at their respective start points. All briefings will be conducted by the exercise conducting officer at one start point and an assistant exercise conducting officer at the other start point who can also be one of the two walkers who will be positioned at this start point. On arrival of the exercising troops they are to be held in an administration area where they are to conduct battle procedure. On completion of initial safety briefs and administration students are to move to the stalk briefing area.

2-222 **Stalk brief.** The stalk brief can be given as a set of orders as part of a battle picture. The stalk board should now be opened and contain the following information:

a. A map and if possible air photography.

b. The map and air photography should be marked with the following areas:

(1) Start point.

(2) Boundaries and limit of exploitation.

(3) Enemy start point.

(4) Rendezvous.

(5) Out of bounds areas.

(6) Map folds.

c. A six figure grid of the start point, enemy start point and rendezvous for dead snipers should be displayed.

d. Engaged sniper procedure.

e. Walker procedure.

f. A full brief on the exercise.

g. Additional points to be covered as part of the stalk brief are:

(1) Scoring and standards.

(2) Dress and equipment to be carried.

(3) Moving out of bounds.

2-223 The instructor is to brief the snipers on the contents of the stalk board and answer any questions snipers may have. Snipers will then have 20 minutes to conduct their ground appreciation and plot their route before they are released to conduct the stalk. Snipers if individual or pair/section commander should approach the instructor to brief him on their chosen route and plan for the stalk. If the instructor is happy with the snipers plan he is to issue the sniper grouping blank ammunition for the sniper rifle. The instructor is to then load the snipers. When the 20 minutes are up snipers are released by the instructor to conduct the stalk. The instructor is also to liaise with the other start point so both groupings of snipers are released at the same time.

2-224 **Walkers.** Once the snipers are released the walkers are to follow them at a discreet distance so as not to alert the opposing force the location of snipers. Walkers are to be equipped with a radio, luminous pointer and standards card. They must also wear a luminous vest so they are identifiable to the observation post at all times. Walkers are to ensure that snipers do not move out of bounds. Walkers can fail snipers if found deliberately moving out of bounds or collaborating between each other. Any sniper deemed to of been found moving out of bounds to deliberately gain an advantage is to remove his headdress and be directed to the rendezvous. Any sniper who is sent to the rendezvous point by the walkers is to remove his headdress to designate himself as not part of the exercise anymore. The snipers name or designated number is to be taken and relayed to the instructor at the rendezvous point. This is so the score chart can be updated and the instructors can identify where all snipers are on the ground at all times.

2-225 Walkers are also to ensure that not all snipers just lay in ambush around their start point and through out the exercise area. Any sniper grouping continuously laying ambushes for long periods of time and have been warned by the walkers then can be removed from the exercise and directed to the rendezvous area.

2-226 Once a shot is fired the snipers are dealt with by the following procedure which is known as the walking procedure.

2-227 **Walker procedure.** On a shot/s being fired all snipers are to stay in their present locations until the walkers have dealt with the engagement and informed all snipers to continue with the exercise. Any sniper caught moving trying to gain an advantage is to be removed from the exercise. The following process will take place:

a. A walker working on the same frequency as the firer will move to the area of the engaged sniper directed by the firer. If a sniper is not there then the walker will inform everyone to continue with the exercise. If a sniper is identified with the walker's luminous pointer then the walker is to locate the firer's position by using binoculars guided by the firer. If not seen then the firer is to take a bearing to the walker and this process should aid the walker in identifying the position.

b. With the position identified the walker at the engaged snipers position will guide another walker onto the firer's position. The walker will check the firer's position, sight settings and muzzle clearance/stick shot. The sight settings are checked in conjunction with the ASATS margin of error method. This is as follows:

(1) The firing position selected by the student is also a factor to determine whether the student will hit the target. His group sizes in different positions at 100 metres needs to be recorded and available to the walker to determine his ESA at further ranges in all positions to determine whether the student will hit or miss.

(2) Elevation sight settings are determined by the walkers using PLRF15C to judge the distance between each location.

(3) Stick shot is called if the student is firing through items of cover that are larger than the bore and are in direct line of sight from the barrel to the target. Stick shot can also be called if items of cover less than the size of the bore but measure the length of the snipers barrel in density.

c. The walker checking the firer's position if possible is not to give the firing position away. Once it is determined if it is a kill or not the walker will move to the flank of the firer and tell the walker with the engaged sniper the out come.

d. If the engaged sniper has been killed he is to stand up take of radio headset, remove his headdress and move out of the exercise area to the rendezvous. Walkers are to ensure that all killed snipers do not indicate positions of opposing force snipers as they extract from the exercise area.

e. If the engaged sniper has not been killed then all snipers are informed to continue with the exercise.

f. Additional instructions for walking procedure.

(1) Snipers are only allowed 2 attempts to identify the engaged sniper.

(2) A clear description of what has been seen must be described by the firer.

(3) A luminous pointer must be used to indicate the engaged snipers location.

(4) The luminous pointer can be in front or behind the position being identified but must be in line with what the firer is describing. Common sense prevails and the walker must use his to decide if the engaged sniper is identified.

(5) Snipers are to identify all information on opposing start point board to count as board correctly identified.

(6) The engaged sniper must look away when the walker is checking the firers fire position and sight settings.

(7) Only the walker can decide the muzzle clearance and stick shot.

(8) The rendezvous must be manned with communications to the walkers and exercise conducting officer. The rendezvous staff must ensure that snipers not taking part in the exercise do not communicate with snipers still taking part in the exercise.

2-228 The exercise ends when all snipers from one start point have been killed, the time allowance for the exercise has finished or when the information from a start point board has been recorded by a sniper formation and returned to that sniper formations start point.

2-229 A head check and serial number check is to be conducted to account for all students and equipment in the friendly rendezvous.

2-230 **Section v Section.** Another scenario to be used for the exercise is as follows:

a. Two six man sections are given different missions and start points. A section will be given a mission to defend their start point. The start point board should be set up as previously explained. The other section is given an offensive mission to engage and kill the target board. An instructor can be used to act as the target but must wait in the defensive start position.

b. Each pair stalking forward must have a designated walker and the defensive position must have at least one walker on the defensive start point.

c. The defensive section must defend their location from the offensive section by laying ambushes dependant on their section commander's plan.

d. The offensive section must stalk forward and kill the defensive target board or live target counter sniping any snipers seen or encountered dependant on the section commanders plan.

e. The walking procedure is exactly the same as previously explained. If using a live target then letter boards must be used and if using a target board then a code must be displayed on the board which will not be recognisable out to a certain distance dependant on the ground using all optics that the snipers have available to them. The identification of this letter board or code is introduced into the walking procedure as it would be during a conventional walking procedure to ensure the firer can see the target and identify what he is engaging.

f. The exercise ends when one sniper section has been killed or the target has been successfully engaged and killed.

g. All killed snipers must make their way to the rendezvous as previously explained.

Conclusion

2-231 **End of Lesson Drill.**

a. *Questions from the squad on the entire lesson.*

b. *Safety precautions.*

c. *Pack kit.*

d. *Summary. To include the following:*

(1) The overall standard achieved and any weak points.

(2) A forecast of the squad's next lesson in this subject.

Destruction Drills

1. If on active service it is necessary to destroy weapons to prevent them being used by the enemy the following actions will prove effective:

    a. Plug the barrel near the chamber or bury the muzzle in the ground; load and fire the weapon, by using string tied to the trigger, from behind cover.

    b. Strip the weapon as far as possible; bury parts or scatter over as wide an area as possible.

    c. Retain essential parts of the mechanism, such as usable firing pins, etc.

    d. All spare parts should be disposed of.

2. Should the foregoing destruction drills not be possible, other methods must be devised, e.g, destroying by explosive charges or by fire; running over by vehicles; scattering components in rivers and undergrowth.

3. Unfired ammunition can be destroyed by explosives using improvised demolition charges made with grenades, bombs, etc.

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