CANADIAN FORCES RECRUIT SCHOOL

RECRUIT HANDOUT BOOK

CANADIAN FORCES RECRUIT SCHOOL

CORNWALLIS

INTRODUCTION

1. The Recruit Handout Book has been produced to assist you in preparing for your written tests.

2. All the information in this book will be taught to you during formal periods of instruction. There will be occasions, however, when you may be absent from some of the lectures due to sick parade, excused duty due to illness, etc. If this happens, you will be required to study the applicable material for whatever written test you will be given.

3. I also highly recommend that you review the required handouts prior to each written test. Our cartoon character, "SERGEANT SAYS", who is illustrated on the next page, will assist you by pointing out many of the "Must Knows" throughout the Handout Book. I caution you, however, that he does not point out all the questions that you will get on the written tests.

4. The Recruit Handout Book is yours to keep when you leave CFRS. I sincerely hope that you will take the time after you complete Recruit Training to review the handouts periodically so that you will retain the knowledge we have taught you.

B.T.N. McGrath
Lieutenant Colonel
Commandant CFRS

25 Nov 82

CANADIAN FORCES RECRUIT SCHOOL
CORNWALLIS

"SERGEANT SAYS"

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CANADIAN FORCES RECRUIT SCHOOL
CORNWALLIS

GENERAL SERVICE KNOWLEDGE

ORGANIZATION OF THE CANADIAN FORCES

GENERAL

1. The purpose of this handout is to outline the Canadian Forces structure and organization.

2. The Dept of National Defence was created by the National Defence Act, 1922, now incorporated in the National Defence Act, 1952, Chapter 184, as amended. It established one civil department of government in place of the previous departments of Militia and Defence and Naval Service and the Air Board.

3. The Canadian Forces Reorganization Act, which came into force on 01 Feb 1968, "UNIFIED" the Royal Canadian Navy, the Canadian Army and the Royal Canadian Air Force in a single service called the Canadian Armed Forces.

4. The Minister of National Defence has the control and management of the Canadian Forces, the Defence Research Board and all matters pertaining to National Defence, and is responsible for the construction and operations of all Defence establishments and works for the Defence of Canada.

5. The Chief of Defence Staff is responsible for advising the Minister of National Defence on all matters of Defence, and is charged with the control and administration of the Canadian Forces.

FUNCTIONAL COMMANDS

6. A recent organizational change has resulted in the formation of four FUNCTIONAL COMMANDS and three other commands.

a. FUNCTIONAL COMMANDS (HQ stands for Headquarters)

(1) Mobile - HQ at St. Hubert, PQ - maintains a combat ready land and air force,

(2) Maritime - HQ at Halifax, NS - maintains a sea and air anti-submarine force,

(3) Air - HQ at Winnipeg, Man - responsible for operational standards, flying training, maintains an operational airlift capability,

(4) Communications - HQ at Ottawa, Ont - provides strategic communications support forces and maintains a communications network for various levels of government in the event of a national emergency.

b. OTHER COMMANDS

(1) Canadian Forces Training System - HQ at Trenton, Ont - maintains the initial (recruit) and trades training of the forces and other specialty courses,

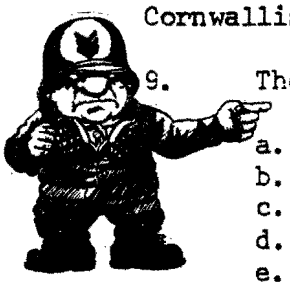
(2) Northern Region - HQ at Yellowknife NWT - regional military matters and support of the other commands operating in the north,

(3) Canadian Forces Europe - HQ at Lahr, Germany - 4 Canadian Mechanized Brigade Group and 1 Combat Air Group, maintains land and air components that make up the majority of Canada's European based contribution to NATO.

ORGANIZATION OF A BASE

7. In order to qualify as a base, a place must have in residence a major unit.

8. An example of a major unit is Canadian Forces Recruit School Cornwallis.



9. There are five job appointments that must be present on a base:

a. Base Commander;
b. Commanding Officer of Major Unit;
c. Base Administration Officer;
d. Base Technical Services Officer;
e. Base Comptroller.

BASE COMMANDER

- responsible to Command HQ
- responsible for the operation of the Base
- the following are responsible to him:

Commanding Officer of Major Unit

- eg CFRS
- responsible for the organization and running of the School.

Base Administration Officer

- responsible for personal administration (Base Orderly Room, Central Registry, etc)
- responsible for Base Services (Security, Food Services, Housing, etc)
- responsible for Physical Education and Recreation, Base Exchange, Medical & Dental

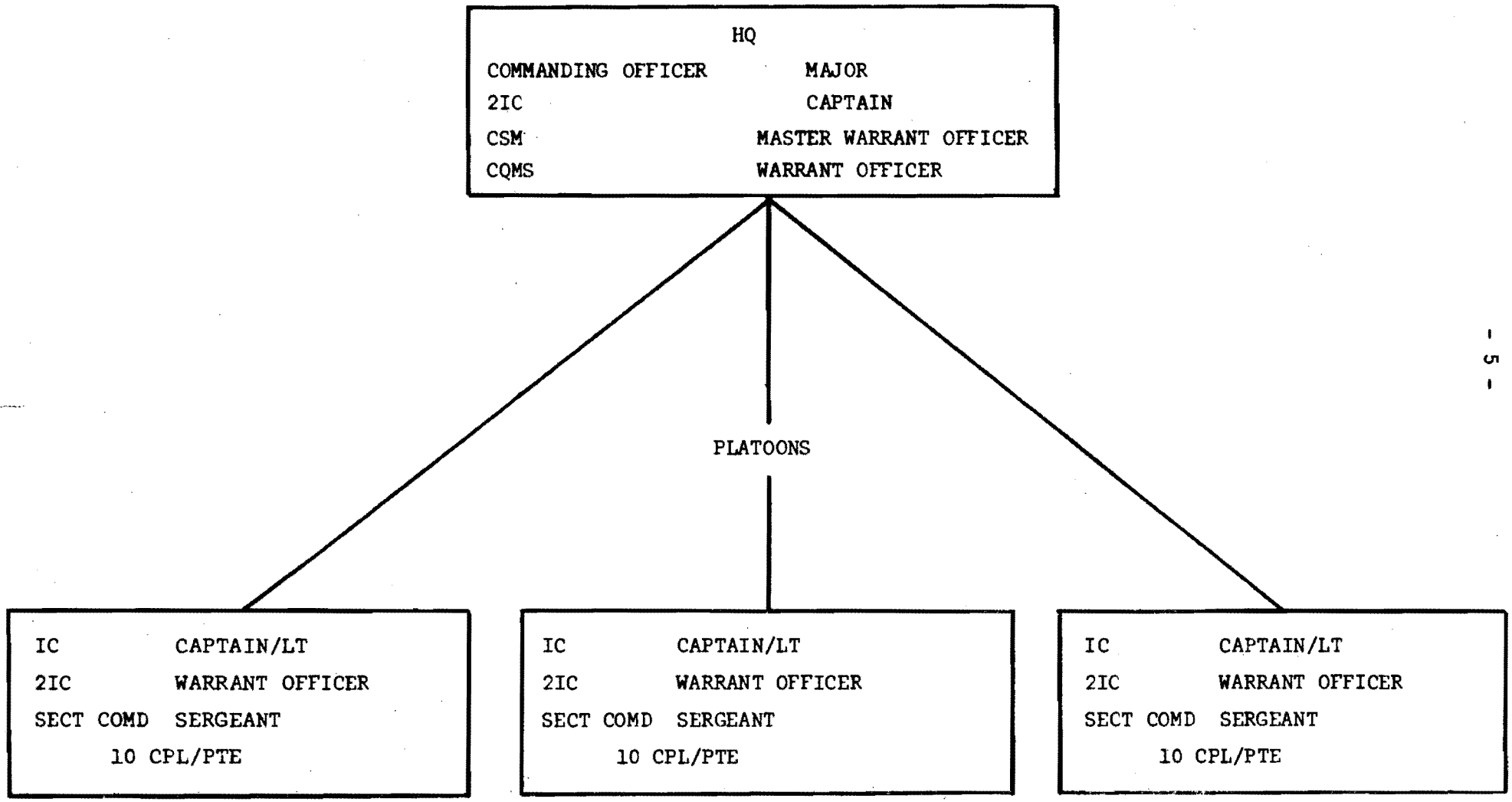
Base Technical Services Officer

- responsible for Construction Engineering, Supply, Transport

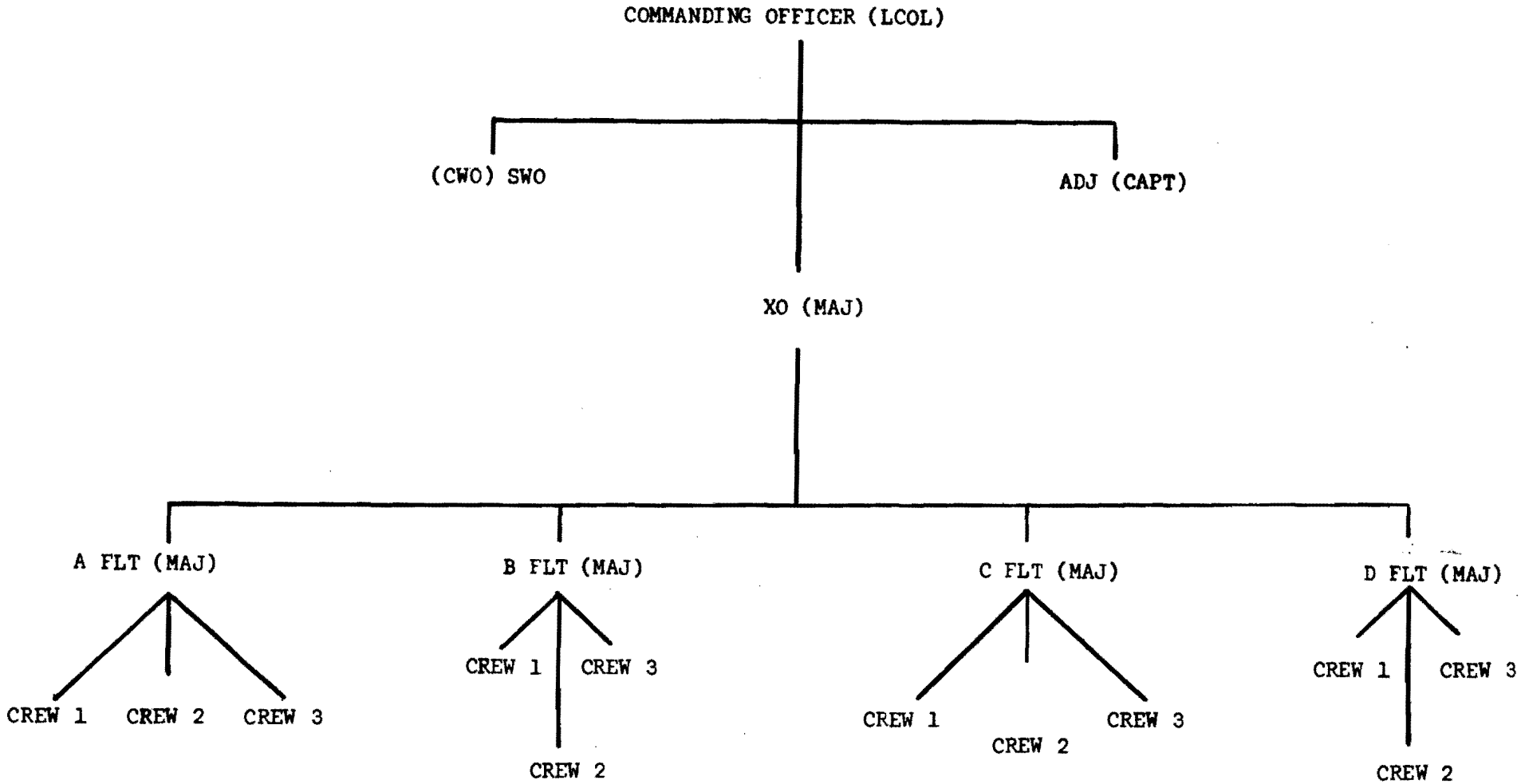
Base Comptroller

- responsible for Pay & Claims, NPF Accounts, Internal Audit

HEADQUARTERS ORGANIZATION OF A BASE

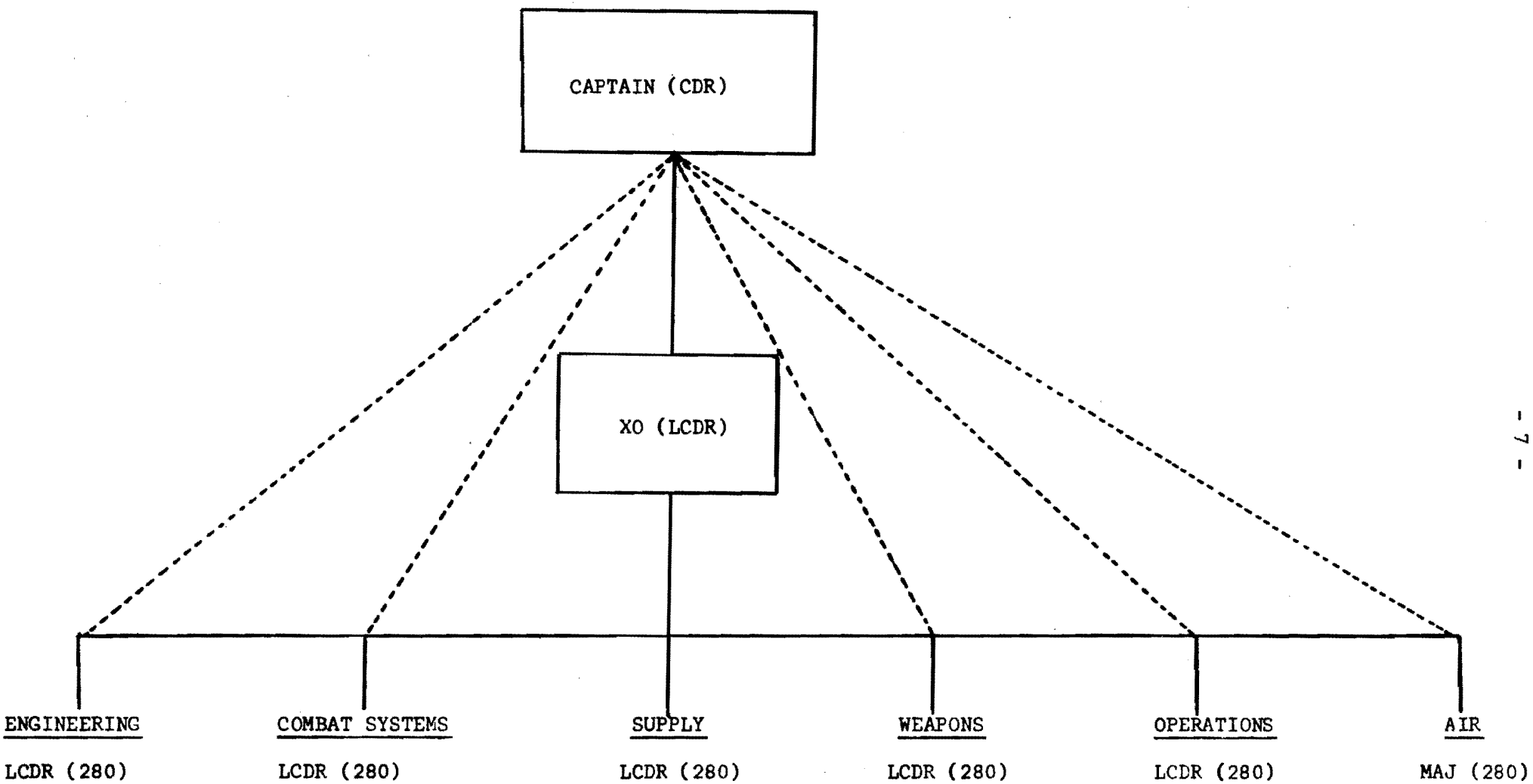


ORGANIZATION OF AN INFANTRY COMPANY



Crew Commanders are normally Capts/Maj.

ORGANIZATION OF AN AIR UNIT (415 SQN GREENWOOD)



LEGEND: ——— NORMAL CHAIN OF COMMAND

- - - - - - - - - - - - - - - - FACTORS AFFECTING OPERATIONAL READINESS

ORGANIZATION OF 280 CLASS DDH

NATO, UN, NORAD AND NATIONAL OPERATIONS

1. Canadian Forces TASK Priorities

a. Defence of Canada

(1) Northern Operations

(2) Surveillance.

b. International

(1) UN - United Nations

(a) Founded in San Fransisco in 1945,
(b) Purposes are to maintain international peace and security and to aid the backward countries of the world,
(c) CF performs peacekeeping duties,

(2) NORAD - North American Air Defence

(a) Original agreement between US & Canada in 1958,
(b) Purpose is to defend the North American Continent,
(c) CF has over 40 radar bases committed to NORAD,

(3) NATO - North Atlantic Treaty Organization

(a) Formed in 1949 between USA & most Western European Countries,
(b) Alliance to protect members from Soviet aggression,
(c) CF has one Ship on active duty with NATO Fleet at all times and also has two bases, Lahr and Baden in West Germany,

c. Domestic/Internal Duties

(1) Aid to Civil Power,
(2) Assistance to Civil Power,
(3) Search & Rescue,
(4) Relief Operations.

CANADIAN FORCES RANK STRUCTURE

1. In the Canadian Forces, there are two categories of rank structure:

a. Commissioned Officers; and

b. Non-Commissioned Officers.

2. The term Commissioned Officer refers to all officers who hold a "Queen's Commission". All male officers may be addressed as "sir" and female officers as "ma'am" or they may be addressed by their rank and surname.

3. Non-Commissioned Officers refers to all the other ranks, ie Privates to Chief Warrant Officer.

4. The term Warrant Officer (WO) refers to the ranks of:

a. Warrant Officer;

b. Master Warrant Officer; and

c. Chief Warrant Officer.

5. The term Senior Non-Commissioned Officer (Sr NCO) refers to the rank of Sergeant.

6. The term Junior Non-Commissioned Officer (Jr NCO) refers to the ranks of:

a. Corporal; and

b. Master Corporal.

7. All Non-Commissioned Officers shall be addressed by their rank except for Chief Warrant Officer who may be addressed as "Sir" or "Ma'am".

COMPLIMENTS

1. A salute is the official compliment paid by all CF personnel as a mark of respect to the "Queen's Commission" held by all male and female officers (whether in uniform or not).

2. The method of paying compliments by an individual or group may vary depending upon:

a. the occasion;

b. the dress worn by the individual paying the compliment; and

c. whether or not arms are carried.

3. When to pay a compliment. Compliments shall be paid to the following persons or on the following occasions:

a. Her Majesty the Queen, and all other members of the Royal Family, Foreign Sovereigns, members of Reigning Foreign Families, Presidents, and Chiefs of States of Commonwealth and Foreign Countries;

b. The Governor General of Canada and Lieutenant-Governors of the Provinces;

c. Officers including those of Commonwealth and Foreign countries;

d. When God Save the Queen, O Canada and National Anthems of foreign countries are played;

e. Uncased Standards, Guidons or Colours, except when they are draped in black and carried by units at a state or military funeral;

f. To a funeral procession as the coffin passes;

g. When coming onboard or leaving a ship or when coming on to the quarter-deck;

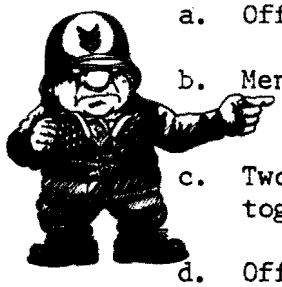
h. Passengers in staff cars bearing distinguishing flags and general officer car plates;

j. When the National Flag is raised or lowered;

k. When Last Post or Reveille are sounded; and

m. On other occasions as notified from time to time in the appropriate regulations, orders and instructions.

4. Saluting General. The paying of compliments in the Canadian Forces shall be as follows:



a.	Officers	Salute all officers of higher rank
b.	Men	Salute all commissioned officers except officer cadets
c.	Two or more officers together	The superior returns salutes and ALL salute superior officers
d.	Officers accompanied by men	The superior officer returns all salutes. ALL salute officers of higher rank.

5. Compliments in Lecture Rooms. When a commanding officer or visiting dignitary enters a lecture room, theatre, etc the instructor or senior member present call the group to attention. ALL members of the group sit to attention, arms straight at the side, head and eyes to the front, heels together. Under certain conditions where this drill may be impractical or dangerous, the order Stand Fast will be given. Members of the group shall suspend all possible action without causing physical danger to themselves or damage to equipment until the order Carry On is given.

6. National Anthems. The procedure for military personnel in attendance when National Anthems are played is as follows:

a. ALL shall stand;

b. Spectators in uniform, not in a formed group and regardless of rank, shall salute during the actual playing of the National Anthems. The salute shall commence with the playing of the first note and shall be cut away at the end of the last note. When in civilian dress, all ranks shall stand to attention with headdress removed; or

c. Formed military groups shall be called to attention and the officer or man in charge shall salute. Formed military groups bearing arms shall present arms.

7. The General Salute. When attending a parade in uniform as a spectator, all officers and men shall stand to attention during the playing of the general salute.

8. Reporting to an Officer. When a man reports to an officer, the following shall take place:

a. March forward, halt two paces in front of the officer;

b. Salute, remain at attention, await acknowledgement;

c. Deliver the message or receive instructions, etc;

d. Salute, remain at attention, await acknowledgement;

e. Turn on the right and march off.

9. Reporting to other than an Officer. When a man reports to someone senior to him, other than an officer, the procedure outlined above shall be followed omitting the salute.

10. Compliments in Vehicles. The senior passenger in a staff car and in the front seat of other vehicles, shall salute. Officers or men driving a vehicle, motorcycle or bicycle shall not salute. Passengers riding in the rear of trucks shall pay compliments by sitting to attention. Other ranks personnel who may be in the front seat of a vehicle with an officer driving may return the salute for that officer.

11. Miscellaneous

a. As a token of respect an officer or man in uniform may salute a lady of acquaintance when meeting her or passing her on the street;

b. Officers and men at the termination of a service funeral may proceed to the foot of the grave to pay their respects individually by saluting;

c. Officers or men shall salute when passing the National War Memorial and Cenotaphs, if practicable;

d. Salutes are not given indoors in either public or service buildings except on parades, ceremonial occasions and when reporting to an officer's office;

e. When an officer approaches a group of men in places other than lecture rooms, the senior man orders the group to attention and salutes; and

f. Compliments shall be paid when recognizing an officer wearing civilian clothing.

*Drill Hall to be considered as indoor parade square.

PAY AND ALLOWANCES

TRADE GROUPS

1. Current policy dictates that all trades be allocated to one of three trade groups:

a. STANDARD GROUP (COVERS MOST TRADES)

b. SPECIALIST 1 (25 SPECIFIC TRADES)

c. SPECIALIST 2 (091 FLT ENGR)
(311 MAR ENGR)
(SGT & ABOVE)

RANK	LEVEL	INCENTIVE PAY CATEGORY	STANDARD GROUP	SPEC	SPEC QUALIFYING TIME
RECRUIT	RECRUIT	RECRUIT			
PTE	1	BASIC			on completion of basic training
		1			after 1 yr in service
		2			after 2 yrs in service
		3			after 3 yrs in service
CPL	5A	BASIC			minimum of 4 yrs service
CPL	5A	1			after 60 months in Cpl rank

NOTE: Eligibility for Specialist groups only after attaining rank of Corporal (Provided the individual is in applicable trade).

ANNUITIES - PENSIONS - DEATH BENEFITS

SUPPLEMENTARY DEATH BENEFITS - (SDB)

1. This is a COMPULSORY term life insurance plan. Benefits are payable to your dependant or estate on your death regardless of the cause. The amount is equivalent to one year's total pay at time of death.

PENSION ACT

2. The Pension Act is NON-CONTRIBUTORY and does not depend on length of service. Benefits paid under this act are paid in respect to death or disability resulting from military service. Amounts payable are determined by a Pension Board.

CANADIAN FORCES SUPERANNUATION ACT - (CFSA)

3. The CFSA is a CONTRIBUTORY pension plan and applies to all service personnel; members contribute 7.5% of their total pay. A portion of this pays your CPP contributions.

BENEFITS OF CFSA

4. Return of contributions with 4% interest normally occurs when service is less than 20 years.

5. An Annuity. An annual amount calculated on the basis of 1/50 of your average annual pay during your best six years of service (consecutive), paid monthly.

6. Severance Pay. Payable at time of release:

   a. On completion of basic engagement 3 or 5 years; or

   b. After 10 yrs service.

Lump sum cash payment equal to 7 days pay for every year served to a maximum of 210 days.

PAY ASSIGNMENTS

7. May be made at Unit pay office after 7 weeks service. Once an allotment is made, it must continue for a period of at least six months, before you can cancel it. Pay allotments cannot be made to a Finance Company. Pay allotments must be limited to an amount which will leave a minimum of $20.00 in your pay account each month.

PAY ACCOUNT

8. Some items that constitute a deduction from your pay account are:

a. Supplementary Death Benefits (SDB);

b. Federal Income Tax;

c. Unemployment Insurance Commission (UIC);

d. Rations & Quarters (R & Q);

e. Canadian Forces Superannuation Act (CFSA).

9. If you receive a pay advance from other than your parent unit, you must inform the Accounts Officer of your home base. You can only receive up to a maximum of 30 days pay and allowances.

INCENTIVE PAY

10. Entitlement to incentive pay categories one to three is based on the recommendation and approval of your Commanding Officer.

CLOTHING UPKEEP ALLOWANCE

11. Upon completion of one year's service you are given a clothing upkeep allowance to aid you in maintaining your kit.

12. Recruits normally receive their first pay increase on completion of Basic Recruit Training.

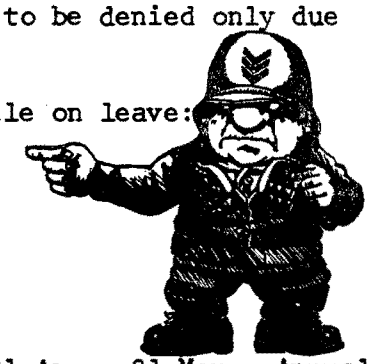
13. If you receive an over-payment, you are responsible for reporting it immediately to the Base Accounting Officer.

LEAVE

GENERAL

1. The purpose of this handout is to familiarize the candidate with the Leave Policy of the Canadian Forces.

2. Leave is considered to be an entitlement to be denied only due to military requirements.



3. Two important things to be considered while on leave:

   a. Dress;

   b. Deportment.

4. Types of Leave

   a. Annual - The official Leave Year is 01 Apr - 31 Mar. Annual Leave may be taken in increments of one or more days and may be taken at any time subject to your commanding officer's approval;

   b. Compassionate Leave - 14 days by Commanding Officer; more than 14 by Commander of a Command;

   c. Sick Leave - 30 days by a Medical Officer;
      91 days by a Medical Board;

   d. Special Leave - Members can be granted up to 30 days Special Leave by the CDS and any amount by the MND.

      (1) Overseas Posting - Commanding Officers may grant Special Leave not exceeding 5 days immediately prior to posting overseas, (EMBARKATION)

      (2) Community Affairs - 14 days Special Leave may be granted by Commanding Officers, for example, to attend Boy Scout Camp as a leader,

      (3) Christmas/New Years - Special Leave may be granted to 50% of a Unit over Christmas and 50% over New Years. The number of days vary by unit policy.

   e. Leave Without Pay - granted when serviceman must be away from place of duty for extended period. May be granted as follows:

      (1) 14 days by Commanding Officer;

      (2) 30 days Officer Commanding a Command;

      (3) Any period by Chief of Defence Staff.

f. Short Leave - 48 hours once a month. Not counted against Annual Leave.

g. Time Off - not counted against Annual Leave, ie holidays, religious obligations.

5. A member must be in the service for a period of 6 months or until completion of TQ3 training, or in the best interest of the service before he is eligible for Annual Leave.

6. If you are unable to return off leave on time, you should notify the Duty Officer or Military Police by telegraph or telephone of your inability to return on time.

7. On the back of the Leave Pass, you will find instructions concerning:

a. Medical emergencies;

b. Dental emergencies; and

c. Emergency instructions.

8. A single serving member is allowed to submit a Leave Travel Assistance Claim, not more than once a year for travel costs to visit a next of kin. The Leave Pass must be stamped by a CF Unit, a railroad agent or post office to certify that the member did indeed visit the residence of his next of kin. The first 500 miles will not be reimbursed.

CF ADMINISTRATION INSTRUCTION

GENERAL

1. The purpose of these handouts is to outline the purpose of Base Orders:

a. Base Standing Orders issued by Base Commander and contain instructions which are peculiar to that Base:

(1) Fire Orders,
(2) Staff Orders,
(3) Administrative Orders,
(4) Range Orders,
(5) Security Orders, etc.

b. CFRS (Unit) Standing Orders Contain:

(1) Training Orders,
(2) Recruit Orders,
(3) Fire Orders,
(4) Range Safety Orders,
(5) Discipline,
(6) Administration, etc.

c. Base Routine Orders published at least once a week by authority of Base Commander; they are restricted and contain such information as:

(1) Duty Officer,
(2) Duty Warrant Officer,
(3) Parade Orders, time, place, etc,
(4) Seasonal Dress Instructions,
(5) Meetings, time, place; Medical appointments, Dental appointments, Immunization needle parades, etc.

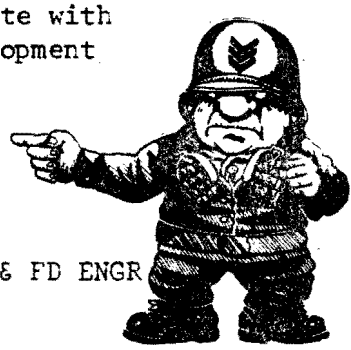
d. Unit Routine Orders published at least once a week by authority of the Unit Commanding Officer, contain information that is applicable to the Unit. (ie CFRS Routine Orders read by all CFRS staff and recruits):

(1) Pennant Winner,
(2) Parade timings,
(3) Winner of Sports Trophy,
(4) Duty Sgts, Duty NCOs lists.

e. Ignorance of any order is no excuse for an offence committed by a serviceman.

CAREER POLICY

GENERAL



1. The purpose of this handout is to acquaint the candidate with the current career policy called the Other Ranks Career Development Program (ORCDP). This system has three tiers or stages:

   a. Basic Engagement;
   b. Intermediate Engagement;
   c. Indefinite Period of Service.

2. Combat Arms Trades - (CRMN 011, ARTYMN 021, INFMN 031 & FD ENGR 041):

   a. Under the Land Operations Trade Reassignment Programme (LOTRP), entry into the Combat Arms trades is for an initial 3 year period. This is called a Basic Engagement (BE).

   b. After 22 months service if you wish to remain in the service, you may re-engage. When re-engaged it will be for an Intermediate Engagement (IE).

3. Other Trades

   a. You have signed a contract to serve for a period of 5 years in the Canadian Forces. This is called a Basic Engagement (BE).

   b. After 46 months service and if you wish to remain in the service, you may re-engage. When re-engaged it will be for an Intermediate Engagement (IE).

4. All members of the CF must apply for re-engagement in the last 6 months of their current period of service. Career status applies to a man who has re-engaged for an Intermediate Engagement (IE). Members who choose not to re-engage after their Basic Engagement, are entitled to Severance Pay.

5. Selection for Intermediate re-engagement is based on:

   a. Vacancies in your trade;

   b. Your assessment.

6. To be considered for re-engagement, a man must be:

   a. Medically fit;

   b. A Canadian citizen;

   c. Have a history of satisfactory conduct;

   d. Be motivated toward service life;

   e. Have shown satisfactory progress in trade advancement;

f. Possess a potential for promotion;

g. Have a satisfactory record of performance in his trade;

h. Have a minimum of 48 months service.

7. Towards the end of your Intermediate Engagement (IE), you may be considered by Ottawa to continue your career after completing 20 years. This next engagement is called an Indefinite Period of Service (IPS). This is the last tier or stage of the three-tier system of ORCDP. If you end your career either after an Intermediate Engagement or after Indefinite Period of Service, you are entitled to an annuity (Pension).

8. A career field is a group of related trades.

9. A trade is a group of related duties.

10. Reclassification from Pay Level 1 through 4 requires the approval of the Commanding Officer of your unit.

11. For promotion from Private to Corporal, a man must have completed 48 months service and be qualified to Trade Level 5.

12. A UER (Unit Employment Record) is a record of qualifications and places of employment.

13. The maximum age a member can serve to on an Indefinite Period of Service is 55.

14. During your career, starting after 2½ years, once a year you will receive a report called a Personnel Evaluation Report (PER). This Evaluation of your performance is sent to Ottawa and informs your Career Manager of your performance. It also lets you know how you are doing.

NATIONAL SECURITY AND BREACH OF SECURITY

GENERAL

1. The purpose of this handout is to outline national security policies and what to do in event of a breach being committed.

2. Security in the Armed Forces is the protection of:

   a. information from espionage;

   b. personnel from subversion;

   c. material from sabotage.

3. Sabotage

   a. primary threat to security of material;

   b. designed to cause physical damage;

   c. methods used are explosives, NBC agents, etc.

4. Subversion

   a. primary threat to security of personnel;

   b. designed to divert a person's loyalty;

   c. methods used are propaganda, coercion, intimidation.

5. Espionage

   a. primary threat to security of information;

   b. means by which a power attempts to acquire information;

   c. methods used are infiltration, reproduction, interception and removal.

6. Security of information

   a. classification;

   b. access;

   c. protection.

7. Classified Material

a. Each person in the Canadian Forces or Department of National Defence is given a security classification for the type of work he is doing. If he works with Secret Files then he must have clearance to that classification. Classified material is protected under lock and key, locked combination, safe, armed guard, fenced in areas, dial safe, depending on their Degree of Classification.

b. Besides having the proper classification, you must also have a need to know the information.

c. The classifications from highest to lowest are as follows:

(1) Top Secret - if its security aspect is paramount and if its unauthorized disclosure would cause exceptionally grave damage to the nation,

(2) Secret - if its unauthorized disclosure would endanger national security, cause serious injury to the interest or prestige of the nation or any governmental activity thereof, or be of great advantage to a foreign nation,

(3) Confidential - if its unauthorized disclosure while not endangering national security, would be prejudicial to the interest or prestige of the nation, or be of advantage to a foreign nation,

(4) Restricted - if it is of slight security importance, and its compromise would result only in embarrassment or slight disadvantage to the nation.

8. There are two agencies in Canada dealing with security:

a. RCMP (the top security agency in Canada);

b. Military Police (Security Branch).

9. Your responsibility to protect official information continues after your release from the service. You will sign a copy of a security briefing stating you are aware of security regulations. Failure to follow security regulations, even after release from the CF, could mean prosecution under the Official Secrets Act.

10. ID Cards shall be carried at all times and will only be surrendered for one of the following reasons:

a. when a person is placed in close custody or jail;

b. when admitted to hospital; and

c. when it is surrendered for a special pass to enter a maximum security area.

11. ID Cards are PUBLIC property and non-transferrable. They shall be produced on demand of the following:

a. Security Officer;

b. Peace Officer;

c. Military Police;

d. Security Guard of a defence establishment;

e. Superior Officer.

12. If you lose your ID Card REPORT IT IMMEDIATELY to your Platoon NCO. Loss of an ID Card is a serious offence. It is also an offence to alter or deface an ID Card.

13. ID Cards are a means of identification only and are only valid for 5 years.

SUBVERSIVE LITERATURE

13. Any publication, writings or letters which advocate the unconstitutional or violent overthrow of any governing body, ie the Government of Canada or Provincial Government, is considered to be subversive literature. Any receipt of literature of this nature shall be passed to your superior for transmission to the Base Security Officer.

PROPAGANDA

14. The use of false statements and rumours in the hope of causing a demoralizing effect on a force or group to reduce their effectiveness.

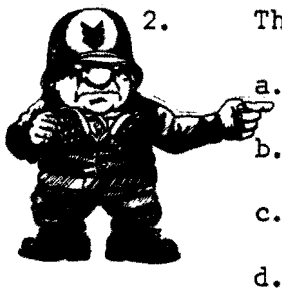
PHOTOGRAPHY

15. The unauthorized taking of pictures of classified material, information and personnel, is a breech of security. The use of cameras in Radar Bases, Units, where sensitive equipment is held, repaired, or used, is an example of unauthorized picture taking.

GENEVA CONVENTION

GENERAL

1. The Geneva Convention was founded as a direct result of the International Red Cross. The main purpose of the Geneva Convention is to guarantee the humane treatment of the sick and the wounded.



2. The four conventions of the Geneva Convention are:

   a. The Wounded Convention

   b. The Maritime Convention

   c. The Civilian Convention

   d. The Prisoner of War Convention

3. Code of Conduct for Canadian Servicemen:

   a. You will never surrender of your own free will;

   b. You will resist capture;

   c. If captured, you will not divulge any information;

   d. You will make every attempt to escape.

4. Powers

   a. The power to which a POW holds allegience is called the Depending Power;

   b. The power that is holding a POW is called the Detaining Power;

   c. The Neutral Power whose duty it is to ensure that the rules of the Convention are carried out is called the Protecting Power.

5. If you are captured, give only the information found on your ID Card or in other words, your name, rank, SIN and date of birth.

6. Personal effects that may not be taken away from you:

   a. Clothing and articles for upkeep of clothing;

   b. Documents of identity;

   c. Badges of rank or nationality;

   d. Protective Clothing (Gas Mask, etc);

   e. Personal items;

   f. Cleaning kit and messing kit.

7. Effects that will be taken from you:

a. Weapons and arms;

b. Military documents;

c. All other military equipment other than of a protective nature.

8. Order in a POW camp is to be maintained by the Senior Officer or Senior person in the rank of the POWs (should be of his own nationality).

9. It is the duty of everyone to attempt to escape. Organized escape attempts shall be co-ordinated by the Senior Officer/man.

10. Work Details and Pay. Medically fit POWs can be put to work at non-military tasks. They shall be paid for this - ½ of (1) Swiss franc per day. POWs will also receive an advance of pay, 8 Swiss francs per month approximately, to purchase soap and razor blades, etc.

NOTE: No Disciplinary Punishment shall exceed 30 days.

11. Medical

a. Prisoners suffering from serious disease or requiring hospital care must be admitted to a suitable military or civil hospital;

b. Prisoners of war will not be prevented from reporting sick or being examined by a MO, where possible by an MO of own nationality;

c. Permanently injured or disabled prisoners may be sent to a neutral country under terms of the Convention.

GENERAL SERVICE KNOWLEDGE REVIEW

1. When does the official leave year begin?

2. When is a service member eligible for severance pay?

3. How often and for how long may a service member be granted short leave?

4. What three sets of instructions are on the back of the CF leave pass?

5. If you are away from your home base and you receive an emergency cash advance to get back to your home base, who must be notified immediately?

6. What must you do if you are unable to return to your home base on time from annual leave?

7. The term "Senior NCO" refers to what rank?

8. How many months must a pay assignment be in effect?

9. How many months must you serve and to what trade level must you be qualified to be promoted to the rank of Cpl?

10. What is the minimum amount that must be left in your pay account after your pay assignments have been deducted?

11. List three deductions from your pay account.

12. What is the amount of supplementary death benefits payable to your dependants or estate in the event of your death?

13. Under what circumstances would a service member qualify for benefits under the Pension Act?

14. Four (4) 5/8th inch gold braid rings worn on the sleeve of a CF uniform indicates what rank?

15. How long must you serve in the CF before you are eligible for annual leave?

16. When do recruits, normally, receive their first pay raise?

17. What is the diversion of a person's loyalty to his country called?

18. What is the destruction of material in a secret manner to undermine a country's war potential called?

19. Regardless of your security clearance, classified information is made available to you on what basis?

20. What are the four (4) security classifications in the CF?

21. Where is Mobile Command Headquarters located?

22. Which command is responsible for maintaining an operational airlift capability?

23. Where is the name of the Base Duty Officer published for any particular day?

24. Who is to read CFRS Routine Orders?

25. What are the three (3) trade groups in the CF Other Ranks Pay System?

26. How many functional commands are there in the CF?

27. How long must you serve in the CF before you become eligible for Clothing Upkeep Allowance?

28. What is the only information a P.O.W. may give to the detaining power?

29. N.A.T.O. was formed for what main purpose?

30. What is the name given to the power to which a P.O.W. holds allegiance?

31. What is the earliest a service member may apply for re-engagement in:

    a. Combat Arms; and

    b. Other trades.

32. What is the only type of work a P.O.W. may perform for his captors?

33. List the four (4) conventions of the Geneva Convention.

34. During internal security or aid to the civil power operations, how much force may be used while making an arrest?

35. To what age can a service member serve if offered an indefinite period of service (IPS)?

36. What are you entitled to at the end of an intermediate engagement (IE)?

37. What are the three (3) tiers or stages of the Other Ranks Career Development Plan (ORCDP)?

38. Where and in what year was the United Nations founded?

39. What is the main purpose of the Geneva Convention?

40. In accordance with the Geneva Convention, what articles will normally be taken by the enemy?

41. What organization was founded as a direct result of the International Red Cross?

42. Who is the military person responsible to the Minister of National Defence for the Canadian Forces?

43. After being released from the Canadian Forces are you still subject to the Official Secrets Act?

44. How often is leave transportation allowance granted to a single member of the CF?

45. What rank must you attain before being eligible for Specialist Pay?

46. What is the top security agency in Canada?

47. What percentage of a service member's pay is deducted for C.F.S.A. (Canadian Forces Superannuation Act)?

48. The term "Junior NCO" refers to what ranks?

49. List the five (5) job appointments that make up the organization of a CF Base.

50. What are the four (4) groups of CF Officers?

51. How often are "Personnel Evaluation Reports" (PER) normally submitted?

52. What is one of the main purposes of PERs?

53. Is it necessary for you to be in uniform and wearing proper headdress to give a hand salute to a CF Officer?

54. List three (3) examples where military headdress should be removed.

55. List three (3) examples where a salute is required.

56. When in uniform and the hands are occupied, what kind of salute can still be given?

57. What is the proper action to take if you were walking out the Main Gate, in uniform, and the National Flag was being raised?

58. Gun salutes are marks of respect paid to whom?

NOTE:

1. To be completed and turned in to GSK Section on Monday, Week 8 of training.

2. Answer all questions.

3. If a holiday timetable is in effect, the GSK Section will inform you of when to turn the answers in.

4. Do not remove this review from this book. If you do not have one given to you by the GSK Staff, answer these on a separate piece of paper.

CANADIAN FORCES RECRUIT SCHOOL
CORNWALLIS

FIRST AID

FIRST AID SECTION CFRS

1. What are the six general rules of First Aid?
2. List the medical names of the skeleton.
3. What side of the heart pumps the blood through the body?
4. Air in the lungs is constantly being renewed in two phases, what are they?
5. What are the objectives of First Aid?
6. How do we diagnose an injury?
7. How does a First Aider help to prevent infection?
8. How does a First Aider control bleeding?
9. Name the types of dressings. (4)
10. Name the types of bandages. (4)
11. Name the types of slings. (3)
12. What do you do for an animal bite?
13. What do you do for a sucking chest wound?
14. Name the types of fractures. (2)
15. What are the rules of splinting?
16. What do you do for a broken ankle or a sprained ankle?
17. What do you do for a broken rib?
18. What do you do for a dislocation?
19. How would one be sure if the ankle was broken or sprained?
20. Name the types of burns.
21. What is the First Aid treatment for a trivial burn?
22. What do you do for a chemical burn?
23. What do you do for a minor frostbite?
24. The First Aid treatment for a person who is unconscious is:
25. The First Aid treatment for a person who has been electrocuted is:
26. First Aid treatment for fainting is:
27. First Aid treatment for a loose particle in the eye is:

28. First Aid treatment for a chemical in the eye is:

29. First Aid treatment for an embedded object in the eye is:

30. First Aid treatment for a contusion of the eye is:

31. First Aid treatment for bleeding from the ear is:

32. First Aid treatment for an insect in the ear is:

33. First Aid treatment for a nosebleed is:

34. First Aid treatment for someone who has choked on a foreign body is:

35. How do we prevent poisoning? (5)

36. First Aid treatment for poisoning is:

37. First Aid treatment for snakebite is:

38. First Aid treatment for a bee sting is:

39. First Aid treatment for infantile convulsions is:

40. First Aid treatment for stroke or heart attack is:

NOTE:

1. To be completed and turned in to First Aid Section on Monday, Day 11 of training.

2. Answer all questions.

3. If a holiday timetable is in effect, the First Aid Section will inform you of when to turn the answers in.

4. Do not remove this review from this book. If you do not have one given to you by the First Aid staff, answer these on a separate piece of paper.

CANADIAN FORCES RECRUIT SCHOOL
CORNWALLIS

NUCLEAR, BIOLOGICAL & CHEMICAL DEFENCE

INTRODUCTION

NBC DEFENCE

1. Numerous wars and military engagements have been fought since the Second World War without resort to the use of NBC weapons. There have been situations, however, where chemical agents have been used, for example, riot control agents in Internal Security operations in Cyprus, and on a larger scale in Vietnam. There has been the possibility of a nuclear exchange, as in the Cuban missile crisis. Future Canadian military operations may well be conducted under the threat of escalation by the employment of NBC weapons.

2. A number of nations are now capable of waging nuclear war. Even more possess chemical weapons, or have allies who can supply them. Biological warfare, although untried in modern times, is a serious threat which must be faced.

3. Canadian policy is not to initiate NBC warfare, but any unpreparedness on the part of our forces to withstand such attacks could invite an aggressor to engage in this type of warfare. All service personnel must therefore be ready to defend themselves against NBC attacks in situations that could range from peacekeeping to general war.

4. The primary responsibilities of the individual subjected to an NBC attack, are to avoid becoming a casualty, to continue, and to aid others who are affected by the attack. The primary aim of this handout, and all instructional periods in NBCD, is to provide all recruits with basic knowledge of NBC warfare and individual responsibilities as a member of the CAF.

CHARACTERISTICS AND EFFECTS
OF NUCLEAR WEAPONS

1. Nuclear weapons are devices that produce larger and more efficient explosions than conventional weapons. The power of a nuclear weapon is expressed in terms of its energy release (yield) when compared with that released by conventional explosives (for ex. TNT.) Thus, a one kiloton (KT) nuclear weapon is one which would produce the same amount of energy as the explosion of 1,000 tons of TNT and a one megaton (MT) weapon would produce the same amount of energy as 1 million tons of TNT.

2. Types of Nuclear Bursts

Almost immediately after the detonation of a nuclear weapon, a fireball is formed. The type of burst is defined by the location of the fireball in relation to the surface of the earth.

AIRBURST - The fireball does not touch the earth's surface.

SURFACE BURST - The fireball touches the surface of the earth.

SUB-SURFACE BURST - The point of detonation is below the surface of the land or water. Below land, it is termed an underground burst and below water it is termed an under water burst.

GROUND ZERO (GZ) - The point on the surface of land or water vertically above, below or at the point of detonation is termed ground zero (GZ).

3. Three Main Effects of all Nuclear Explosions

a. Thermal Radiation - The fireball of the nuclear explosion reaches a temperature hotter than the surface of the sun, and releases great quantities of light and heat. This is known as thermal radiation. Thermal radiation produces a light flash that can dazzle or damage the eyes at great distance. This flast blindness is temporary and can occur regardless of the direction the individual is facing. Permanent damage is rare and occurs only if the fireball is viewed directly.

The heat from the explosion travels outward from the centre of the explosion. It is absorbed by dark materials causing them to burst into flames and causing flash burns on the bare skin. The range of significant heat effects is usually greater than the destructional range of the blast wave.

Maximum effects from thermal radiation is obtained from an air burst, whereas it is greatly reduced in a surface or sub-surface burst because it is absorbed by the earth or water.

b. Blast Wave - The blast wave (shock wave) of a nuclear weapon is caused by the rapid expansion of the fireball which starts a pressure or shock wave.

The shock wave in the air is accompanied by, and resembles a very strong wind travelling outwards at the speed of sound, in all directions from the point of detonation. It collapses buildings, uproots trees, overturns or damages military material, etc and fills the air with flying projectiles and debris.

c. Nuclear Radiation - Some of the energy of the nuclear explosion is released as nuclear radiation. There are four types of nuclear radiation which may affect an individual after a nuclear explosion:

(1) Alpha Particles - Have a range of only a few inches in the air with little penetrating power,

(2) Beta Particles - Have a range of a few feet in the air and can penetrate and cause damage to the skin,

(3) Gamma Rays - Are similar to X-rays but more powerful. They can travel thousands of metres in the air, are deflected by particles in the air. They have great penetrating power, but are decreased in intensity as they do so.

(4) Neutrons - Have a range somewhat less than gamma rays but are able to penetrate materials in a similar manner. They also induce radiation in certain materials. This is known as neutron induced activity.

4. Fallout

The major source of radiation is fallout. As a fireball from a nuclear burst rises into the atmosphere, large quantities of dirt, stones, water, and dust particles are sucked up into the nuclear cloud. As soon as the fireball cools, the heavier particles fall back to earth. Those particles which fall back to earth within the first minute are known as initial radiation.

The smaller and lighter particles which remain and settle out in the nuclear cloud, and fall to earth after the first minute, are known as residual radiation.

5. Protection and Precaution

There are three ways the hazard from nuclear radiation to an individual can be reduced:

a. Distance;

b. Shielding; and

c. Time.

6. Effects of Nuclear Radiation on the Body

Nuclear radiation damages the cells of the body and large doses of radiation can cause radiation sickness. If a large enough dose is received to the whole of the body, the effects normally follow three phases:

a. Suggestive - Within 48 hours symptoms of headache, vomiting, and feeling of general weakness;

b. Latent - In severe cases, a latent phase may occur lasting for as long as 2 weeks, when an individual may look and feel well; and

c. Definite - All symptoms from "Suggestive Phase" reappear except much more seriously, plus they are accompanied by further symptoms of bleeding from the mouth or rectum, sweating, bleeding under skin, loss of hair and high fever.

PuraPura: is a definite sign of radiation sickness.

7. Initial Radiation

Initial radiation is the nuclear radiation emitted by the fireball or nuclear cloud within one minute after detonation.

8. Residual Radiation

Residual radiation is the radiation that remains on the earth, or falls back to the surface after the explosion of a nuclear weapon.

9. Nuclear Alarms - Two Types

a. Local Alarm - Air raid siren may sound to warn of a suspected or actual attack.

b. Fallout Warnings - An organization exists for the detection of nuclear bursts and warning unit commanders close to the area that would be covered by fallout.

CHARACTERISTICS & EFFECTS
OF BIOLOGICAL AGENTS

Biological agents are living micro organisms (germs).

Biological warfare is the intentional use of living micro organisms (germs) to cause death, disability or damage to man, his animals and crops.

IDENTIFICATION

1. Positive identification of Biological Agents can only be achieved through laboratory tests.

DISEMMINATION (Means of Delivery)

2. The agents would probably be dispersed as aerosols of solid or liquid particles by some or all of the following methods:

a. Aircraft Spray
b. Vectors - flies, mosquitoes, fleas, ticks and rats
c. Aerial Bombs
d. Aerosol Generators
e. Missiles
f. Bomblets
g. Sabateurs

ROUTES OF ENTRY

3. a. Nose - Breathing passages;

b. Mouth- Breathing passages and through the ingestion of contaminated food and water; and

c. Skin - Breaks in skin (open wounds) or from bites from infected insects (vectors).

EFFECTS ON THE BODY

4. Effects vary with the agent used but individuals exposed to equal doses of an agent will react differently. In general, the agents cause fever and weakness in the infected individual so that he becomes incapable of performing his military duties and may even need some degree of medical care.

INDIVIDUAL RESPONSIBILITIES BEFORE AND AFTER A BW ATTACK

5. All personnel are responsible to maintain and strengthen measures for personal hygiene as follows:

a. Shower with soap and hot water daily;

b. Wash hands before all meals and after urination and defecation;

c. Keep ears and nose clean;

d. Pay careful attention to cleanliness of teeth, nails, hair and feet;

e. Give immediate attention to cleaning cuts, scratches, and wounds and cover with clean dressings;

f. Keep hair and fingernails short;

g. Keep toilet articles covered when not in use;

h. Change soiled clothing, especially underclothes, as often as possible;

j. Co-operate with medical staff for innoculations, medications, etc;

k. Report all illnesses;

m. Consume food and water from approved sources only.

BW DECONTAMINATION

6. The responsibilities of an individual are limited to the decontamination of the following:

a. Body - remove clothing and shower thoroughly; pay special attention to minor cuts and abrasions;

b. Mask - disinfect using periodic cleaning procedures;

c. Clothing- wash thoroughly in hot, soapy water;

d. Food - unopened food cans should be thoroughly boiled or washed in soap and water;

e. Water - use water purification tablets and boil for 5 min, or boil for 15 mins.

f. Eating Utensils - disinfect or boil for 15 mins.

CHARACTERISTICS AND EFFECTS OF CHEMICAL AGENTS

DEFINITION OF CW

1. Chemical Warfare is defined as the employment of Chemical Agents (excluding riot agents) to:

a. Kill or incapacitate man or animals; and

b. Deny or hinder the use of space facilities or materials.

DISSEMINATION

2. Chemical Warfare agents may be disseminated in liquid, solid or vapour (gaseous) form.

DELIVERY SYSTEMS

3. Almost any weapon system can be used to deliver chemical agents.

PERSISTENCY

4. The duration of effectiveness of a chemical agent is termed persistency. An agent which will remain effective longer than 10 minutes is termed a persistent agent, and an agent which will remain effective less than 10 minutes is termed non-persistent.

ROUTES OF ENTRY

5. Chemical agents can attack the body by one or more of the following routes:

a. Eyes - Solid particles can enter eyes, liquid and vapour can penetrate;

b. Nose - Breathing passages;

c. Mouth- Breathing passages and through the ingestion of contaminated food and water;

d. Skin - Liquid and vapour can be absorbed through the skin.

CLASSIFICATION

6. Agents are classified by their tactical use and the effect they have on the body, and one termed lethal or non-lethal.

7. Lethal agents are used with intent to kill or maim. Non-lethal agents are used with the intent to render individuals incapable of performing their tasks for indefinite periods, but in the knowledge that there will be complete recovery.

LETHAL AGENTS AND ACTION ON THE BODY

8. a. Nerve Agents - These interfere with the transfer of nerve impulses, thereby disrupting essential bodily functions, such as breathing, muscular control and vision.

b. Blister Agents - These cause inflammation, blistering of the skin and superficial destruction of internal tissues such as the lining of the breathing passages.

c. Blood Agents - These interfere with the use of oxygen by tissue cells of the body.

d. Choking Agents - These attack the breathing passages and lungs, and cause swelling and liquid in the lungs leading to choking (dry land and drowning).

NON-LETHAL AGENTS - ACTION ON THE BODY

9. Physical Incapacitants - These cause temporary physical incapacitation, and include the following agent groups:

a. Vomiting Agents - They cause irritation of the nose and throat and vomiting.

b. Tear Agents - They cause irritation of the eyes, a capious flow of tears and stinging of the skin.

c. Other Agents - They cause such effects as fainting, paralysis, blindness or deafness.

10. Riot Control Agents - Some non-lethal agents are suitable for riot control because of their temporary irritant or disabling effects.

11. Training Agents - Some of the non-lethal agents, principally the tear agents, are useful as training agents to test the fit of masks, or to exact a temporary penalty for poor chemical discipline.

FIRST AID FOR ALL CHEMICAL CASUALTIES

12. a. Mask Casualty immediately;

b. If casualty shows symptoms of nerve agents, administer atropine;

c. Apply artificial respiration if casualty has breathing problem;

d. Decontaminate exposed skin; and

e. Report to Unit Commander.

ATROPINE

1. a. Atropine is the drug used to counteract the effects of nerve agent poisoning, and is designed to permit the individual to administer it to himself when he experiences nerve agent symptoms.

Mild Dose

(1) Administer one injection at 20 min intervals,

(2) If effects of nerve agent persist, seek medical advice.

Moderate Dose

(1) Administer one injection at 10 min intervals.

Severe Dose FA

(1) Administer a total of 3 injections 3-8 minutes apart. If more required, seek medical help.

(2) Administer First Aid,

(3) If effects of nerve agent persists, seek the advice of a medical officer immediately.

Signs of Atropine working

(1) Dry mouth and skin,

(2) Rapid heartbeat,

(3) Warm flushed feeling.

b. Astra Training Injector

Colour - Blue and White

Blue end contains the needle and solution.
White end contains spring and guide with directions for use printed in red lettering.

c. Method of Use

Hold injector with blue end facing away from you, pull red safety ring off, place blue end firmly against thigh muscle and press white end. This will cause the injector to function. Hold for a count of five (5) and withdraw.

METHODS OF DETECTION & PROTECTIVE MEASURES AGAINST NUCLEAR WARFARE

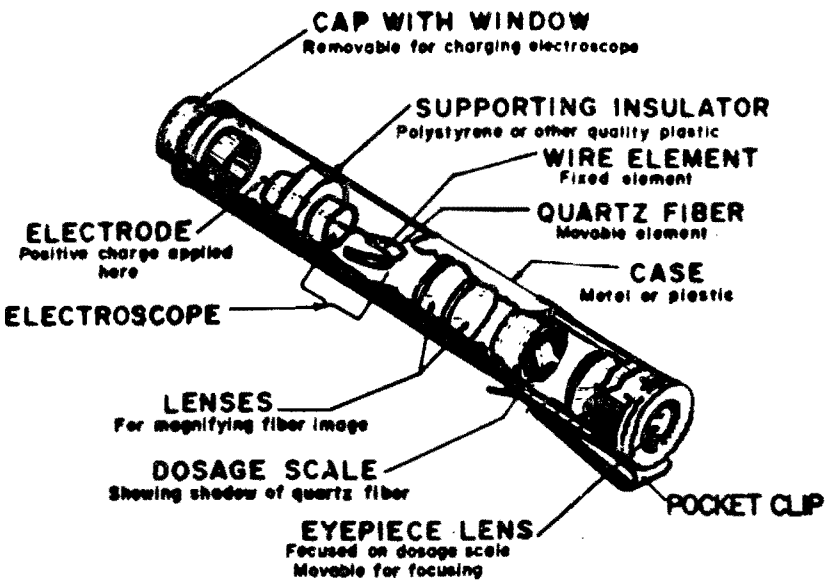
DOSIMETERS

1. A dosimeter is an instrument for recording the amount of radiation received by the individual wearing the dosimeter.

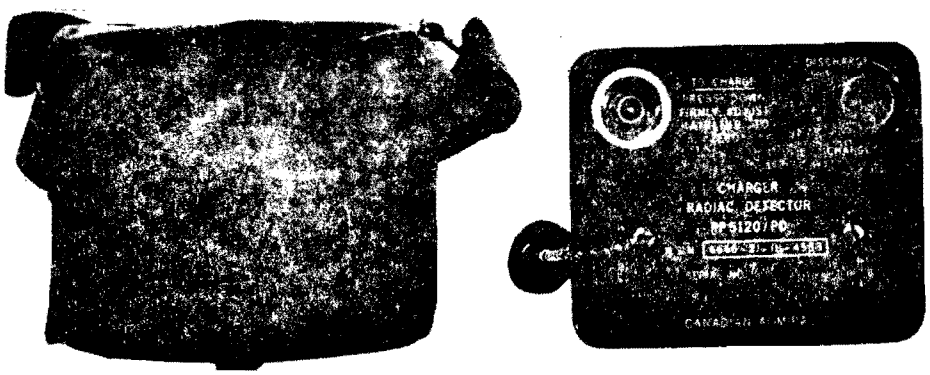
2. There are two classes - direct reading, which can be read directly by the individual carrying it, and indirect reading, which must be read with an auxillary reader.

3. The two dosimeters taught in CFRS are the IM5002A/PD and the DT60A/PD. Both measure Gamma radiation in "RADS" which is the standard of measurement used by the Canadian Forces.

IM5002A/PD - Gamma radiation on a scale from 0-10 RADS. Direct reading by holding dosimeter to a light source and reading directly from the scale.

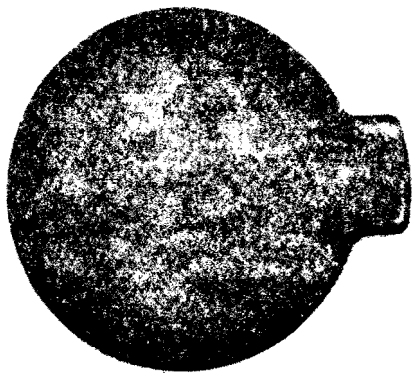


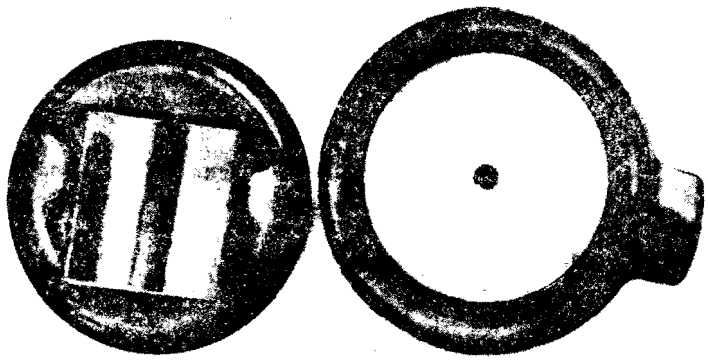
CUTAWAY DIAGRAM OF SELF-READING POCKET DOSIMETER



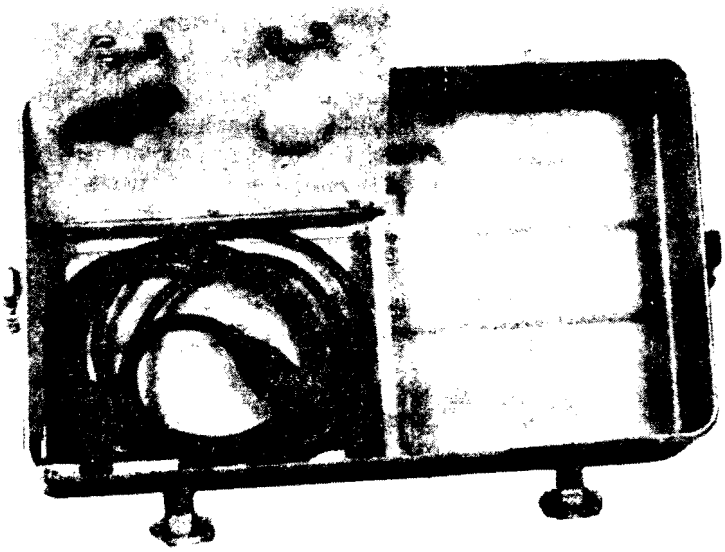
CHARGER RADIAC DETECTOR

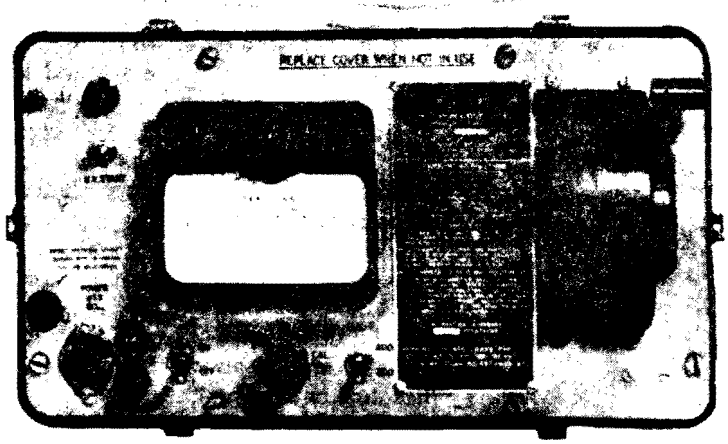
PP5120/PD -- It is a light weight power supply designed for changing direct reading dosimeters ie the IM5002A/PD.





DT60A/PD -- AN INDIRECT reading dosimeter and is the dosimeter that will be issued to all military personnel in the event of war. It measures gamma radiation on a scale from 0 to 600 rads.





COMPUTER INDICATOR RADIAC PERSONAL DOSIMETER READER

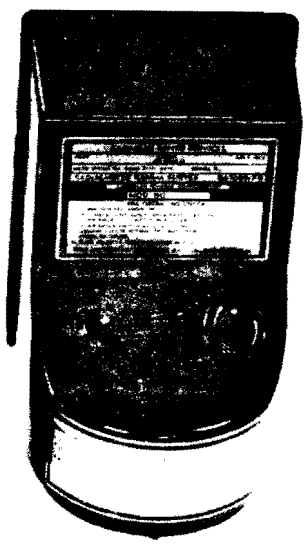
CP95A/PD - Is a portable instrument designed for computing and indicating the total amount of gamma radiation to which the personal dosimeter has been exposed. ie: DT60A/PD.

RADIACMETER GAMMA SURVEY LOW RANGE

IM5016/PD -- Is a portable lightweight geiger tube instrument for the detection of GAMMA radiation.

RADIAC METERS

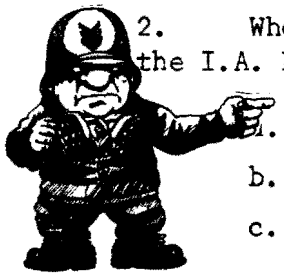
The following equipment is battery operated equipment used to detect gamma radiation.



RADIACMETER GAMMA SURVEY HIGH RANGE

IM108B/PD -- Is an instrument designed to measure gamma radiation in a range of 1 to 500 rads/hr.

I.A. DRILL (NUCLEAR)



2. When an individual sees a dazzling flash of light, he must perform the I.A. Drill which is:

a. go to ground;

b. close eyes, cover all exposed skin; and

c. after the bang is heard, wait until all debris has stopped falling before opening eyes or moving.

3. Individual responsibilities during and after a nuclear attack are to perform without order:

a. I.A. Drill;

b. First Aid;

c. Firefighting;

d. Detailed decontamination of self and rough decontamination of personal equipment; and

e. Disposal.

4. Perform on order:

a. Decontamination of unit equipment;

b. Report dosimeter readings; and

c. Other unit tasks.

INDIVIDUAL RESPONSIBILITIES AGAINST FALLOUT

5. a. Remain under cover whenever possible in suitable fallout protection;

b. Keep maximum amount of skin covered;

c. Keep food, water and personal equipment covered;

d. Cover shelters with suitable material; and

e. Close down covers of all vehicles.

ARRIVAL OF FALLOUT

6. When fallout arrives, or the fallout warning is given, individuals should immediately go to designated shelters. Once in shelter:

a. remain under cover until released by commander; and

b. place as much distance as possible between yourself and contamination by crouching in trenches or shelters and below overhead cover.

DECONTAMINATION

1. Decontamination is the process of making safe any person, object or area by removal or relocation. Radioactivity cannot be destroyed. There are two standards of decontamination:

a. Rough Decontamination is performed with the aid of any readily available means. The aim is to reduce the hazard to a level acceptable for emergency military operations.

b. Detailed Decontamination is a more thorough and lengthy process. The aim is to improve on rough decontamination and reduce the hazard to the lowest possible level.

DECONTAMINATION BY INDIVIDUALS

2. The decontamination that can be performed by individuals without order is as follows:

a. rough decontamination of skin, clothing, personal equipment, food and water containers; and

b. detailed decontamination of the body.

DECONTAMINATION OF FOOD AND WATER

3. Food: After fallout, food in unbroken sealed containers will normally be safe for use, but care must be exercised in opening as contamination could be transferred in opening. All food containers should be thoroughly cleaned by any available means prior to opening. Plastic and paper containers must be thoroughly dusted with a damp cloth.

Water: Water in sealed containers can be treated in the same manner as food. Water cannot be decontaminated by an individual.

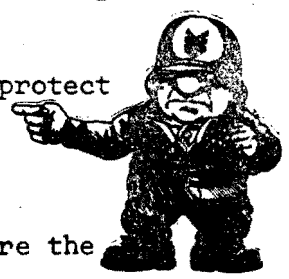
GENERAL

4. If all food and water is contaminated, small amounts of food and water can be consumed rather than go hungry or thirsty. This must be with the Unit Commander's permission.

DONNING THE MASK PROTECTIVE NBCD & DECONTAMINATION

GENERAL

1. The mask, Cml-Bio, protects the eyes, nose, throat, lungs and facial skin against all known CB agents, radioactive dust and screening smokes.



2. The mask is not designed to replace oxygen, and will not protect against carbon monoxide and ammonia fumes.

TYPES OF MASKS

3. The types of masks used by the CAF for initial training are the Cml-Bio, C2 and C3, which are produced in Canada.

DESCRIPTION

4. The only visible difference between the C2 and C3 masks is the green camouflage tape on the C3 in lieu of the black tape on the C2 over the binding wires.

5. The C3 is non-magnetic to prevent compass interference. The C3 mask is available in three sizes: small, medium and large.

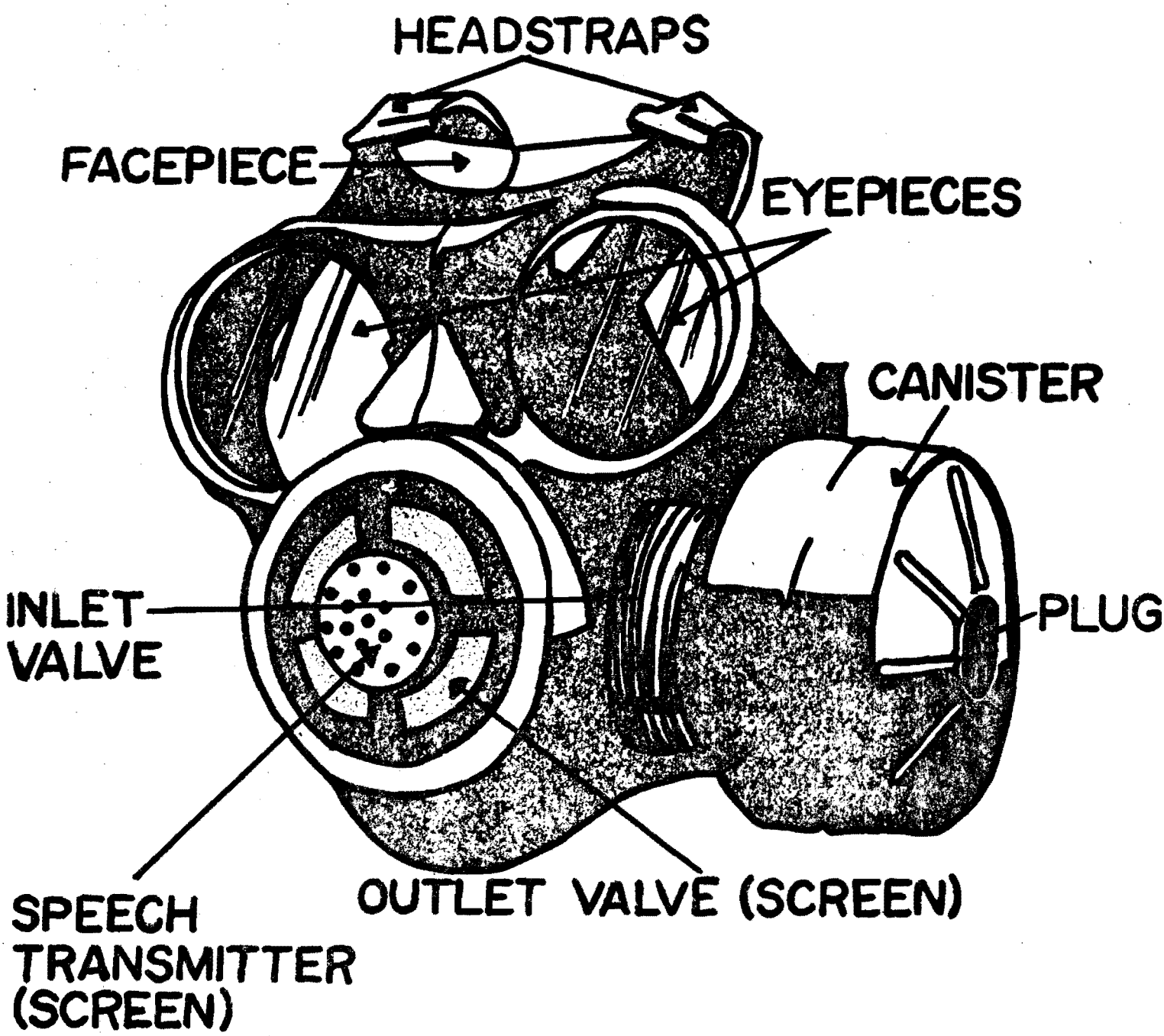
6. The C2 mask is available in normal size only.

COMPONENT PARTS AND SERVICEABILITY CHECK (See Annex)

7. The component parts are:

a.	rubber facepiece	- check for rips, puncture tears
b.	shatterproof eyepieces	- check for cracks
c.	outlet valve assembly and speech transmitter	- check for large dents, dirt in screen
d.	canister mount & inlet valve	- check threads, proper seating of valve
e.	nose cup and inlet valve	- securely attached and valve seated properly
f.	headharness	- check for frayed or broken straps.

MASK PROTECTIVE CLM-B10



ANCILLARY EQUIPMENT (See Annex)

1. Ancillary equipment consists of items issued and carried with both types of masks:

a. Carrier (1) - The carrier is designed to provide storage for the mask and ancillary equipment, and is fitted with straps to allow the carrier to be secured to the body.

b. Plug Set (1 Set) - To prevent moisture from entering the canister.

c. Chemical Agent Detective Paper (1 Book) - Used for detecting nerve and blister agents in liquid form.

d. Mitt Decontamination (2) - Used to remove harmful contaminating liquids from the skin and personal equipment.

e. Nerve Agent Vapor Detector Kit (2) - Used to test for nerve agent vapor.

f. Atropine (3) - Counteract effects of nerve agents.

2. Stowage of Mask in Carrier - To stow the mask in the carrier, grasp it at the outlet valve with the right hand. Insert mask, canister first all the way to the rear of the carrier. Properly close and fasten carrier.

3. Fitting and Testing - Fitting and adjusting of the mask will be taught in the classroom prior to going to gas training area for testing of the mask. When fitting the mask head harness: first, adjust the top 2, bottom 2, then centre 2 straps.

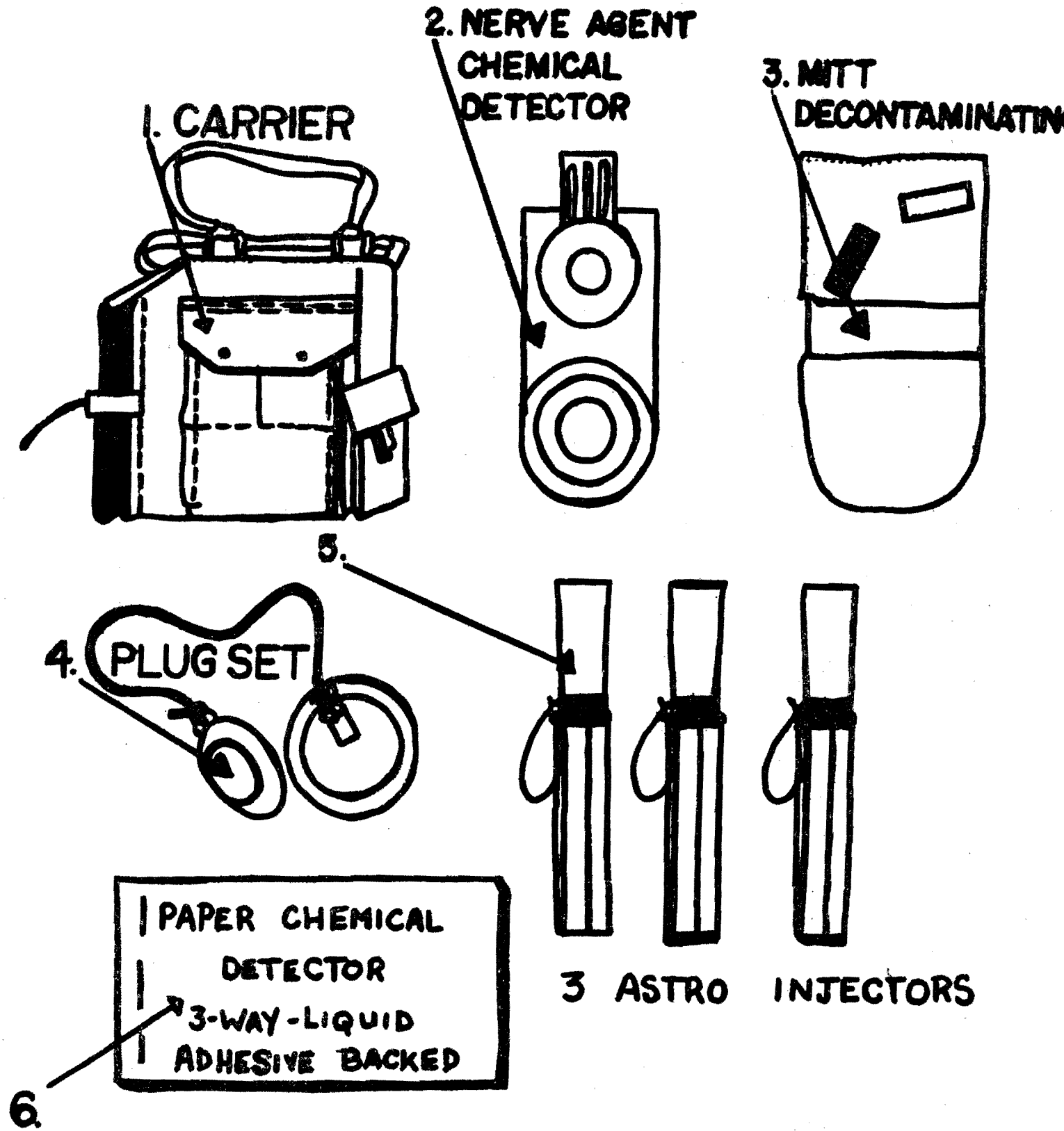
4. Carriage Positions - The position of where the mask is carried on the body will be determined by the situation. Three common carriage positions are:

a. Slung - One strap is placed over the head and rests on right shoulder with the waist strap snugly secured.

b. Chest - One strap is placed over the head and the waist strap adjusted so that the carrier sits high on the chest.

c. Wading - The waist strap is unhooked and the carrier held over the left shoulder.

MASK PROTECTIVE NBCD ANCILLARY EQUIPMENT



5. The correct sequence for the masking drill is:

   a. Stop breathing,close eyes;

   b. Remove headdress with right hand;

   c. Pull carrier release with the left hand, hold open;

   d. Grasp the mask by the outlet valve assembly with right hand and remove mask from carrier;

   e. With the left hand tap canister and find bottom left strap with left thumb;

   f. Rotate the right hand from the outlet valve and find bottom right strap with right thumb;

   g. Holding mask by the two bottom straps, put on chin first ensuring straps are not twisted;

   h. Blow out;

   j. Check for air tightness;

   k. Yell gas, gas, gas;

   m. Replace headdress; and

   n. Properly cose and fasten carrier.

6. Care of the Mask - In caring for the mask, avoid:

   a. storage over heat;

   b. storage of unauthorized articles in the carrier;

   c. dismantling of component parts;

   d. unnecessary stretching of the head harness;

   e. leaving in the carrier for extended periods;

   f. unnecessary rough handling;

   g. moisture in the canister;

   h. dirt and dust in the carrier; and

   j. unnecessary prolonged exposure to sunlight.

7. Cleaning of the Mask

a. Normal Cleaning

(1) Wipe the inside with a clean cloth,
(2) Clean the eyepiece,
(3) Clean the facepiece and the head harness, and
(4) Ensure valves are seated correctly.

b. Periodic Cleaning (Disinfect)

Periodic cleaning which also disinfects the mask, is performed on four occasions. The mask is disinfected:

(1) at intervals of not more than six months,
(2) when personnel are suffering from, or in contact with, a contagious disease,
(3) when ordered to do so by a medical officer, and
(4) when drawing from, or returning to, stores.

8. Masking Drill - The masking drill must be performed immediately upon detecting chemical or biological agents, at the sound of the local alarm or the shouting of Gas, Gas, Gas or Spray, Spray, Spray. Time allowed for the Masking Drill is 9 seconds.

BCW SURVIVAL RULE

1. An alarm system to provide warning of chemical attack or the presence of chemical hazards is a unit responsibility. Even when unit automatic detectors are available, they will not react to the presence of all agents, and may not be as sensitive to an agent as is the individual's body. There will be occasions, therefore, when we will suspect or detect the presence of a chemical agent before an alarm has sounded.

2. When the local Commander has ordered that the BCW Survival Rule be put into effect, the individual on his own initiative may assume the presence of chemical agents, as summarized in the BCW Survival Rule.

3. The catchword AROUSE formed by the initial letter of each event noted in the rule, may be used to remember it.

WHEN THE USE OF THE BCW SURVIVAL RULE IS ORDERED AND

4. A Artillery or other bombardment is experienced

R Raids or hostile acts are made by aircraft against your unit

O Odours, liquids, or solids which are suspicious are detected

U Unusual bomblets or missiles are seen

S Smoke or mist from an unknown source is present

E Effects on your body, or on others are noticed.

5. If any of these events occur, then you must assume the presence of chemical or biological agents and perform the IA drill.

PURPOSE OF THE IMMEDIATE ACTION (IA) DRILL

6. The IA Drill is designed to:

a. provide the individual with a rapid method of gaining protection from CB hazards;
b. warn all other personnel;
c. reduce the hazard from a liquid attack;
d. determine the need to perform the IA Drill; and
e. treat any agent effects on the body (ie atropine for nerve agent symptoms).

7. The IA Drill is performed when:

a. ordered;
b. the sounding of the local NBC alarm;
c. CB markers are seen;
d. any event covered by the BCW Survival occurs.

CW SENTRIES DUTIES

8. a. The duties of the CW sentries are to detect suspected or actual BC attacks by:

(1) observing the occurrence of any event covered by the BCW Survival Rule,

(2) monitoring detector paper for its reaction to liquid agents,

(3) monitoring the alarm or any automatic detectors allotted to his position, and

(4) noting the means of delivery or dissemination system;

b. To warn his area of responsibility of a suspected or actual attack by:

(1) sounding the NBC alarm,

(2) shouting "gas" repeatedly or in the case of a liquid attack shouting "spray" repeatedly;

c. Report to his Commander as required:

(1) the reason for sounding the NBC alarm,

(2) the reaction of the detector paper,

(3) the means of delivery or dissemination with the members involved if possible;

d. If ordered by the Commander to use his nerve agent vapour detector (NAVD) and report the results of the test.

NBC HAZARD SIGNS

9. Signs are used to indicate:

a. Areas contaminated by NBC agents;

b. Minefields containing chemical mines;

c. Disposal sites for contaminated materials.

10. Individuals must be able to recognize these signs and act accordingly:

a. Shape & Size - Triangle - 11½"x 8".

b. Colour - Nature of contamination indicated by background and incription colour.

c. Where used - Above ground or vine trees, rocks, poles, etc.

d. Made of - Tin, hard plastic, wood, etc or any material that will stand up to the weather.

MITT DECONTAMINATING

1. The mitt decontaminating is used for decontamination of the skin and personal equipment.

a. Description

(1) Waterproof foil package,
(2) Thumb holes either side,
(3) Contains fuller's earth powder,
(4) Absorbs liquids,
(5) Velcro fastener at wrist to prevent slipping off.

b. Method of Use

(1) BLOT - mitt absorbs liquid,
(2) BANG - cover surface liberally with powder,
(3) RUB - ensures complete coverage of contaminated area and removes excess powder and contaminant.

IMMEDIATE DECONTAMINATION DRILL

2. Several lethal or incapacitating doses of liquid chemical agent could be deposited on exposed skin and hair during a liquid attack - sometimes with the individual knowing it. Unless the liquid is removed very rapidly, a proportion of the contamination penetrates the skin and is no longer accessible to decontamination.

3. On completion of the IA drill and there is evidence that a liquid attack has occurred, it is the responsibility of the individual to determine the need to perform the ID drill.

4. ID is the decontamination performed by the individual on himself immediately after becoming contaminated that will enable him to survive.

ID DRILL	REMARKS
1. Prepare a new mitt and place it on the hand.	
2. Decontaminate the gloved hand.	
3. Remove helmet and place in a convenient place.	3d. Hung on arm, between knees on ground, avoiding contaminated surfaces.
4. Undo the velco fastener of the hood.	
5. Take a few deep breaths, steady breathing and hold the last one.	5b. Do not breathe again unless mask is on.
6. Push hood back.	
7. Unmask, keeping eyes closed and hold mask in gloved hand.	7c. Hook thumb in bottom strap as aid in orienting mask in remasking.

ID DRILL	REMARKS
8. Rapidly but thoroughly decontaminate the following in the order stated: BLOT, BANG, RUB a. Face b. Ears, neck, hair c. inside of mask	The IA Drill cannot be completed in one masking. Remask any time it is required. Three or four maskings and remaskings may be necessary. Special attention to areas under the chin, behind the ears and back of neck. Pay special attention to eyepieces and nosecup.
9. Mask, blow out, test for air tightness.	
10. Decontaminate head harness and outside of mask.	
11. Replace the secure hood and helmet.	
12. Return mitt to carrier.	
13. Replace detector paper on CW suit.	

ID NOTES

5. If nerve agents effects occur during the drill, the individual must mask, administer atropine, then continue the drill, if possible.

6. Steps 8 & 9 may be more effectively performed by another individual.

7. The neck, parts of the hair and ears may be decontaminated during periods when the mask is on and the breathing is being steadied.

8. The drill normally requires from 5 to 10 minutes to complete.

NBCD REVIEW

1. What is a biological agent?
   A living micro-organism.

2. What are the routes of entry for biological agents?
   Breathing passages - nose & mouth
   Skin - open wounds or bites from infected insects (vectors)
   Consuming contaminated food or water.

3. What dc we decontaminate after a BW attack?
   Clothing
   Body
   Mask
   Food
   Water
   Eating utensils.

4. How do we decontaminate clothing?
   Wash in hot soapy water.

5. What is the definition of biological warfare?
   The intentional use of living micro-organisms to produce death, disability or damage to man, his animals or his crops.

6. How do we gain positive identification of a biological agent?
   Laboratory testing and investigation ONLY.

7. What will the mask protective protect you against?
   All known chemical & biological agents radioactive dust & screening smoke.

8. What are the two types of mask protectives available?

   C2
   C3.

9. Name the items contained in the ancillary equipment.
   Carrier, plug set, detector paper, 2 decontamination mitts, nerve agent vapour detector kit, 3 atropine injectors.

10. What is the purpose of the nosecup inlet valve?
    Prevents moist air from getting into the eyepieces.

11. What is the proper sequence for adjusting the head harness straps?
    First - Top 2
    Second - Bottom 2
    Third - Side 2.

12. What are the three main carriage positions for the mask?
    Slung
    Chest
    Wading

13. Why do we blow out hard after putting on the mask protective?
    To remove any vapour that may be trapped inside the nosecup.

14. How long do we have to perform the masking drill?
    9 seconds.

15. What is done on normal cleaning of the mask?
    Wipe inside & outside with a clean cloth; ensure the valves are intact.

16. What do you do on periodic cleaning of the mask?
    The mask is disinfected.

17. What are the four occasions that you disinfect the maks?
    Every 6 months
    When ordered to by a medical officer
    When in contact with a contagious disease
    When drawing from or returning to stores.

18. What are the three types of nuclear bursts?
    Air burst
    Surface burst
    Sub-surface burst.

19. What are the two reasons for gas training?
    Fitting of the mask
    Chemical discipline.

20. When referring to nuclear warfare, what does YIELD mean?
    The ENERGY RELEASE by a nuclear detonation.

21. What size is the nominal bomb?
    20 kilotons.

22. What is the yield of a 20 KT nuclear weapon?
    20,000 tons of TNT.

23. What is the definition of ground zero?
    The point on the surface of land or water vertically above, below or at the point of detonation (centre of the fireball).

24. What are the three main effects of a nuclear explosion?
    Thermal radiation
    Nuclear radiation
    Blast wave.

25. What is the definition of an air burst?
    The bomb is exploded in the air and the fireball does NOT come in contact with the ground.

26. What is the definition of a surface burst?
    The bomb is exploded at such a height that the fireball comes in contact with the ground.

27. What are the four kinds of nuclear radiation?
    Alpha particles
    Beta particles
    Gamma rays
    Neutrons.

28. What do neutrons do?
They induce radioactivity.

29. What type of burst will result in the maximum amount of fallout?
Surface burst.

30. What type of burst will cause the greatest amount of damage from heat, light, and blast?
Air burst.

31. What are the two types of nuclear radiation?
Initial radiation - within the first minute
Residual radiation- after the first minute.

32. What are the three ways to reduce the hazard from radiation?
Time
Distance
Shielding.

33. What causes the blast wave?
The rapid expansion of the fireball.

34. What are the two distinct phases of the blast wave?
Positive and negative.

35. What are the three phases of radiation sickness?
Suggestive
Latent
Definite.

36. What disease is a definite sign of radiation sickness?
PuraPura (a purple-bruise like rash.)

37. What are the two types of dosimeters taught?
IM5002A/PD
DT60A/PD

38. What class of reading do the above dosimeters fall 'nto?
IM5002A/PD - direct reading
DT60A/PD - indirect reading.

39. What dosimeter will be issued to all military personnel?
DT60.

40. What kind of radiation do dosimeters read?
Gamma radiation.

41. What will happen if the IM5002 malfunctions?
It will give a higher reading.

42. In chemical warfare the proper sequence for the IA (immediate action) is:
Mask, take overhead cover, check detector paper, decontaminate if required, and administer atropine IF the symptoms of nerve agent poisoning are present.

43. What is the best type of shelter against nuclear attack?
Underground reinforced concrete structure.

44. What is the IA drill for NUCLEAR?
Fall to the ground, cover exposed skin, and remain there until all debris has stopped falling.

45. What are individual responsibilities during and after a nuclear attack?
IA drill, First Aid, Firefighting, Decontaminate, Disposal.

46. If radiation cannot be destroyed, what is the purpose of decontamination?
To transfer the hazard to an open area where it will cause less harm.

47. What are the two standards of decontamination?
Rough & Detailed.

48. What parts of the body must we pay particular attention to during personal decontamination?
Fingernails, hair and folds in the skin.

49. What do we do with meat that has been contaminated?
Trim of ½".

50. What is the definition of Chemical Warfare?
The employment of chemical agents (excluding riot agents) to produce death or casualties in man or animals and to deny or hinder the use of space, facilities or ma terial.

51. What are the physical states of chemical agents?
Solids
Liquids
Gases (vapours).

52. What does Persistency mean when referring to chemical warfare?
The duration of effectiveness of a chemical agent.

53. What are the routes of entry for chemical agents?
Eyes
Nose
Mouth
Skin.

54. The tactical use of a chemical warfare agent is:
Lethal or Non-Lethal.

55. What are the four lethal chemical agents?
Nerve
Blister
Blood
Choking.

56. How do nerve agents attack the body?
They interfere with the transfer of nerve impulses.

57. How do blood agents attack the body?
They interfere with the transfer of oxygen from the blood to the body tissues.

58. What is the First Aid for all chemical casualties?
Mask the casualty, atropine if the symptoms of nerve agent poisoning are present, ensure breathing, decontaminate, and report to CO.

59. The (U) in the BCW Survival Rule means:
Unusual bomblets or missiles are seen.

60. When doing a serviceability check on the mask, what do you check?
The mask protective complete and all ancillary equipment.

61. What is the purpose of atropine?
It counteracts the effects of nerve agent poisoning.

62. The purpose of the IA (immediate action) drill is?
a) to provide the individual with a rapid method of gaining protection against CB hazards,
b) to determine the need to perform the ID drill,
c) to warn other personnel who may not be aware of the hazard.

63. What are the three signs which tell you atropine is working?
Dryness of the mouth and skin
Warm flushed feeling
Rapid heartbeat.

64. How do you tell if you have been attacked by nerve agents?
Prompt recognition of the symptoms of nerve agent poisoning.

65. When should atropine be injected?
At the onset of symptoms of nerve agent poisoning.

66. What is the purpose of the decontamination equipment?
To decontaminate the skin and personal equipment.

67. What is the proper method of use for the mitt?
Blot
Bang
Rub.

68. What is the cathcword for the BCW Survival Rule?
AROUSE.

69. What does the letter R stand for?
Raids or hostile acts are made by aircraft against your unit.

70. What is the prime responsibility of the CW sentry?
To warn his unit of suspected or actual chemical or biological attack.

71. By what method could the CW sentry warn his unit?
Any sound that will not be confused with the sound of battle.

72. What is the proper sequence for the immediate decontamination drill?
Face
Ears
Neck
Hair
Inside of the mask.

73. The ID (immediate decontamination) drill should be performed when?
After putting on the mask protective.

74. What does a chemical hazard sign indicate?
a) areas contaminated by NBC agents,
b) minefields,
c) disposal sites for contaminated material.

75. If you suspect there is a chemical agent around, what should you do?
Put on your mask protective.

76. How much time does it take to do the ID (immediate decontamination) drill?
5 - 10 minutes.

77. What are the two types of nuclear alarms?
Local Alarm
Fallout Warning.

78. What are the two phases of the blast wave?
Positive
Negative.

79. What does the word "ingestion" mean?
Consuming contaminated food or water.

80. What sizes does a C2 mask protective come in?
One size only - normal.

81. What sizes does a C3 mask protective come in?
Small, medium, large.

82. What is the yield of a 1 kiloton nuclear weapon?
1,000 tons of TNT.

83. What is the scale of an IM5002?
0-10 rads.

84. The (S) in the BCW Survival Rule means?
Smoke or mist from an unknown source is present.

85. The duties of the CW sentry are to detect suspected or actual BC attacks by:
a) observing the occurrence of any event covered in the BCW Survival Rule,
b) monitoring detector paper for its reaction to liquid agents,
c) noting the means of delivery and dissemination.

86. What do you do with used atropine injectors?
Attach it to your clothing.

87. What are the two categories of cleaning for the mask protective?
Normal and Periodic.

88. The rubber plugs that are fitted into a protective mask canister are there to:
Prevent moisture from entering the canister.

89. The DT60A/PD is designed to:
Record the total amount of gamma radiation received by the wearer on a scale of 0-600 rads.

90. What is the ancillary equipment?
Extra equipment issued and used in conjunction with the mask protective.

91. What are the symptoms of nerve agent poisoning?
Tightness of the chest, dimness of vision, drolling, excessive sweating, running of the nose, difficulty in breathing, muscular twitching, paralysis, cessation of breathing, death.

92. The purpose of the ID (immediate decontamination) drill is to:
Remove liquid chemical from your skin which was previously deposited there.

93. After a nerve agent attack you find an unconscious person, the first thing you should do is:
Put on his mask protective.

94. Why is the astra training injector not injected through the clothing?
Risk of infection.

95. Before returning the mask protective to the carrier, after using it you must:
Wipe off any moisture from inside the facepiece.

CANADIAN FORCES RECRUIT SCHOOL
CORNWALLIS

DRILL

INTRODUCTION

PURPOSE

1. The purpose of this publication is to provide guidance and uniformity in the conduct of drill and ceremonial throughout the Canadian Forces. The procedures detailed in this book are designed to achieve and maintain a high standard of drill and deportment for each member of the Forces. Deviations are permitted where space or environmental circumstances dictate. However, a lower standard is unacceptable.

2. Military troops, displaying competence in drill movements, are recognized universally as highly trained, well-disciplined, professional servicemen. Drill that is well taught and executed develops individual pride, mental alertness, precision, and esprit-de-corps which will assist the individual serviceman to carry out his orders instinctively at all times.

AIM

3. The aim of this publication is to contribute to the overall effectiveness and efficiency of the Canadian Forces by maintaining high standards of drill and ceremonial.

FUNDAMENTALS OF FOOT DRILL

4. Posture. Constant checking during all phases of training must be stressed to ensure the individual's attention to proper bearing.

5. Bearing. The individual who consistently maintains perfect balance on the completion of movements demonstrated:

a. quick reflexes;
b. steadiness;
c. physical control of the body;
d. mental alertness;
e. mastery of the basic skills.

BASIC SKILLS

6. There are four basic movements of foot drill described hereafter as:

a. "bend the ... knee". One leg is kept braced with the foot firm and flat on the ground by applying pressure to the toe and the ball of the foot. The opposite knee is bent to the front of the body so that the toes hang directly below and behind the line of the knee and the leg straightened to the ground. The foot is raised six inches clear of the ground in quick time and the thigh raised parallel to the ground for all movement executed in slow time.

b. "Straighten the ... leg". The leg is straightened by forcing the toe down so that the impact is taken on the ball of the foot.

c. "Shoot the ... foot forward". One leg is kept braced with the foot on the ground. The other foot is shot forward with the knee braced, ready to carry the weight of the body forward.

d. "Shifting the ... weight". Body weight is shifted by transferring the total weight on the ball of the foot which is straightened to the ground and the balance is maintained by placing it flat and firm.

LENGTHS OF PACE

7. The standard lengths of pace are:

a.	quick and slow time	30 inches;
b.	stepping out in quick and slow time	33 inches;
c.	stepping short in quick and slow time	21 inches;
d.	double time	40 inches; and
e.	side pace	10 inches.

CADENCE

8. When marching the cadence is:

a. in quick time, 120 paces to the minute;
b. in slow time, 60 paces to the minute; and
c. in double time, 180 paces to the minute.

2. The cadence in quick time may be increased during recruit training.

CALLING OUT THE TIME

9. In the early stages of training the squad shall call out the time when executing drill movements. After completing a movement on the march the step shall be called for three paces, eg. on quick march the squad calls Left-Right-Left.

10. To warn the squad that the time is to be called out, the instructor is to precede the command for the movement by the cautionary command CALLING OUT THE TIME.

11. As an example, on the command CALLING OUT THE TIME, RIGHT - TURN, the squad:

a. executes the first movement of the turn on the executive order and simultaneously calls out "One";

b. on completing the first movement calls "Two", "Three" while observing the standard pause; and

c. when executing the final movement, calls out "One".

LIST OF TERMS AND DEFINITIONS

Advance

A unit is advancing when it is moving in the direction the front rank is facing, or would face if it were in line.

Appointment

Positions of command within units and sub-units, eg Company Commander, Division Commander, or Platoon Commander.

Alignment

A straight line on which a body of troops is formed or is to form.

Cadence

The number of paces to the minute.

Changing Direction

To form a new front, eg by changing direction, but not the formation of the unit.

Column

Sub-units one behind the other on parallel and successive alignments, at such a distance from one another as when formed to an angle of 90 degrees to either flank, will bring them into line with a seven-pace interval between platoons and a ten-pace interval between companies.

Column, Close

A column with distance reduced to suit requirements with a minimum distance of 12 paces between platoons and 15 paces between companies.

Column of Route

A unit with not more than three servicemen abreast in any part of the column, including officers and supernumeraries.

Column of Threes

A unit in threes with officers and supernumearies in the same positions as in line, but turned to a flank.

Company

A military formation consisting of two or more platoons.

Covering

The act by which a man places himself directly in rear of another.

Depth

The extent of ground occupied by a body of men from front to rear.

Distance

The space between men or bodies of men from front to rear.

Dressing

The act of taking up correct alignment and covering.

File, Moving to a flank in

A unit in two ranks moving to a flank.

File, Single

Men, one behind the other on a frontage of one man.

File, Blank

The blank file is the second single file from the left, when:

a. in three ranks, this single file is without a centre or a centre and rear rank man; and

b. in two ranks, this single file is without a rear rank man.

Flank

Either side of a body of men, as opposed to its front and rear. Designated as either the right or the left flank.

Flank, Directing

The flank by which units march or dress.

Flank, Inner

The directing flank serving as a pivot when a body of men changes direction.

Flank, Outer

The flank opposite the inner or directing flank.

Form

The method of changing direction but not formation.

Form Squad

The method of changing formation but not direction.

Front

The direction in which troops are facing or moving.

Frontage

The extent of ground covered laterally by a body of men.

Guides, Right or Left

Men on the right and left of the front rank, whose specific duties are to maintain correct distances or intervals from other units when on the march and on whom the remainder of the men in their unit march, take up, and maintain dressing. The guides are not to be covered. Guides may be used to indicate unit and sub-unit parade square positions for fall-in.

Incline

To face, and if on the march to move, in a direction of 45 degrees from the front to the indicated flank.

Interval

The space between men or bodies of men on the same alignment.

Line

Bodies of men formed up on the same alignment.

Marker

An individual place to indicate the position which a body of men will occupy when covering and falling in.

Open Order

An increased distance between ranks in line which when completed is two and one-half paces.

Close Order

The normal distance between ranks in line which is one pace.

Pace

A measurement of distance measured from heel to heel.

Platoon

A basic military formation of approximately 30 men, normally formed in three ranks, having one right marker, a Platoon Commander, and a Platoon Sergeant.

Rank

A line of men, side by side, on one alignment, separated by an interval.

Rank, Front

The rank which is leading when a unit is advancing.

Rank, Leading

The rank in front whether retiring or advancing.

Rank, Rear

The rank which is in the rear when the unit is advancing.

Retiring in Line

A unit is retiring in line when moving in such a direction that the rear rank is leading.

Retiring in Threes

A unit is retiring in threes when the right or left flank is leading in a direction opposite to which they were originally formed.

Standard Pause

The pause between movements of drill. The standard pause for drill at the halt is 40 beats to the minute. The standard pause for drill on the march is the period of time required to take two paces.

Squad

A military formation of approximately platoon size which is adopted to teach drill movements.

Supernumeraries

Officers, warrant officers, and senior non-commissioned officers who form in front or in rear of their respective formations without filling a parade appointment.

Wheel

A movement by which a body of men changes direction.

CANADIAN FORCES RECRUIT SCHOOL
CORNWALLIS

WEAPONS

RIFLE FN C1 7.62 MM

SAFETY PRECAUTIONS

1. It is necessary to carry out safety precautions at the beginning of each lesson. It is also important that you carry out safety precautions whenever a weapon is picked up.

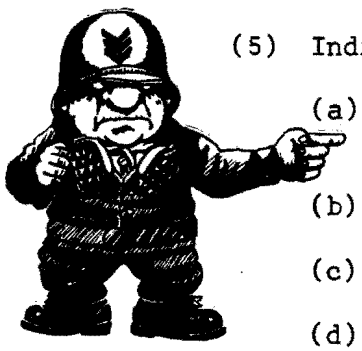
a. General Safety Rules (To be applied at all times)

(1) All weapons must be considered loaded until proven otherwise. NEVER ASSUME THAT A WEAPON IS SAFE! When proving the rifle, ensure that it is pointed toward a 'safe' area,.

(2) Weapons must never be pointed or aimed at a comrade unless specifically ordered in training. The serviceman must always have control of his rifle and be aware of where it is pointed,

(3) The change lever will be kept on Safe - "S" except when engaging targets or moving in the Alert Position,

(4) Weapons will only be loaded when required and will be unloaded once the requirement has passed,



(5) Individual Safety Precautions will be carried out:

(a) whenever a rifle is picked up or received from another person,

(b) before handing a rifle to another person,

(c) before handling, stripping or cleaning the rifle, and

(d) whenever there is doubt that the rifle is clear;

b. Individual Safety Precaution (Done by individual)

(1) Adopt the load position (Fig. 1),

(2) Remove the magazine, if fitted,

(3) Pull the cocking handle to the rear and inspect the chamber to ensure that it is clear, and allow the action to go forward,

(4) Place the change lever on "R", fire the action, place the change lever on "S", and

(5) Inspect all magazines and remove all live or dummy rounds;

c. Supervised Safety Precautions (Done at the beginning of each lesson on the rifle - on the range, beginning of training, before each relay leaves the firing point, and leaving the range.)

On command, PREPARE FOR INSPECTION, firers will:

(1) Adopt the load position (Fig 1),

(2) Remove the magazine, if fitted,

(3) Cock the action and engage the holding-open device, and

(4) Place the magazine, platform up, to the left of the ejection opening;

d. On hearing the declaration, CLEAR, the firer will:

(1) Depress the holding-open device, allowing the action to go forward,

(2) Place the change lever on "F", fire the action, place change lever to "S",

(3) Return all magazines to pockets, and

(4) Return to the load position.

Fig. 1

CHARACTERISTICS

2. a. The rifle is a shoulder controlled, magazine fed, gas operated, self-loading weapon capable of firing single rounds. A different version of the rifle called the rifle automatic, 7.62 mm, C2, can fire both single rounds and bursts of several rounds;

b. The rifle weighs approximately 5 kg (11 lb) with a full magazine;

c. The magazine holds 20 rounds;

d. The rifle is so designed that all operations such as cocking and loading are done with the left hand while the right hand grasps the pistol grip;

e. The rifle has a carrying handle fitted at the point of balance;

f. The rifle has a flash eliminator of the slotted tube type fitted to its muzzle;

g. The rifle can be fitted with a bayonet or a grenade launcher;

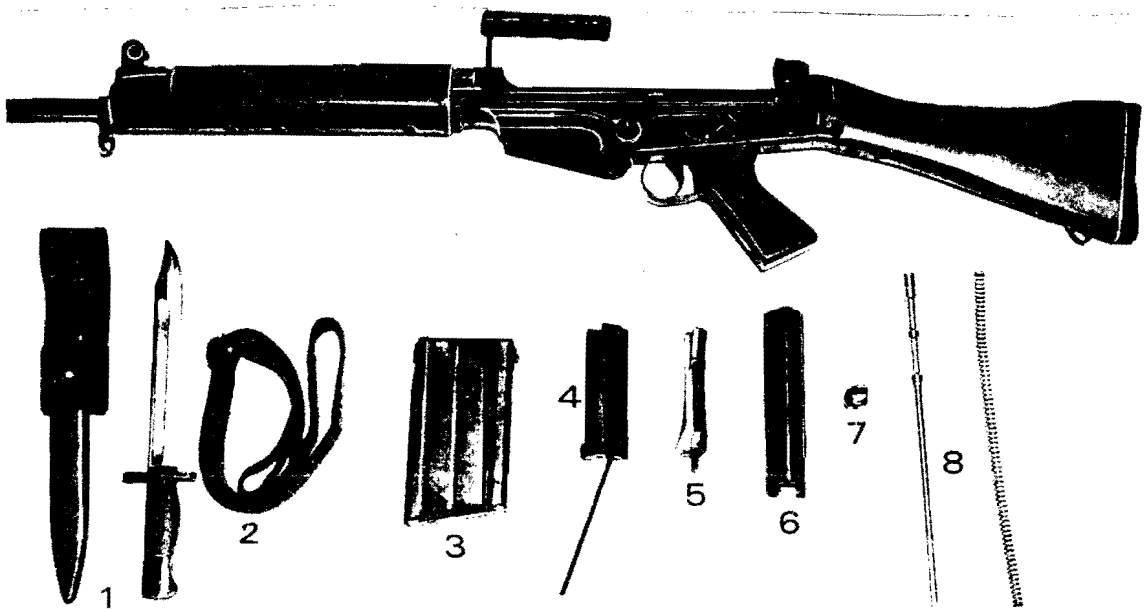
h. The rifle is fitted with a folding disc sight of the aperture type (200-600 yds). The 200 yd aperature is normally used as the battle sight; and

j. The rifle has a trap in the butt designed to hold a coiled pull-through and oil bottle.

STRIPPING

1. The rifle must be stripped for cleaning. The sequence of stripping the rifle without causing damage to the parts is explained below. Whenever the rifle is stripped, the parts will be laid out from left to right to assist in naming the parts and in the assembling of the rifle.

a. Remove the bayonet;
b. Remove the sling;
c. Remove the magazine;
d. Cock the rifle,allow the action to go forward;
e. Change lever to "S", break the weapon open and remove the breech block and carrier from the weapon;
f. Separate the breech block from the breech block carrier;
g. Remove the body cover;
h. Close the rifle;
j. Remove the gas plug;
k. Remove the piston and the piston springs; and
m. Separate the piston and the piston spring.



1. BAYONET AND SCABBARD
2. SLING
3. MAGAZINE
4. BREECH BLOCK CARRIER
5. BREECH BLOCK
6. BODY COVER
7. GAS PLUG
8. GAS PISTON AND SPRING

Fig. 2 Rifle Stripped for Daily Cleaning

ASSEMBLING

2. The rifle is assembled in the reverse order.

TESTS AFTER ASSEMBLY

3. The tests after assembly will be carried out after stripping the rifle, or any portion of it, and reassembling the rifle.

4. Holding the rifle in the "Load" position:

a. Remove the magazine;
b. Cock the rifle;
c. Place the change lever at "S";
d. Press the trigger (rifle should not fire);
e. Place the change lever at "R";
f. Press the trigger (rifle should fire);
g. While keeping the trigger pressed, cock the action (the action should not go forward);
h. Release the trigger and then press the trigger (the rifle should fire);
j. Place an empty magazine on the rifle and cock the action (action should remain at the rear);
k. Release the holding open device by depressing the release catch on the left side of the body (action should go forward);
m. Press the trigger (rifle should fire); and
n. Place the change lever at "S".

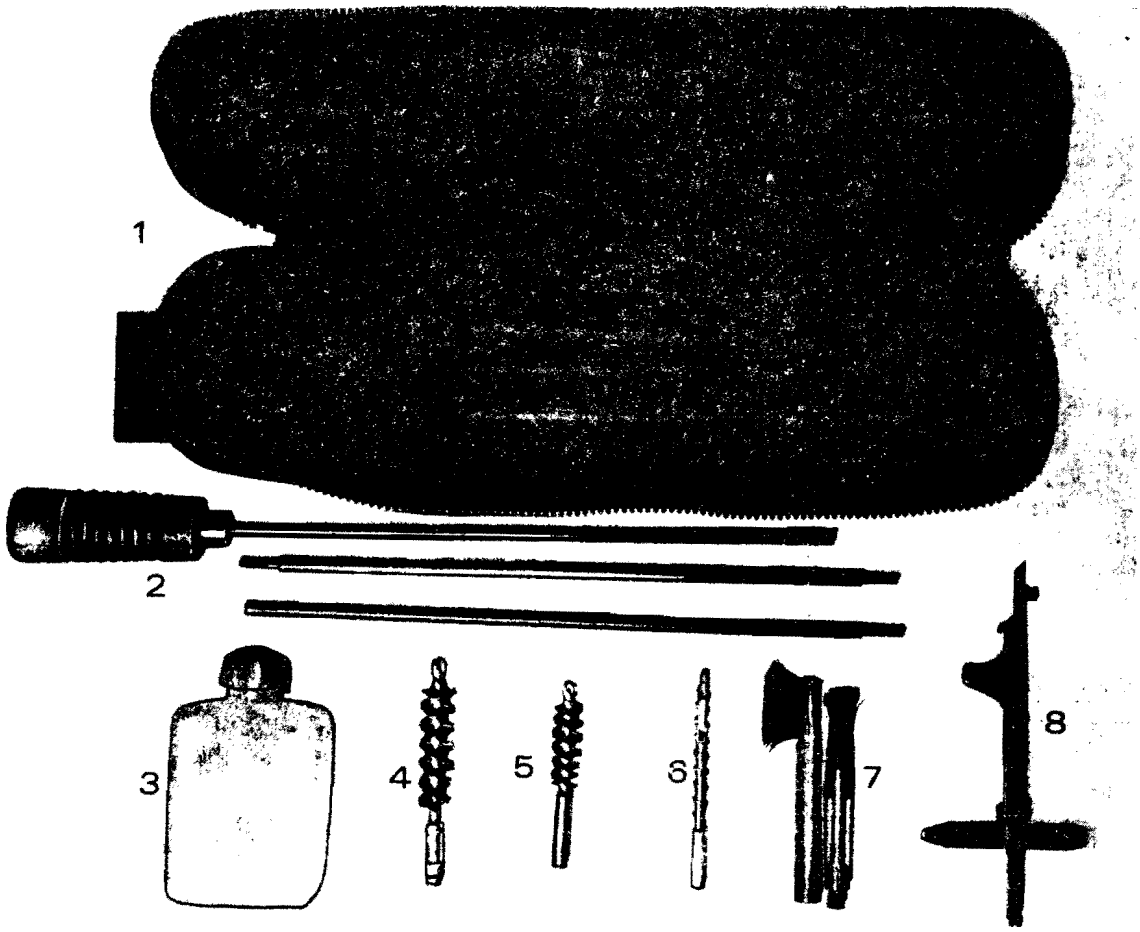
NOTE: In stripping the rifle, you WILL NOT strip the rifle any further than what you have been taught.

CARE AND CLEANING

GENERAL

1. The efficiency of the rifle depends on two factors: the care given to the rifle and the skill of the firer.

a. The Cleaning Kit



1. CANVAS HOLDALL
2. CLEANING ROD
3. PLASTIC OIL BOTTLE
4. GAS CHAMBER BRUSH
5. BORE BRUSH
6. SLOTTED BRASS JAG
7. CLEANING BRUSHES
8. COMBINATION TOOL

Fig. 3

In order to keep the rifle in serviceable condition, it will be cleaned as follows:

Daily,
Before Firing,
After Firing.

b. Daily Cleaning

(1) Strip the rifle as previously taught,
(2) Open the butt trap and remove the pull-through and oil bottle,
(3) Unroll the pull-through, check if serviceable, run through fingers, take out wrinkles and place a cleaning swab in the correct loop provided,
(4) Pull the swab through, repeating as necessary and changing to clean patches when required,
(5) Clean the chamber (examine barrel and chamber),
(6) Pull a slightly oiled cleaning swab through barrel,
(7) Slightly oil chamber,
(8) Using two cleaning swabs on jag clean the gas cylinder (apply light film of oil),
(9) Clean the outside of magazine and the magazine platform with slightly oiled rag,
(10) Remove all dirt from the bayonet and scabbard and wipe the blade with a light film of oil,
(11) Wipe dirt and dust from all parts of rifle and apply light film of oil, and
(12) Assemble the rifle, testing after assembly.

c. Cleaning Before Firing. Before firing, clean the rifle as for daily cleaning and then remove all traces of oil from the following parts:

(1) bore,
(2) face of the breech block,
(3) gas block,
(4) gas cylinder, and
(5) gas piston.

d. Cleaning After Firing. Strip the rifle as for daily cleaning. In addition, strip the gas regulator as follows:

(1) Remove the screw situated on the right side of forestock,
(2) Remove the right and left handguards by sliding them forward,
(3) Remove the gas retaining spring on the regulator by prying it up and to the rear, and
(4) Press down on the gas detent spring along side the regulator sleeve to the rear,
(5) Clean the gas port, piston sleeve, and the interior of the regulator sleeve with the combination tool,
(6) Oil the gas affected parts thoroughly (gas plug, gas cylinder, piston, exhaust port,the face of the breech block, breech block carrier) and set them aside for later cleaning,

(7) Pull a dry cleaning swab through the barrel and repeat as necessary, changing to a clean swab when required,
(8) Examine the barrel. The bronze rod brush may be used for further cleaning, if necessary, but only under the supervision of the instructor.

Clean the chamber as for daily cleaning.

NOTE: The stripping and assembling of the gas regulator should only be done when deemed necessary, eg: wet weather and after extensive firing.

(1) Oil the barrel and chamber,
(2) Clean the gas affected parts with a swab (the carbon should have been softened by the pil used earlier). If necessary, the bronze wire brush may be used in the gas cylinder under supervision of the instructor. If the gas escape holes require cleaning, use gas port reamer on the combination tool,
(3) Leave all parts well oiled,
(4) Strip, clean and check magazines,
(5) Thoroughly clean and oil all other metal parts,
(6) Assemble the rifle and test fire functioning,
(7) Apply a light film of oil to the woodwork, rubbing it well in.

NOTE: The barrel and the gas cylinder must be cleaned carefully for two or three days after firing. Under no circumstances, will the rifle be cleaned after firing with water or abrasives. Issued oil serves the purpose of thoroughly cleaning the barrel and water will only cause damage to the metal and woodwork.

e. Care of the Rifle

(1) Never prop the rifle against a wall, tree, etc. When it cannot be properly stowed in a vehicle or a safe place, it should be laid on a clean surface in a location where it will not be run over by a vehicle or stepped on,

(2) Handle the rifle with due care at all times. It should not be dropped or otherwise mishandled,

(3) As far as possible, keep the rifle out of mud and water. If the rifle does become muddy, it should be cleaned at the first opportunity,

(4) Fill the magazines carefully. When using the magazine charger, press the rounds into the magazine with care. Do not ram the magazine against objects,

(5) The rifle should be carried at the "shoulder", at the "trail" or slung as required or detailed,

(6) If the rifle is to be stored separately from the breech block and carrier, its hammer will be released under control in order to take the tension off the hammer spring. (For long term storage only).

f. Abnormal Weather Conditons. Under cold, hot or dusty weather conditions, the rifle is cleaned as above except that after cleaning, all parts of the rifle must be carefully dried and a slight amount of the appropriate oil applied to the bearing surfaces of the breech block and the breech block carrier. When firing under cold conditions, the action should be manually operated backwards and forward several times before loading the rifle.

MECHANISM

1. Stoppages may occur when the rifle is fired. In order to quickly and correctly remedy the stoppages, the recruit must understand the mechanism.

a. The Backward Action

(1) When the trigger is pressed, the hammer strikes the firing pin and a round is fired. Some of the gases following the bullet up the barrel go through the gas vent in the barrel into the gas plug, then into the gas cylinder, striking the piston head and driving it backward.

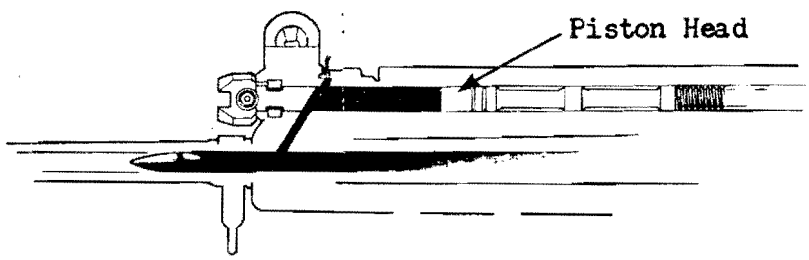


Fig. 4 Travel of gases

(2) The piston is in its backward movement, strikes the breech block carrier, driving it to the rear. This action compresses the return spring (see Fig. 5) by means of the rod on the breech block carrier working on the return spring plunger. Simultaneously, the piston spring is compressed.

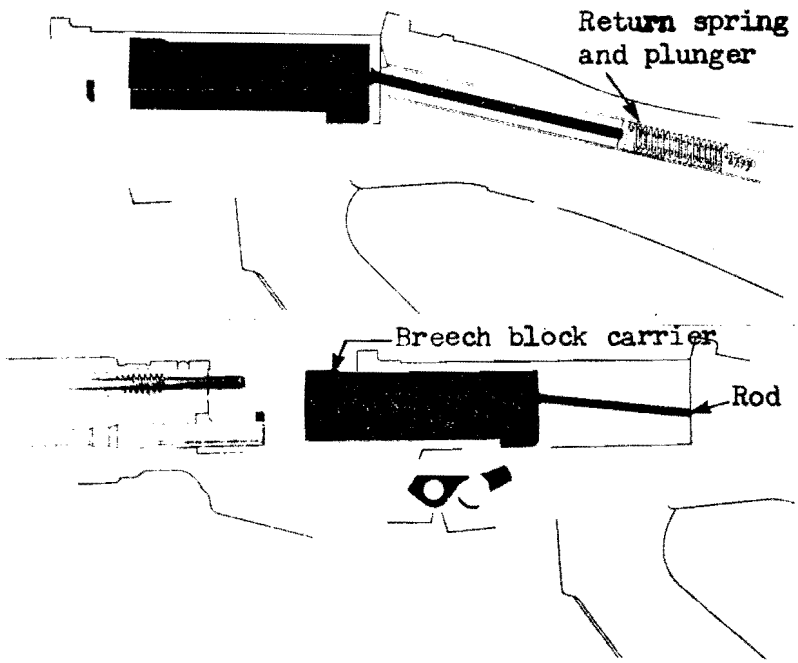


Fig. 5 Compression of Return Spring

2. As the breech block carrier is driven to the rear, it lifts the breech block up out of the locked position and carries it backward.

3. As the breech block and carrier go to the rear, they press the hammer down which is now locked.

4. During this movement, the extractor withdraws the spent casing from the chamber. When the casing strikes the ejector, it is thrown clear of the rifle. (Fig. 6)

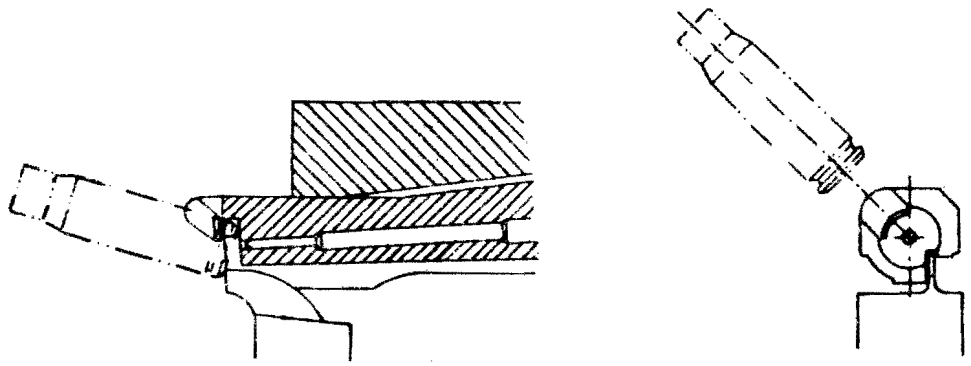


Fig. 6 Ejection

5. After the piston has carried the breech block carrier to the rear, the piston spring, which has been compressed, asserts itself and returns the piston to the forward position. When the last round in the magazine is fired, the breech and breech block carrier in the backward action move behind the "holding-open" device. The pressure of the magazine spring on the magazine platform causes the projection on the platform to raise the "holding-open" device in front of the breech block, preventing the action from going forward.

6. Forward Action

a. The compressed return spring presses against the return spring rod and drives the breech block carrier and the breech block forward;

b. During travel, the lower part of the face of the breech block comes in contact with the base of the top round in the magazine, thus feeding the round into the chamber;

c. The forward movement of the breech block is stopped when the cartridge is seated in the chamber. The breech block carrier continues to move forward and, as it does so, pushed the breech block down into the locked position.

d. As the breech block is locked in position, the extractor grasps the rim of the cartridge;

e. The breech block carrier continues forward until it comes against the body where it is held by the pressure of the return spring. This action causes the rear of the firing pin to protrude through the rear face of the breech block carrier where it is in position to be struck by the hammer;

f. On its final movement forward, the breech block carrier while locking the breech block down, strikes the arm of the safety sear which is in contact with the hammer and unlocks it so that the weapon will now fire. This is a safety device to ensure that the action will not fire until the breech is fully closed.

7. The Gas Plug. The gas plug is fixed to the end of the gas cylinder. It can be placed in two positions:

a. When the slot in the gas plug is uppermost, the gas is allowed to pass from the barrel into the gas cylinder through the gas vent;

b. When the plug is rotated 180 degrees, the slot appears at the bottom and the gas is prevented from passing into the gas cylinder. The rifle then ceases to be self-loading and must be operated manually by means of the cocking handle. This position is used when the grenade launcher is employed and all the gases are needed to project the grenade. Rotation of the gas plug to this position must be done under control.

LOADING AND UNLOADING

1. Loading. On the command "LOAD", the firer will undertake the following procedure:

a. Adopt the load position (Fig. 1);

b. Ensure that the change lever is at "S";

c. Take the magazine from the pocket and inspect it to make certain that it is clean, undamaged, and properly loaded;

d. Cant the rifle to the right, insert the forward end of the magazine into the magazine housing and rotate it to the rear until it clicks home. Ensure that it is fully home by giving it a sharp tug;

e. Point the rifle towards the target area or other safe area and cock it by drawing the cocking handle fully to the rear and releasing it. This will allow the action to go forward under the pressure of the return spring. Do not "ride" the cocking handle forward with the hand as this may prevent the breech block and carrier from going fully forward. Fold the cocking handle flush with the body;

f. Fasten the pocket; and

g. Return the left hand to the forestock.

2. Unloading. On the command "UNLOAD", the firer shall undertake the following procedure:

a. Hold the rifle parallel to the ground and point it toward the target;

b. Cant the rifle to the right,depress the magazine catch with the left thumb and withdraw the magazine. Replace the magazine in the pocket;

c. Cock the rifle, place change lever on "R";

d. Return left hand to forestock, bring rifle to the shoulder, and press the trigger. Re-cock the rifle and press the trigger;

e. Place the change lever on "S"; and

f. Return to the load position. Put the sight down. Fasten the pocket and return the left hand to the forestock.

3. Change Magazines. When the last round in the magazine has been fired, the breech block will be held ot the rear by the holding-open device. When this occurs, the firer shall undertake the following procedure:

a. Remove and examine the magazine;

b. Insert a full magazine. Depress the holding-open device with the left thumb and allow the action to go forward. This movement places another round in the chamber;

c. If more rounds are to be fired, continue firing. If no more rounds are to be fired, place the change lever at "S".

4. Magazine Filling. Ammunition must be inspected for damage and cleanliness before the magazine is filled. If dirty, it must be cleaned and particular attention should be paid to the rim of the round.

a. Filling With Loose Rounds

(1) Hold the magazine in the left hand and seat it on the knee or thigh with the magazine platform shoulder away from the body,

(2) Hold a few rounds in the left hand with the base of the rounds facing away from you,

(3) With the right hand, insert the rounds, one at a time, between the lips of the magazine. Press each round downward and forward with the thumb. Ensure that the base of each round is up against the rear wall of the magazine. Count the rounds and continue filling until 20 rounds have been inserted. (See Fig. 8)

Fig. 8 Filling with Loose Rds

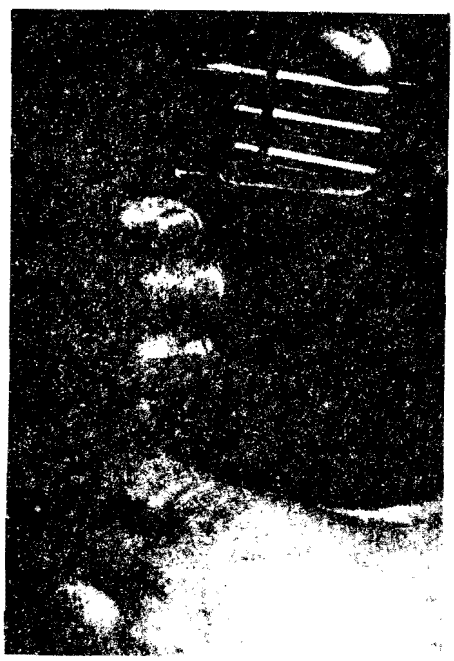


Fig. 9 Filling with Magazine Charger

b. Filling with Magazine Charger

(1) Ensure that the magazine charger is clean,

(2) Place the magazine charger on the magazine with the wider guide lips to the rear,

(3) Place a full clip in the charger and ensure that it is fully home, and

(4) Holding the magazine firmly, place the thumb immediately in front of the clip and with a continuous pressure force the five rounds into the magazine. Remove the empty clip and repeat three more times.

c. Empty the Magazine. Using the nose of a round behind the base of each round in the magazine, push them out one at a time. Care must be taken NOT to strike the cap on the base of the round. Ensure that the rounds fall on a clean surface.

d. Emergency Loading. There will be occasions when the rifle will be loaded with the magazine already on. This will occur when filled magazines are not available, and time does not allow them to be filled. The method for emergency loading is as follows:

(1) Hold the rifle with the left hand at the forestock and the butt into the waist or pressed against the upper thigh,

(2) With the right hand,place a filled clip in the clip guide on the body cover and ensure that it is fully home. Load the rifle in a manner similar to that used when filling a magazine using the magazine charger. If necessary, place the fingers of the right hand under the carrying handle for greater leverage,

(3) Return to the "Load" position. Depress the holding-open device. Place the change lever on "R" and continue firing.

5. Sight-Setting

a. Flip the sight up into its upright position;

b. Rotate the disc until the first number of the range at which you are going to fire appears in the lower window. The disc has a series of detents and a positioning spring to indicate that the aperature is properly positioned;

c. The range is increased from 200-600 yards by rotating the disc clockwise, and decreased by rotating it in an anti-clockwise direction; and

d. The sight will normally be set at 200 before being pressed down, as this is the battle sight-setting.

I. HOLD THE RIFLE IN THE PRONE POSITION

ATTITUDE. The first point that must be made clear is that marksmen are made, not born! Any serviceman can be taught to shoot accurately if he is willing to learn and is provided with competent instruction and enthusiastic coaching. Some men will learn more slowly than others, but if properly motivated anyone can learn to shoot accurately.

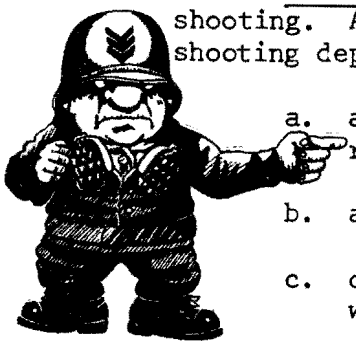
FUNDAMENTALS.

The serviceman must not be permitted to fire the rifle on the range until he has mastered the fundamentals of Position, Holding, Aiming, Breathing and Trigger control.

1. General

a. Left-Handed Firers. If a serviceman fires from the LEFT shoulder, the position should be identical to that given in this article, except that the words "RIGHT" and "LEFT" should be interchanged. All actions of cocking, etc will still be done with the LEFT hand, and the RIGHT hand should remain on the forestock.

2. Essentials of Good Shooting. There are three essentials of good shooting. Although they are explained and taught separately, accurate shooting depends on the co-ordination of:



a. a comfortable, natural position and a hold so firm that the rifle will have a rock-like steadiness;

b. a correct aim; and

c. correct trigger manipulation so that the aim is not disturbed when the rifle is fired.

3. Holding

a. Support the rifle at the forestock with the LEFT hand. The left elbow should be directly under the rifle for maximum support. If the LEFT forearm can be rested against the magazine this will provide added steadiness;

b. Hold the pistol grip with the RIGHT hand, forefinger resting lightly on the trigger. Pull the rifle into the shoulder;

c. Rest the RIGHT cheek against the side of the butt, exerting pressure sidewards and downwards. The cheek bone must be behind the hump formed by the comb on the butt so that the comb will not strike the cheek when the rifle is fired;

d. Ensure the head is held well back so that the backsight is at least 5-8 cm (2-3 ins) away from the eye. The distance from the eye to the rear sight is called "eye relief".

(1) The rifle must be held firmly so that it does not move when the trigger is pressed. It must, however, not be held too tightly or vibrations from straining muscles will be transferred to the rifle,

(2) In order, firing positions and aiming may vary with the situation, but the correct hold will not vary except when firing from the waist,

(3) It is essential that the firer always hold the rifle the same way. Variations in the hold may cause the MPI to shift. For example, if the firer wraps the fingers of the LEFT hand firmly around the forestock during zeroing and later holds the forestock loosely, his main point of impact will go high,

(4) Once the rifle is pointed in the right direction (aimed) it must be held perfectly still until the bullet has left the muzzle. This is the purpose of correct holding.

STAGE II

1. The Left Elbow. When teaching holding in the prone position, the initial stress is placed on the position of the Left elbow and forearm. It should be explained that the position will be much steadier and much less tiring if the rifle is supported by the bones of the LEFT arm rather than the muscles. For this reason, he must get his Left elbow as near as possible to a point directly under the rifle, not more than 5 cm (2 in) away. If the Left forearm is rested against the magazine when the rifle is vertical the elbow will be in good position. The half-roll and flat-hand techniques will assist in proper positioning of the elbow:

a. Half-Roll. To achieve the half-roll, the serviceman first adopts the prone position. Keeping the Right elbow stationary, he makes a half-roll to the Right so that the rifle points upwards at an angle. While the Left shoulder is high, he pulls the Left elbow well in towards the centre of the body and then rolls back into the prone position. This helps to loosen the muscles and joints. The man may feel some tightness and discomfort in the left arm initially, but with practice the muscles will loosen and the position will become comfortable (Fig. 4-1);

b. Flat Hand. The serviceman achieves the flat hand technique by adopting the prone position, placing the Right hand on the ground, and raising the Left elbow. He then holds the Left hand open flat and moves the Left elbow in until the hand is level. It will be of assistance if a ruler or similar article is laid across the hand. When the hand is level, the elbow is lowered to the ground.

2. The Left Hand. There is no point in having the Left forearm form a solid support unless the rifle rests directly above the support. The axis of the rifle should bisect the angle formed by lines running from the centre of the wrist to the thumb and to the third and fourth fingers. In this position, the rifle will rest comfortably in the hollow of the hand and directly above the solid support of bone. The steadiness of the man's position can be tested by having him open his fingers so that the rifle is resting on his open hand. If the rifle remains steady, and in its proper position, then the Left elbow, arm and hand are doing their job. The thumb and fingers are wrapped around the forestock so the maximum possible inner surface of the hand is against the forestock. Figure 4-3 shows the correct method of holding with the Left hand. The job of the Left hand merely is to hold the rifle and draw it back into the shoulder.

3. The Shoulder and Right Arm. The shoulders should be level or very nearly so. If the Right shoulder is high, the Right elbow should be moved out to the Right until the shoulders are level.

4. The vertical Triangle. The Left and Right forearms and the floor should form a triangle with the three sides nearly equal in length (Figure 4-4). If the elbows are too close together, usually resulting from the Right elbow being too close, the triangle will be high and unstable (Figure 4-5A). If the elbows are too far apart, usually resulting from the Left elbow being out too far, the triangle will be low and weak (Figure 4-5B). A good vertical triangle is very strong (Figure 4-5C). The vertical triangle can be tested by pressing down firmly on the rifle between the man's two hands and then attempting to move the rifle Right and Left. If the position is good, the rifle will not move without considerable force being applied.

STAGE III

1. Vibration and Tensions. The common tendency among beginners is to grip the rifle too tightly in an effort to hold it still. As the muscles tighten, they begin to vibrate, the vibrations are transferred to the rifle, and the muzzle vibrates as well. The instructor should advise the student to relax, who will then see that the movement of the muscle is decreased.

2. Head and Chin. The correct placement of the head is achieved by relaxing the neck muscles and letting the head fall forward onto the butt until the eye is in line with the aperture of the rear sight. Side pressure is then applied to stop the chin from falling further and to serve as a counter brace against the support of the Right arm. The cheek should rest to the rear of the comb on the butt with the eye about 5-8 cm (2-3 ins) from the rear sight.

3. The Shoulder

   a. One of the instructor's most important jobs in training marksmen is assisting them to overcome the fear of recoil or "kick". The best way to do this is to ensure that the student's position and holding are so good that he does not suffer the effects of recoil the first time he fires the rifle. The secret of preventing a sore shoulder is to hold the rifle firmly into the natural "recoil pad" which is formed by the hollow of the shoulder;

b. The butt of the rifle must rest against the muscle pad located below the collar bone. The butt must NOT rest against the collar bone. The instructor must point out the location of the collar bone and the muscle pad;

c. Holding the rifle properly reduces the sharp blow of recoil to the effect of a shove. This is achieved by the use of backward pressure. The hands must pull the rifle back into the shoulder with sufficient force to compress the muscle pad slightly.

4. Checking Holding

a. To check backward pressure, have the serviceman adopt the prone position. Place an upright lath or similar object approximately 1.5 cm (½ in) in front of the muzzle. Have the serviceman release the pistol grip with the Right hand. The rifle should move forward slightly. Next, have him open his Left hand, and the rifle should move forward as the muscle pad expands. Ensure that the serviceman does not nudge the rifle forward. This method can also be used as a demonstration to show how much backward pressure is required;

b. The solidness of the man's position can be tested. In the following tests the body and rifle should move together as a unit:

(1) Grasp the man's feet and pull him backwards. The position of his rifle, arms, and head should not change,

(2) Grasp the barrel of the rifle and pull steadily forward. The rifle should not move before the man's body starts to slide; they should move as one,

(3) Grasp the barrel and push the rifle back towards the man with a firm steady push. The man should be very difficult to move.

5. The Horizontal Triangle

a. The horizontal triangle is a further method of testing the correctness of the position. With the serviceman in the prone position, the instructor stands over him and visualizes the triangle formed by the imaginary lines connecting the two elbows and the centre of the body. The centre of the body is that point directly under the spine where the chest meets the floor. If the position is correct, the sides of the triangle will be equal, or nearly equal, in length;

b. More information can be gathered by marking the triangle on the floor with chalk. Chalk marks are placed just inside the elbows where the bone touches the floor, in the centre of the body where it meets the floor, directly under the muzzle, and directly under the butt. These marks can be labelled as shown in Figure 4-5. Have the serviceman stand up and join the chalk marks with straight lines (Figure 4-6). The position is correct if the sides of the triangle are equal or nearly equal in length.

The butt should be halfway between the Right elbow and the centre of the body, and the Left elbow should be no more than 5 cm (2 in) from the axis of the rifle.

c. If the horizontal triangle is not correct, corrections in position should be made by moving the elbows.

CONCLUSION

6. To shoot accurately, the firer's position must be comfortable. He may not, however, find the correct position comfortable at first. With practice the muscles and joints will loosen up and the correct position will become comfortable. This is particularly true on the Left shoulder and arm. Encourage the serviceman to practice the correct position.

AIMING

1. Accuracy of aim depends on a certain intimate relationship that never varies at a given range, between the backsight, the foresight and the point of aim. An explanation of the terms used in firing follows:

a. Aperture. It will be noticed, when looking through the aperture in the rear sight, that the area near the edge is blurred and that there is a small area in the centre through which objects can be seen clearly;

b. Focusing. Focusing can best be explained by using the following simple example. With the thumb at arm's length, point the arm at some distant object. Allow the eye to pick out details, first on the distant object, then on the thumb. If the thumb is in focus the far object will be slightly blurred as the eye cannot focus on two different ranges at the same time. For accurate shooting the eye must be focused on the foresight at the time the rifle is fired. The firer will focus on the target until just before the round is fired and then switch his focus to the foresignt;

c. The Aim Picture. The correct aim picture is when at the grouping target the point of aim is the bottom centre of the aiming mark. See Fig. 10. When aiming at a fig. target the normal point of aim is in the centre of the target. See Fig. 11.

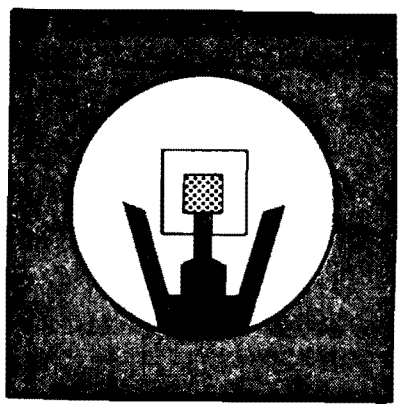


Fig. 10 "Aim Picture" of a grouping target

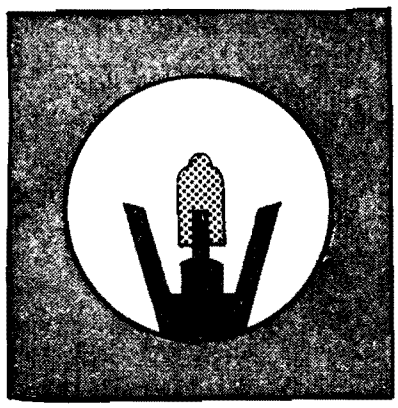


Fig. 11 "Aim Picture" of a Figure Target

d. The Rules of Aiming

(1) Close the disengaged eye,

(2) Look through the centre of the aperture at the target and select the point of aim,

(3) Keeping the sights upright, align the top of the fore-sight on this point of aim, and

(4) Make sure that the point of aim is in the centre of the aperture.

FIRE THE FN(C1)

BREATHING

1. When the rifle is correctly held and aimed in the prone position, it will be noticed that the tip of the foresight blade moves up and down on the target as the lungs are inflated and deflated. With the lungs fully inflated, the foresight will be at its lowest point; as the lungs are deflated fully, the foresight will reach its highest point. The firing position should be adjusted slightly so that the aim picture is correct, with the top of the foresight blade exactly on the point of aim, when the lungs are about three quarters deflated. Once the correct position and sight picture are reached, the firer should take a deep breath, which will drop the foresight below the point of aim, then exhale with an audible sigh until the top of the foresight rises to the point of aim. At this point the firer should stop breathing momentarily, focus the eye on the foresight and fire the shot.

2. Correct breathing is a great aid to relaxation and therefore considerably reduces the vibration of the muzzle. The movement of the muzzle described in Art. 221-5a should be explained to the serviceman and he should try it himself to see. To persuade him of the value of the audible sigh and firing with the lungs two-thirds to three-quarters deflated, carry out the following test:

a. Take a deep breath and hold it while aiming the rifle at any convenient aiming point, holding your breath for 30 seconds;

b. Relax for a few moments and then deflate your lungs fully and try to hold an aim for 30 seconds. Few, if any, will be able to do so;

c. Relax for a few moments and then take an aim. Take three normal breaths, exhale with an audible sigh until the lungs are two-thirds to three-quarters deflated, then another normal sigh with no effort made to empty the lungs, and hold the aim for 30 seconds;

d. You will find that the rifle is much steadier and that you are more relaxed after the sigh than with the lungs full or empty.

TRIGGER CONTROL

3. Trigger control is the manipulation of the trigger so the firer neither disturbs nor imparts any motion to the rifle's sight. Trigger control is the most important skill in good shooting. No matter how expert one may be in the preliminary phase of good marksmanship, all this effort can easily be lost if faulty operation of the trigger causes aiming precision to be disturbed even the slightest amount.

4. Often the difference between good and poor shooting depends on the ability to press the trigger correctly. Misses and poor shooting results from jerking the trigger, flinching, or unnecessary body movement. If the trigger is pressed correctly with a firm, steady squeeze, in a sense the shot will come as a surprise to the firer. If the firer does not know the exact moment when the discharge will take place he is unlikely to flinch.

5. The correct method of operating the trigger is as follows:

a. Grasp the pistol grip firmly, forefinger on the trigger, and the trigger midway on the first joint. Squeeze the trigger straight to the rear to avoid side pressure pulling the rifle off its aim. Continue pressing straight back to the rear. Only the trigger finger should move while the rest of the hand and body remain firmly in position;

b. Release the trigger completely before firing another shot;

c. If the firer remains in the aim too long the muscles will tire and become too tense. This will result in involuntary shaking and twitching. If the firer finds that his aim is becoming strained, he should release the trigger, relax for a moment and start again.

6. Correct Trigger Squeeze

a. The only way to release the hammer of the rifle properly is with a firm, controlled, slow, steady, deliberate and cumulative squeeze of the forefinger on the trigger. All other methods are wrong;

b. The finger by itself cannot be held steady unless it has a counter pressure. This counter pressure is provided by the base of the thumb bearing on the rear of the pistol grip. Only the forefinger actually moves but the forward pressure on the pistol grip, countering rearward pressure of the forefinger, prevents movement of the rifle.

7. Surprise. The release of the hammer and the firing of the round should come as a surprise to the firer. The firer must be cautioned not to try to anticipate the firing of the round. The problem occurs when the muzzle of the rifle is not steady because of poor holding or breathing and the firer attempts to pull the trigger as the foresight passes the point of aim. Anticipation of the firing of the round frequently leads to flinching.

8. Flinching. The bane of marksmanship is fear of recoil which causes the firer to close his eyes, grit his teeth, and tense his muscles just before he jerks the trigger. This reflex action, known as flinching, is one of the chief causes of poor shooting and is extremely difficult to correct once it develops. As with any other fear, it is of no use to tell the firer not to be afraid. Instead, he must be persuaded by logic and demonstration of the mechanics that produce and minimize recoil. This natural fear of recoil must be overcome before the man goes onto the range.

9. Position of the Finger. The trigger should be placed midway on the first joint of the finger. The finger should rest on the centre of the trigger and should press the trigger straight back (Fig. 4-10).

10. Control. Very often the foresight will begin to wander from the aiming point while the trigger is being pressed. Although this may be the result of a deterioration of the body position, which leads to excessive vertical and hotizontal groups, it is more likely to be the result of improper, jerky, unsteady trigger squeeze. When this occurs, the beginner should release the trigger, relax for a moment,and start again. Once the firer has learned to control the trigger properly there is no need to release the trigger, this might be a fatal waste of time on the battlefield. Instead he should merely pause, moving the trigger neither back nor forward, until the foresight steadies down.

11. Practice. Correct trigger control can only be learned through constant practice. You should practice squeezing the trigger, with the rifle cocked, until you have a smooth steady pressure and the release of the hammer comes as a surprise. Another method of practising is in the prone position while aiming at an aiming mark or target on the wall. You should practice until you can release the hammer five consecutive times without the foresight moving the slightest amount. This exercise should be practised for a few moments several times a day.

FOLLOWTHROUGH

12. Followthrough consists of maintaining the aim during the trigger squeeze and until after the bullet has left the barrel. Just as the golfer practices followthrough to ensure that his drive is completed properly and not pulled short, the marksman follows-through to ensure that he does not relax prematurely and move the rifle before the bullet has left the barrel. Once the sear has disengaged the lower hammer bent, the following sequence of events occurs: the hammer must rotate forward and strike the firing pin; the firing pin must move forward and strike the cap; the cap must detonate and ignite the propellant in the cartridge; and the bullet must travel the length of the barrel. The rifle must be held as steady during these mechanical actions as it is during trigger squeeze.

13. The aim and hold must be maintained during and after the pressing of the trigger. Followthrough consists of keeping the tip of the foresight on the point of aim during the trigger squeeze and until after the shot has been fired. A firm steady hold and smooth, steady trigger operation are essential to good 'followthrough'. If the rifle is held properly, the tip of the foresight will return to the point of aim after the rifle is fired. If the tip of the foresight does not return to the point of aim, the firer must re-align his rifle before refiring.

14. Checking Followthrough. The following exercise is an excellent method of checking followthrough and introducing calling of shots. The Master-Pupil method is used.

CAUTION: Before this practice is done safety precautions will be carried out. Both master and pupil will examine the rifle.

a. Master. The master lies facing the firer and holds up a sheet of paper supported by two sticks. The paper is marked as shown in Figure 4-11;

b. Pupil. The pupil adopts the prone position facing the master with the muzzle nearly touching the paper. He aims at the centre of the cross (Figure 4-11);

c. Procedure. The pupil fires 'dry' at the sheet of paper using the centre of the cross as his aiming mark. As the master watches the shadow of the muzzle on the paper, the light should be at the pupil's back. Any movement of the muzzle when the hammer is released will be seen by the master. It should also be seen by the pupil. The pupil will declare the direction in which the muzzle moved, if any. The master will confirm or reject the call. The master will keep score on the scoresheet (Figure 4-12).

AIMING DISC PRACTICE

CAUTION: Before this training is carried out safety precautions will be done. The instructor and student will BOTH examine the rifle.

15. Aiming Practice. Aiming, including the rule of aim, and breathing can be checked by using the Master-Pupil method with the aiming disc. The method is as follows:

a. The master lies facing the student and looks through the hole in the aiming disc, which should be only a few centimeters from the muzzle of the student's rifle;

b. The student adopts the prone position and aims at the eye disc in the normal manner. He will carry out the rule of aim, proper breathing, and squeeze the trigger;

c. The master, by looking through the pinhole in the aiming disc, can see if the student is carrying out the rule of aim correctly and whether he has the foresight, aperture, and point of aim properly lined up at the time the hammer is released. Any tendency toward flinching can be detected.

16. Uniformity of Sight Picture. It is extremely important that the firer have the same aim picture everytime he fires. He must develop this uniformity of aim picture before his rifle can be zeroed. To have a uniform sight picture the 'eye relief' or distance from the aiming eye to the aperture, must be exactly the same for every shot.

SUMMARY

17. In summary, the procedure for firing a shot is as follows:

a. When a target is anticipated, flip the sights up and watch the front;

b. When the target is identified adjust the position if necessary and set the sights at the appropriate range;

c. Check the body position and eye relief and place the forefinger on the trigger;

d. Close the disengaged eye;

e. Look through the centre of the aperture at the target and select a point of aim;

f. Keeping the sights upright, focus the eye on the tip of the foresight. Exhale until the lungs are one quarter filled and align the tip of the foresight on the point of aim;

g. Focus the eye on the point of aim and ensure that it is in the centre of the aperture;

h. Inhale (the tip of the foresight should drop). Exhale until the tip of the foresight comes up to the point of aim. Stop breathing momentarily;

j. During the pause in breathing, focus the eye on the tip of the foresight blade and press the trigger straight back with a firm, steady pressure;

k. Keep the eye open and maintain the aim until after the recoil is felt;

m. Release the trigger completely;

n. Declare where the tip of the foresight was on the target, at the instant the round was fired.

FIRING POSITIONS

1. a. Prone Position. The prone position is used when firing at distant targets or when there is little or no cover, or both. It is the steadiest position and has the lowest profile. If a support such as a sandbag is used, it should support the firer's left forearm, not the rifle.

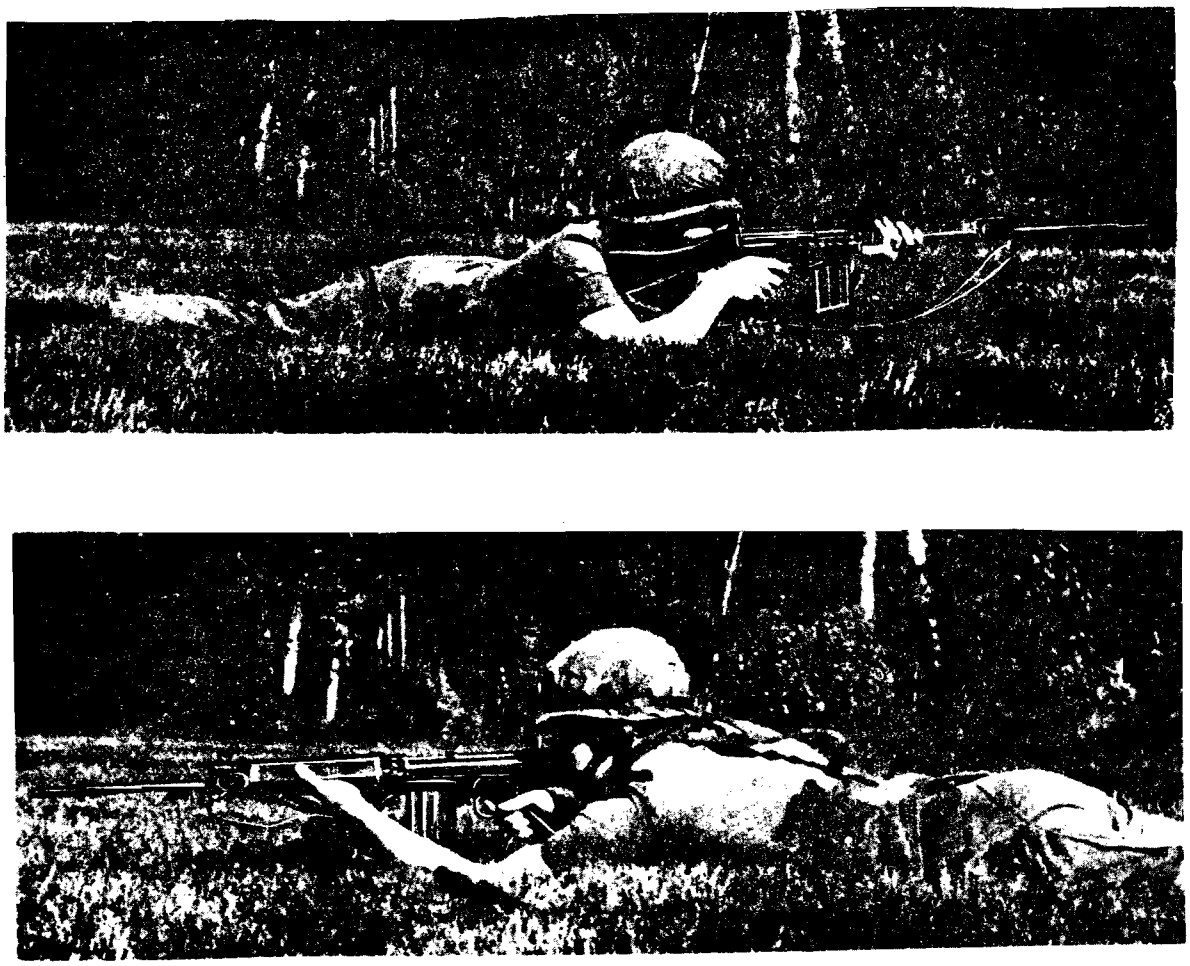


Fig. 12 Prone position Unsupported (top)
Supported (bottom)

b. Kneeling Position. The kneeling position is used when cover is about waist high. It is an easy position to adopt quickly and is suited for the engagement of fleeting targets which are too far away for use of the less accurate standing position. If support is available, it will be used to support the left arm, not the rifle.

Supported

Unsupported

Fig. 13 The Kneeling Position

c. Sitting Position. The sitting position is used for firing from fairly low cover and is especially suited for firing from the forward slope of hills.

Fig. 14 The Sitting Position

d. Standing Position. This position is used only if time does not permit adopting another position (usually at ranges under 100 yd) or when firing over high cover.

Fig. 15 Standing Position

IMMEDIATE ACTION AND STOPPAGES

1. a. Immediate Action. If the rifle stops firing or fails to fire, the firer will raise his head immediately and look at the position of the breech block carrier. The following actions will be carried out when the breech block carrier is to the rear or forward:

(1) To the Rear. Remove the magazine, put on a full magazine, depress the holding-open device, and continue firing,

(2) Forward or Partially Forward. Pull the cocking handle fully to the rear, release it, and continue firing.

This drill will remedy most stoppages. It is not complete, however, until the rifle has been re-aimed and fired.

b. Insufficient Gas. If after carrying out the Immediate Action, the rifle fires one or two rounds and then stops again, the firer will adjust the gas regulator:

(1) Look and cock the action (as for IA),
(2) Bring the rifle to the "Load" position,
(3) Place change lever to "S",
(4) Adjust the gas regulator to two numbers lower, and
(5) Place change lever to "R" and go on firing.

c. Other Stoppages. If after carrying out the IA, the IA, the rifle does not fire, the firer will:

(1) Pull the cocking handle fully to the rear and engage the "holding-open" device,
(2) Remove the magazine, and
(3) Raise arm and receive assistance from NCO.

Other Stoppages are:

(1) Broken firing pin,
(2) Broken or weak extractor spring or broken extractor,
(3) Broken or weak return spring, or
(4) Trigger mechanism faults.

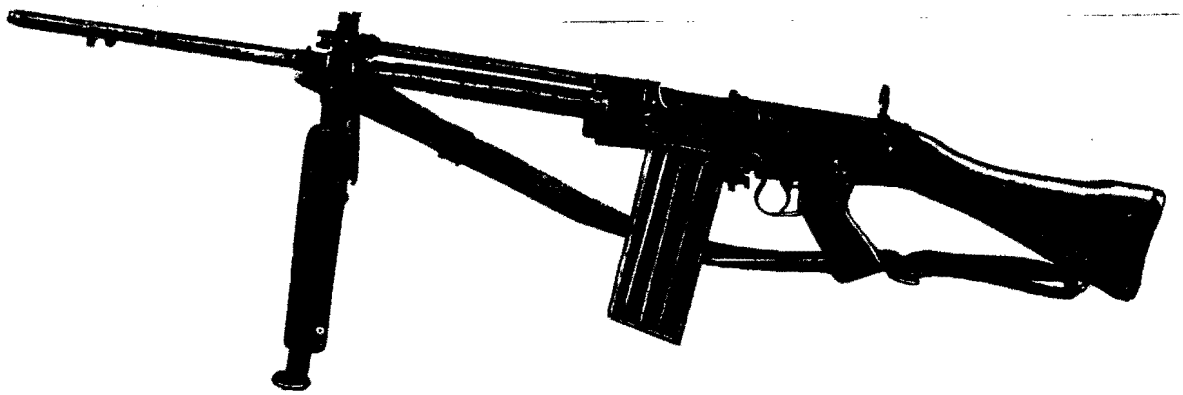
RIFLE FN C2 7.62 MM

AUTOMATIC RIFLE C2

1. The Automatic Rifle C2 is very similar to the Rifle C1 in mechanism and operation. This handout will show you additional characteristics of this weapon.

SAFETY PRECAUTIONS

2. The general safety rules and individual safety precautions are the same for the LAR and the rifle. Supervised safety precautions are carried out under the same circumstances as with the rifle C1; they may, however, be done in the prone position with the bipod extended.



LAR with bipod extended

CHARACTERISTICS

3. a. The C2 rifle is capable of firing either single rounds or bursts of several rounds;

b. The C2 rifle weighs approximately 15 pounds with a fully loaded magazine;

c. The magazine capacity is 30 rounds and is interchangeable with the C1 rifle;

d. The C2 rifle is fitted with a disc rear sight which is graduated from 200 to 1000 meters; and

e. A pressed metal bipod with a laminated wood covering is fitted to the C2 rifle. It is a folding type and when folded can be used as a forestock. The C2 rifle can then be fired in the same manner as the C1 rifle.

MECHANISM

4. The mechanism of the C2 rifle is exactly the same as for the C1 rifle except the mechanism of the C2 rifle allows it to fire automatically in addition to repetitiously.

a. With change lever at "R" the sear is in position to engage in the lower bent. This is what happens when the safety sear is tripped and the rifle will not fire until the trigger is pressed.

b. With the change lever at "A" the sear is not in a position to engage the lower bent as long as the trigger is pressed. Thus when the safety sear is struck, the hammer will rotate and fire the round. This will continue until the trigger is released or the rifle finally runs out of ammunition.

STRIP AND ASSEMBLE/CARE AND CLEANING

5. The strip and assemble and care and cleaning of the C2 rifle is the same as for the C1 except that the body of the C2 is set out supported by its bipod instead of laid down with the carrying handle up.

LOAD

1. On the command "LOAD":

   a. adopt the prone position, placing the body directly behind the rifle. Due to the slight recoil, this position allows the firer to control the rifle. To ensure a correct position, the body, not the rifle, is moved forward or backward;

   b. grasp the pistol grip with the right hand, take the magazine out of the pocket, inspect it, and insert it into the rifle. Ensure it is fully home;

   c. cock the action and release the cocking handle allowing it to go fully forward. Turn the cocking handle fluch with the body;

   d. ensure the change lever is on "S";

   e. grasp the small of the butt with the left ahnd, thumb down and back of the hand, uppermost.

UNLOAD

2. On the command "UNLOAD":

   a. unload as for the C1 rifle; remain in the prone position with the right hand on the pistol grip, left hand on the small of the butt, weapon canted to the right and lower the butt to the ground.

PREPARE FOR INSPECTION

3. On the command "PREPARE FOR INSPECTION":

   a. as for the C1 rifle except that the butt of the rifle is place up on the right shoulder, arms as close together as possible;

   b. on the command "CLEAR" lower the butt to the ground, release the holding open device, fire the action, stand up behind the weapon.

SIGHT SETTING

4. Sight setting for the C2 is the same as for the C1 except that it is graduated from 200 to 1000 meters.

HOLDING - AIMING - FIRING

HOLDING

1. When the bipod is folded and used as a forestock, the LAR is held in the same manner as the C1 rifle. When the bipod is extended the LAR is held as follows:

   a. the bipod is extended and the feet of the bipod dug slightly into the ground to provide stability;

   b. the right hand grasps the pistol grip in the same manner as when holding the rifle. The left hand grips the small of the butt with the thumb down and the back of the hand uppermost;

   c. if the firer has difficulty holding the LAR in the above manner, he may grasp the butt near the rear sling swival with the left hand, thunb up, and back of the hand facing down; and

   d. the butt is placed into the shoulder as with the C1 rifle and the firer inches back slightly to take up the slack in the bipod.

AIMING

2. Aiming is the same as with the C1 rifle.

FIRING

3. a. Breathing is as for the C1 rifle.

b. Trigger operation is as for the C1 rifle, except that;

(1) because of the added movement during automatic firing, the trigger operation must be an independent movement at the trigger finger. This will enable the pistol grip to be held firmly by the thumb and the remaining three fingers with the pressure exerted into the shoulder. Loosening of this hold will cause erratic firing and pronounced recoil effects.

(2) Bursts should be of two or three rounds with the ability to fire a series of bursts in rapid succession without loosing accuracy.

(3) Individual targets of man size proportions should always be engaged with "REPETITION" or single shot action. Multiple targets or fire to pin down the enemy positions should be "AUTOMATIC". As the spread of shot is normally horizontal and to the left for a right handed firer, this must be considered when engaging fire with automatic fire.

(4) The sequence for firing a shot is as for the C1 rifle.

IMMEDIATE ACTION & STOPPAGES

4. There are a number of things which may cause the rifle to stop firing. Whenever the rifle stops firing, the Immediate action will be carried out. The IA drill is not complete until the rifle has been reaimed and fired.

5. If the rifle stops firing or fails to fire, the firer will immediately raise his head and look at the position of the breech block carrier. If the breech block carrier is:

a. to the rear; (same as C1)

b. forward or partially forward; (same as C1)

c. insufficient gas;

The firer will carry out the following action:

(1) look at the position of the breech block carrier, cock the action;

(2) place the change lever to "S";

(3) lower the butt from the shoulder to the ground, cant the rifle to the right;

(4) move up the left hand side of the weapon, leaning on the left elbow, with the right hand adjust the gas regulator to two numbers lower;

(5) the firer will move back behind the weapon, weapon into the shoulder, change to "A" or "R" and continue firing.

NOTE: Both the barrel and the gas cylinder are extremely hot - avoid touching.

d. other stoppages; (same as C1)

e. broken firing pin; (same as C1)

f. broken or weak extraction spring, or broken extractor; (same as C1)

g. broken or weak return spring; (same as C1)

h. trigger mechanism faults; (same as C1).

SUB MACHINE GUN C1 9 MM

THE LOAD POSITION

The Load Position Fig. 1

1. The load position will always be adopted prior to loading (except in the load position), and during instruction and range practices as detailed. Details of the load position are:

   a. Hold the SMG in right hand grasping the pistol grip, extend the forefinger along the trigger guard;

   b. Place the butt just in front of the right hip, muzzle to the front and pointed upwards at an angle of 45 degrees;

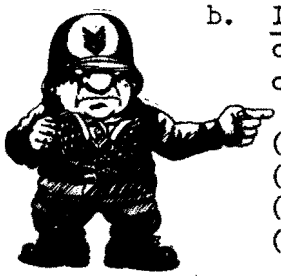
   c. Left hand remains at the side; and

   d. The feet placed slightly apart when in the standing position.

SAFETY PRECAUTIONS

2. a. Supervised Safety Precautions. On the command "Prepare for Inspection", you will carry out the following actions:

(1) Adopt the load position,
(2) Remove the magazine if fitted,
(3) Change lever to "R" - cock gun - change lever tc "S",
(4) Grasp magazine with left hand and place on top of magazine housing (weapon to be inspected by instructor),
(5) Declared "CLEAR" by NCO - pockets magazine, change lever to "A", grasp cocking handle with left hand allowing action to go forward under control - change lever to "S"; and return to load position.



b. Individual Safety Precautions. The following drill will be carried out if you handle the SMG without supervision, ie before cleaning:

(1) Adopt the load position (Fig. 1),
(2) Remove the magazine, if fitted,
(3) Set the change lever to "A",
(4) Cock the weapon, tilt the SMG to the left and inspect the chamber to ensure it is clear,
(5) Press the trigger and allow the breech block to go forward under control,
(6) Set the change lever to "S", and
(7) Inspect all magazines and dummy rounds.

ROLE AND CHARACTERISTICS

3. a. Role. The sub-machine gun is a lightweight, short range, automatic weapon that delivers semi-automatic and automatic fire. It is used by the infantry in an offensive role for such tasks as patrolling, house clearing, and woods clearing. It is also issued to members of crew-served weapons teams, drivers, and headquarters personnel for local defence purposes;

b. Characteristics

(1) The gun is operated by blow back action,
(2) The gun is designed to fire either single rounds or bursts,
(3) There is a change lever on the left side of the gun which has three positions:

(a) "S" for safe when the gun can neither be cocked nor fired,
(b) "R" for repetition when the gun will fire one round at each pressure on the trigger, and
(c) "A" for automatic when the gun will continue firing for as long as the trigger is pressed and there is ammunition in the magazine.

(4) The gun can be used with butt folded (19 inches long) or extended (27 inches long),
(5) With a full 30 round magazine and sling the gun weighs 8 lb,
(6) There are two types of magazines:

(a) a 10 round magazine for use in a confined space,and
(b) a 30 round magazine for general use,

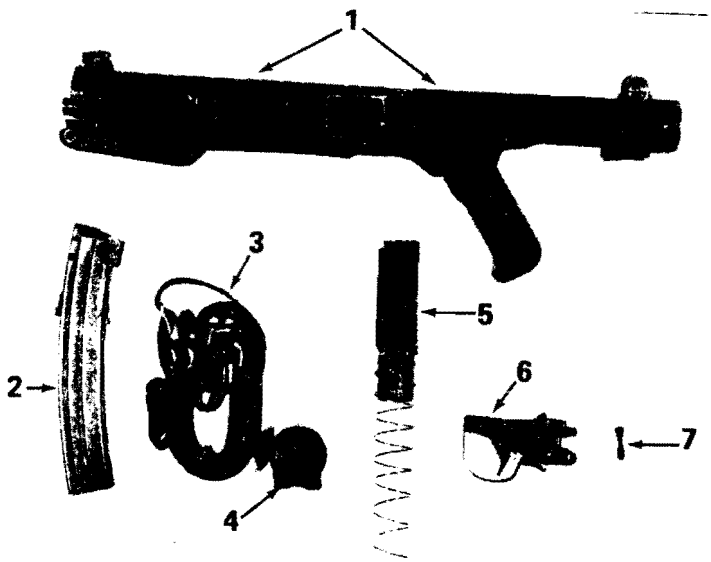
(7) The gun has a blade-type foresight and an aperture rear sight that has two positions, 100 and 200 yards,
(8) The SMG can be fitted with the same bayonet as the rifle 7.62,
(9) To handle the SMG effectively when wearing mittens, the trigger guard can be removed and reassembled forward of the trigger,
(10) Three types of ammunition available for the SMG are:

(a) 9 MM Ball,
(b) 9 MM Blank,
(c) 9 MM Dummy.

STRIPPING AND ASSEMBLING

1. a. Stripping. To clean the sub-machine gun properly, it must be stripped and the parts laid out in the correct sequence. The gun should always be stripped and laid out in the same order to facilitate cleaning and assembling in darkness. Below is the sequence to be followed:

(1) Carry out individual safety precautions but do not replace the magazine,
(2) Remove the sling,
(3) Release the butt plate catch and collapse the butt,
(4) Press the body cap catch in fully and, with the other hand, push body cap in towards the body and rotate it anti-clockwise until it disengages. Remove the body cap and allow the return spring to expand under control,
(5) Remove the cocking handle,
(6) Remove the breech block and return spring but do not separate them, and
(7) Remove the trigger group (if necessary).



1 — BODY
2 — MAGAZINE
3 — SLING
4 — BODY CAP
5 — BREECH BLOCK AND RETURN SPRING
6 — TRIGGER GROUP
7 — LOCATING PIN

Sub-Machine Gun Stripped Fig. 2

b. Assembling. The SMG is assembled in reverse order:

(1) Replace the trigger group and locating pin if they have been removed,
(2) Replace the breech block and spring (ensure the front end of the spring is placed in the spigot hole of the breech block,
(3) Replace cocking handle (ensure the concave curve is toward the muzzle),
(4) Press the trigger allowing the working parts to go forward under control. Set change lever at "S",
(5) Replace the body cap,
(6) Replace the sling, and
(7) Replace the magazine.

c. Tests After Assembling. The tests after assembling will be carried out every time the weapon is stripped and assembled. It is important that the tests be done correctly because if there is a faulty mechanism the change lever at "R" or "A" and the safety catch will not function properly. The following tests will be carried out:

(1) Set the change lever at "A", cock the weapon, press the trigger and keep it pressed, bring the action to the rear and release it (the breech block should move forward freely),

(2) Set the change lever at "R", cock the weapon, press the trigger and keep it pressed, cock the weapon (breech block should remain at the rear), release the trigger, press the trigger (breech block should go forward),

(3) Cock the SMG, place change lever at "S", press the trigger (the trigger should not operate and the breech block should remain locked in the rearward position, and

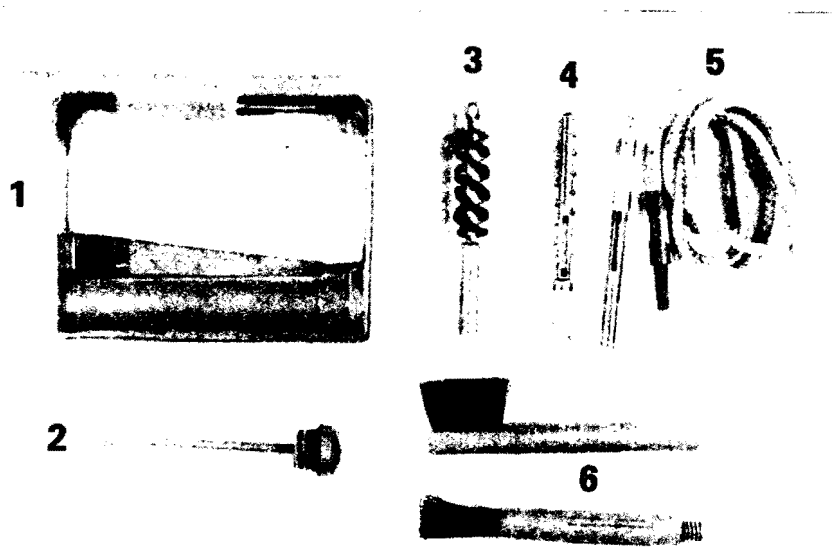
(4) With the breech block forward, place change lever at "S" and attempt to cock weapon (it should not be possible to cock the action).

CARE AND CLEANING

1. The SMG is an open breech weapon and the breech can easily become blocked by dirt. The SMG is blow-backed operated and cannot be adjusted for the increased force necessary to overcome dirt, sand, fouling, etc. During cleaning, all parts of the weapon should be carefully examined for damage, rusting, and pitting.

a. Cleaning Kit. A special cleaning kit for the SMG is issued with each gun. The kit consists of the following:

(1) A plastic container with built-in oil bottle,
(2) A nylon pull-through which has a threaded portion at one end and a weight at the other,
(3) A wire brush which can be screwed into the end of the pull-through,
(4) A brass jag with a slot which can be screwed onto the pull-through, and
(5) A two piece cleaning brush.



1 - CONTAINER
2 - OIL DAUBER
3 - WIRE BRUSH
4 - BRASS JAG
5 - PULL-THROUGH
6 - CLEANING BRUSH

SMG Cleaning Kit Fig. 3

2. Daily Cleaning

a. Remove all dirt and fouling from the exterior of the body paying special attention to recesses or moving parts such as sights, magazine catch, etc. Oil lightly;

b. Carefully remove all dirt and fouling from the breech and wipe all interior surfaces with a lightly oiled rag;

c. Clean the barrel in the following manner:

(1) Screw the brass jag onto the pull-through,
(2) Fold a piece of flannelette lengthwise and pass it half-way through the slot of the jag. Drape the flannelette loosely around the jag,
(3) Hold the body of the SMG with the muzzle pointing down and lower the weight of the pull-through through the barrel from the breech end,
(4) Pull the flannelette through the barrel,
(5) Repeat (4) as necessary, changing to a clean flannelette when required, and
(6) Pull a clean but slightly oiled flannelette through the barrel.

d. Brush loose dirt from the breech block, paying particular attention to recesses. Ensure the area around the extractor and the face of the breech block is clean. Wipe all surfaces, including the spring, with a lightly oiled rag;

e. Wipe the cocking handle with an oily rag;

f. Brush all loose dirt or sand from the body cap;

g. Assemble;

h. Wipe the magazine exterior and the top of the magazine platform with a lightly oiled rag, and inspect the magazine for damage.

3. Cleaning After Firing. When the SMG needs to be cleaned but the tactical situation does not permit stripping, the following procedure should be followed:

a. Remove the magazine;

b. Move the working parts to the rear, place the change lever to "S";

c. Thoroughly brush the breech to remove dirt and fouling;

d. Wipe the face of the breech block clean; and

e. Pull a lightly oiled flannelette and then a dry one through the barrel until no trace of oil shows.

MECHANISM

1. a. Backward Action

(1) When the cartridge is fired, the propellant gases exert an equal pressure against the bullet and the cartridge casing. The pressure of the gases on the casing forces the empty casing and breech block to the rear compressing the return spring,

(2) During the backward movement of the breech block, the extractor holds the empty casing; when the empty casing comes in contact with the ejector, it is ejected through the ejector opening;

b. Forward Action

(1) When the breech block reaches the limit of its backward movement with the change lever at "A" or when the trigger is pressed with the change lever at "R", it is forced forward by the compressed return spring,

(2) In its forward movement, the breech block comes in contact with the top round in the magazine, feeding it into the chamber,

(3) The breech block then pushes the round into the chamber and fires it just as the forward movement ceases; during the forward movement of the round from the magazine, the firing pin on the breech block cannot come in contact with the cap of the cartridge until the round is actually in the chamber, this provides the mechanical safety for the weapon. The extractor grips the casing on its final movement forward.

LOAD, UNLOAD AND MAKE SAFE

LOAD

1. The following is the correct sequence for loading the SMG:

   a. On the command "LOAD", adopt the load position;

   b. Remove magazine from pocket, hold in left hand with convex portion toward the body;

   c. Examine the magazine to make sure that the rounds are correctly placed and clean and that the lips of the magazine are not damaged. Insert the magazine into the magazine housing and press it firmly home by pulling it outward. Do not tap the base of the magazine as it may displace the rounds in the magazine;

   d. Place the change lever to "A" with the thumb of the left hand;

   e. Take a pace forward with the left foot, and at the same time, point the SMG in the direction of the target and cock the weapon with the left hand;

   f. Place change lever to "S";

   g. Fasten the pocket.

UNLOAD

2. The following is the correct sequence for unloading the SMG:

   a. On the command "UNLOAD", keep the weapon pointing toward the target, remove the magazine, and return it to the pocket;

   b. Press the change lever to "A". Grasp the cocking handle, pull the working parts to the rear, tilt the weapon to the left, and examine the chamber to ensure that there are no rounds present;

   c. Ease the working parts forward under control, re-cock and again ease the working parts forward;

   d. Place the change lever to "S" with the left hand;

   e. Return to the load position;

   f. Fasten the pocket; and

   g. Return the left hand to the side.

MAKE SAFE

3. Should it be necessary to move with a magazine on the SMG when out of contact with the enemy, it must first be made safe. On the command "MAKE SAFE", firers shall:

a. Unload;

b. Put on a full magazine; and

c. Check to ensure that the change lever is on "S".

STOP

4. The command "STOP" will be used to control fire in battle and on the range. On hearing the command, the firer will stop firing, remove his finger from the trigger, place the change lever on "SAFE" and await further orders.

SMG #1

MAGAZINE FILLING

5. Because of the high rate of fire of the SMG, there is a constant requirement to refil magazines. Every effort should be made to keep all magazines full by refilling empty or partially empty magazines at every opportunity. The following is the sequence and method of filling magazines:

a. Check each round for cleanliness;

b. Hold the magazine in the left hand, resting it on the knee or thigh, with the inner curved portion toward the body;

c. Hold several rounds in the right hand with the base of the rounds facing away from the body;

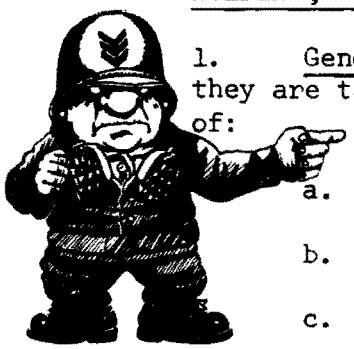
d. With the right hand, insert the rounds, one at a time, between the lips of the magazine, with the mose of the round facing the firer;

e. With the left thumb, press each round down and back against the rear wall of the magazine;

f. Count the rounds as they are inserted into the magazine.

6. Magazines must be emptied prior to cleaning and storage. The magazine is emptied by pushing the rounds out with the thumb and forefinger. The rounds should be caught in the hand or on a clean surface.

HOLDING, AIMING AND FIRING



1. General. There are three essentials of good shooting. Although they are taught separately, accurate shooting depends on the co-ordination of:

a. a natural position and a firm hold;

b. a correct aim; and

c. correct trigger operation so that the aim is not disturbed when the SMG is fired.

2. Holding

a. The following is the correct method of holding the SMG:

(1) Support the SMG at the barrel casing with the left hand. If possible, allow the magazine to rest on the left forearm in unsupported positions; this will give further support and steadiness to the weapon. In supported positions the left elbow should be nearly under the weapon for best support,

(2) Hold the pistol grip firmly in the right hand. With the forefinger resting lightly on the trigger, pull the butt into the hollow of the shoulder and hold it there firmly,

(3) Rest the cheek or jaw against the butt or body cap, exerting pressure sideways and downwards. The position of the head cannot be detailed as it will vary from firer to firer. The firer must position his head so that he has good eye relief and a comfortable position;

b. The SMG should be held firmly to prevent movement of the breech block from shifting the point of aim. It must, however, not be held too tightly or vibrations from the straining muscles will be transferred to the weapon;

c. In action, the firing positions and aiming will be dependent on the situation, but the correct hold will not vary except when firing from the waist.

3. Aiming. Aiming is simply the alignment of the eye, the sights and the target. The SMG is aimed when the centre of the aperture, the tip of the foresight blade and the point of aim are in line.

a. The Aperture. It will be noticed, when looking through the aperture in the rear sight, that the area near the edge is blurred and that there is a small area in the centre through which objects can be seen clearly. Do not look AT the aperture, look THROUGH it;

b. Focusing. Focusing can be best explained by using a simple example. With the thumb at arm's length, point at some distant object. Allow the eye to pick out details, first on the distant object, then on the thumb. If the thumb is in focus, the far object will be slightly blurred as the eye cannot focus at two different ranges at the same time. For accurate shooting the eye must be focused on the foresight, although the target may be slightly blurred;

c. The Aim Picture. The centre of the aperture, the tip of the foresight blade and the point of aim are in line;

d. The Rules of Aiming. The rules of aiming describe the correct sequence of taking aim:

(1) Close the disengaged eye,

(2) Look through the CENTRE of the aperture at the target and select a POINT OF AIM,

(3) Keeping the sights upright, align the tip of the foresight on the POINT OF AIM,

(4) Ensure the POINT OF AIM is in the CENTRE of the aperture;

e. Practice in Aiming. The Master-Pupil Method. The Master and Pupil Method is used to practice servicemen in the correct aiming.

4. Firing A Shot

a. Breathing. When the SMG is correctly held and aimed in the prone position, it will be noticed that the tip of the foresight blade moves up and down across the target as the lungs are inflated and deflated. With the lungs fully inflated, the foresight will be at its lowest point; as the lungs are deflated fully the foresight will reach its highest point. The firing position should be adjusted slightly so that the sight picture is correct, with the tip of the foresight blade exactly on the point of aim, when the lungs are about three-quarters deflated. Once the correct position and sight picture are reached, the firer should take a deep breath, which will drop the foresight below the point of aim, then exhale with an audible sigh until the tip of the foresight blade rises to the point of aim. At this point the firer should stop breathing momentarily, focus the eye on the foresight, and fire the shot;

b. Trigger Control

(1) Often the difference between good and poor marksmanship depends on the ability to press the trigger correctly. Misses and poor shooting result from jerking the trigger, flinching, or unnecessary body movement. If the trigger is pressed correctly with a firm but steady squeeze, the shot will come as a surprise to the firer. If the firer does not know when the discharge will take place, he is unlikely to flinch,

(2) The correct method of operating the trigger is as follows:

(a) Grasp the pistol grip firmly with the right hand and put the first joint of the forefinger on the trigger. Squeeze the trigger straight to the rear to avoid side pressure pulling the weapon off the aim. Continue pressing straight back to the rear. Only the trigger finger should move while the rest of the hand and body remain firmly in position,

(b) When the change lever is set at "R", the trigger must be pressed fully to the rear and then released completely before firing another shot. If the trigger is not pressed fully to the rear, the SMG may fire more than one round,

(c) If the firer spends too long in the aim, the muscles will tire and tense up, which will result in involuntary shaking or twitching. If the firer finds that his position is becoming strained, he should release the trigger, relax for a moment, and start again;

c. "Follow-Through"

(1) The aim and hold must be maintained during and after the pressing of the trigger. "Follow-Through" consists of keeping the tip of the foresight blade on the point of aim during the trigger squeeze and until after the round has been fired. A firm, steady hold is particularly important to good "follow-through" with the SMG because the time lapse between the trigger squeeze and the primer being struck is longer than with other weapons. In addition, the forward movement of the heavy breech block will tend to cause movement of the weapon,

(2) The small recoil of the SMG results primarily from the rearward movement of the breech block AFTER the round has left the barrel. If the firer follows-through correctly by maintaining his aim and hold, the tip of the foresight blade will return to the point of aim;

d. "Calling the Shot"

(1) If the firer follows-through correctly and keeps his eye open, he will know where the tip of the foresight was at the moment the round left the barrel. He will then be able to declare where, on the target, the round landed. This declaration is known as "calling the shot". Firers will call their shots when being coached on the range.

e. Method of Firing. The method of firing will depend on the situation. As a guide, the following methods are suggested:

(1) Whenever time permits the SMG will be fired in single rounds, from the shoulder, using the sights,

(2) When the shot must be hurried and the target is some distance away, the SMG will be fired in short bursts from the shoulder, using the sights, or without using the sights (rough alignment). Rough alignment combines fair accuracy with speed,

(3) In an emergency (close target), the SMG will be fired in bursts from the waist if the firer is standing or walking (accuracy will be improved if the firer halts momentarily). If the firer is in any position other than standing, the SMG should be fired in bursts from whatever position is the quickest to adopt.

IMMEDIATE ACTION & STOPPAGES

1. a. Immediate Action. There is only one IA for the SMG. Whatever the reason for the stoppage, the IA will always start with two actions by the firer:

(1) cock the SMG; and
(2) cant the weapon and look into the ejection opening.

What you observe in the ejection opening will indicate what action will be taken to remedy that particular stoppage in order to complete the IA.

b. Stoppages. There may be instances when the IA will not clear the weapon and further action must be taken:

(1) If on trying to shake out obstruction, it does not come out, it will be necessary to remove the magazine. At this time, the obstruction may either fall out or can be taken out by hand. If the obstruction is formed in the lips of the magazine, check the magazine for damage,

(2) If a stoppage should occur and the action cannot be cocked by hand, remove the magazine, place the sling around the cocking handle and give it a sharp jerk to cock it. Ensure the gun is kept pointing at the target,

(3) Mechanical breakdowns caused by broken or damaged parts are rare, but may occur and cause a stoppage. Such breakdowns can only be remedied by a weapons technician;

c. IA at Night

(1) Cock the gun,

(2) Set change lever to "S",

(3) Feel inside the ejection opening and determine stoppage, and

(4) Carry on with IA.

FIRE POSITIONS

1. a. Prone Position

(1) Adopt the load position,
(2) Holding the SMG at the barrel casing with the left hand, take a pace forward with the left foot and place the right hand on the ground beside it,
(3) Kick the legs to the rear and slightly left,
(4) Grasp the pistol grip with the right hand and observe the target,
(5) On the command "LOAD", the firer will load as previously taught,
(6) On the command "UNLOAD", the firer will unload as previously taught, stand up, and hold the weapon in the load position.

The Prone Position Fig. 4

b. Standing Unsupported

(1) This position is adopted when it is necessary to fire quickly at a fleeting target, or when there is no time to adopt another position. It can also be used for firing over high cover which does not offer support,
(2) Firing - The firer turns half-right and moves his left foot out to the left, bending both knees so that the body is bent slightly forward, in the manner of a boder,
(3) The firer should raise the left elbow so the magazine rests on the left forearm unless this position is strained or uncomfortable. This will add steadiness to the position.

Standing Unsupported Fig. 5

c. Standing Supported

(1) The standing supported position is adopted when in a fire trench or when firing from behind high cover,

(2) The firer leans against the front of the cover with his left forearm or elbow resting on the cover. The left elbow may be under the SMG and resting on a solid support or the left arm may be held against the support. The firer holds the SMG in the normal manner with the shoulders kept as level as possible.

Standing Supported Fig. 6

d. Firing from the Waist

(1) On meeting an enemy at point blank range and without time to fire from the shoulder, the SMG can be fired from the waist. This should only be done in an emergency and at very short range,

(2) To fire in this way, point the gun at the enemy and fire a burst of sufficient duration to kill, correcting the aim while firing,

(3) If time permits, jump around quickly to face the enemy squarely. Put the butt, or if the butt is folded, the butt cap, in the middle of the stomach with the head right over the barrel. The method used will depend on the situation.

Firing from the Waist Fig. 7

e. Sitting & Kneeling

(1) The SMG can be fired from the sitting and kneeling position. If the firer finds it difficult to support the elbows on the knees, the SMG can be held as in the standing, unsupported position, or with the elbows placed forward of the knees.

Sitting

Fig. 8

Kneeling

SERVICE AMMUNITION

1. Ident and Markings of Small Arms Ammo

   a. Rifle - FNC1

   b. Pistol- 9 mm

   c. SMG - 9 mm

   d. Machine Guns - LAR - MMG - HMG

2. Types of Ammo

a. Dummy Rds	- No explosive used for train.
b. Display Rds	- Looks real - No expl used - Museums - Classrooms.
c. Inspection Rds	- Looks real - No expl for testing and inspection.
d. Live	- High velocity cont explosive for FNC1 - LAR - MMG - HMG.
	- Low velocity - Cont Expl for SMG - 9 mm pistol.

GRENADES AND SMOKE

3. Fragmentation

Delay	- M61
"	- M67
Mini Frag	- V40
Practice	- M62
Frag Delay	- M36

4. Smoke

   #80 MK1 (White Phopherous)
   #83 3 (Smoke Canister)
   Colour - Green

PYROTECHNICS & TRIP FLARES

5. Pyro

C-3 Hand Fired Para Flare

C1A1 Thunder Flash

Simulator Projectile Ground Burst C1

10 Guage Signal Hand C4

6. Trip Flares

M 48

M 49 A1

7. Misfires

Small Arms FNC1 - C2 - SMG and Pistol

Remedy dealt with in IA & Stoppages.

Misfires are weapon fired projectiles which fail to leave the weapon when fired.

All misfires handle with caution.

Stores separately - Marked.

All misfires vary depending on weapon.

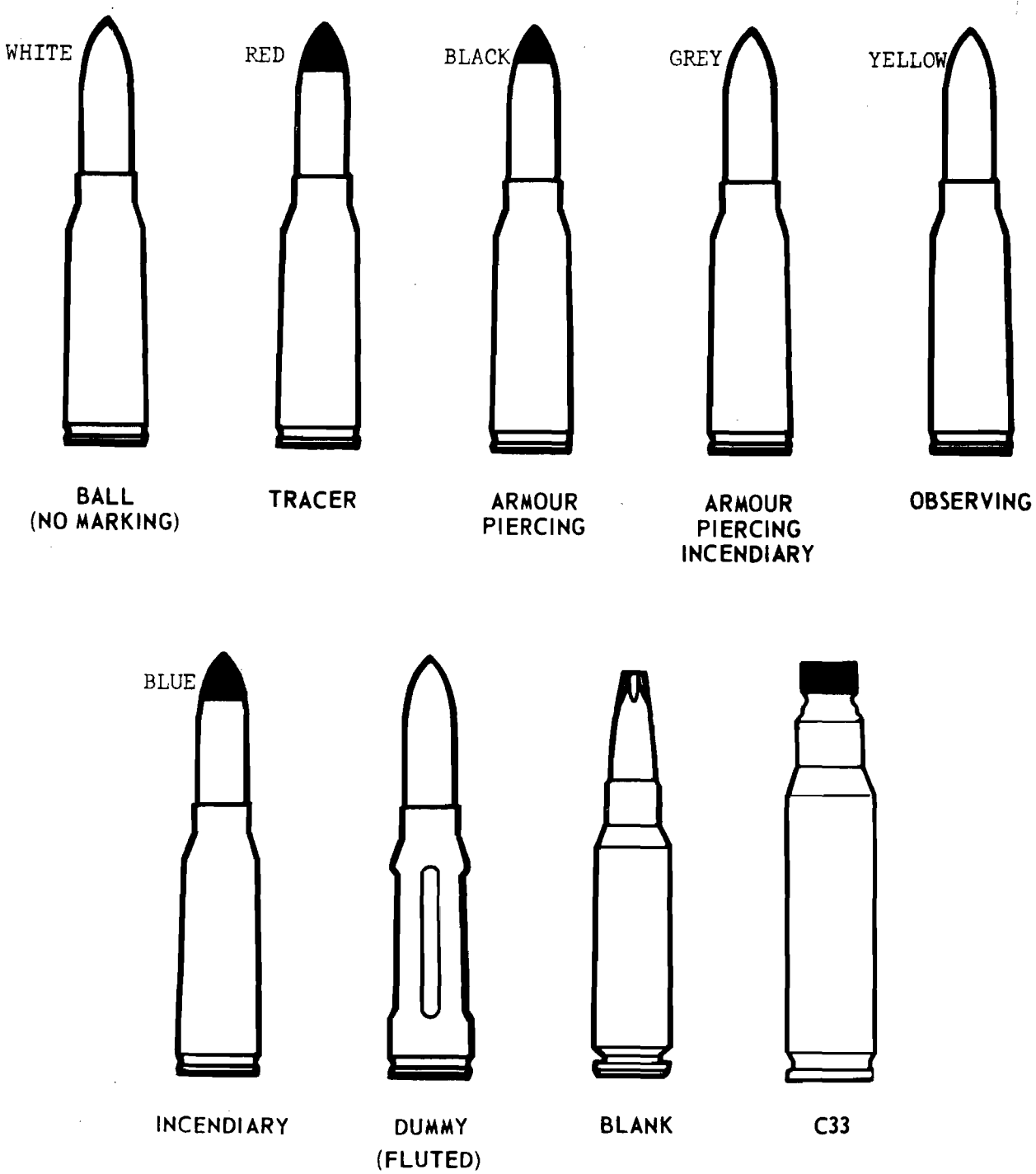
Destruction of misfires done up especially trained personnel.

Normal waiting period on misfires -

Electrically fired rounds - 20 min

Non-Electrically fired - 30 min.

SMALL ARMS AMMUNITION



NOTE: MORE THAN ONE OF THE ABOVE ROLES WILL BE INDICATED BY A COMBINATION OF THE APPROPRIATE COLOURS
ALL CARTRIDGE CASES - BRASS FINISH
ALL BULLETS - COPPER FINISH (TIPS AS SHOWN)

FIGURE 2–21 7.62 AMMUNITION

CANADIAN FORCES RECRUIT SCHOOL
CORNWALLIS

FIELD LIVING

BUSHCRAFT TOOLS

MISCELLANEOUS EQUIPMENT

1. Your kit will contain many small items which can easily become lost if not looked after. The following rules apply to such pieces of gear which are not usually carried on the person but are used by everyone in the party:

   a. Have a designated place for the equipment and return it after use. Have this location well marked and make everyone in the party aware of its existance;

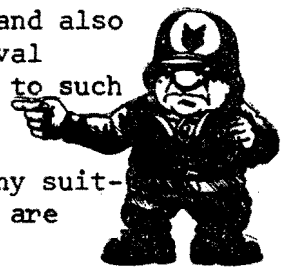
   b. Never lay equipment down on snow, spruce boughs, or ground. Put it in your pocket or hang it in a conspicuous place;

   c. Locate your equipment in an accessible place, so that you can reach such items as your flashlights, at a moment's notice;

   d. Small items such as compass, matches, etc should be tied or well secured to the body to prevent loss or damage.

THE AXE, KNIFE AND MACHETTE

2. These are the most important pieces of survival equipment, and also some of the most abused. Properly used it can simplify your survival problem, but, misused, it can become a means of crippling yourself to such an extent that survival becomes impossible.



3. If your cutting tools do not have a sheath, make one from any suitable material available, and keep them in their sheaths until they are required for use.

4. Before using make the following checks:

   a. Check your axe head for tightness of the handle. If it is loose, either drive the wedge further home or make a new wedge using hardwood. Soaking the head is another method but it is not recommended for winter time, as ice may form on the handle and inside the head allowing the head to slide off and cause possible injury. To drive the handle into the head, strike the handle not the head of the axe;

   b. Check for sharpness. A dull axe can be dangerous for two reasons:

      (1) First, it will not bite properly and will tend to glance off the wood being cut,

      (2) Secondly, when blunt, it is necessary to use more force which means a sacrifice of control;

c. Check that the handle is not cracked or split. A serious cut or sliver may be received. When carrying an axe, be sure that the sharp edge is always held away from the body. In the event of a fall, there will be less chance for injury.

USE OF BUSHCRAFT TOOLS

5. When falling a tree, these procedures should be followed:

a. Before beginning, clear the tree of lower limbs, and remove the underbrush from around the bottom of the tree. This is to ensure the axe does not deflect during the swing;

b. Check your distance from the tree to avoid overreaching or underreaching. Overreaching can result in breaking the axe handle; underreaching in a cut foot;

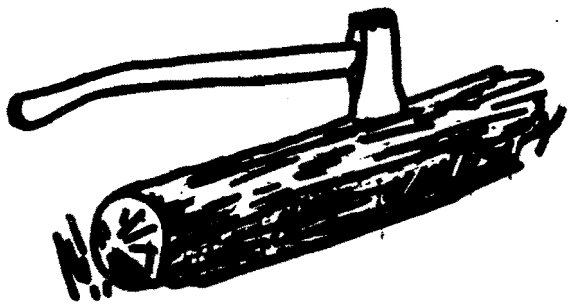
c. Take up a comfortable stance, making sure that both feet are firmly set;

d. The first cut should be made on the side of the tree facing the direction of the desired fall, often decided by the "lean" of the tree. This cut should not be more than half-way through the tree. The back cut should be commenced slightly above and opposite the first cut.

e. It is safest to cut the tree off not over a foot above the ground. Always keep the axe handle low, i.e., parallel to the ground where the blade strikes the cut. When using short handled axes or hand axes bend fully at the hips or kneel on one knee.

6. When splitting, do not lay the piece to be split on the ground, but support it as illustrated. This not only prevents the axe from chopping into the ground and becoming blunted, but may also prevent injury to the legs and feet.

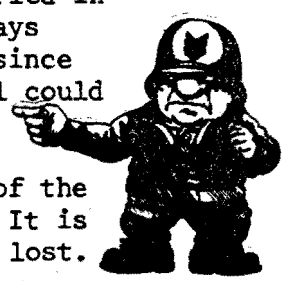
7. When finished with the axe, clean the head carefully, replace the sheath, and store in an upright position. It is permissable to store by sticking it into a dry stump, but green wood should never be used for this purpose.



Always stick your axe in a log or stump.

KNIFE AND MACHETTE

8. As with the axe, the knife should be kept sharp and carried in a sheath. Return it to the sheath immediately after use. Always position the sheath on your belt towards the back of the hip, since with the knife in a forward position it is possible that a fall could drive the knife into the groin.



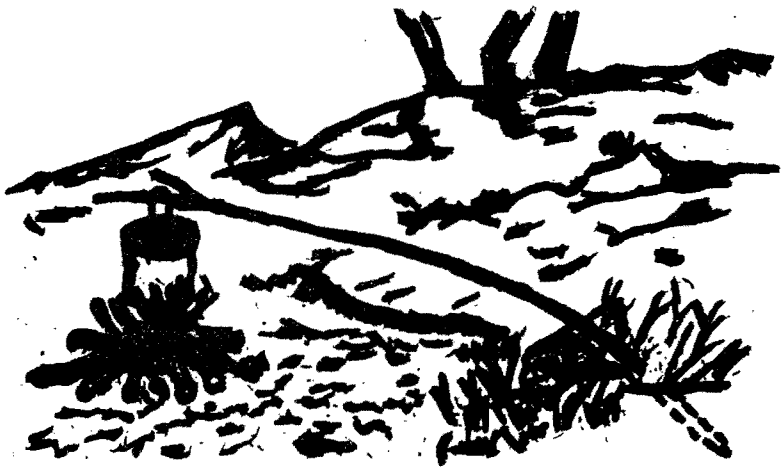
9. Guard against loss by attaching a cord from the handle of the knife to your belt loop. Never throw your knife or machette. It is ineffective when so misused and it will probably be damaged or lost.

PREPARE AN OPEN FIRE TO COOK RATIONS
AND TO PURIFY WATER

1. Using the canteen cup have the trainee dissove one purification tablet to purify his water - if available.

2. Water that is boiled need not be purified, as boiling will sterilize water.

NOTE: Follow the instructions on the bottle.

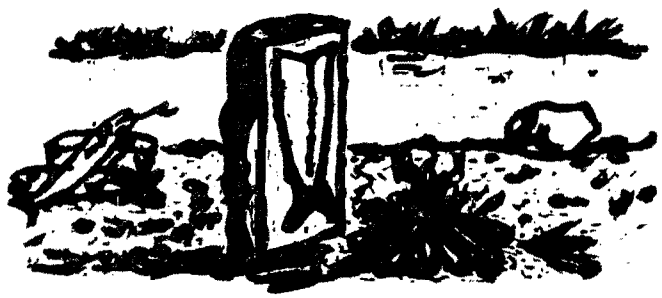


A simple method of suspending the pot over the fire

BOILING

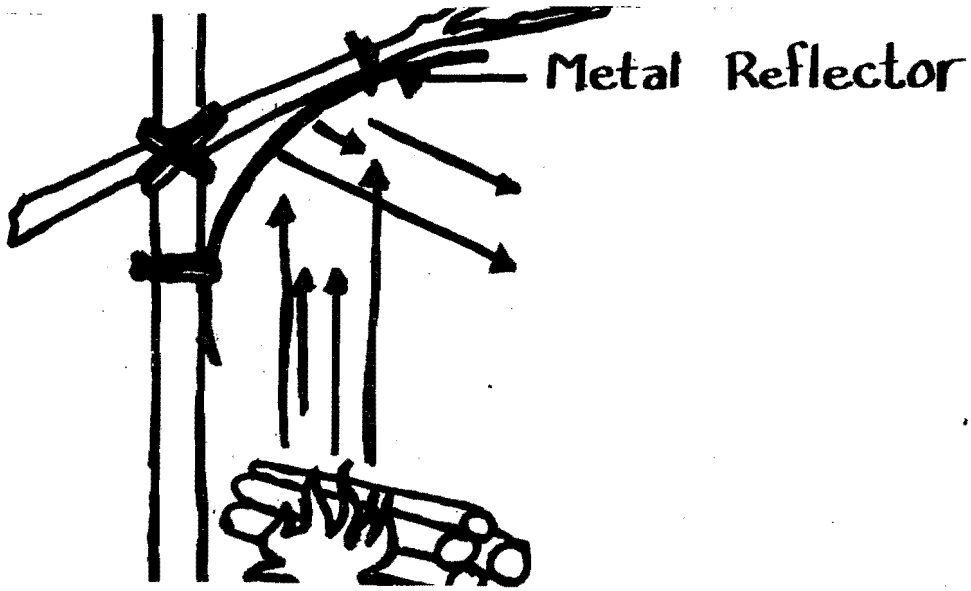
Broiling and Barbecueing or Roasting

3. Meat should be held to the side of hot coals, not over them. Avoid smoke and flame. Use a receptacle to catch drippings.



Plank fish or meat on a split log with pegs.

Use a weight on the butt of the pole if necessary. The pole can be rotated to baste all sides of the meat.



Camp Fire Showing the Reflector log principle.

4. Four common mistakes in fire lighting:

   a. Poor selection of tinder and fuel;

   b. Failure to shield the match from the wind;

   c. Lighting the fire from down wind (or leeward side); and

   d. Smothering the newly lit fire with too much fuel, too soon.

5. SUGGESTIONS

a. Carry ample matches always.

b. Keep matches dry. If damp, rub them through the hair, or back and forth between the palms of the hands with the match head protruding slightly.

c. Don't waste matches - use sticks from the fire for lighting smokes.

d. Collect adequate tinder and fuel for the next day and keep them under dry cover.

e. If forest is wet, use dry standing wood. Split the wood, make feather sticks for starting the fire.

f. Pick a fire location sheltered from strong winds.

g. Beware of rocks around a fire. Some rocks will explode when heated.

h. Guard against flying embers. You could lose all your equipment.

j. Keep your sleeping bag covered as much as possible to avoid sparks from landing on it.

k. Bank the fire at night to permit easy lighting from the embers in the morning.

FUEL

6. In going from tinder to the fuel stage in fire lighting, it must be borne in mind that large fuel materials require greater heat to ignite' therefore, it is essential that some form of kindling be used tc nuture the fire until it is hot enough to ignite larger fuel. A few suggested forms of kindling are:

a. Dry, dead evergreen twigs;

b. Birch bark, shavings, wood chips or fine splinters of resinous wood;

c. Feather sticks (dry sticks of wood shaved on the sides in a fan shape); or

d. Gasoline or oil impregnated wood.

Feather Stick

7. A good supply of fuel should be gathered prior to attempting to light the tinder in order to maintain the fire. Different types of fuel are desirable for a variety of requirements. Use what is available, bearing in mind that all woods burn better when dry and that pitchy woods or wet woods, smoke. The finer the wood is split, the less smoky the fire will be. The denser the dry wood, the hotter the fire will be, and usually slower burning.

8. Green wood will burn, but requires a hot fire to start. Split green wood fine and start with dry wood.

FIRE LAYOUT

9. The ideal camp fire site is on mineral soil or solid rock. Forest fire hazard is always present with fires on musky, dry grass, leaves, evergreen needles, or dead roots. A handy water supply or sand is useful for extinguishing flames.

10. If the ground is dry, scrape down to bare earth. In winter dig down to solid ground, trample the snow, or dig out an area around shelter and fire area. If the snow is exceptionally deep, a small fire may be maintained by lighting it on top of a layer of green logs.

11. A cooking fire on the trail is ideal if built on a gravel bar, presenting no fire hazard.

12. Do not build a fire directly under a tree because of the danger of igniting the dry humus and leaves.

13. A reflector is of little or no value unless it is burning. Large logs rolled on the back of the fire make an excellent burning reflector.

PREPARE AN OPEN FIRE TO COOK

14. a. Spark

The usual sequence for lighting a fire is from spark to tinder to fuel. The spark may be provided in one of the following ways:

(1) Matches - These should be carried by all. Remember to stow the striking strip with safety matches. They should be made water-proof or moisture proof. i.e. wrapped in plastic, put in a container, or dipped in wax, etc.

(2) Cigarette lighter - A good source of spark, long after the fuel runs out, the flint will still ignite absorbant cotton.

(3) Flint & Steel - An easy and reliable method of fire lighting, i.e. the flint on the bottom of the issue water proof match container. Use a knife blade, etc to scrape a spark from the flint into a tinder next of cotton batting, scraped cotton cloth, or scraped paper fluff, like tissue or kleenex. Make sure the tinder nest is large enough to ensure that the resultant fire will ignite to the kindling.

(4) Magnifying Glass - Focus the sun's rays on a good tinder. The lens from binoculars, or a camera are good examples.

NOTE: Sub para (4) not to be practised.

b. Tinder

The first starter should be fine, dry, highly inflammable material such as:

(1) cotton fuzz;

(2) paper fuzz;

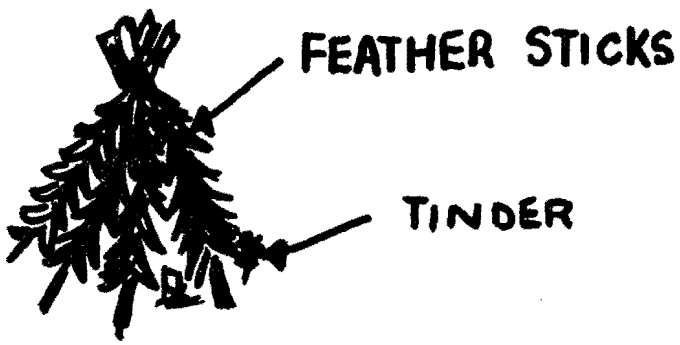
(3) absorbant cotton;

(4) gasoline impregnated rags; or

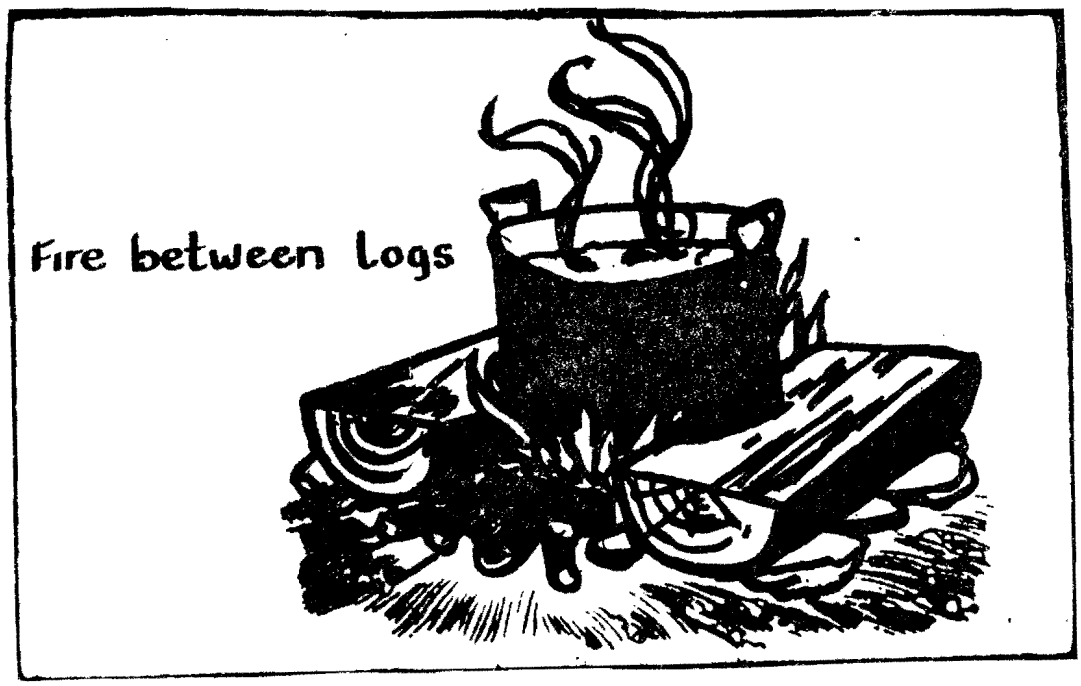
(5) dead, dry grass or witches hair.

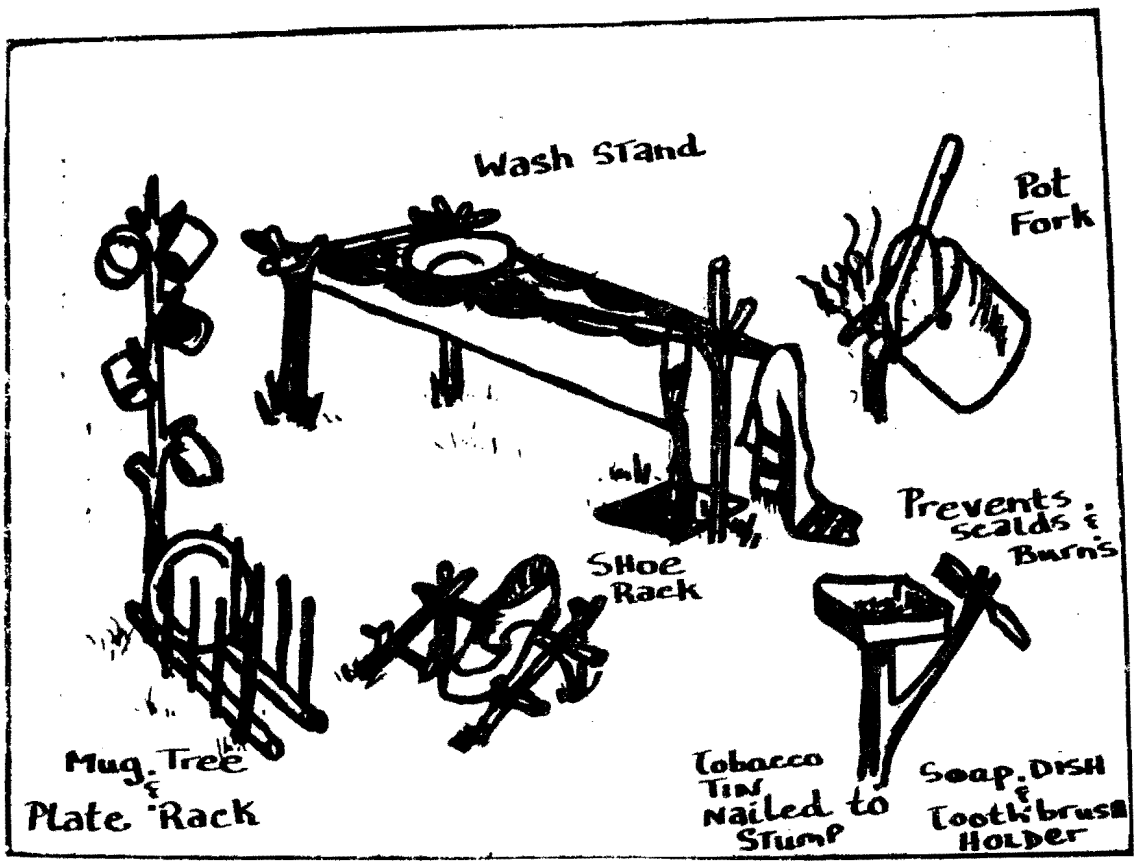
NOTE:

Tinder absorbs moisture readily from the atmosphere and may be least effective when you most urgently require it. Keep your tinder dry.



FUEL ARRANGED CONICAL


Fire between logs


Wash Stand
Pot Fork
Prevents scalds & Burns
Shoe Rack
Mug Tree & Plate Rack
Tobacco Tin Nailed to Stump
Soap Dish & Toothbrush Holder

CONCLUSION

SUMMARY

Remember, trying to take shortcuts in lighting fires can be disastorous, unless you are sure it will work. Training that you take under good weather conditions can stand you in good stead - during winter or inclement weather conditions. Do not skimp on your efforts.

CLOSING STATEMENT

As you will now note, we have learned to build a fire and that our bushcraft tools have come in very handy. Combine this along with a lean-to and we will see we have set up a reasonable home for ourselves. After we have learned to keep ourselves clean and to feed ourselves, survival will be guaranteed.

INTRODUCTION

1. IRPs provide sufficient nutrition to sustain a man under field conditions for one day. Each ration pack contains approximately 3800 calories per day if everything is consumed. In prolonged operations it is important to drink all liquids (coffee, tea, cocoa, fruit drink) or plain water because lack of sufficient liquids will cause dehydration with loss of efficiency - tiredness, drowsiness, lack of alertness, headaches and illness. A hazard in cold weather operations is that personnel who do not eat sufficient rations or drink enough liquids dehydrate quickly without notice, and individuals may become a hazard to themselves and especially to others. The unfit will faint during hard work. Should dehydration occur slowly individuals may make mistakes (lamps/stoves) causing injury to themselves or to others.

IRP PREPARATION

2. Types of Fire Using Heat Tablets

a. tinfoil

b. rocks

c. wood

d. heximine food cooker

e. mess tin handle

f. empty cans

3. Planning a Three Meal Menu

a. Introduction: Ensure a balanced diet, sufficient food for each meal, and that each meal is palatable.

b. Demonstrate: Full contents of an IRP
Sub-dividing contents into three meals
Variety contained in eight different menus.

c. Confirm: Have each candidate break down their rations and plan the menus for their next 3 meals.

4. Preparing a Meal

a. Introduction: IRPs must be prepared correctly to ensure you enjoy your meal while getting the food value. Shown here are the basics of cooking, however, use your imagination to vary content of meals as well as cooking methods.

b. (1) The soup and drinks in your IRP are prepared by adding water in the volume recommended on the package. Remember that it is especially important to have hot liquids in cold weather, therefore the water added for the soup should be hot if possible.

(2) The food pouches in an IRP can be consumed hot or cold (when no fires or time does not permit). To heat the foil pouch simply drop them (still sealed) in boiling water for five minutes. The foil will not contaminate the water so it can still be used for coffee, soup, tea, hot chocolate or to make your instant mashed potatoes.

(3) The instant mashed potatoes in the pack can be prepared by simply adding the amount of hot water recommended on the package and working the package between your fingers for a few minutes to throughly mix it.

(4) Hot drinks are prepared by simply adding the amount of hot water recommended on the package and mixing throughly.

(5) Supplementary rations are used to increase the basic calorie count of the rations and provide snacks for quick energy, which is important under stress or a high work load.

(6) It is advisable to keep a container of hot water readily available. This can be easily accomplished by having a metal container of water in contact with the fire (remember it must not be totally sealed), the fire guard normally is responsible to keep the container topped off and adjust its proximity to the fire.

(7) If you are having a multiple course meal; eg: soup, dinner and coffee, you should plan ahead so in the time which you are eating your soup your foil pouch can be heating in the hot water. After the pouch is removed you can use the water to make your coffee.

(8) Section cooking (done by one man for the whole squad or section) simply means you pool your food eg: dinner pouch, and the contents are cooked together then distributed amongst those who contributed. This method saves time, confusion, manpower and can minimize squables over fire and water preparation.

5. Disposal of Garbage

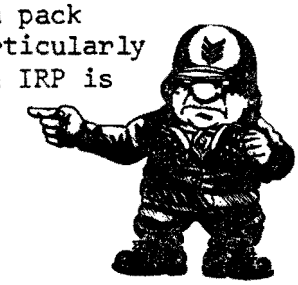
(1) All garbage (approx. 50% of the IRP's weight will be garbage) must be properly disposed of to prevent a health hazard, as well as to minimize environmental pollution and to keep from leaving an item of intelligence about your strength and logistics for the enemy.

(2) If possible garbage should be burned and compressed before burying to kill bacteria and minimize bulk.

(3) Where garbage connot be buried, it should be burned and compressed if possible and carried well away from food. This is especially important if it can't be burned because bacteria may develope in old garbage.

SUMMARY

6. It is necesaary to use the full contnets of the ration pack to ensure a good energy producing diet and to aid morale, particularly in cold weather. Time spent in the correct preparation of an IRP is revealed by the well being of the individual.



CONSTRUCTION OF A LEAN-TO SHELTER

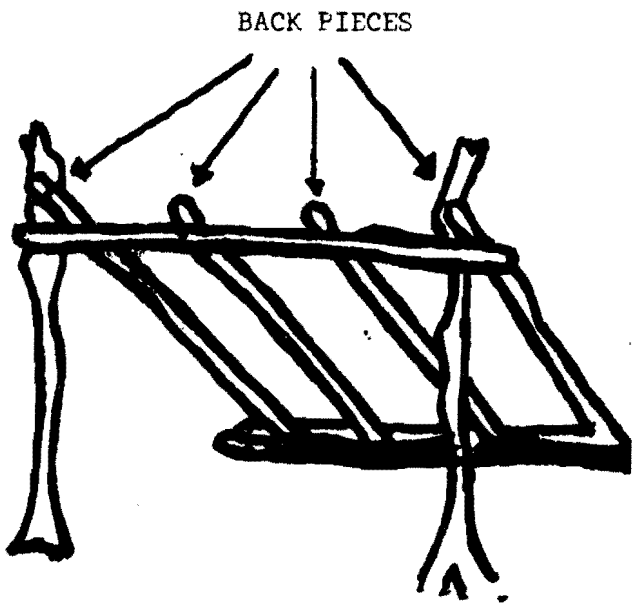
1. To begin the construction of a lean-to shelter, select two solid, husky trees for the uprights. The distance between them depends upon the intended size of the shelter. Allow approximately two feet per man. Clear the selected site. Select a pole long enough to go between the uprights, about four inches thick and lash it to the uprights.

2. Next, select four poles. They should be six to seven feet long and two or three inches thick, to be used as back pieces. Next, lean the back pieces at equal intervals so that one end of each rests on the cross-piece, which has been lashed between the trees and the other end rests on the ground.

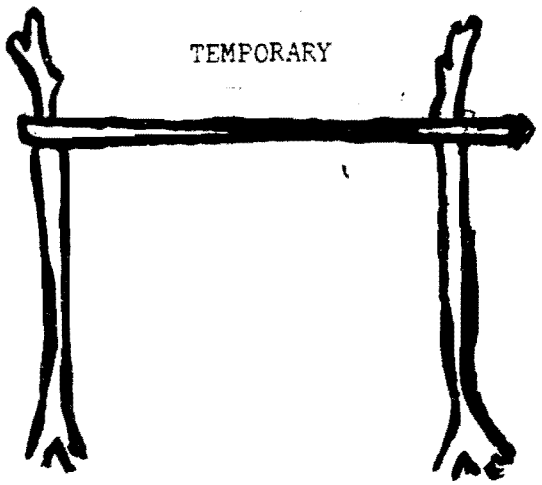
3. This frame work is covered with a sheet utility nylon as required. The sheet is secured to the cross-piece. A pole of four to six inches thick is laid across the bottom of the back pieces and the sheets are secured.

BOUGHS

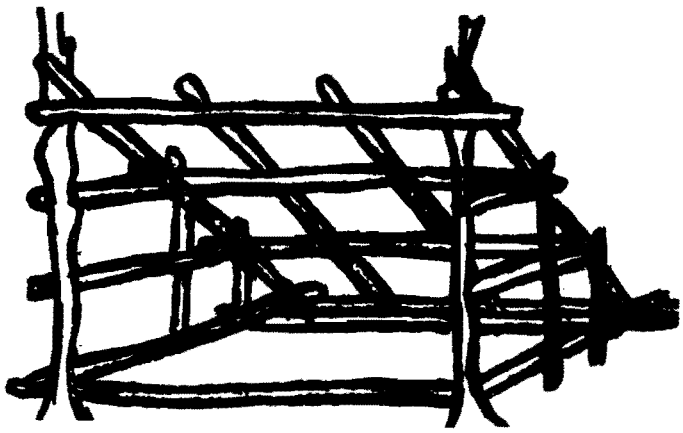
4. Boughs are used for insulation for the bed on the floor inside the shelter. These boughs should be placed carefully with all sharp points downward. Build this bough bed to a depth of six inches, to give plenty of insulation from the ground.

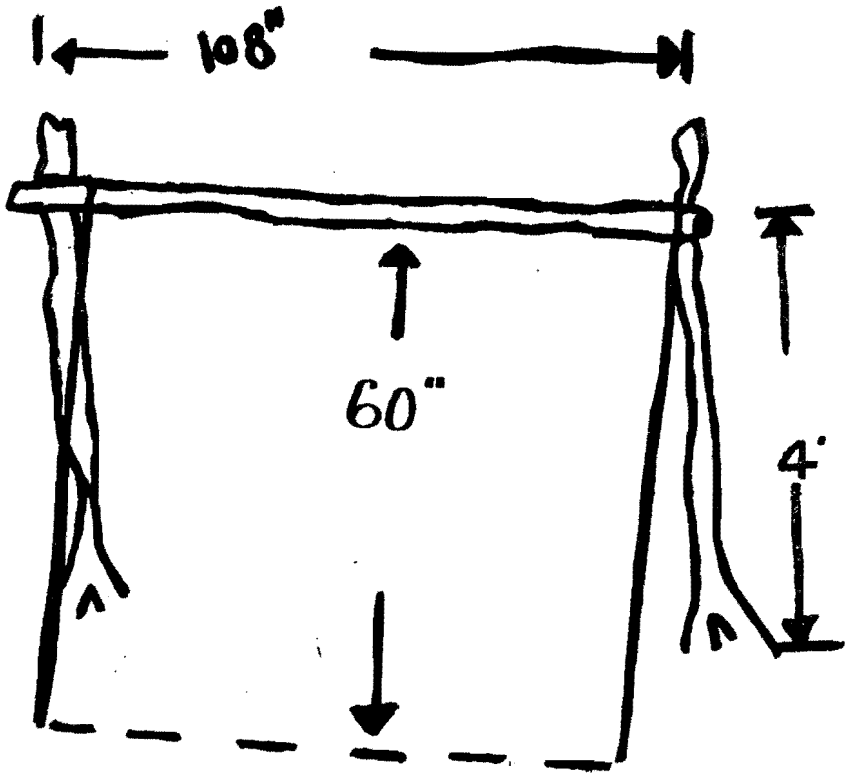


TEMPORARY



LEAN-TO SHELTER





NOTE: The lean-to shall be constructed of small poles to be covered with sheet utility nylon.

During fair to good weather, the two-man tent is more popular and in some cases more practical. This may be accomplished by adding one more utility nylon sheet in a manner as shown in Fig 3 so that you have one on the opposite side forming a pup tent. This method, however, is not practical with the open fire.

As with the lean-to principal, the heat from the open fire will reflect back from the wall in turn keeping the occupant warmer.

All shelters, time permitting, should be improved by digging a water ditch to allow the water to flow around the shelter and not under or into it.

Poles with extra length used in the construction of your shelter, should not be cut off, as they are handy to dry clothing.

IMPORTANT POINTS TO REMEMBER

1. Ensure each shelter used is firmly constructed.

2. Ensure that the two-man tents have the flap over the zipper in a manner to shed water.

3. Inform the trainee he will not leave rope or wire tied to the tree when he breaks camp.

4. Also inform him to pile all poles and boughs for the next course; show him where.

5. Do not cut or notch live trees.

6. Do not dig trenches around individual bivouacs; try not to disturb the natural covering of the soil.

CANADIAN FORCES RECRUIT SCHOOL
CORNWALLIS

MAP USING

AN INTRODUCTION TO MAP USING

This precis is not to be taken as the absolute authority for all that you must know as far as map using is concerned. Its purpose is to supplement the lessons you have already received and to provide you with a guide from which to study.

WHAT IS A MAP- A map is a drawing of the ground as it would appear to an observer in an aeroplane.

INFORMATION ON A MAP - When you first pick up a map you will find much information in the margins. This information should be read carefully and thoroughly. There is no sense in trying to use the map until you understand all the marginal notes.

1. What locality is dealt with is to be found in several places on the map, notable the top centre of the map.

2. The scale must be known before any attempt can be made to measure distances from your map. The scale will usually be found at the bottom of the map in the centre.

3. Magnetic variation is useful when you are in the actual area and attempting to "set" your map. It tells you where True North is on your map and also shows you the amount of variation a magnetic compass will have from True North. This information is found on the right hand corner of the map.

4. Conventional signs are used to indicate roads, railways, lakes, rivers and various buildings which you will find in the map. This information, sometimes called the "Reference" or "Key" is to be found in the upper right margin of the map.

5. Contour system and interval - this information, necessary for you to see what the region looks like geographically, (hills, valleys, etc) is to be found in the lower right hand corner of the map.

6. Date of the issue and revision - which is found in the lower left corner will enable you to determine whether or not your map is up to date.

7. By whom and how made - is to be found in the lower left hand corner.

8. System of reference - the grid system and system of reference which is found in the right hand margin of the map, tells you, briefly, what grid is on the map and how to give a map reference of that particular map.

9. Name and number of adjoining sheets is found on the right hand margin of the map and tells you what map number you must order if the map you have does not cover enough area for your purposes.

10. Grid lines - grid lines are the lines drawn on the map at 1000 yard or 1000 metre intervals. They are numbered from South to North and from West to East. A thorough knowledge of grid lines is essential in order that you may find the position of objects on the map. The distance or interval between grid lines is found in the right hand margin of the map (See 8 above).

MAGNETIC DECLINATION

What is Declination?

The magnetic needle in a compass is attracted by the magnetism of the earth, and that is why it always points North.

However, there are really two North Poles on the earth; one is the True North Pole which is located geographically, while the other is the Magnetic North Pole which is where magnetic lines of force come together. Map and directions are usually based on True North which is static. The compass needle points to Magnetic North, which is located in the upper Hudson Bay Region but moves slightly from year to year.

Magnetic declination is the angle between True North and Magnetic North. The amount of declination at any given point depends on the location of that point on the continent. Where True and Magnetic North are in the same direction, the declination is zero.

In North America, a line of Zero declination runs roughly from west of Hudson Bay down along Eastern Lake Michigan to the Atlantic Coast in upper Georgia.

At any point of the west side of that line, your compass needle will point east of True North. This is called "Easterly Declination". At any point east of that zero line, your compass needle will point west of True North. This is called "Westerly Declination". In North America, Magnetic Declination varies from 30 degrees east in Alaska to 30 degrees west in Labrador.

NOTE: All the following methods of using the Compass must have the declination set in order to produce grid bearings.

GENERAL

1. a. To use map and compass, the variation between them must be computed and set on the compass in order to read grid bearings and coincide with the gridded map.

   b. There are three Norths:

      (1) True North (TN) - The direction of the North Pole (geographically).

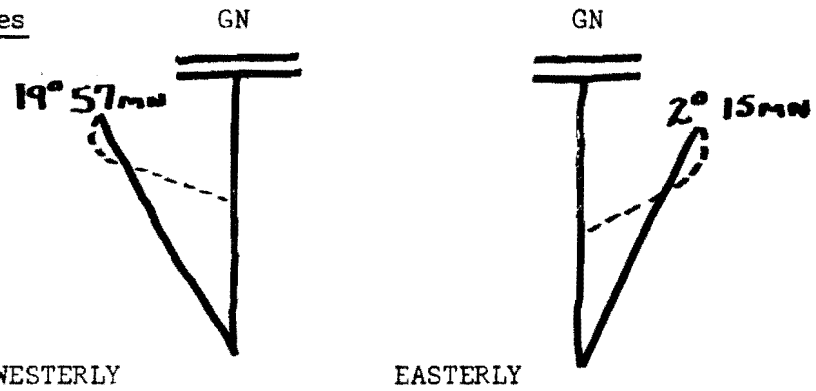
      (2) Magnetic North (MN) - The direction in which a compass needle points.

      (3) Grid North (GN) - The direction of the north-south lines of a grid.

   c. For our purposes, in recruit training and using gridded maps, True North will be ignored.

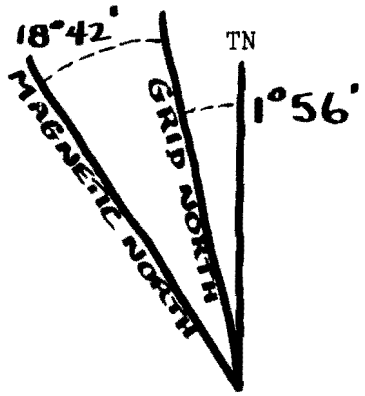
d. Magnetic Declination - is the angle between the Magnetic North line and the Grid North line, shown in the marginal information of a map, and may be easterly or westerly, depending on the part of the world in which you are located.

Examples



e. Annual Change - The position of Magnetic North moves slightly from year to year, consequently, the magnetic variation or declination changes slightly from year to year, and is shown in the marginal information of the map.

Example of Marginal Information:



Use diagram only to obtain numerical values.

APPROXIMATE MEAN DECLINATION 1975 FOR CENTRE OF MAP

Annual change decreasing 1.7 minutes.

2. Computing the Magnetic Declination for 1981

Example

a. Map - Digby, Nova Scotia 21A/12 Edition 3 MCE

b. Marginal Information: (1) annual change - 1.7 minutes,
(2) map produced in- 1975, and
(3) mean declination- 18 degrees, 42 minutes, West.

c. Start by determining the total annual change from 1975 to 1981 (Eg: 1981 - 1975 = 6 years) at 1.7 minutes a year x 6 years = 10.2 minutes;

d. When the annual change is in the opposite direction from the mean declination, you subtract; when they are in the same direction, you add;

e. From the marginal information we know the mean declination is WESTERLY, and because the annual change is decreasing it is EASTERLY, therefore, we subtract;

f. To make this easier to use, round off the total annual change to 10 minutes and subtract it from the mean declination:

-	18 degrees	42 minutes	WEST
		10 minutes	EAST
	18 degrees	32 minutes	WEST

g. The magnetic declination in 1981 is 18 degrees 32 minutes west.

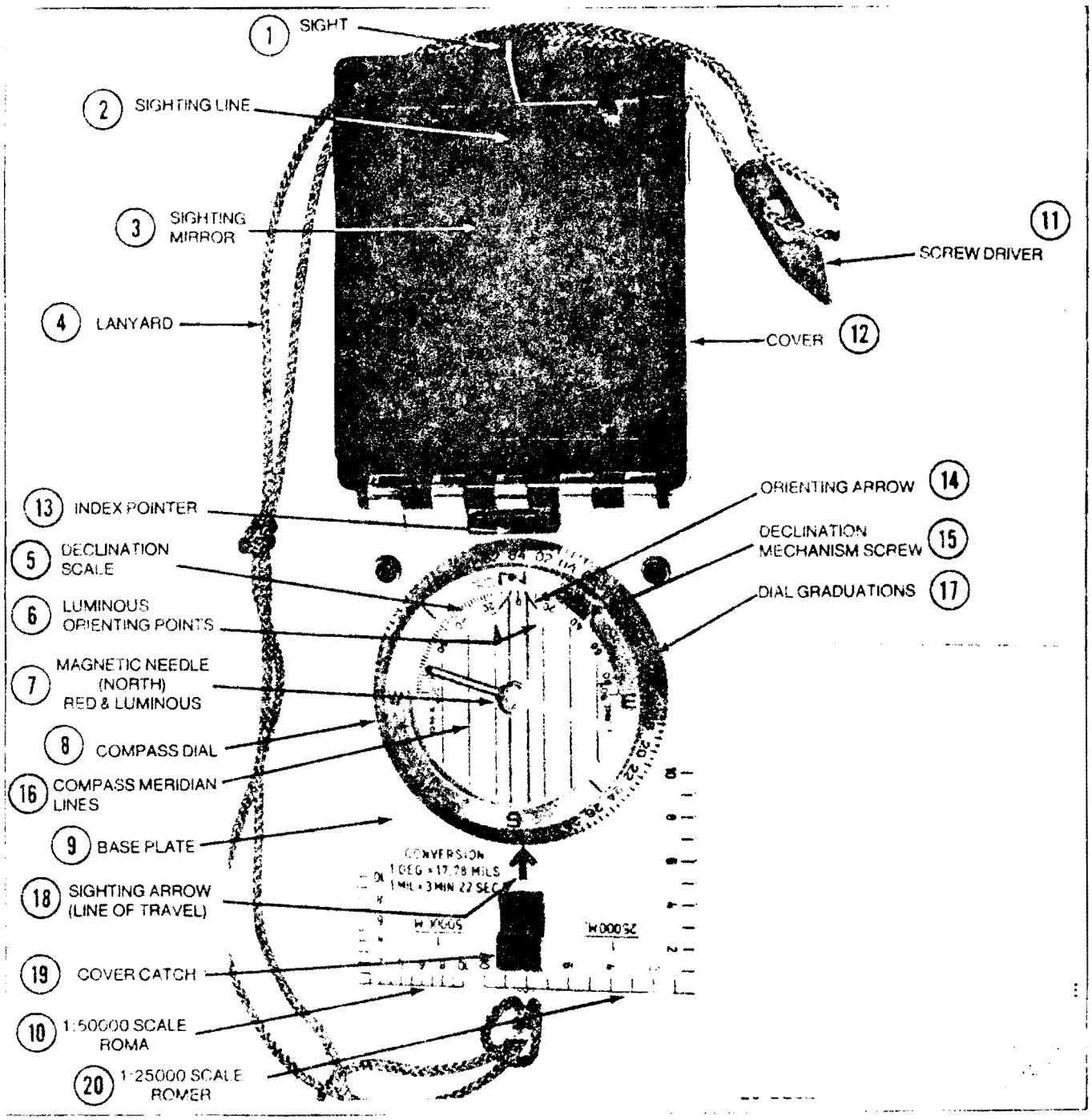
SILVA RANGER COMPASS (C6)

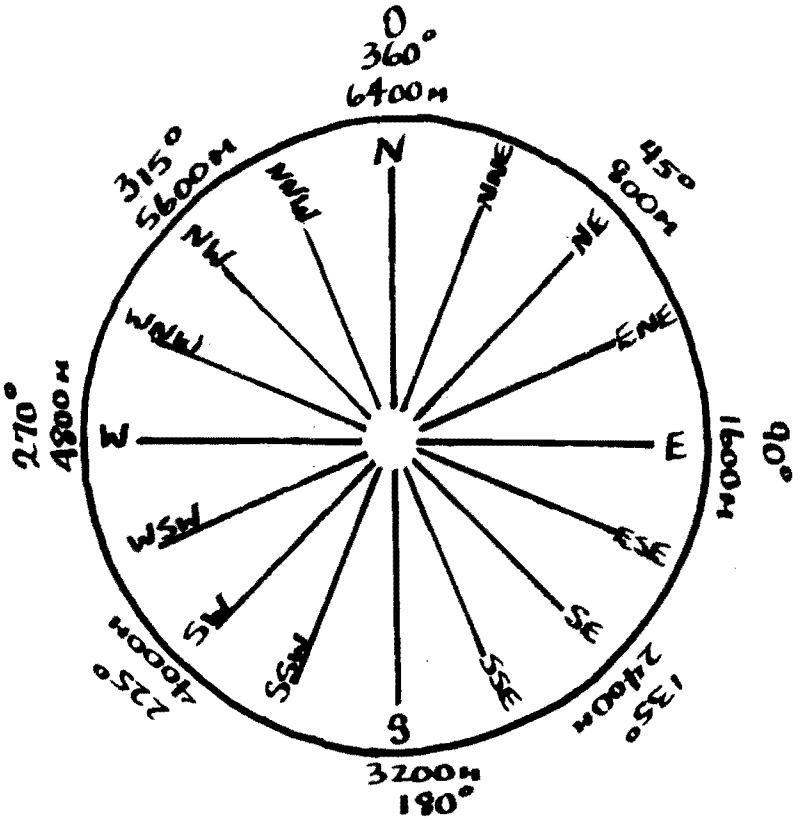
GENERAL

1. The Silva Ranger Compass (C6) is a precision instrument, made by experienced specialists in this field. It is designed to be the finest hand compass available for professional use.

2. It is made to withstand rigors and abuses associated with the outdoor professions and is a rugged, durable piece of equipment. Nevertheless, it is a precision compass and should be treated with the respect of all fine instruments.

3. This instruction is to help you get the most from Silva Ranger (C6) Compass. To help you use it quickly, easily and accurately.


1 SIGHT
2 SIGHTING LINE
3 SIGHTING MIRROR
4 LANYARD
11 SCREW DRIVER
12 COVER
13 INDEX POINTER
14 ORIENTING ARROW
15 DECLINATION MECHANISM SCREW
17 DIAL GRADUATIONS
5 DECLINATION SCALE
6 LUMINOUS ORIENTING POINTS
7 MAGNETIC NEEDLE (NORTH) RED & LUMINOUS
8 COMPASS DIAL
16 COMPASS MERIDIAN LINES
9 BASE PLATE
18 SIGHTING ARROW (LINE OF TRAVEL)
19 COVER CATCH
10 1:50000 SCALE ROMA
20 1:25000 SCALE ROMER
CONVERSION
1 DEG = 17.78 MILS
1 MIL = 3 MIN 22 SEC



CARDINAL POINTS AND INTERMEDIATE POINTS

1. a. These points of a compass are used to roughly indicate direction.

   b. There are 4 cardinal points and 12 intermediate points.

   c. N-S-E-W are the cardinal points.

   d. NNE-NE-ENE - etc, are the intermediate points.

MILS SYSTEM

2. a. The mils system is used to accurately indicate direction.

   b. The circle of the compass is divided into 6400 mils.

   c. The cardinal points are: N - 6400 mils

      S - 3200 mils

      E - 1600 mils

      W - 4800 mils.

SAFE DISTANCES

1. a. The compass is a delicate instrument and quite small quantities of iron nearby will affect its behaviour.

b. When shooting bearings:

(1) Remove wristwatch from wrist,

(2) Remove spectacles with steel frames,

(3) Remove helmet,

(4) Small articles will be safe in a trouser pocket.

EXAMPLES

2. TANK

75 metres (approx)

HEAVY GUN

60 metres (approx)

STEEL HELMET

3 metres (approx)

RIFLE

3 metres (approx)

KEYS WHISTLE

½ metre (approx)

GENERAL INFORMATION

3. Your compass may be used for finding:

a. Direction with the aid of the sighting mirror.

b. When in use, the compass must be held level enough to permit the needle to swing freely.

c. Beware of nearby iron or steel objects. They may attract the magnetic needle if close to the compass. Even a hidden nail in a table top or helmet or rifle can deflect the needle if too close.

d. A small bubble may sometimes form in the liquid compass, but it has no influence on the accuracy of the instrument. The appearance and subsequent disappearance of this bubble is due to changes in temperature and atmospheric pressure. Bubbles larger than ¼" diameter, however, should be viewed with suspicion and probably are caused by a leaking capsule.

e. The brilliance of the luminous points may be increased by exposure to light.

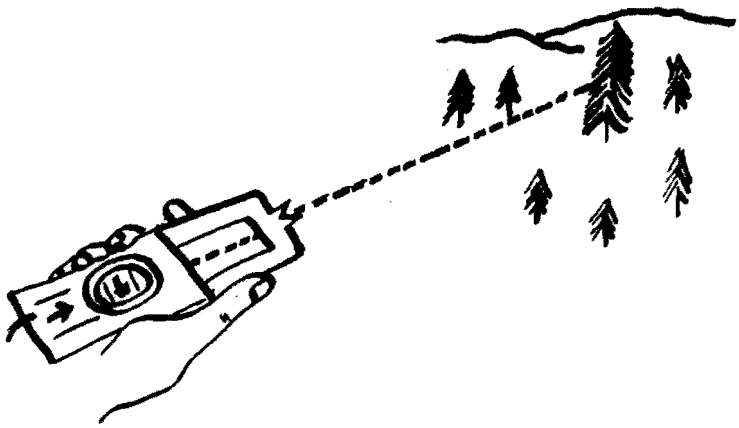
f. Do not lay your compass near a radiator or where temperature can become extreme, such as on pavement in the sun. The expanding liquid may damage the capsule.

USE OF THE COMPASS SHOOTING A BEARING

1. The following steps are taken to obtain a bearing or direction to an object which is visible.

2. a. Open the compass cover wide and hold it level and waist high in front of you.

b. Pivot yourself and your compass around until the sighting line points straight to the object on which you are taking the bearing.



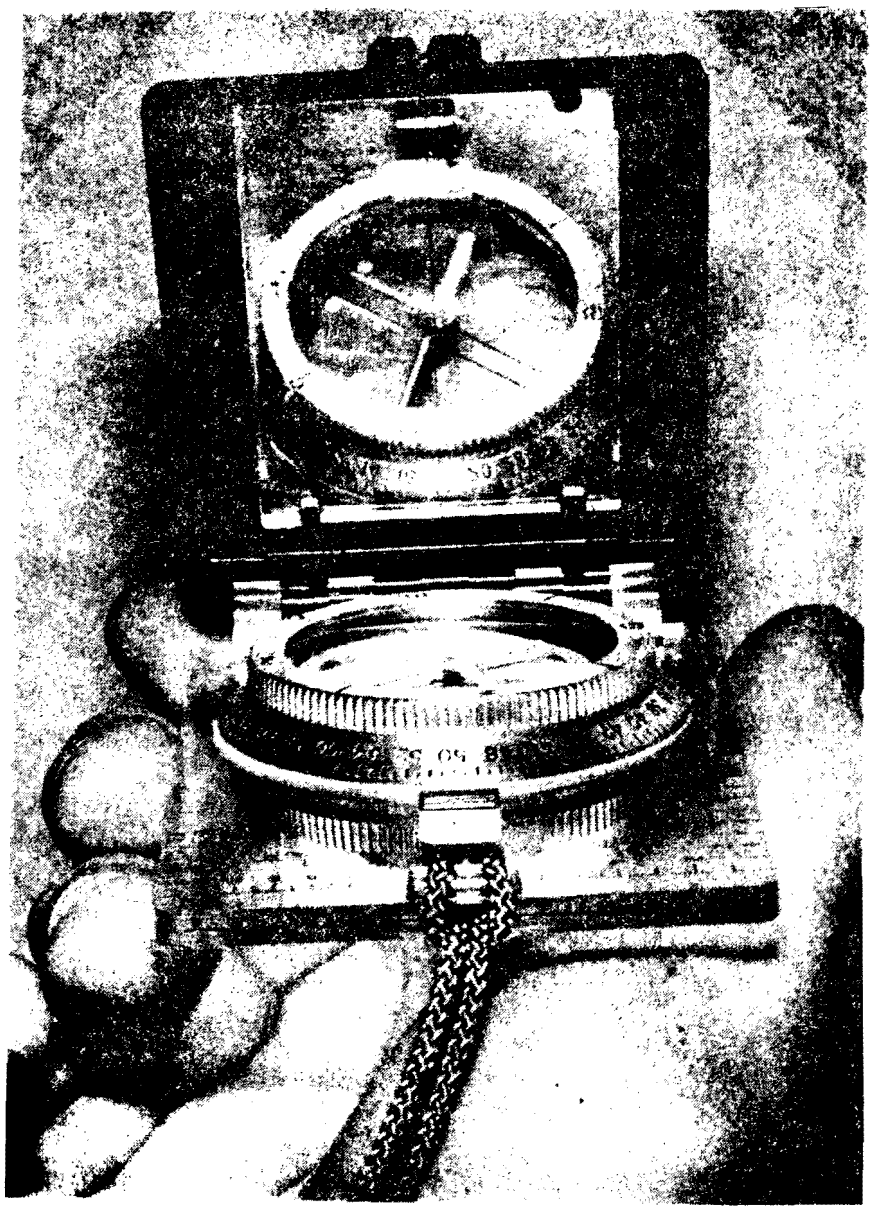
c. Turn the dial until the orienting arrow and the magnetic needle are lined up with the red end of needle lying between the two orienting points.

3. The bearing to your object is the mil reading indicated at the index pointer.

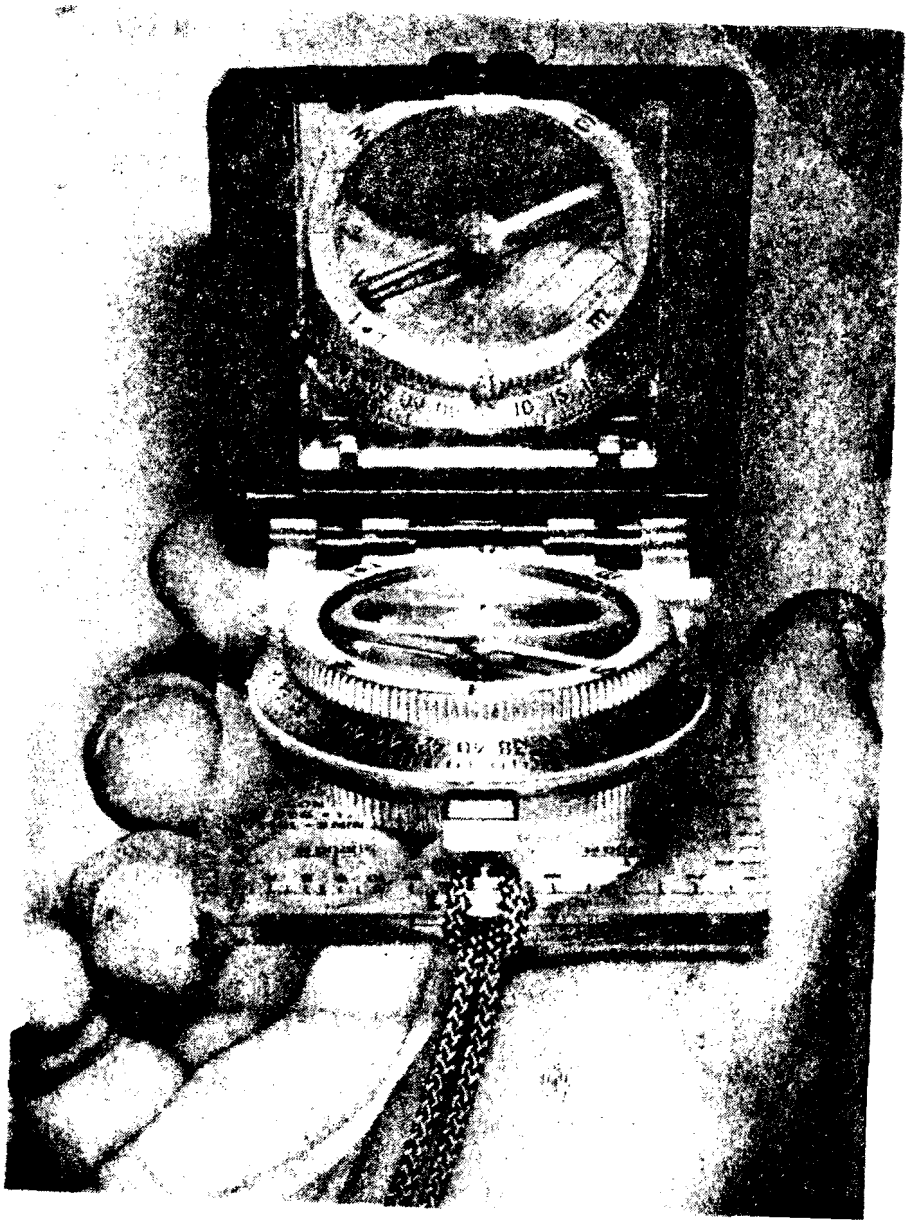
4. Bearings can be determined by using the sighting mirror. This will result in greater accuracy.

a. Hold the compass at eye level and adjust cover so the top of the dial is seen in the mirror. Face toward your object using the sight.

b. Look in the mirror and adjust position of the compass so the Slighting Line intersects the luminous points.



c. Seeing your objective across the Sight and the Sighting Line intersects the luminous points, turn the dial, so

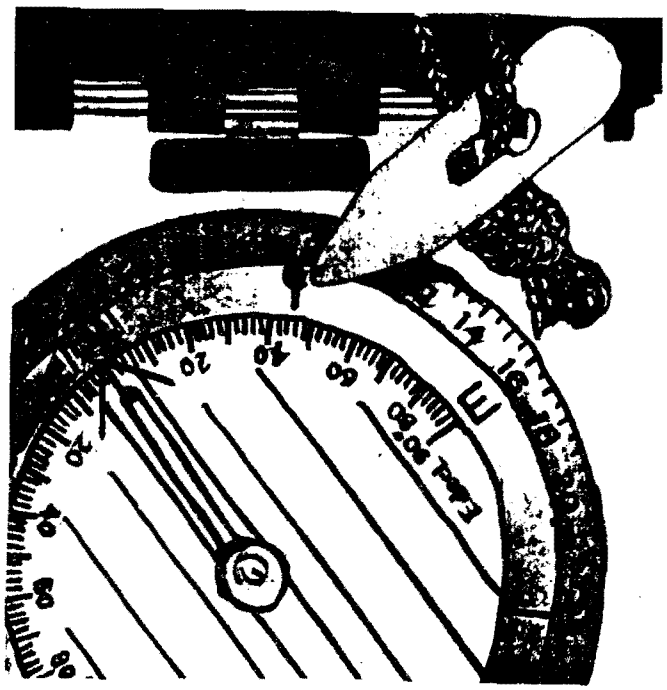


d. The Orienting Arrow is lined up with the needle, red end between the orienting points.

ADJUSTING FOR DECLINATION
"PERMANENT METHOD"

1. The Silva Ranger Compass is equipped with a highly convenient and desirable off-setting mechanism to "permanently" allow for declination in any given area. When you use the Compass extensively in one area, you will appreciate this feature because, once set, you need not make further allowance for declination. Furthermore, the adjustment simultaneously takes care of both map bearings and field bearings.

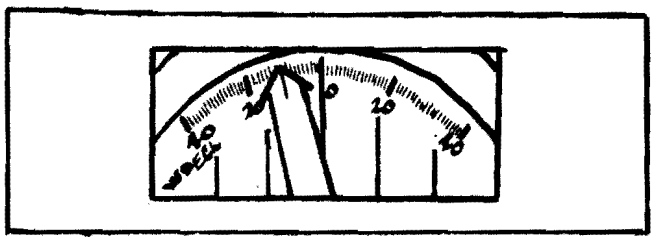
2. The off-setting mechanism basically consists of two bottoms in the Compass housing, one of which can be off-set in relation to the other by means of the declination adjusting screw. The declination scale and meridian lines are engraved on one bottom. The orienting arrow and the orienting points are on the other bottom. As you turn the adjusting screw, you change the angle between the meridian lines and the orienting arrow. It is this angle that should correspond to the declination of your area.



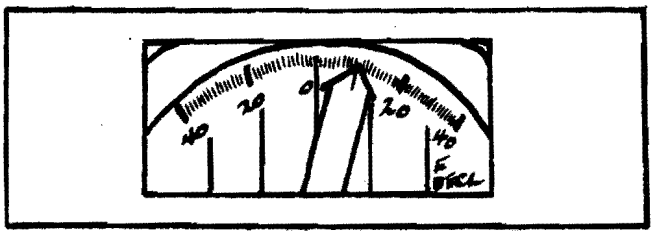
Declination Mechanism

If the declination in your area is 10 degrees west, turn the adjusting screw clockwise so the orienting arrow points to 10 degeees on the west side of the scale.

If the declination in your area is 10 degrees east, turn the adjusting screw anti-clockwise so the orienting arrow points to 10 degrees on the east side of the scale.



Declination West

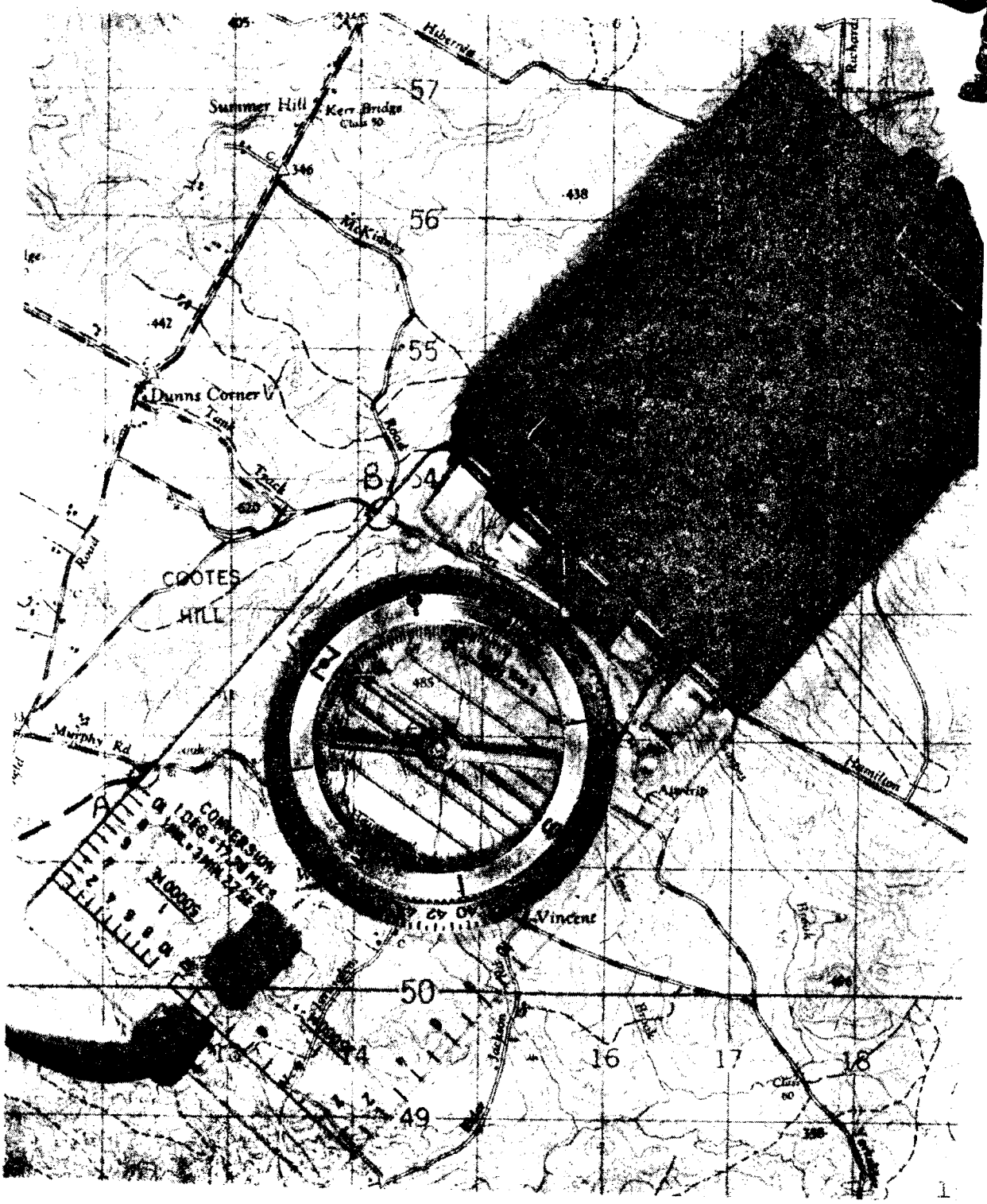


Declination East

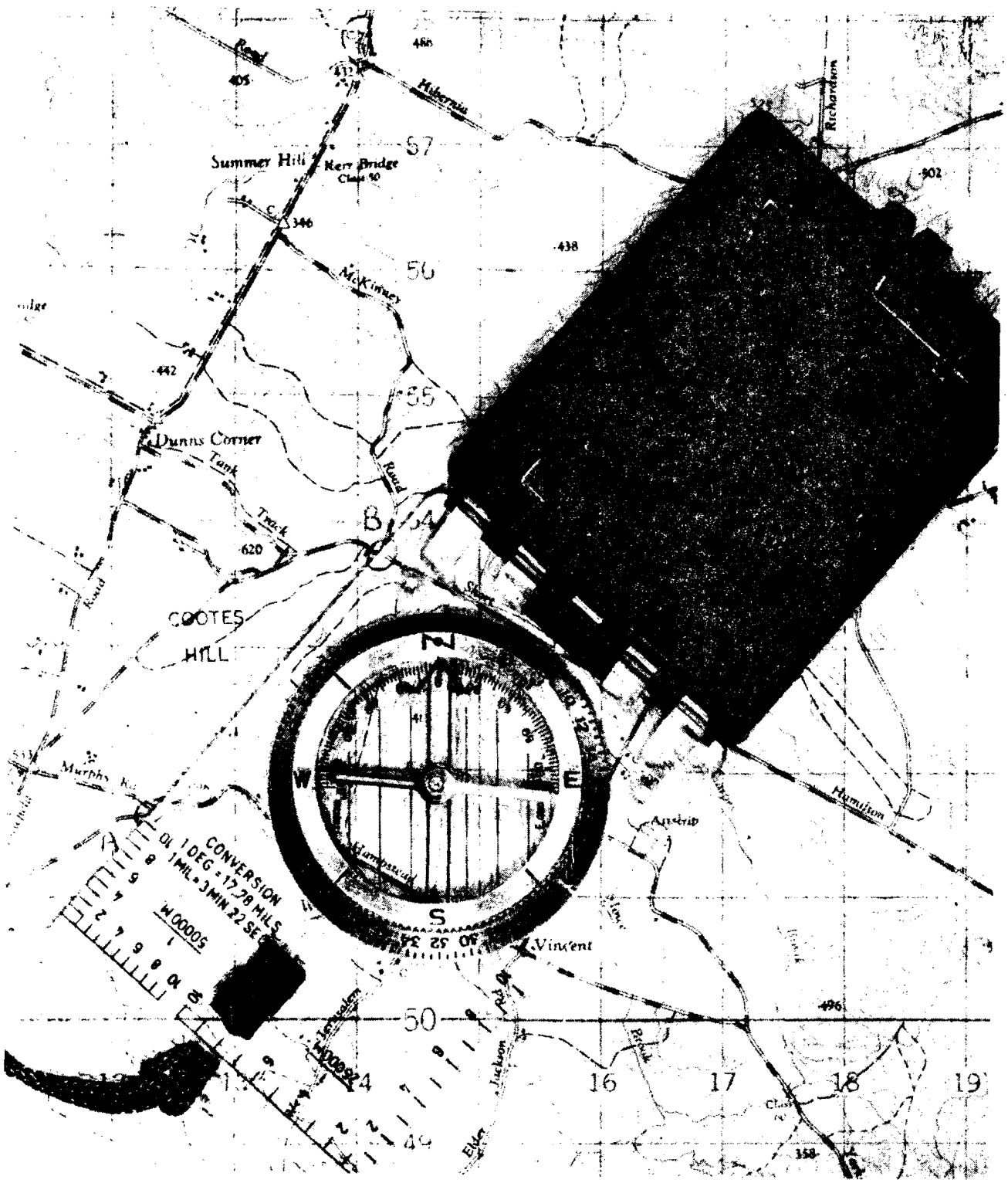
MEASURING A BEARING ON A MAP

1. The following steps are taken to obtain a bearing or direction to an object which is not visible. This is done with the assistance of a map.

a. Place the compass on the map so that either edge of the compass base plate is exactly parallel with the line on the map you wish to travel, ensuring the cover points in the direction you wish to travel.



b. Holding the compass in position on the map, turn the dial so that the meridian lines of the compass are exactly parallel with the eastings on the map, ensuring the north on your dial is facing the top of your map.



2. In these two steps your compass was set for the mil reading to your objective. By lining up the red end of the Magnetic Needle - the Orienting Points on the Orienting Arrow you are pointing in the direction of your objective.

ORIENTING THE MAP WITH THE COMPASS

1. Place your map flat on the ground, then place the compass with the cover wide open on the map, ensuring the cover points to the top of the map.

2. Line up the meridian lines on the compass so that they are parallel with the eastings on your map.

3. Rotate the map and compass together until the end of the magnetic needle is between the two luminous points on the orienting arrow.

4. Your map is now oriented and prepared for position finding.

ORIENTING A MAP USING GROUND FEATURES

1. Fig. 1 represents the ground as you see it. Fig. 2 represents the map. X indicates your position and arrow indicates direction you are looking.

Fig. 1
THE GROUND

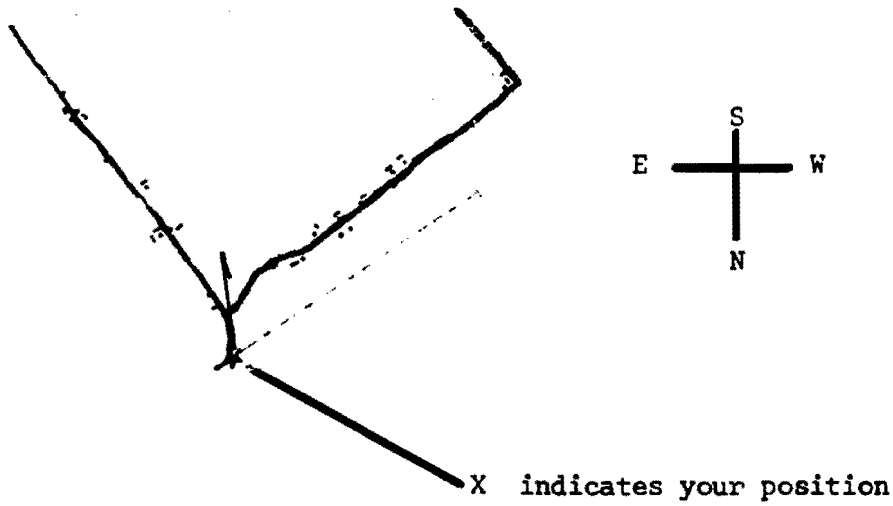
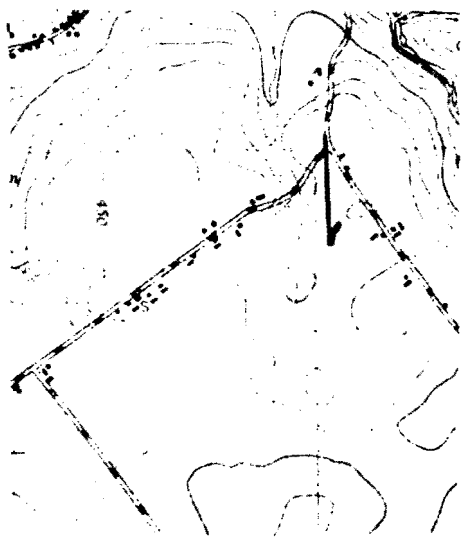


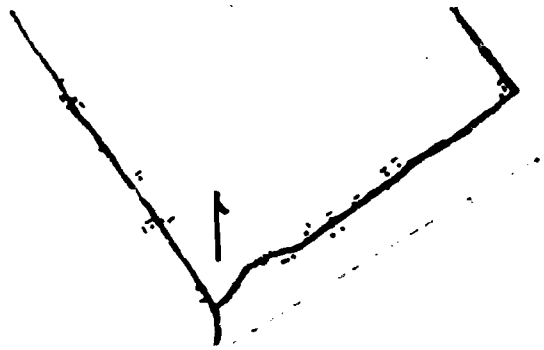
Fig. 2
THE MAP



2. Fig. 1 (the ground) and Fig. 2 (the map) do not correspond.

3. To orient the map, turn it around so that map and ground correspond.

Fig. 3
THE GROUND



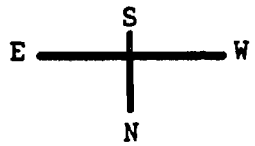
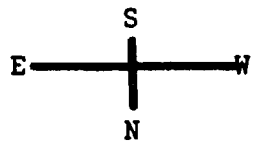


Fig. 4
THE MAP



4. The map is now oriented.

MARCHING ON A BEARING BY DAY

BEFORE MOVING OFF

1. a. Ensure correct declination is set on compass.

   b. Place compass safety cord around your neck.

   c. Remove steel helmet and rifle to safe distance before shooting bearing.

USE OF PROMINENT OBJECTS

2. a. Select prominent object along line of bearing and move to it.

   b. Continue in this manner until you reach the objective.

   c. Check distance travelled frequently.

DESERT AND WOODED AREAS

3. a. Check compass frequently to ensure you are marching on correct bearing.

   b. Check distances travelled frequently.

   c. Other methods - see marching on a bearing on dark or cloudy night (next page).

MEASURING DISTANCE TRAVELLED

4. a. There are approximately 120 paces in 100 metres which varies according to the individual length of pace and whether on flat or hilly ground.

   b. Fill one pocket with pebbles and transfer one pebble to another pocket every 100 metres travelled, or

   c. Tie a know in a piece of twine for every 100 metres travelled, or

   d. Use a previously measured length of twine or rope (ie 100 metre length).

      Send a man out on the bearing with the rope until he reaches the end of rope and he has travelled 100 metres. Continue in this manner.

MARCHING ON A BEARING BY NIGHT

GENERAL

1. a. Aids to keeping direction will be determined by the need for speed, silence and the degree of darkness.

   b. Area should be reconnoiter by day.

   c. Bearings should be plotted and set by day.

BRIGHT NIGHTS

2. a. Use prominent objects on the skyline as per marching on a bearing by day; ensuring that you will be able to see or find the object from point A to point B.

   b. Proceed as per dark or cloudy night where there are no prominent objects.

DARK OR CLOUDY NIGHTS

3. a. When prominent objects cannot be seen and silence is not a factor:

      (1) Send a man ahead on the bearing as far as you can see him.

      (2) Tell him to halt, to right or left, as necessary.

      (3) Follow-up to him and send him ahead again.

      (4) Continue in this manner until you reach your objective.

   b. When silence is a factor:

      (1) Tie strong twine or Sigs wire to man's belt.

      (2) Affix white tape or other white material to man's back so that you can see him for greater distance.

      (3) Send man out on bearing as far as you can see him; keeping loose end of twine in your hand.

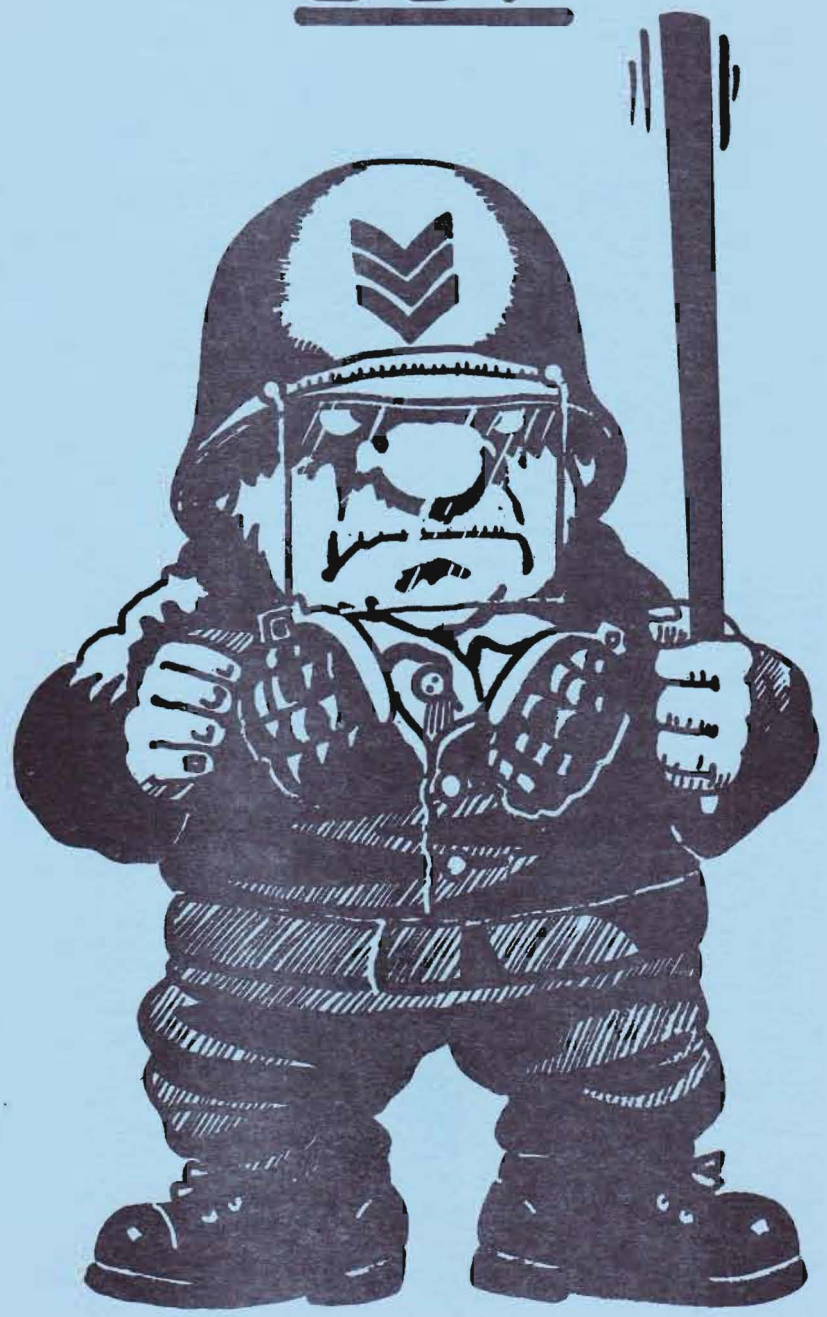
      (4) Ensure prearranged signals have been rehearsed in daylight.

      Eg: One tug on twine - halt
      Two tugs on twine - go left
      Three tugs on twine- go right

      (5) Continue in this manner until objective is reached.

CANADIAN FORCES RECRUIT SCHOOL
CORNWALLIS

BDF



PRINCIPLES OF CONCEALMENT

INTRODUCTION

1. Effective concealment of the individual depends primarily on the choice of background and its proper use. Background is the surrounding area seen from the ground and the air. It may be anything - a portion of the jungle, an area in a barren rocky desert, a farm yard, or a city street. It is the controlling element in individual camouflage and governs every concealment measure. The clothes that are worn must blend with the predominant colour of the background. Skin and light coloured equipment are toned down for the same purpose. The individual soldier must practice blending with the background by hiding in shadows and avoiding contrast between his silhouette and the background. He must avoid movement which the immobile background will emphasize. To keep the appearance of the background free of signs which point to the presence of military personnel and activities, he must follow hidden routes, and conceal spoil, tracks, equipment, and installations. He must remember also that he is out to deceive the air observer as well as the ground observer.

WHY THINGS ARE SEEN

2. Things are seen because they contrast with their surroundings in one way or another. There are ten reasons why things are seen:

a. shape;
b. shadow;
c. silhouette;
d. movement;
e. spacing;
f. position;
g. texture;
h. colour;
j. scale; and
k. noise.

SHAPE

3. Experience teaches people to associate an object with its shape or outline. At a distance, the outline of objects can be recognized long before the details of makeup can be determined. Trucks, guns, tanks, APCs, helmets, and other common military items of equipment all have distinctive outlines that help to identify them.

SHADOW

4. The sides of an object that are turned away from the light will be in shadow. Against a dark background the lit surface of an object will be distinguishable, while against a light background the dark or shadow sides will show.

5. In addition, an object may cast a shadow beside it, which can be visible, though the object itself is out of sight. Objects in shadow may be missed because the eye tends to accept conspicuously dark or light areas as uniform, and does not seek for minor differences in darkness or lightness within them.

SILHOUETTE

6. Anything silhouetted against a contrasting background is conspicuous. Any smooth flat background, like water, a field, or most frequently the sky, will provide such a contrast. Any object may be silhouetted if it is simply against a background of a different colour.

MOVEMENT

7. Although this factor seldom reveals the identity of an object itself, it is the most important one for revealing existence. Even though the other factors of recognition have been completely eliminated, an enemy observer will be attracted to the area if movement is not controlled. He may even be concentrating his attention on some other area but he will not fail to detect movement in another area through side vision. Do not move unless absolutely necessary and then only to the extent necessary.

SPACING

8. In nature, things are seldom regularly spaced. Regular spacing therefore usually indicates man-made objects and attracts the eye of the observer. Be careful how you park your vehicles and how you dig your trenches.

POSITION

9. An object is often identified by its position with relation to its surroundings. A long object on a railroad track is assumed to be a train similar objects on a river and parallel to its banks are assumed to be boats or barges. A large structure in a group of frame buildings might be a barn. Position is nothing more than the relative space relationship of one object to another object or objects.

TEXTURE

10. Texture refers to the ability of an object to reflect, absorb, and diffuse light. It may be defined as the relative smoothness or roughness of a surface. A rough surface, such as a field of grass, reflects little light and casts many shadows on itself. Consequently, it appears very dark to the eye or on a photograph. A smooth surface, such as an airstrip or the roof of a building, reflects more light

on an aerial photograph. Thus, an airstrip, even though it might be painted the same colour as the surrounding terrain, would show up as a lighter tone on a photograph. The almost total absence of texture results in shine. One of the most revealing breaches of camouflage discipline is shine. This alone can attract attention to a location under enemy observation regardless of the type. Shine is generally associated with the reflection of sunlight from windshields, windows, mess kits, and other such almost textureless surfaces. Even the lenses of binoculars, when used in direct sunlight, can reflect a bright shine similar to that of a mirror. (Some substances, such as certain plastics, regardless of the degree of texture, still present a shine.)

COLOUR

11. Colour is an aid to an observer when there is contrast between the colour of an object and its background. The greater the contrast in colour, the more visible the object appears. While colour alone will usually not identify an object, it is often an aid in locating the object or confirming a tentative identification. A secondary consideration is the tone of a colour. This is the modification of colour in varying shades. Usually, darker shades of a given colour will be less likely to attract an observer's attention than the lighter, more brilliant shades.

SCALE

12. Objects that differ greatly in size from those around them will be more readily distinguishable than those amongst others of approximately the same scale.

NOISE

13. Sudden noises contrast with the normal quiet of the battlefields. Loud noises such as the firing of artillery weapons or the running of generators can pinpoint locations. During the Korean Conflict, sound ranging equipment provided the initial location of 80 percent of the enemy indirect fire weapons.

PERSONAL CAMOUFLAGE

14. The tone and colour of hands, neck, and face, and the shape, surface and silhouette of the helmet and personal equipment must not contrast with their background.

CONCLUSION

15. Camouflage discipline must be constantly observed as surroundings change, shadows move, and foliage wilts.

FIRE CONTROL ORDERS

GENERAL

1. Fire control orders are given to direct attention to a target and to bring effective fire on it. Failure to insist on proper fire control orders results in danger to friendly troops, loss of surprise, premature disclosure of position, application of fire on unimportant targets, loss of time in adjusting fire, and wastage of ammunition.

2. The best fire control order is the one that results in the target being engaged in the shortest possible time.

SEQUENCE

3. This is a fire control order and the sequence does not vary.

There is a code word to help you remember the sequence:

"G R I T"

G - group - so you know whether or not you are to fire.

R - range - so you can set your sights, and know how far away to start looking for your target.

I - indication - so you know the target and direction.

T - type of fire - so you know whether to fire in single rounds or bursts.

4. There are 4 types of Fire Control Orders:

a. Full;

b. Brief;

c. Delayed; and

d. Individual.

5. What type is actually used depends on the situation:

a. Full - used under ideal conditions;

b. Brief - when there is little time and the target is obvious;

c. Delayed - when the target is out of sight, but will appear shortly; and

d. Individual - to allow individual firers to choose their own moment to open fire.

6. An example of each:

a. Full - G - No. 1 Section, prepare to fire;
R - 200;
I - Bearded man in red shirt waving rifle;
T - No. 3 rifleman, one round - FIRE.

b. Brief- I - Enemy;
T - Quarter right - rapid - FIRE.

c. Delayed - G - No. 3 section;
R - 300;
I - Enemy in woods, when they move into open;
T - Rapid - await my order. (When the enemy actually moves into the open) - FIRE.

d. Individual - G - Relay;
R - 200;
I - Target in front - one round per exposure;
T - Watch and shoot.

INTERNAL SECURITY OPERATIONS

INTRODUCTION

1. It is apparent that social values have changed a lot since the end of WWII; terrorism, mass violence and civil disobedience have become a common method of showing dissent. This continual conflict may lead to more violent disturbances in the future. Terrorism, riots and disturbances of the peace should normally be handled by the civil authorities, and the strength of the Municipal, Provincial and Federal Police Forces should be kept at levels sufficient for this purpose. The CF must anticipate the possibility that emergencies will occur which will necessitate that the Forces come to the aid of the Civil Power.

LEGAL LIABILITY

2. Canada is a Federal state and the legislative powers are set forth in the BNA Act. The provinces are responsible for the administration of justice within the provincial boundaries. When a province considers that it lacks the necessary means of law enforcement to deal with potential or actual civil disturbances, it requests aid from the Federal Government in the form of:

a. Additional Police support (RCMP);

b. Canadian Forces.

3. A member of the CF has the same rights and duties as oridinary citizens when dealing with criminal activity.

4. When called out in aid to the civil power, a member of the Canadian Forces has the powers of a constable.

5. When performing certain duties prescribed in Regulations by the Governor in Council under the authority of the Criminal Code of Canada (CCC), a member of the CF is a peace officer and may do the following:

a. Execute search warrants to gather evidence;

b. Seize suspected goods under the authority of a search warrant;

c. Use such force as is reasonably necessary to prevent the commission of an offence;

d. Order anyone to assist him in his duties; and

e. Arrest or detain without warrant persons who are believed to have committed serious offences.

6. A member of the Forces must:

a. Respond to a lawful request for help, from civil authorities, made through proper channels; and

b. Use the minimum force necessary to achieve the immediate aim when enforcing law and order.

CRIMINAL LIABILITY

7. The acts of military personnel are subject to review by the civil courts in actions for Damages or in Criminal proceedings.

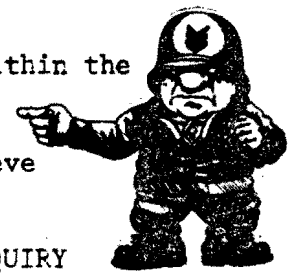
8. Military personnel also continue to be subject to military law.

LEGAL PROTECTION

9. Provided that members of the Forces:

a. Obey the lawful orders of their superiors and act within the law, in good faith; and

b. Provided that the action taken is necessary to achieve immediate aim:



MEMBERS OF THE FORCES NEED NOT FEAR THE RESULT OF AN INQUIRY INTO THEIR CONDUCT.

10. Normally, only the reckless or malicious use of force will result in disciplinary or criminal action. Members of the Forces are at all times accountable for their actions, but not necessarily liable.

RULES OF ARREST

11. Individual servicemembers may arrest persons who are in the act of, or about to commit, offences. However, in the Aid to Civil Power operations servicemembers will rarely make arrests. Normally, suspected and/or alleged offenders will:

a. Be detained at the scene until police officials arrive at the scene; or

b. In some circumstances alleged offenders may have to be escorted to police stations where police officials will assume responsibility;

c. Military forces do not detain individuals for a period longer than is necessary to turn them over to civil authorities;

d. Military personnel do not interrogate alleged offenders.

12. Arrests for offences such as illegal picketing, intimidation, inciting to riot, should be made only on instructions from an officer. Once a riot or disturbance has started, however, all servicemembers will be allowed to exercise their own judgement in arresting for rioting, assaulting a peace officer, etc. Keeping in mind use of minimum force.

13. Section 29(2) of the Criminal Code states "It is the duty of everyone who arrests a person, whether with or without a warrant, to give notice to that person the reason for the arrest."

14. The sequence for following an arrest is:

a. Search the dissident for weapons, identifying papers and other items of evidence;

b. Use of ID Tag to chalk the clothing with an identifying serial number;

c. Photograph the dissident with the arresting party, who should display any weapons, literature, etc found on him;

d. Complete an "ARREST CARD";

e. Hand the detainee over to a police collecting post which may be solely civil police or joint MP/Civil Police. The police will take the detainee to a central location for interrogation and formally charge the man. If there is no police collecting post or station nearby, arrangements must be made for holding offenders in a selected, secure area until they can be handed over.

15. Troops may be called to give evidence during trials.

SUMMARY

16. It is imperative that you, as members of the Canadian Forces, be fully conversed with the legal implications and arrest procedures dealing with Aid to Civil Power.

RULES GOVERNING USE OF FORCE

INTRODUCTION

1. When force becomes necessary, it must not be excessive. The primary requirement is for a military force that is smart, alert, and well disciplined. The sudden appearance of a smartly turned out body of troops is a great deterrent to a mob.

2. The serviceperson must be:

a. Careful not to antagonize by either gesture or speech but at the same time must be firm;

b. Must not display fear;

c. On no account will he take sides or show impartiality;

d. Must not mix with the crowd; and

e. He must carry out all orders promptly.

ACTION INITIATION

3. Action is taken after the representative of the civil authority in attendance makes such a request.

WEAPON FIRE

4. The level of force and the decision to deliberately employ weapon fire with ball ammunition to achieve the aim of restoring law and order is the responsibility of the Officer in immediate command, or their delegated representative at the officer level who may order fire.

5. To restore law and order in a confrontation situation, the employment of weapon fire with ball ammunition will be ordered by officers in immediate command AS A LAST RESORT.

GUARDS/SENTRY

6. The guard is a deterrent by his presence. The sequence of escalation of force for Canada is:

a. challenging;

b. show of force by calling for assistance;

c. drawing and/or arming his weapon;

d. arrest;

e. verbal warning;

f. warning shots into pre-selected safe area after a verbal warning; and

g. firing to disable after verbal warning:

(1) fire only aimed shots, and

(2) fire no more rounds than absolutely necessary.

DISPERSAL NON-VIOLENT DEMONSTRATIONS

7. The sequence for dispersal of non-violent demonstrations is:

a. persuasion followed by arrest;

b. in certain circumstances physical or psychological devices such as noise, water, smoke or small quantities of tear gas may be used.

REMEMBER

8. When you are assisting civil authority you will not use more than the MINIMUM FORCE necessary to achieve your aim. ie No more force than absolutely necessary.

USE OF FORCE WITH FIREARMS

FIREARMS

1. Your magazine will be loaded with live ammunition and placed on your firearm unless otherwise ordered. Normally, no live round is to be in the breech, the working parts will be forward and the safety applied.

2. Unless otherwise ordered you will not cock your firearm except:

a. in the course of a challenge;

b. when about to fire in self-defence; or

c. when about to fire in defence of persons or property.

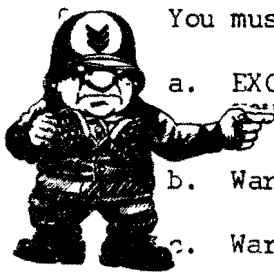
3. You will carry your weapon in a safe professional manner. You will guard your weapon and ammo at all times.

CHALLENGING

4. You will only challenge when you have reasonable grounds for believing that there is a threat to person or property. Depending on the situation you may ask a person for identification without challenging.

5. You will always challenge before opening fire unless a dangerous attack is made without warning upon you or the person or property you are guarding.

WARNING BEFORE FIRING



6. You must always give a warning before firing:

a. EXCEPT WHEN ANY DELAY COULD LEAD TO DEATH OR INJURY TO YOURSELF OR OTHER PERSONS;

b. Warning will be oral whenever possible; and

c. Warning (shot/pre-selected area).

AUTHORITY TO FIRE

7. After giving due warning you may fire:

a. Against a person carrying a lethal weapon, when you believe he/she intends to use it or when he/she does not halt when ordered to do so;

b. Escaping person who has killed or seriously injured a person does not halt when ordered to do so;

c. Attempting to destroy a VP and doesn't stop when ordered to do so;

d. Stealing firearms or explosives; and

e. When there is no other way to prevent yourself or the person whom it is your duty to protect from being killed or seriously injured.

8. You will not fire at an assailant who has commenced to retreat and is no longer a threat, unless, he has killed or seriously injured a member of the Force or a person you are protecting.

9. You will not fire at a vehicle simply because the driver does not stop (eg at a road block) unless fire has come from that vehicle.

10. You will note its make, licence number and direction of travel and report it immediately to your superior.

OPENING FIRE

11. If you have to open fire, you will:

a. fire to disable;

b. fire only aimed shots; and

c. fire no more rounds than absolutely necessary.

12. You will arrange for medical assistance.

13. Collect all empty casings, to assist in counting the number of rounds fired.

ACTION AFTER FIRING

14. The following action will be taken after firing:

a. stop firing, make safe, collect and count empty casings;

b. assist wounded;

c. assist in clearing area, but avoid blocking exits or taking action against people who are trying to disperse;

d. if possible, obtain particulars of neutral witnesses who saw the military action;

e. collect any bodies, hand them over to police, they must not be moved by friends or relatives;

f. remain at the scene until it is clear that the situation has been restored.

15. A report in writing will be demanded of any member of a unit who fires or orders firing. It should include the following:

a. description of events that led to firing;

b. time, date, and place of firing;

c. name of person ordering fire;

d. number of rounds fired;

e. name and disposition of casualties;

f. name and address of witnesses.

Also a statement from civil authorities.

16. Military police may be especially useful in the role of recorders as they are trained in collection and preservation of evidence.

SUMMARY

17. Section 26 of the Criminal Code of Canada states, "Everyone who is authorized by law to use force is criminally responsible for any excess thereof according to the nature and quality of the act that Constitutes the excess."

MINIMUM FORCE

CANADIAN FORCES RECRUIT SCHOOL
CORNWALLIS

OCR

PROPERTY

GENERAL

1. The purpose of this handout is to define the two main types of properties in the Canadian Forces.

2. All properties in the Canadian Forces are in one of the two categories:

a. PUBLIC, or

b. NON-PUBLIC.

3. These properties are bought through one of two funds:

a. PUBLIC FUND, or

b. NON-PUBLIC FUND.

4. Public funds are from TAX dollars in the form of defence budget. Non-public funds are return of profits from such things as CANEX.

5. Example of PUBLIC PROPERTY (Military):

a. Military buildings;
b. Military equipment;
c. Or items purchased from tax dollars;
d. ID Cards.

6. Examples of Non-public Property (Military):

a. Military Recreation Equipment;
b. Television Sets in Barracks;
c. Soft drink dispensers in Barracks;
d. Pays for your Graduation - Meal, DJ, etc.

7. If you are careless and lose or damage any item of Public or Non-Public Property you will have to PAY for the replacement (eg Barrack Damage).

8. You are responsible for:

a. all issued items of kit or other equipment that you may receive;

b. that equipment used in common with others.

9. If you discover or witness loss or damage and FAIL to REPORT it IMMEDIATELY, you are equally responsible for the loss or damage.

10. It is an offence to loan, sell, or barter any service item.

11. Distribution Account Holder - Responsible to the Commanding Officer for all Public/Non-Public Property in your Barrack Block. He can be a Sgt or Cpl in your platoon. He is called a Distribution Account Holder.

ROYAL CANAD) ARMY (REGULAR)

Participated in:
Western Front
Mediterrean
Palestine
Persia
Russia & Siberia

Memorable Battles:
Second Battle of Ypres
Vimy Ridge

ROYAL CANADIAN NAVY

Responsibilities:
Halifax, Esquimalt
Intelligence Service
RN Recruiting
Wireless Stations
Supervising ship building

Vessels:
1914 - 4 - Niobe, Rainbow, C1 & C2
1918 - 115 - 5500 personnel

ROYAL CANADIAN AIR FORCE)

Main Purpose:
Reconnaissance
Aerial Bombing
Aerial Fighting

20,000 Canadians served with the Royal Flying Corps, Royal Naval Air Service and Royal Air Force

WORLD WAR ONE 1914 1918

1922 - National Defence Act was passed creating the Dept. of National Defence
1923 - Militia set up radio telegraph stations in Yukon and NWT's
1924 - RCAF - Duties: Forestry & Fishing Patrols, Suppressing Smuggling, Aerial Surveying and Mercy Flights.

BETWEEN WARS

Participated in:
Hong Kong
NW Europe
Sicily
Italy
Africa
Pacific

Campaigns:
Dieppe 18 Aug 42
Sicily 10 Jul 43
Italy 3 Sep 43
D Day 6 Jun 44
Rhineland Feb-Mar 45

Duties:
Convoy Duties
Protect Canadian Coastline
Rescue Work
Anti-Submarine Sweeps
RCN - Alone or with Allied support destroyed 29 submarines and 42 surface vessels

Participated in:
NW Europe
Mediterrean
Far East

Duties:
Home Defence
BCATP
Aerial Fighting & Bombing
Battle of Britain
May - Oct 1940

WORLD WAR TWO 1939 1945

NATO-1 Battle Group W. Germany
UN-Peacekeeping 10 countries
Major Roles- Korea 1950-53
Suez Canal 1956
Congo 1960
Cyprus 1964-
Egypt/Israel 1974

NATO-Anti-Submarine Warfare
ASW-Escort Squadron
UN-Korea

NATO-Germany
UN-Gaza Strip
Congo
Cyprus
Yemen
Pakistan
NORAD

POST WAR

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01 Feb 1968 the three forces became an integrated force known as the Canadian Armed Forces.

INSIGNIA, DECORATIONS AND MEDALS

1. The specific information on how or where to wear insignia, medals and decorations is contained in CFP 265.

2. You must remember that unless a decoration or medal has been awarded to you, you are not allowed to wear it.

3. The Canadian Forces Decoration (CD) is awarded for twelve (12) years of faithful service. A second clasp may be awarded for a further ten (10) years.

4. The Chief of Defence Staff Commendation is awarded for a one-time outstanding service worthy of note.

5. You'll receive a PIP providing you with greater detail on this subject.

GOVERNMENT OF CANADA

GENERAL

1. The purpose of this handout is to outline the basic construction of the Government of Canada.

2. The British North American Act gave Canada the right to self-government on 01 July 1867.

3. It established the type of government and specified the guaranteed rights of the Canadian people. The new Charter of Rights and Freedoms signed on 16 April 1982 further specified these rights.

4. In Canada we have what is called a Federal Government System. By this we mean a union or federation of provinces.

5. There are three areas of authority in the Federal Government:

a. Executive
b. Legislative
c. Judicial

6. Executive. The executive sanctions the laws and is divided into three sections:

a. Governor General - is the Queen's representative in Canada. He is appointed by Her Majesty the Queen on the recommendation of the Prime Minister. The Governor General must sign the Legislative Bills before they can become law.

b. Prime Minister - is the leader of the party in power.

c. Cabinet - members are chosen by the Prime Minister from the elected members of his party. Each member of the cabinet is called a minister eg; Minister of National Defence.

7. Legislative - The legislative drafts the laws and confers the necessary authority to govern the country. It is divided into two sections:

a. House of Commons - The House of Commons is composed of 285 members (including the speaker) elected by the people of Canada.

b. Senate - The Senate is a separate section of the government which examines the legislative measures that are passed by the House of Commons. The Senate is composed of 104 members chosen from all provinces on a proportional representative basis.

8. Judicial - The Judicial authority is the system of courts. The courts resemble a pyramid, at the head is the Supreme Court of Canada.

a. Supreme Court of Canada
b. Federal Court of Canada
c. Provincial Supreme Courts
d. District Courts
e. Magistrates Courts or Police Courts

9. Responsibilities of Federal Government:

a. National Defence
b. Banking and Money
c. Immigration
d. Criminal Code of Canada
e. Dept of Transport

10. Provincial Government. The Provincial Government consists of:

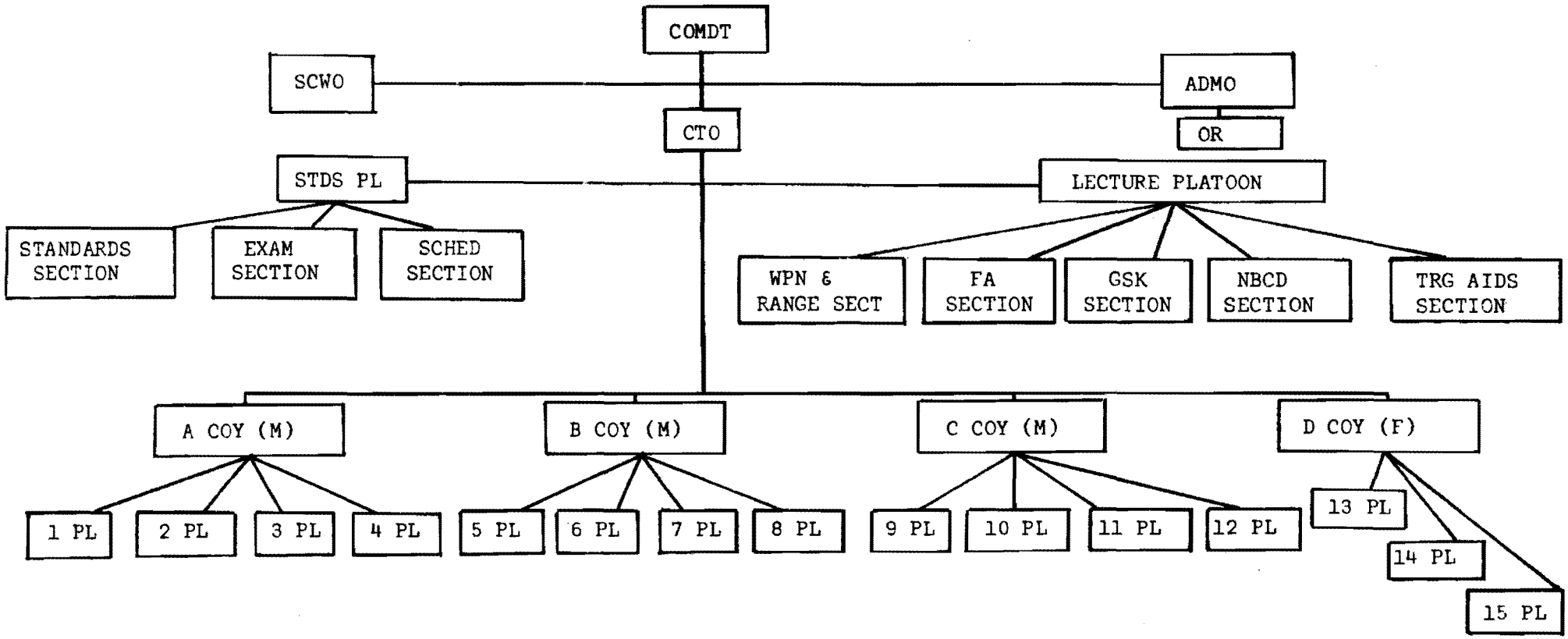
a. Lieutenant Governor (Governor General's Representative)
b. Premier
c. Cabinet
d. Legislative Assembly

11. Responsibilities of Provincial Government:

a. Education
b. Dept of Highways
c. Hospitals and Institutions
d. Courts
e. Liquor Regulations

12. Some areas such as public health and agriculture are controlled jointly by the Provincial and Federal Government.

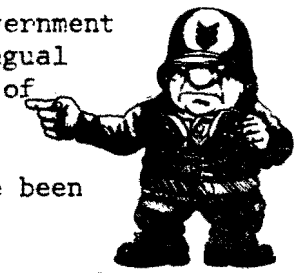
ORGANIZATION OF CANADIAN FORCES RECRUIT SCHOOL



The rank of a Company Commander in CFRS is a Captain.

The rank of a Platoon Commander at CFRS is a Warrant Officer.

OFFICIAL LANGUAGES POLICY



1. "In accordance with the Official Languages Act and government objectives, the Canadian Forces will be institutionally bilingual and representative of the two Official Languages communities of Canada while maintaining a one-force concept."

2. Second language training programs for Anglophones have been conducted in the CF for more than ten years.

3. Continuous French Program - This program will provide 40 weeks of instruction to 520 Anglophones personnel annually.

4. Further information can be obtained at your next unit from the Base Education Officer.

JUNIOR RANKS DINING HALLS

1. When you enter the Armed Forces, you enter a new world. This extends to the operation of the service mess halls and dining rooms. The purpose of this handout is to give the recruit a working knowledge of the limits around which Food Services works, proper conduct in the mess halls, and how to properly forward suggestions or complaints.

CONDUCT IN MESS HALLS

2. The mess hall feeds large numbers of people and each individual's co-operation is necessary to get everyone fed on time. The following regulations are laid down to keep confusion to a minimum:

a. Stand quietly in line while awaiting your turn at the steam-line;

b. If you arrive near the beginning of the meal hour, go to the seats at the back of the dining hall. This reduces congestion around the buffet table;

c. Horseplay or shouting is not tolerated in the dining halls;

d. Smoking is not permitted;

e. All diners shall return their trays, glasses, plates and eating utensils to the dish wash area provided.

THEORY OF RATIONS

3. A certain amount of your pay is deducted for rations (food). Food Services does not receive this money but rather receives authority to draw one "ration" each day. This ration consists of various amounts of all types of food required to feed one person three meals in twenty-four hours.

4. Upon occasion this system can present problems. For instance, this system is not geared to provide seconds. It is only by very careful management that seconds can usually be provided at Cornwallis. If a person takes more than his share of a certain item, it means that someone else must go short. Thus, it occasionally happens that there is not enough milk, fresh fruit, etc. to go around. There is very little Food Services can do about this because drawing over the entitlement to rations is not permitted.

5. In the balance of this information handout, let us try to clarify some of the specific questions which are most frequently asked of Food Services and at the same time point out some of the problems which we routinely encounter.

MILK

6. Why do we run out of fresh milk? The answer to this question lies in the "theory of rations". Each man on ration strength is entitled to 30 oz of milk per day; subtract from this the 5 oz used in cooking (cream pies, puddings, cakes, sauces, etc), and the balance of 25 oz (about 2½ cups) is available to you from the milk machine. When the diners drink 3 and sometimes 4 cups per day, the result is a shortage of milk (to the point where some diners go without).

JUICE

7. Why do we run out of juice? Like milk, juice is rationed. However, it is complicated somewhat by existing as a choice of 4 oz of juice or ½ of a grapefruit or 1 whole orange per person per day. Incidently, this ration provides a more than adequate daily supply of vitamin C. We often see recruits taking two glasses of juice plus an orange at breakfast. In such a case, he alone has consumed the full day's juice ration of three people all at one meal!

DESSERTS AND SALADS

8. These items are "self serve" items and all too often the diners tend to take 2 or 3 desserts at once plus a heaping plateful of salad. We are only too happy to be able to provide seconds on desserts and plenty of salad items. However, excessive wastage of these items is frequently noted as diners take more than they can actually eat. Please, feel free to return for seconds, but take only one serving at a time - avoid waste!

BUFFET/SALAD TABLE

9. Food items on this table are carefully prepared and handled (refrigerated where appropriate) in order to ensure that they are served in a sanitary manner. Please support us in this objective by using the serving utensils provided at these tables (and refraining from picking at food with your fingers). Do not remove sauce bottles from this table.

JUNIOR RANKS DINING COMMITTEE

10. The Junior Ranks Dining Committee consists of Food Services staff and representatives from those eating in the Dining Halls. Each recruit course has an appointed representative on this committee which meets monthly.

11. If you are nominated as a member to represent your course, make sure all personnel on your course are aware of your appointment and responsibilities.

12. Any suggestions or complaints you receive deserve your attention. If the matter is serious, you should immediately bring it to the attention of your Platoon NCO, to be passed on to the Chairman of the committee. If it is minor, bring it up at the next committee meeting yourself.

REGISTRATION OF COMPLAINTS

13. The following procedure should be followed by anyone who wishes to register a complaint:

a. Individual complaints - immediately to the Duty NCO in the Mess Hall;

b. Individual,the same day, reports the complaint to the Course Dining Committee member who records the complaint in the Course "Complaints Book".

14. Food Services Staff are instructed to treat diners with respect and in return we expect you to conduct yourselves as ladies and gentlemen.

TABLE MANNERS

15. a. Good table manners are based on consideration for other people. Do nothing to disgust, embarrass, or inconvenience fellow diners.

b. Listed below are a few manners that should be followed by all:

(1) Ensure that you are properly dressed, clean, hair combed, etc. prior to entering dining area,

(2) Sit in an upright position. Bring food to your mouth, not the mouth to the food. Do not eat with your elbows on the table, however, elbows may be rested on the table when not eating,

(3) Napkins are used to keep your face and hands clean. When not in use, they shall be placed on your lap, not tied around your neck or tucked in your jacket or shirt,

(4) The fork is used to eat with. Do not eat from your knife. Do not put food on your fork with your fingers. Do not put too much food in your mouth. Do not talk with your mouth full. Chew your food quietly with the mouth closed,

(5) Do not cut all your meat at once. Food should be cut and eaten one bite at a time. Do not mix all your food together like a child. Do not spit out hot food, take a drink of water or milk. Do not butter your bread in the flat of your hand,

(6) If you must cough, shield your mouth with your hand. Blow your nose in a handkerchief,

(7) Drawing designs on the table with utensils, crumbling or throwing food, playing with glasses, etc are all in bad taste.

16. Gentle manners and quietness mark a well bred person.

PUBLIC AFFAIRS

1. When dealing with the press or the public, you must do the following:

   a. Have a professional military appearance;

   b. Have an alert attitude;

   c. Pay compliments;

   d. Be courteous to the public; and

   e. Use humane treatment for all members of the public.

2. Always advise the press that you are not authorized to give statements. You should say:

   "Capt _____ is the Public Information Officer. You will find him located _____, sir."

3. Refrain from expressing any opinion on the origin or nature of the disturbance.