

2922-B-GL-300-000/FP-000 vol.1

VOL. 1

FILE NUMBER/DOSSIER 2922-B-GL-300-000/FP-000

DEPARTMENT OF NATIONAL DEFENCE
MINISTÈRE DE LA DÉFENSE NATIONALE

NATIONAL DEFENCE PUBLICATIONS - OPERATIONAL/TACTICAL ORDERS
THE ARMY (CFP 300)

[illegible]

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000968



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DATED FROM
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19/3/65

TO
JUSQU'AU

30 March 78

AFFIX TO TOP OF FILE - À METTRE SUR LE DOSSIER

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FILE NO. - DOSSIER N°

2922-BGL-300-000 / FP-000

VOLUME

2

2910-CFP 300 (DLP)

National Defence Headquarters
Ottawa, Ontario
K1A 0K2

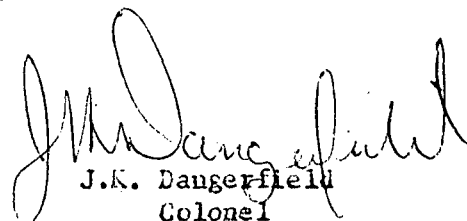
9 January, 1978

Distribution List

**FIRST DRAFT CFP 300 -
CONDUCT OF LAND OPERATIONS**

- References:** A. Land Forces Combat Development Committee decision
of 7 February 1977
B. 2910-CFP 300 (DLP 4-2) dated 30 March 1977

1. Attached is the first draft of CFP 300 - The Conduct of Land Operations prepared by Deputy Commandant of the Canadian Land Forces Command and Staff College and the staff officers of the Directorate of Land Plans.
2. This draft does not attempt to enunciate new tactical doctrine for the land forces but rather seeks to codify the existing doctrine that has evolved since the writing of CFP 165 in 1964, and to incorporate agreed NATO doctrine. Addressees are requested to review the draft in that light for content ignoring minor editorial errors. It would be appreciated if, where there is strong disagreement with the text, that proposed revisions be forwarded with your comments for consideration.
3. In order to produce an interim edition of this critical manual by 1 May 1978 you are asked to forward your comments and recommendations to reach the Directorate of Land Plans by 1 March 1978.



J.K. Dangerfield
Colonel

Director Land Plans
for Chief of the Defence Staff

Attachment: 1st draft
CFP 300

DISTRIBUTION LIST

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LCol WEJ Hutchinson, 2-8550/mr

MEMORANDUM

FMC 2910-CFP 300 (CD&TD)

30 Mar 78

SO Doc Production

COMMENTS CFP 300

1. In Chapter 1, the two following difficulties should be corrected:
 - a. Lengthy references to current Canadian defence policy;
 - b. At times unconventional outlines of standard strategic concepts.
2. Detailed Canadian defence policy (priority of roles etc) could, and probably will, change frequently. Our basic manual on the Army's "doctrine" should perhaps not be tied to such changing factors. Our philosophy should be such that it prepares officers to adapt to new roles; as such it must be general and concentrate on principles that will survive changes in defence priorities.
3. Strategic concepts (nature and causes of war, components of power etc) have become an academic discipline ("Strategic" or "War" studies). Chapter I should be reviewed by academics in this discipline so as to reflect a concise summary of the currently accepted concepts.
4. On the positive side, the treatment of the principles of war and of the "elements of tactics" in Chap 6 is quite attractive.
5. The chapters on the phases of war are receiving detailed study by the SSOs and I will forego comment at this time. However the reluctance to define a firm concept of defence cannot pass without mention.
6. In view of these concerns, comments from other sources, and the inadequate time for review, I wish you to recommend to DLP that a further draft be produced, or that revision of the interim manual be planned. A necessary preliminary must be the presentation of CFP 300 to Command Council.
7. Enclosed are detailed comments.

J.T.F.A. Liston
Col
DCOS CD & TD
247

④ DLP4-2

Action on rewrite.

WJH
DLP4
5 Apr 78

② JEP
Photocopy pls.
E2
31 Mar.

③ Hetch

Letter covering
this and all other
Comments is on the way.
E2
4 Apr 78.

PAGE	PARA OR COLUMN	LINE OR COLUMN	COMMENT	REASON
1-2	6		Definition of Grand Strategy omitted - Should be included.	Although US does not recognize the concept, it is generally accepted elsewhere.
1-5	106		This para should deal with defence objectives in general, and not with current Canadian policy. Defence objectives can range from "containment" through "dominance" "acquisition" and "destruction"	Canadian policy objectives can change. CFP 300 on the other hand is designed to set out principles.
1-7	Section 5	Title	"Types", "levels" or "scales" are more suitable alternatives.	"Nature of conflict" implies a discussion of the causes or origin of conflict, which is only superficially mentioned in this section. It is essentially a definition of the levels of conflict.
1-7	109	Whole para	Delete or expand adequately	The cause of war and determinants of its intensity has been a subject of intense study. These two paras fail to outline the problem usefully.
1-8	Section 6	Complete	Revision required in order to stick to a general outline of the nature of military power. List the components of power and indicate to the reader how he can assess the relative military power of a country faced with a military objective.	CFP 300 should describe principles. In this section the nature of power is not adequately examined. While Canadian policy can be usefully used as an example, the section on military power should not be diverted into a discussion of specific policy.

- 2 -

PAGE	PARA OR COLUMN	LINE OR COLUMN	COMMENT	REASON
1-10 to 1-14	114	Whole para	Flexibility, adaptability, operational readiness and combined forces are essentially characteristics of types of military force and should be discussed under that heading (i.e. para 112).	
1-15	116	Whole para	The role of the Canadian Forces should be deleted from Section 7 - "The nature and role of land forces".	Section 7 starts off well but gets diverted into a discussion of current defence policy, and a re-definition of the levels of conflict.
1-15	116		Para 301 (Basis of Organization) should be included here.	The "combat functions" of land forces should be the basis of a section on the nature of land forces and should precede chapter 2 (operational environment).
3-1	301	Whole para	a. Should be in Chapter I b. Mass should be deleted c. Protection or survivability should be included as an essential combat function.	"Mass" here, is another word for numbers. This concept is discussed under the principles of war (concentration, security economy of effort). However "survivability" which would include armoured protection, NBCW protection (as well as, perhaps, the notions of durability in the face of casualties) is an accepted function. Note that page 6-12 lists protection, fire and movement as the tactical functions. Consistency requires that Chapter 3 provide the same approach. This concept also re-appear in examining the characteristics of the various arms.



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MEMORANDUM

NOTE DE SERVICE

TO
À

MAJ. R. Graham
DLD 4

FROM
DE

A. LAJAMBE
HQ FMC

SUBJECT
OBJET

CFP 300 Comments

SECURITY - CLASSIFICATION - DE SÉCURITÉ
OUR FILE - N/RÉFÉRENCE FMC 29 10 - CFP 300 (Doc)
YOUR FILE - V/RÉFÉRENCE
DATE 29 Mar 78

Dick,

1. There are comments from the following sources:

CTC, 10 TAG, SSO Armd, SSO Inf,
SSO Arty, SSO Td Engrs, SO Air Doc,
SO STDZN, SSO CD COORD,

2. Comments are still awaited from SSO Comm-
and SSO Cht Svc Sp. They will be forwarded
as soon as received.

3. Sorry for the delay. SSO Armd will
be forwarding a covering letter in the next day
or so referring to these enclosures. It
appears the Manual is generally well received
but "mobile defence" is apparently causing
some indigestion!

Al

000975

Air Command
10 Tactical Air Group

Commanement Aérien
10e Groupement Aérien Tactique

TAG 2910-1 (SSO Plans)

Headquarters
10 Tactical Air Group
St Hubert, PQ
J3Y 5T4
2/Mar 78

Mobile Command
St Hubert, PQ
J3Y 5T5

Attention: SO Doc Prodn

CFP 300 (FIRST DRAFT)
CONDUCT OF LAND OPERATIONS

Reference: A. FMC 2910-CFP 300 (CD+TD) 25 Jan 78

1. A review of the subject publication has been completed as requested in Ref A. Unfortunately very few positive comments have been made. As with many new publications, it turns out to be repetitious and a poor lead-in to the 311 series and other air publications.

2. The comments have been divided in two sections, general and specific.

a. General Comments

- (1) a portion of the land operations normally managed at corps level are delegated to brigades and divisions,
- (2) the concept of the "air war" is not clearly identified, ie, a land officer using this manual as a training vehicle would expect close air support all the time,
- (3) helicopter operations are mentioned in various sections but with insufficient impact to be of value,
- (4) inference is made that command will always be exercised by a land commander,
- (5) the whole air input requires revision, the specific comments indicative of the extent.

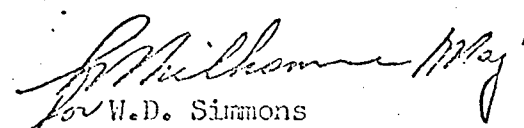
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
b. Specific Comments

- (1) Art 207. It is misleading to state that operations will succeed only if the enemy air forces are prevented from interfering. This is assuming that air superiority must be obtained first. The majority of airpower will be directed at gaining control of the air. Efforts may be directed to offensive counter air or defensive counter-air; however, close air support may not be available nor is it guaranteed. The close air support concept must be explained.
- (2) Art 328. The author shows little knowledge of our helicopter capabilities and of the total air flexibility in resupply.
- (3) Art 330. This paragraph gives a good description of casualty evacuation procedures. However, para 4 contains three ideas: move, number of beds, and holding policy. Para 7 should indicate that "were helicopters to be employed, they may be allocated under "tactical control" of the Field Ambulance or Field Hospital".
- (4) Chap 4, Sect 8 - Tactical Aviation. The whole section may be Chap 1 of CFP 311 (5) Sections 1 to 3 inclusive.
 - (a) Art 422.1 Tactical helicopter support is provided by the air element not environment.
 - i. infra-red or thermal devices are not synonymous and should not be used as such;
 - ii. helicopters can adjust and control all indirect delivery weapons, not only arty fire,
 - iii. sub-para c is too vague; ie, the present wording is not accurate enough to properly define "Tactical and Logistic Transport",
 - iv. there is no "Fire Support" role for helicopters in the Canadian Forces, it is totally against our concept unless the author refers to AT helicopters or gunships,
 - (b) Art 423. The article is titled "Equipment and Organization" but deals more on command and control which is dependant on the roles assigned.
 - (c) Art 424. This Headquarters does not agree with the author's statement that the tactical helicopter squadron has "sufficient fire power" to protect itself. The statement is false and conducive to wrong assumptions by tacticians.

.../3

- (d) Art 125. During a conflict, the employment of aircraft is controlled, not supervised.
- (5) Chap 6 Art 623.3 Airspace control guidance will be found in ATP 33/1.
- (6) Chap 8 Art 805. This is not considered an adequate definition of AIR SITUATION.
- (7) Chap 10. At this stage of the publication one gets the feeling that the author is becoming unconcerned and wants to bring the book to an end. The format is poor and the air input almost meaningless.
- (8) Chap 11. There is no helicopter input in the chapter. Mountain, desert, and arctic operations are not even considered.
- (9) Chap 16. Land-Air Battle.
- (a) Much of the information should be placed as a section in lieu of Art 207.
- (b) 1601.2 This doctrine is being revised, and the procedures will be found in ATP 33 series.
- (c) 1603.1 Close Air Support. A caution is required to indicate that close air support is a last effort when organic army firepower cannot neutralize the enemy. The resources available for CAS are rather restricted.
- (d) 1603.5 Counter-Air operations is a pure air function which is not coordinated through the army.
- (e) 1604.2 All electronic warfare is not integrated with the army.
- (f) 1604.3 The first statement is not quite accurate and requires clarification.
- (g) 1607.3 A scout helicopter is more properly referred to as a light observation helicopter.


for W.D. Simmons
Lieutenant - Colonel
for Commander 10 Tactical Air Group

 National Défense
Defence nationale

2910-1

Tactics and Development Department
Combat Training Centre
Canadian Forces Base Gagetown
Oromocto, New Brunswick
EOG 2PO
7 March 1978


Headquarters
Mobile Command
St. Hubert, Quebec
J3Y 5T5

Attention: Mr. A. Lajambe, SO Doctrine Production

CFP 300 (FIRST DRAFT)
CONDUCT OF LAND OPERATIONS

References: A. FMC 2910-CFP 300 (CD & TD) 25 Jan 78
B. Telecon Mr. Lajambe/Maj Bianco 28 Feb 78

The first draft of CFP 300 - the Conduct of Land Operations has been reviewed by a number of agencies at CTC. The comments submitted thus far are attached. Other comments will be forwarded as they are received.


W.J. Pettipas
Lieutenant Colonel
for Commander Combat Training Centre

Enclosures: 6

TACTICS AND DEVELOPMENT DEPARTMENT

DS ARTY COMMENTS

CFP 300 (FIRST DRAFT)

1. Chapter 4, Art 405.1. It is questionable whether you neutralize rather than destroy when using precision-guided ammunition. Perhaps since we are considering future capabilities such as cannon launched guided projectiles, we should consider adding destruction as an application of fire of artillery?
2. Chapter 4, Art 405.1 and 405.2. There seems to be some confusion between terms role, tactical functions and application of fire in these paras.
3. Chapter 4, Art 405.7. The artillery corps used to be composed of field branch and air defence branch. Field branch included field artillery and locating artillery. Has this changed?
4. Chapter 4, Art 406.1.b. page 4-10 line 1. After "missile" add "and multiple barrel rocket launchers."
5. Chapter 4, Art 406.1.b. page 4-10 line 3. After "advisers to" add "supported".
6. Chapter 4, Art 406.2.a. page 4-10. This subpara should read "Field artillery units may be equipped with guns, howitzers, pack howitzers, mortars, rockets or guided missiles."
7. Chapter 4, Art 406.2.b. Why are four categories required? Since we or our allies don't have any delivery systems greater than 210mm would not the category heavy be sufficient to cover 161mm and above.
8. Chapter 4, Art 406.2.e. By stating each battery is composed of two or more troops, the impression that a battery consists of more than one fire unit is created. This is simply not true any more. All Canadian batteries are six gun single fire units now.

408 AIR DEFENCE ARTILLERY

<u>Ref</u>	<u>Comment by Air Defence Wing Arty Dept CTC</u>
para 1 line 2/3 line 6/7 para 2 lines 5-8	ADA does not deal with SSMS. Anti-missile defence so far is in the NORAD/SAFEGUARD and PVO STRANY anti-rocket forces context only. Suggest all reference to it be deleted.
para 3 line 2	"positive" to read "passive".
para 4 a, line 4 4 e, line 1	"control and reporting system" should read "command and control system".
para 4 d, (1) & (2)	Should read: "High-to-Medium Level AD" "Low-to Medium Level AD"
para 4 f	Some further mention of EW should be made as an expansion of para 4 a, e.g. <u>Electronic Warfare</u> ECM and ECCM measures must be used by all Air Defence components at all levels.
para 4 d(3) line 5	Should read: "Their task may be further subdivided....." Remainder talks about the US LOFADS system which is not necessarily accepted by all.
para 5 a, line 4	Should read: "..... and distribution of fire control systems".
para 6 a, (3)	"hostile air vehicles" may remain if RPVs are included. If not, should simply read "hostile aircraft".
para 6 e, line 5	Change "or" to read "nor" Para 6 generally well written

DEPARTMENT OF NATIONAL DEFENCE



MINISTÈRE DE LA DÉFENSE NATIONALE

2900-1 (22 FS)

22 Field Squadron
Canadian Forces Base Gagetown
Oromocto, New Brunswick
EOG 2PO
14 Feb 78

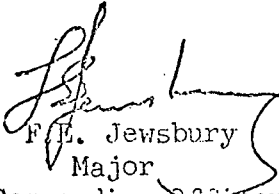
Headquarters
Combat Training Centre
Canadian Forces Base Gagetown
Oromocto, New Brunswick
EOG 2PO

Attention: T & D DEPT (DS ARTY)

CFP 300 (1ST DRAFT)
CONDUCT OF LAND OPERATIONS

Reference: 2910 (C of TD) dated 07 Feb 78

1. This unit submits the following comments:
 - a. Pg 10-9, para 3, line 4 - after "shallow" insert "water".
 - b. Pg 10-14, para 8a - There is an apparent conflict between para 8a and para 9. Suggest that the following be added to para 8a; "area through the crossing control group".
 - c. Pg 14-7, para 1417a, line 3 - Delete "frequency" insert "frequently".


F.E. Jewsbury
Major
Commanding Officer
22 Field Squadron

MEMORANDUM

2910-1 (Tech Svcs)

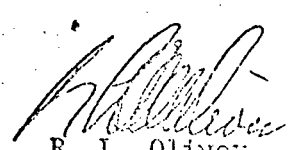
10 Feb 78

DS Arty (T&D Dept)

CFP 300 (1ST DRAFT) CONDUCT OF LAND OPERATIONS
COMMENTS FROM TECH SVCS DIV

Refs: A. FMC 2910 -- CFP 300 (CD and TD) 25 Jan 78

1. CFP 300 (1st Draft) has been given a cursory review. It was found to be very comprehensive pub that may obviate the need for detail in other CFPs relating to the land battle. Some gen comments follow.
2. The following comments are submitted:
 - a. A pub such as this should be class "RESTD";
 - b. While the doctrine for empl of armour is much improved in that "penny packaging" seems to be laid to rest, more emphasis should be placed on the lessons learned from the Yom Kippur War eg., inf must be incl in armd offensive fmns since def locs can be expected to contain many AT wpns;
 - c. Since "Adm" has been re-instated as a principle of war, "Intelligence" or "Information" should also be added due to its importance in the rapidly changing atmosphere of the modern battlefld.
 - d. More thought must be given to the conc in depth of modern AT wpns so that adv is taken of their range while their vulnerability to confrontation is reduced and better coord of AT def is achieved through more cen comd and con; and
 - e. More delineation is required to clarify the differences between routes, axes of adv and approaches to the vital grd.
3. If more clarification on the above comments is required, the Tech Svcs Div contact is the S02 Log loc 177.


R. L. Oliver

Maj
for SSO Tech Svcs

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ARMY DEPT COMMENTS

CFR 300 (FIRST DRAFT)

1. Chapter 4, Art 403.3b. The USAF can air lift tanks. Is the move of tanks by rail or ocean slow or is movement general by rail or ocean slow?

422 TACTICAL HELICOPTER SQUADRON

COMMENTS ON CFP 300 (FIRST DRAFT)

1. Chapter 4, Art 406(2). No mention of AOP helicopters and their principles of employment.

2. Section 5, Chap 4. No mention of Attack helicopters in anti-tank plan - but it is mentioned later in Chap 4, Sect 8.

3. Section 8 - Tactical Aviation

422 1.a. What type of radar??

1.b. Hel don't carry FAC's the pilots are FAC's.

1.c. Transport helicopter implies Chinooks -
their use forward should be considered very carefully.

423 Hel organization described is a standard
Brigade Group

- CMBG Hel organization is completely
different -

You seem to think they are same!!

424 It is questionable whether a Tac Hel Sqn
can protect itself for any significant
period of time.

425 All traffic coord throught FSCC Seems to
be some confusion between rotary/fixed wing
Air Traffic Control.

427 No mention of Tact Air at all.

429 No mention of Attack Helicopters or heliborne
carried tow to stop en tk threat.

Chap 8

834 No mention of helicopters for resupply.

Chap 9

904 Could use AH's etc for counter penetration
prior to c-attack.

911.8 Again no mention of AH's

Chap 10

1004.5 Could expand. Due to vulnerability of hels -
could put limitations of their use in such
situations - especially since obstacles are
usually heavily covered by fire.

- On the other hand - hels could be very
effective in seizing X-ings

1014.26 Air Mov Plan is made up by Air Mobile Commands

COMMENTS

Chapter 4

Section 3, Art 406.2 (Fd ARTY)

- does not incl principle of employing AOP (hels).

Comparable ARMOUR section does.

Section 5, Art 412 ANTI TANK

- No mention of anti tank hels on eqpt.

Section 8, TAC AIR (HELS)

422 1.a. Radar for surveillance?

b. Obs of Fire -- Chge as noted.

c. Implies using Chinooks Forward. Implies deep
pen across FEBA.

423 1 - Tac Hel Sqn org incorrect - org is for SBG = CBG
which is explained as a "different" type of fm
in introduction.

- Assumes that hels sqn should be under op con of
Bde. - I think STALWART WARRIOR had more
realistic command structure for hels. "Arty" makes
pt about "command centralized at highest level -
why don't we.

424 1 Tac Hel Sqn cannot self protect - should (must?)
be co loc to other units.

425 I haven't seen these principles stated as such
before - I thought the last theory was "big sky".

Section 9 - ARMS IN COOP

427 2 we're orphaned again!

429 Grouping

- add sufficient hel borne anti tk, and Att and heliborne
TOW - req'd to stop deep tk pens when our forces in def.
- esp applicable in subpara 4.

Chapter 8

Section 3 - The Advance

834 11 Adm Tpt - should mention max possible employment of hel's.

Chapter 9 Defence Ops

Section 2 - Defence

902.8 Good pt!

915.1 Defence Against Armour

e & f mention anti-tk hel's, but not Hel Tptd grd TOWs. This is the ideal environment for UTH ops, since AA fire is at min, close contact to en is not desirable (TOW's must be concealed when contacted) and tremendous firepower can be conc in short time ahead of pen. Comb ops to grd and air (hel) TOW should be effective.

Chapter 10 Other Actions

1004.5 "Obstacles" esp artificial often heavily defended. Before getting carried away to using hel's to cross obstacles, let's make sure the grunts understand the ground rules & the vulnerability aspects. I felt this para is rather loose in definition.

Section 3 - Airmobile Ops

1014 2.b. AMC is resp for AIR MOV PLAN - this is not stated.

3.(a)using LO's again, incorrectly.

- somewhere should emphasize reqt for good drills.

RESTRICTED

MEMORANDUM

6'

CH PA FMC 2910-CFP 300 (Inf)

23 Mar 78

PERM CHARGE TO 300 POC

Distribution List

CFP 300 1ST DRAFT
CONDUCT OF LAND OPERATIONS

Ref: A. FMC 2910-CFP 300 (CD & TD) 25 Jan 78

1. This draft manual has been reviewed, as requested, from a point of view of content. Therefore points of detail have not been commented on unless they are significant.
2. In general this draft manual satisfies the stated aim. It provides a sound basis for the professional officer to commence his study of land operations covering the whole spectrum of warfare. Since it is the keystone manual in the Land Force this fact should be stated, either in the Preface or the Introduction. Additionally the family of related manuals should be identified possibly in an annex.
3. Constructive comments on the content are:
 - a. the scope of the manual is too broad and this has caused it to be too long and too detailed. The writing style is academic and this has led to an over abundance of descriptive narrative. FM 100-5 provides a reasonable model for this type of manual. It attempts to apply fundamental principles and precepts to the conduct of operations on the modern battlefield. Our manual should attempt to do the same otherwise it will only serve as a general military work and be of little value as a keystone doctrine manual.
 - b. Special conditions including types of terrain, that affect the conduct of offensive and defensive operations, should be included in the chapters dealing with these operations and not be the subject of separate chapters. This will reduce the repetition.
 - c. the lowest level of command at which various operations would be conducted should be identified to avoid confusion, eg delaying and mobile defence operations.

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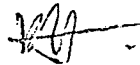
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- 2 -

- d. There is obvious repetition in Chapters 6, 7 and 12. It is suggested that Chapter 12 could be eliminated, and its content incorporated into Chapter 7 where necessary.
- e. it is suggested that Chapter 13 be deleted. The subject is covered in applicable chapters throughout the manual. If necessary this treatment can be expanded in these chapters.
- f. low intensity conflicts have been relegated to the last chapter. It is suggested that the author go one step further and remove this chapter. They are not war operations and the fundamental principles governing the conduct of land operations do not apply.

4. Despite the above comments the Author has done a praise-worthy job in writing/assembling this manual. The draft contains all the relevant material required and what remains to be done is to cull out the non essential and repetitive parts. It is emphasized again that the form and style of the manual would be better received if they followed the FM 100-5 model.


P.A.E. Harrison
Maj
SO Inf Doc
462

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MAJ PAE HARRISON/SO INF DOC/462/cp

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MEMORANDUM

EMC 2910-CFP 300 (Amnd)

20 Mar 78

50 Doc Prod

Distribution List

CFP 300 (FIRST DRAFT)

CONDUCT OF LAND OPERATIONS

Ref: A. EMC 2910-CFP 300 (CD&TD) of 25 Jan 78

1. Attached at Annex A are several comments which relate to the manual. Tardiness in reply is regretted.
2. It is understood that as a base document this manual should prove important. As well, it is considered that each chapter should stand relatively on its own and therefore a certain amount of redundancy is necessary. However, three major areas of concern are expressed as follows:
 - a. Length and redundancy. The manual is long and often repetitious within a given chapter. More scrutiny to reduce the size and redundancy is required. It cannot be produced in its present state without serious cuts.
 - b. Mobile Defence. As confusing and open to interpretation as any description of "defense based on mobility". In light of this and to avoid confusion with a covering force action, this whole concept must be more clearly expressed. At brigade level, I do not see mobile defense as possible. At higher levels, the concept makes more sense. This should be spelled out.
 - c. Armour and Reconnaissance. There is a tendency to consider tanks only as anti-tank weapons and, more seriously, to tend towards piecemealing and frequent grouping. Although intellectually satisfying, this is not foreseen as either tactically sound or practically feasible

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.../2

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RESTRICTED

- 2 -

given the future battlefield. In reconnaissance, this idea of grouping is also a dangerous tendency and it is suggested it be deleted totally.

3. For your consideration.

E. Exley LCol

E. Exley

LCol

SSO Armd

271

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DCOS CD&TD

SERIAL NO.	COMMENT SUBMITTED BY	PAGE	PARAGRAPH OR COLUMN	LINE NO. OR COLUMN	COMMENTS	REASONS SUPPORTING THE PROPOSAL
(a)	(b)	(c)	(d)	(e)	(f)	(g)
	SO ARMD DOC	1-11	114.1	Last Sentence	Suggest that "limitations on the degree of force" do "diminish the force". Suggest that "force" be deleted in last line.	
	SO ARMD DOC	3-2	301.B	Last Sentence	Delete "or" insert "and".	
	SO ARMD DOC	3-3	301.5B		Reword. Heavy and unclear.	
	SO ARMD DOC	3-3	301.5C	Second Sentence	Should read "These means are provided by both the headquarters and their organic communications units, as well as by specialized communications units." Reason: Clarity.	
	SO ARMD DOC	3-4	302.1		Delete from "involving" to "in" and add "alone or in". Reason -Simplicity.	

SERIAL NO.	COMMENT SUBMITTED BY	PAGE	PARAGRAPH OR COLUMN	LINE NO. OR COLUMN	COMMENTS	REASONS SUPPORTING THE PROPOSAL
(a)	(b)	(c)	(d)	(e)	(f)	(g)
6	SO ARMD DOC	3-11	313.1	3	Delete "with" insert "with which" after "weapons". Grammar	
7	SO ARMD DOC	3-19	322.1	Second Sentence	Not understood. Redo	
8	SO ARMD DOC	3-30	329	Title	Suggest "RESERVE STOCKS", "RESERVE" has tactical significance other than logistics.	
9	SO ARMD DOC	3-30	329 through-out		Suggest that the "basic load" concept, if it still applies, be defined in this para.	
10	SO ARMD DOC	3-33	After para 330.8		Insert figure 3-3, not later on	
11	SO ARMD DOC	4-4	403.3.d		Within this para, it should not be forgotten that tanks can play a major role in the covering force or guard actions due to their firepower and mobility	

SERIAL NO.	COMMENT SUBMITTED BY	PAGE	PARAGRAPH OR COLUMN	LINE NO. OR COLUMN	COMMENTS	REASONS SUPPORTING THE PROPOSAL
(a)	(b)	(c)	(d)	(e)	(f)	(g)
					This should come out in the defense para.	
12	SO ARMD DOC	4-6	404.2.b		Delete from "and" to "situation". Troops should not be decentralized under present doctrine.	
13	SO ARMD DOC	4-6	404.3.a	Last Line	Delete "his" insert "the".	
14	SO ARMD DOC	4-8	404.3.f	Last Sentence	Reword - not understood. Should be considered in light of serial 12 above.	
15	SO ARMD DOC	4-14	407.1	4	Spelling "meteorology".	
16	SO ARMD DOC	4-16	408.3	2	Air defense "positive" should read "passive"?	
17	SO ARMD DOC	4-21	409.1		Review in light of Infantry Study.	

SERIAL NO.	COMMENT SUBMITTED BY	PAGE	PARAGRAPH OR COLUMN	LINE NO. OR COLUMN	COMMENTS	REASONS SUPPORTING THE PROPOSAL
(a)	(b)	(c)	(d)	(e)	(f)	(g)
18	SO ARMD DOC	4-21	409.3	1&2	Review terminology of types of Infantry. See Infantry Study.	
19	SO ARMD DOC	4-21	410.1	6	Should be limit of <u>area of responsibility</u> . Suggest somewhere 5-6 kms ahead of FEBA. "Several thousand" is too vague.	
20	SO ARMD DOC	4-22	410.3	1	Spelling "possesseses".	
21	SO ARMD DOC	4-23	411.1.d	8	The ability to fight mounted must not be excluded.	
22	SO ARMD DOC	4-24	411.1.e	4	Spelling "perilously".	
23	SO ARMD DOC	4-26	411.6		Reword - Adds nothing as presently worded.	
27	SO ARMD DOC	4-295	416.2		AVLB's located at brigade should be mentioned here.	

IAI	COMMENT SUBMITTED BY	PAGE	PARAGRAPH OR COLUMN	LINE NO. OR COLUMN	COMMENTS	REASONS SUPPORTING THE PROPOSAL
	(b)	(c)	(d)	(e)	(f)	(g)
	SO ARMED DOC	4-41	429.4.	9	Believe should read "anti-tank" defences.	
	SO ARMED DOC	5-4	502.8		Whole para dealing with strategic considerations should come earlier possibly in introduction para 501.	
	SO ARMED DOC	5-6	506		Suggest this be reviewed as Chaplains should be with each regiment and battalion in war. <u>They are required.</u>	
	SO ARMED DOC	5-6	507		Same as para 30	
	SO ARMED DOC	5-8	509.2.		Provision must be made for crew testing and zeroing of major weapons, guns and tanks. This should occur in the rear area and means ranges and training.	
	SO ARMED DOC	6-10	606.5	7	Delete "be" insert "by".	

SERIAL NO.	COMMENT SUBMITTED BY	PAGE	PARAGRAPH OR COLUMN	LINE NO. OR COLUMN	COMMENTS	REASONS SUPPORTING THE PROPOSAL
(a)	(b)	(c)	(d)	(e)	(f)	(g)
34	SO ARMD DOC	6-12	607.1		Chapter should but does not follow the described order.	
35	SO ARMD DOC	6-12	607.1.b(2)		Should read, "Firepower".	
36	SO ARMD DOC	6-16	614.1	9-10 and 14-15	Sentences 6 and 9 must be reworded.	
37	SO ARMD DOC	6-22	620		Para 5 is missing	
38	SO ARMD DOC	6-32	Section 6		Repetitious when compared to 614	
39	SO ARMD DOC	6-36	631.4 and 631.5		Finally a difference is recognized between screen and guard and the requirement for reconnaissance "in force" when needed. Excellent!	
40	SO ARMD DOC	6-40			Section 8 - Why does it exist since Chapter 14 explains.	

SERIAL NO.	COMMENT SUBMITTED BY	PAGE	PARAGRAPH OR COLUMN	LINE NO. OR COLUMN	COMMENTS	REASONS SUPPORTING THE PROPOSAL
(a)	(b)	(c)	(d)	(e)	(f)	(g)
41	BO ARMD DOC	79	713.8	1	"common" should read "conducted"?	
42	BO ARMD DOC	7-13	719		Title should be "RECONNAISSANCE AND PLANNING" for consistency with above and content of para.	
43	BO ARMD DOC	7-14	721.1		This para is not considered necessary.	
44	BO ARMD DOC	7-14	725.6	Last line	Between "operations" and "so", insert "normally in the form of a warning order".	
45	BO ARMD DOC	81	SECTION 1		Should be significantly reduced in light of what follows in Chapter 8, especially 801 with 806.	
46	BO ARMD DOC	8-13	807		This para lays out the organization of the chapter but it is considered that for reasons of logic the advance should pre-	

SERIAL NO.	COMMENT SUBMITTED BY	PAGE	PARAGRAPH OR COLUMN	LINE NO. OR COLUMN	COMMENTS	REASONS SUPPORTING THE PROPOSAL
(a)	(b)	(c)	(d)	(e)	(f)	(g)
					code the attack.	
47	SO ARMD DOC	8-31	816.2		This para should be redone. It tends to imply necessarily grouping. This para should be reworded to be less dogmatic and to stress the dangers of piecemeal use of tanks.	
48	SO ARMD DOC	8-34	816.7		This para is very weak especially sub para b. Suggest that other economy of force missions be considered along with "deception" at higher levels. This tends to deal only with bde level roles.	
49	SO ARMD DOC	8-36	817.4	3	Reword last sentence. Reason - Grammar	
50	SO ARMD DOC	9-13	904.6		"Ce qui se conçoit bien s'énonce clairement". One of the dangers of "defense based on mobility"	

REF.	COMMENT SUBMITTED BY	PAGE	PARAGRAPH OR COLUMN	LINE NO. OR COLUMN	COMMENTS	REASONS SUPPORTING THE PROPOSAL
	(b)	(c)	(d)	(e)	(f)	(g)
					is that the concept is unclear and too much mobility is assumed likely on the future battlefield. This concept must be more clearly stated as must the level at which this "mobility" applies. It is obviously open to vast interpretation if this para is retained as guidance.	
	SO ARMD DOC	9-17	905.4	3	Again the question of decisive battle versus the concept of defense based on "mobility" requires clarity.	
	SO ARMD DOC	9-30	911.5	Whole para	This should be rewritten. It is misleading and again leads to piece mealism. Concept should be relative to the "covering force" and not to "hit and run" tactics "throughout his advance". Also suggest that "separation between positions" does not necessarily	

SERIAL NO.	COMMENT SUBMITTED BY	PAGE	PARAGRAPH OR COLUMN	LINE NO. OR COLUMN	COMMENTS	REASONS SUPPORTING THE PROPOSAL
(a)	(b)	(c)	(d)	(e)	(f)	(g)
					imply "decentralized control". On the contrary, where resources are limited centralized control in depth with the ability to react to a multiple number of threats may be the only way of defending. Caution is also to be used when employing tanks solely as anti-tank guns. This must be stressed since it is a recurring pit-fall not only in our doctrine but in our deployment on exercises.	
53	GO ARMD DOC	9-47	§14.4.b	3rd Sentence	Suggest strongly that this be reconsidered. Regrouping as a practice is much more difficult to achieve than that which is suggested. The concept of a "viable reserve" cannot and should not depend on the ability to "regroup".	

SERIAL C.	COMMENT SUBMITTED BY	PAGE	PARAGRAPH OR COLUMN	LINE NO. OR COLUMN	COMMENTS	REASONS SUPPORTING THE PROPOSAL
(a)	(b)	(c)	(d)	(e)	(f)	(g)
54	SO ARMD DOC	9-48 9-49	914.5 914.6		Suggest that a successful counter-attack, like an attack, must be exploited and the enemy pursued in order to provide for the maximum destruction and disruption of the enemy and to afford time for reorganization of the main defensive area. This should be stressed.	
55	SO ARMD DOC	949	915.1.d		Suggest second sentence read "They should not normally be tasked with responsibilities which place a restraint on their ability to manoeuvre".	
56	SO ARMD DOC	9-52	915.3.b	Second Sentence	Reword - Grammar	
57	SO ARMD DOC	9-55	916.3.b 916.3.c 916.3.d		A term in use as well is "junction point". (See para 923.5). The problem is the need for exchange of information at a	

SERIAL NO.	COMMENT SUBMITTED BY	PAGE	PARAGRAPH OR COLUMN	LINE NO. OR COLUMN	COMMENTS	REASONS SUPPORTING THE PROPOSAL
(a)	(b)	(c)	(d)	(e)	(f)	(g)
					given level and hence the requirement for physical versus visual contact. Please clarify notwithstanding CFP 121(AAP 6).	
58	SO ARMD DOC	9-68	923.5	4	Predetermining the use of tanks as a "tank screen" is not considered sound doctrine. Suggest this be reconsidered.	
59	SO ARMD DOC	10-7	1005.3.c	Last Sentence	Should read: "Crossing equipment should be made available to lead troops as soon as possible after breaching, such that the advance might be pursued with haste".	
60	SO ARMD DOC	10-12	1006.6.b		Suggest that in present environment of I2, the advantages of surprise achieved by darkness will be lost and, since control is easier by day, perhaps a re-think of this section is in order.	

SERIAL C.	COMMENT SUBMITTED BY	PAGE	PARAGRAPH OR COLUMN	LINE NO. OR COLUMN	COMMENTS	REASONS SUPPORTING THE PROPOSAL
(a)	(b)	(c)	(d)	(e)	(f)	(g)
1	SO ARMD DCC	10-14	1006.8	GENERAL	A concurrent is necessary here on control and disersion in face of likely enemy artillery activity.	
2	SO ARMD DCC	10-17	1007.3	3rd Sentence	Suggest "night" be replaced by "limited visibility" to include use of smoke and the fact that under I2 and a full moon chances are about the same as by day.	

COMMENTS BY MAJ LEHMANN - SO AIR DOC

1. I have read the air related section and find nothing objectionable. It is in line with ideas/concepts found in current pubs. Certainly no new ground is broken - motherhood.
2. It could be helpfull to indicate to the writers of amendment procedures in process. These amendments are well advanced and, I believe, will be ratified. A series of ATP-33 volumes will replace all NATO tactical Air Doctrine Publication. It does not comprise changes in substance only editorial. ATP-27 will become ATP-33/3 and ATP-40, ATP-33/1 the following articles (not necessarily exhaustive) are affected 16D.2, 1606, 1607.2 and 1608.2.

Maj Marc Lehmann

SO Air Doc

426

COMMENTS BY MR BOYD - SO STDM

1. Page 13-2 Art 1303.4.
 - a. Line 4. The meaning is not clear. I suggest that if the line was reworded "... obtaining protection from non-nuclear weapon effects ..." it would make more sense.
 - b. This paragraph is not well written, the last sentence bears no relation to the rest of the paragraph.
2. Page 13-2 Art 1304.2.
 - a. Line 3. Delete "hitherts employed" - nuc weapons used in during World War 2. Amend line to read: "any single non-nuclear weapon. This effect ..."
3. Page 13-12 Art 1308.2.
 - a. Line 4. Artillery what - staff? Regiment, Fire control centre? Target Analysis should be job of the SO NBC. He will need the co-operation and assistance of the Int Staff as well as the Arty Staff assigned to sp the fm Comd.
4. Page 13-15 Art 1310.2.
 - a. Lines 7, 8 & 9. Delete last two sentence, they are no longer correct. Replace with: "These agents initiate the eyes and breathing passager; as well son of them produce intense skin pain. While they are used primarily for training and net control they have been used tactically in the past and may be again used in the future. They can also be used with slower acting lethal agents to increase the effect."
 - b. Art 1310.3. I do not know where he got the "ten minute" rule. Chemical texts use the term "for a short time" for non-persistents. Strangely enough Mustard is classified as "non-persistent" by many authorities, yet its field persistency in temperate climates may be as high as three weeks. The only agent which would meet the ten minute rule under all conditions is HCN. Suggest that "ten minutes be replace with" a relatively short period of time.
5. Page 13-17 Art 13-11.
 - a. Lines 5 and 6. While I agree with the author, there is as yet no

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- 2 -

definite CA policy on protective collection for forward troops is still in the air. Note that it is a very expensive proposition.

6. Page 13-18 Art 1311.2.

- a. Line 3. Delete the word "all" I have yet to hear of a biological agent that destroyed property or equipment. The only materials that could be affected is food and animals, which are covered in the next sentence.

7. Page 13-19 Art 1311.5.

- a. Line 2. Second sentence is incomplete.

Mr. Boyd

SO Stzn

748

COMMENTS BY MAJ AITKEN - SO CD COORD

1. I have reviewed CFP 300, First Draft. In general, I found it to be a very complete volume - I especially liked some of the less formal language (eg the analogy of the boxer) which tends to make it more readable.
2. I found the book to be more a collection of individual chapters, rather than a united text. This may rest be a bad thing, since I expect that it will be used chapter by chapter at staff colleges, etc.
3. Some specific comments as fol:
 - a. Pg 1-1 Art 102 para 2 - suggest ATP 35 should be mentioned;
 - b. Pg 1-3 Art 10 para 6a - the fewer "training" used in discussion of operations in foreign to my thinking. We usually say "ops" or "tr exs" differentiating between the two.
 - c. Pg 1-5 Art 106 - the objectives are not in order of priority - perhaps this was done intentionally.
 - d. Pg 1-13 Art 114 para 3a - suggest "regular and reserve forces" and "mobilization" be defined here or before.
 - e. Pg 2-8 Art 209 - this should be expanded, if possible, to give a few examples of the laws, or a list of international conventions.
 - f. Pg 3-10, 3-11 Art 311 para 3-4 - perhaps definitions of under command, "under op command insp" should be included.
 - g. Pg 4-16 Art 408, para 3 line - delete "hostive", in sent "passive".
 - h. Pg 4-17 Art 408 para 4a - after electronic warfare inser "support" add new sub para 4F - Electronic Warfare Support.
 - j. Pg 4-33 Art 419 para 5 (last line) after "... by bad weather" insert "and enemy action".
 - k. Pg 4-35 Art 422 para 1d - delete "radio relay" insert "radio rebroadcast".
 - m. Pg 4-32 Art 419 para 3 line 4 after "...drawbacks similar to" insert "though not as pronounced as".
 - n. Pg 6-22 - Draft missing part of Art 620, para 5!
4. Not many comments for such a thick volume, I'm afraid, but ...
5. May I have this copy of CFP 300 back?

Maj R.L. Aitken

SSO Cd Coord

MEMORANDUM

EMC 2910-CFP 300 (Arty)

09 Feb 78

→ SO Doc Prod

CFP 300 (FIRST DRAFT)
CONDUCT OF LAND OPERATIONS

Reference: A. EMC 2910-CFP 300 (CD & TD) 25 Jan 78

1. Attached as Annex A are comments on subject CFP.

M.C. Brown
M.C. Brown
LCol
SSO Arty
240

Attachment

Annex A - Comments on CFP 300 (First Draft)

ANNEX A
TO FMC 2910-CFP 30 (ARTY)
DATED 9 FEB 78

COMMENTS ON CFP 300 (FIRST DRAFT)

SERIAL (a)	ITEM CFP 300 (b)	COMMENTS (c)	REMARKS (d)
1	Page 4-10 Para 406.2.d Line 1	Delete "cornection" Insert "correction"	Spelling
2	Page 4-11 Para 406.2.e Line 2	Delete "two or more troops" Insert "one or more firing sections"	Takes into account six gun single fire unit
3	Page 4-11 Para 406.2.f Line 7	Delete "command and control battery includes a survey and sound ranging troop" Insert "regimental headquarters battery includes a locating troop"	
4	Page 4-13 Para 406.3.f Line 3	Delete "occupation will be with fire plans and targets which are of immediate interest to those units" Insert "duties will be to advise on fire support, provide continual observation and engage targets as they appear or as indicated by the supported arms commander"	
5	Page 4-14 Para 407.1	Delete the first sentence. Insert "The main tasks of locating artillery is to obtain information about the enemy, with particular reference to the location of enemy weapons"	

-2-

ANNEX A
TO FMC 2910-CFP 500 (ARTY)
DATED 9 FEB 78

COMMENTS ON CFP 300 (FIRST DRAFT)

SERIAL (a)	ITEM CFP 300 (b)	COMMENTS (c)	REMARKS (d)
6	Page 4-15 Para 407.2.b Line 4	and advising on the neutralization or destruction of enemy weapons Delete "command and control battery in" Insert "regimental headquarters battery of"	
7	Page 4-15 Para 407.3.b Line 3	Delete "Reconnaissance" Insert "Besides locating devices and other artillery sources, reconnaissance"	Line 4 Delete "," after photography
8	Page 4-15 Para 407.3.b Line 6	After "artillery." Insert "most of this information will be passed in the form of SHELLREPS, MORTREPS and results from crater analysis"	
9	Page 4-15 Para 407.3.c Line 2	Delete "both" Insert "two"	
10	Page 4-18 Para 408.4.d(3) Line 9	After "missiles" insert "or mobile guns"	

ANNEX A
TO EMC 2910-CFP (ARTY)
DATED 4 FEB 78

-3-

COMMENTS ON CFP 300 (FIRST DRAFT)

SERIAL (a)	ITEM CFP 300 (b)	COMMENTS (c)	REMARKS (d)
11	Page 4-20 Para 408.6.e Lines 4, 5, 6	Delete ", or are they normally sufficient to meet the air defence requirement." Insert period.	Meaning not clear.
12	Page 8-25 Para 814.2 Line 6	Delete "artillery," Insert "artillery and mortars,"	Page 9-29 Para 911.3.d states this again
13	Page 8-26 Para 814.4 Line 7	Delete "location end"	
14	Page 8-27 Para 814.8 Line 2 Line 4	Delete "or visual signal" Delete "either of this fails." Insert "they fail."	
15	Page 8-27 Para 814.9 Line 2	After reliability, insert "and flexibility in that it can be changed to an on-call programme if desired"	
16	Page 8-61 Para 830.3 Line 1	Delete "place" Insert "pace"	Spelling

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ANNEX A
TO EMC 2910-C-300 (ARTY)
DATED 9 FEB 78

-4-

COMMENTS ON CFP 300 (FIRST DRAFT)

SERIAL (a)	ITEM CFP 300 (b)	COMMENTS (c)	REMARKS (d)
17	Page 9-28. Para 911.1	Delete "deployed" Insert "brought to bear"	
18	Page 9-29 Para 911.3.c Line 1 Line 3	Delete " <u>Protective Fire</u> " Insert " <u>Defensive Fire</u> " Delete "Close protective Fire" Insert "close defensive fire"	Check punctuation
19	Page 9-29 Para 911.3.d Line 1 Line 2	Delete " <u>Counter-bombardment</u> " Insert " <u>Counter-battery</u> " Delete "guns and mortars" Insert "indirect fire weapons"	
20	Page 9-32 Para 911.7 Line 4	After "deployed", insert ",,"	Punctuation
21	Page 9-32 Para 911.7.b Line 2	Delete "Protective Fire" Insert "Defensive Fire"	"Final protective Fire " is correct term

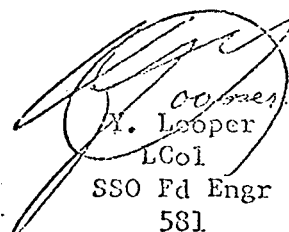
FMC 2910-5 (Engr)

21 February, 1978

SO Doc Prodn

CFP 300 (FIRST DRAFT)
CONDUCT OF LAND OPERATIONSReference: A. FMC 2910-CFP 300 (CD & TD) dated 25 Jan 78

1. Comments were requested on the subject publication by Reference A. Several minor comments are attached as Annex A.
2. Generally, it is felt that for a manual on "principles and precepts", it is somewhat lengthy and detailed. There is some redundancy within the manual itself, and when compared with other manuals (e.g. CFPs 301(1), 301(2), 301(3), 301(4)).
3. Chapters 6 and 7 could be combined in one chapter and reduced somewhat. Sections 6 through 9 of Chapter 6 are expanded upon in Chapters 12, 14, and 16.
4. Chapter 5, and Section 3, Chapter 15, are in excessive detail when it is considered that CFP 301(4), Administration in the Field, is available.



A. Looper
LCol
SSO Fd Engr
581

Attachment:

Annex A - Comments

ANNEX A

TO FMC 2910-5 (ENGR)

DATED 2 / FEB 78

COMMENTS

1. Article 313, para 3. Delete "field engineer squadron", insert "combat engineer regiment".
2. Article 416, para 1, line 1. Delete "field engineer regiment" insert "combat engineer regiment".
3. Article 416, para 1, line 3. After "a support squadron", add "an armoured engineer squadron".
4. Article 908, para 5a, last line. Delete "artificial", insert "man-made".
5. Article 915, para 5a. Delete "barriers and field fortifications", insert "obstacles and field defences".
6. Article 915, para 5b(1), line 5. Delete "barriers", insert "obstacles".
7. Article 915, para 5b(2). Delete all detail, and insert:

"(2). The obstacle plan will be coordinated with the occupation, fire, and anti-tank plans, and will be improved continually as the battle proceeds. Remotely delivered mines will augment or complement obstacles. Obstacles to be effective must be covered by observation and fire".
8. Article 1048, para 1.b.(1). Delete "barriers", insert "obstacles".

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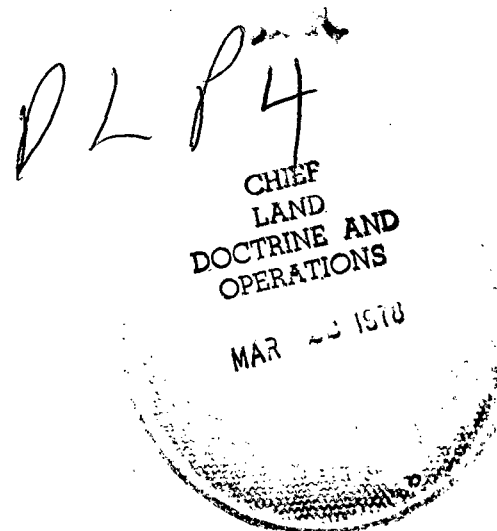
FOR DLP

SUBJ: CFP 300(DRAFT) REVIEW

COMMENTS ON SUBJ DRAFT FORWARDED TO NDHQ THIS DATE.

REGRET DELAY

BT



ANNEX A
TO 2900-1 (OPS)
DATED 22 MAR 78

SERIAL	CHAPTER	SECTION	PARA	PAGE	COMMENTS
(a)	(b)	(c)	(d)	(e)	(f)
1	Preface				Paras 2 to 5 incl should be deleted and the first sentence of the last para re-worded accordingly. (Paras 2-5 are pessimistic and wishy-washy and add nothing to the manual). The topics it tries to cover are well explained in the appropriate Chapters.
2	2				No comment on this particular chapter of a very general nature.
3	2	2		2-2	Somewhere in this section there should be included a para or so on allied forces. Canada cannot hope, regardless of the conflict, to enter unilaterally into any operation. Our contribution to NATO as an example, must cater to the "interoperability factor." We must be able, in this context, to work with German or United States troops. Similarly, in Cyprus, Egypt or other areas, we must interoperate particularly as it effects our logistics tail.
4	2	2	208	2-8	The need for this para is questioned. This might better be included in a volume under leadership, the principles thereof, and the application of such principles.
5	2	2	209	2-8	A similar comment is made to this section on the laws of war and land. It is questioned whether this is appropriate at this particular stage in the book. It might be better included into the introduction or preface.

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PAGE 2
TO ANNEX A
TO 2900-1 (OPS)
DATED MAR 78

SERIAL	CHAPTER	SECTION	PARA	PAGE	COMMENTS
(a)	(b)	(c)	(d)	(e)	(f)
6	3	1	301	3-1	The basic structure as listed in this para is not completely understood. Must all military organizations meet the "principle" of mass? In peacekeeping this might not be so. The value of this information must be explained more fully.
7	3	1	302	3-4	The first possible conflict on definitions arises here. A glossary of terms must be included and used as a reference or in the introduction the glossary of terms to be used be it CFP 121(4) or ATP 35 or whatever must be made quite clear.
8	3	2	304	3-5	You must be careful that we do not think too small in laying out our general organization. The question is posed, do we ever foresee deploying corps in depth? Certainly our potential enemy postulates employing army and even front second echelon troops. Why not an allied force organized in a similar fashion? It is realized that paucity of friendly troops in today's NATO battle-field would practically preclude this type of deployment but we must be prepared for mobilization and ultimate full employment of the field force.

.../3

PAGE 3
TO ANNEX A
TO 2900-1 (OPS)
DATED 22 MAR 78

SERIAL	CHAPTER	SECTION	PARA	PAGE	COMMENTS
(a)	(b)	(c)	(d)	(e)	(f)
9	3	3	313	3-11	The proposed system of mixing and matching to make ad hoc brigades is not quite understood. The requirement for this system is not foreseen. No army currently employed in a potentially high intensity northwest European battlefield structures brigades or divisions in this fashion. Again if this is valid, why? The reasons are certainly not clear from what is written in the text.
10	3	3	313 sub 2	3-12	The statement of the division being able to act independently is questioned. It is believed that in northwest Europe, again in the high intensity battlefield, it cannot work outside of the corps environment for considerable periods of time as quoted in the section under review.
11	3	3	313 sub 2D	3-14	Air Mobile Divisions equipped as they are in northwest Europe are not weak due to their vulnerability to enemy armour as they are well equipped with heavy and medium anti-tank weapons, and are quite maneuverable on small wheeled vehicles which are portable. They are however vulnerable to the "combined arms team" which includes enemy artillery. They do not possess "balance" which is a secret to success in any battlefield but absolutely essential in northwest Europe. This point is made in referring back to para 301(1) and the requirement for balance as a requirement for any type military force.
12	3	3	313 sub 3	3-15	<u>The Canadian Brigade Group.</u> Generally stated, this para is disagreed with. Perhaps it is slightly more independent than the average brigade. This is construed to fall out of the Canadian situation of organizing in independent brigade groups. This

.../4

PAGE 4
TO ANNEX A
TO 2900-1 (OPS)
DATED 22 MAR 78

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(a)	(b)	(c)	(d)	(e)	(f)
					brigade regardless, must work within the context of a division, particularly as the service support aspect of the problem is concerned. Regardless of what was said above, under the independent capabilities of a division, it is felt that this is the first organization which can in fact work independently. To truly be independent, a brigade would need a slice of div or corps troops from both the service support and the combat support aspects.
13	4	1	401.1	4-1	Delete complete para. Add new para: "Those elements of the land forces that contribute to the destruction of the enemy are referred to as the "arms"."
14	4	1	401.2.b	4-1	Delete "and Air". Air is not a combat support arm in the context of this manual.
15	4	2	402.1	4-1	First sentence. Delete all between "warfare" and "through".
16	4	2	402.1	4-1	Second sentence. Delete all between "action" and "where".
17	4	2	402.1	4-2	Add to last sentence "although it is capable of operating independently as the situation dictates".
18	4	2	402.2	4-2	Delete "normally".
19	4	2	403.1	4-2	Delete last sentence.
20	4	2	403.2.a	4-2	Delete all after "units".
21	4	2	403.2.b	4-2	First sentence. Amend to "The main battle tank encompasses the desirable features of all known tanks".

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(a)	(b)	(c)	(d)	(e)	(f)
22	4	2	403.2.b	4-3	Second sentence. Delete "kill", insert "destroy". Add "or less" after "comparable".
23	4	2	403.2.b	4-3	Third sentence. Delete "one or".
24	4	2	403.3.a	4-3	First sentence. Delete all after "mobility". Insert "flexibility and armour protection".
25	4	2	403.3.a	4-3	Second sentence. Delete "and destructive". Insert "and indirect."
26	4	2	403.3.b	4-4	Last sentence. Re-unite as follows: "The main battle tank is portable by aircraft, ship, train or tank transports although these methods are slow and cumbersome".
27	4	2	403.3.d	4-4	Third sentence. Delete "disclosed". Insert "determined".
28	4	2	403.3.f	4-5	Between second and third sentence add new sentence. "Without infantry, tanks cannot hold ground".
29	4	2	404.1	4-5	Delete "Branch". Insert "Corps".
30	4	2	404.2.b	4-6	Second sentence. Delete all after "brigades". (The Squadron should never be decentralized).
31	4	2	404.3.a	4-6	Second sentence. Delete "agility of movement". Insert "mobility."
32	4	2	404.3.b	4-7	Delete last sentence.
33	4	3	405.2	4-8	While Canada has never possessed any, artillery heavy mortars should be included in the type of equipments that can deliver projectiles.

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(a)	(b)	(c)	(d)	(e)	(f)
34	4	3	406.2.f 407.2.b	4-11 4-14	Close support regiments do not have a command and control battery. This term pertains to the commander divisional artillery (CDA) headquarters.
35	4	3	408.4.d	4-17	Altitude expressed in metres above ground level should be added to the description of air defence artillery altitude divisions.
36	4	4	49	4-21	<u>The Role of Infantry.</u> The role of infantry as stated is not correct. The main role of infantry is basically to close with and destroy the enemy. Regardless, the wording which is absolutely vital to what follows, must be in concert with that agreed to for the infantry by the combat development committee.
37	4	4	411.1.a	4-22	The word "parachute" should be added so that the sentence reads "helicopters, fixed-wing aircraft and/or parachute."
38	4	4	412.3	4-26	"The ideal anti-armour system is a judicious mixture of the above weapons taking into consideration the principles of range, terrain and visibility."
39	4	9	427.3	4-38	Delete all after "teams".
40	4	9	428.1	4-39	Second sentence. Delete "slightly".
41	4	9	428.5	4-40	Delete last sentence. (Artillery should never be placed under command. No other unit is capable of administering it.)
42	4	9	430	4-41	It would seem, at this stage, as if we were getting down to deciding the methods of commanding and controlling a combat team. This level is for another pamphlet. In this stage we must stick with the general principles of the command and control at formation level.

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43	4	9	430.3	4-42	Delete "direction". Insert "leadership".
44	4	6	416.1	4-29	Delete "field". Insert "combat" engineer regiment. Canada is the only NATO country with a Fd Engr Regt at Bde level. Since this publication attempts to incorporate NATO doctrine as well as codify existing doctrine then recognition of this fact (Regiment vs Brigade) should be acknowledged.
45	4	6	416.2	4-29	Only British Engrs are organized as stated, therefore, all reference to "regiments" should state "battalions" in lieu.
46	4	7		4-31 to 4-34	A new redraft of this section was received for comment direct from NDHQ/DCEO under 2910-CFP 300 (DCEO) dated 20 Jan 78. Comments will be forwarded direct to NDHQ as requested by DGCEO.
47	4	8	422.1.a	4-34	We do not, at present, have any of the eqpt or systems mentioned in the last sentence.
48	4	8	422.1.b	4-35	This para implies that the FAC is a pax. We do not practice this as airborne FACs are members of the hel crew. Perhaps better worded as "with appropriately trained grd crew, they are also used as FACs to control fighterground attacks."
49	4	8	422.1.c	4-35	The inference here is that transport helicopters may be used forward of the FEBA. This fmnn found on REFORGER 76 that use of large helicopters even at the FEBA is suicidal. They are too large to avail themselves of such cover as would be adequate for LOH's or UTHs and are far too valuable for logistic transport to lose in this role.

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(a)	(b)	(c)	(d)	(e)	(f)
50	4	8	422.1.d	4-35	No allied force helicopters are equipped for line-laying.
51	4	8	422.1.1	4-35	Perhaps this should read "direct fire support" to set it apart from arty and close air sp.
52	4	8	422.1.f		Add para "Helicopters can lay scattered minefields quickly."
53	4	8	423.1.a	4-36	Although this organization is correct in reference to the SBG helicopter squadron, the general opinion is that such a valuable and limited resource as MTH's should be controlled at divisional (or higher) level. This is in fact US doctrine.
54	4	8	424.1	4-36	The present estb for tac hel sqns does not provide sufficient pers to protect itself and make a contribution to the fire sp of the fmn battlefield unless equipped with anti-tank weapons or machine guns. Suggested wording, change to "the aircraft are extremely vulnerable to all types of en fire."
55	4	8	425	4-37	In the divisional area the only type of control likely to be successful is procedural. The inference here is that "airforce" control channel will provide direction to "tactical" helicopters. On EX CARBON EDGE 77 only procedural control was used in the divisional area. Communications even to the rear were seldom successful in maintaining positive control. In fact communications in the European theatre will never, I suspect permit very much positive control. This was pointed out on Carbon Edge with 4 CMBG's difficulties in acquiring close air support. It is doubted that the air traffic control system will provide the nec liaison with the air defense system.

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SERIAL	CHAPTER	SECTION	PARA	PAGE	COMMENTS
(a)	(b)	(c)	(d)	(e)	(f)
56	5	2			A para on civil affairs should be added. Although we know little about it, it is a subj which will have to be faced during ops. The legal branch is ultimately responsible for this area but it is in fact a G-5 function which should not be omitted.
57	5	2	508	5-7	"The Military Police role includes; route reconnaissance, signing and traffic control; the custody of prisoners of war until they are transferred to base camps; collection, control and disposal of stragglers; assisting in the control of refugees; and assistance to units in the maintenance of discipline. MP organizations are normally provided at each level of command and their duties fall within the geographic area of responsibility of that command excluding those areas allotted to subordinate commands. The Military Police are directly responsible to the operations staff for traffic control, custody of prisoners of war, refugees and straggler control since all of these have direct bearing on operations, however it is considered a personnel service in so far as discipline and stragglers are concerned. In war, other duties may be assigned to Military Police depending on the nature and locale of the conflict."
58	5	2	511.4.b. (2)	5-11	The word scout car should be deleted or classified as an "A" vehicle. Both the new Cougar and the old Lynx are certainly "A" vehs.

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59	6	2	604.1	6-6	A commander is given his precise aim/mission by his higher HQ and therefore should not be able to "if he is wise, limit his aim to suit his resources", except those he gives to his subordinates.
60	6	2	605	6-8	Delete paras 1, 2, and 3.
61	6	3	618		This conclusion is hard to understand.
62	6	4	619	6-20	The inclusion of this entire section is questionable. This is not a leadership manual and this particular subject should be saved for such a publication.
63	6	5	629.2	6-32	There are other well supported theories which are based on "basic needs of the human being" to be influenced by leadership and to operate at maximum effectiveness. Therefore we suggest that good administration and welfare are part of, if not before, the four main factors influencing morale.
64	6	9		6-41	Tac psy ops and consolidated psy ops are not addressed separately. They are both touched on in Article 640 under the heading "Conduct of Tac Psy Warfare". The paper should point out that either consolidated ops is not going to be addressed or they should be addressed under separate headings.
65	7	1	704	7-2	Second sentence. Delete "acutely sensitive to". Insert "be aware of".
66	7	1	704	7-2	Delete all after second sentence. (The subject of leadership should not be dealt with in this paragraph. In fact it is questionable if the "Human Element" should be discussed in this manual period!)

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(a)	(b)	(c)	(d)	(e)	(f)
67	7	1	705	7-2	Delete first sentence. Insert "The success of a command depends on team work".
68	7	1	705	7-2	Delete second and third sentences. The fourth and last sentence says it quite well.
69	7	1	707	7-3	Delete second sentence. Add to last sentence, "and it should only be done under exceptional circumstances".
70	7	1	707/708	7-3	These two paras should be combined under "Chain of Command". Subsequent paras should be remembered.
71	7	1	709	7-3	First sentence. Delete "the loss of communications." Insert "various reasons".
72	7	2		7-4	This Section needs to be re-written in entirety. Although the subject is well covered, the wording is flowery and ambiguous. Such terms as "whatever the circumstances", "for instance", "for example", etc. are out of place and must be removed.
73	7	2	712.5	7-5	<u>Staff</u> . The section on the Deputy Commander and its inclusion here is questioned. Is the Deputy Commander a member of the staff or is he in fact a Deputy Commander? The entire question of the Deputy Commander in our system is quite interesting. Perhaps a definition of a Deputy Commander at formation level is required. Is one foreseen in the Canadian Brigade? Is one foreseen at a division? Certainly, our German allies think so, as do the Americans.

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(a)	(b)	(c)	(d)	(e)	(f)
74	7	3		7-41	Within this section should be included the logical progression of: a. Can the Comd identify and state the "int problem"?; b. If he cannot then the int staff offr must do an "int appreciation"; and c. Therefore, from one of the above the "int requirements" can be defined with subsequent "EEIs" given or approved by the Comd.
75	7	4		7-12	Heading. Delete "Deployment". Insert "Battle".
76	7	4	718.1	7-12	Delete "Deployment". Insert "Battle".
77	7	4	718.2	7-13	Delete "deployment". Insert "battle".
78	7	4	719.1	7-13	First sentence. Delete between "possess" and "situation", and insert "a general knowledge of the" .
79	7	4	719.3	7-14	Add to para. "The armoured commander should provide advice on the anti-tank plan and employment of armoured resources."
80	7	4	720	7-14	Delete last sentence. Insert in first sentence before "orders", "clear and concise".
81	7	4	721.1	7-14	Delete first sentence. Insert new sentence. "Deployment is the maneuvering of a military force into location in readiness for battle." Delete second and third sentence. Insert new sentence "For example, an infantry company moving off a line of march onto a defensive position."
82	7	5	723	7-17	Delete "deployment". Insert "battle procedure".

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83	7	5	724.4	7-18	First sentence. Delete "ahead". (You can't plan behind!)
84	7	5	724.9	7-22	Last sentence. Insert "not" before "possible".
85	7	5	724.10	7-22	First sentence. Delete "useful". Insert "essential".
86	7	5			There is much repetition in this section, ie, "The Comd must go forward" is stated five times in various forms.
87	8	1	801.1	8-1	Last sentence. Delete "responsibility". Insert "influence".
88	8	1	801.4	8-2	Last sentence is contradictory. Delete.
89	8	1	802.1.a	8-3	Delete "Approach".
90	8	1	802.1.b (1)	8-3	Delete "Hasty".
91	8	1	802.1.d	8-3	Delete last sentence. (It doesn't say anything).
92	8	1	802.2	8-4	Sub-para title. Delete "Approach".
93	8	1	802.4	8-4	The use of a Division (as illustrated) is not a typical organization for an advance to contact. (No situation can be envisaged wherein a division is not in contact in the European theatre).
94	8	1	802.7	8-6	Delete "Hasty". Insert "Quick".
95	8	1	803	8-8	<u>Fundamentals.</u> Fundamentals as listed must be collated with what was previously taught as fundamentals into our principles. These in fact have not changed with our recent changes to organizations and equipment.

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96	8	1	803.5	8-9	Delete last sentence.
97	8	1	803.7	8-10	Second sentence. Delete "to opportunity".
98	8	1	806.1	8-11	Last sentence. Circumstances can be foreseen that necessitate the alignment of units. Re-word sentence.
99	8	1	807	8-13	Delete para in entirety. Include intent/chapter organization in para 801, Introduction.
100	8	2	808.1	8-14	First sentence. Delete all after "enemy".
101	8	2	808.2	8-14	Delete sub-para in entirety. There is no "cycle of battle".
102	8	2	809.5	8-16	Second sentence. Delete "of". Insert "or".
103	8	2	809.5	8-16	"...normally accepted ratio of forces" ... should be explained.
104	8	2	809.11	8-17	"Turning Movement" as a form of maneuver is no different to a "Flanking Attack", and therefore all reference to it should be deleted.
105	8	2	810.3	8-19	The assault is a phase unto itself and should not be broken down into three more phases of action, the break-in, dog-fight and break-out as suggested. In any event these terms are inappropriate and confusing.
106	8	2	811.3	8-20	This sub-para is irrelevant to "Planning General" and should be deleted or inserted elsewhere.
107	8	2	812.1.e	8-22	Delete sub-sub-para in entirety. (A Reconnaissance Regiment or Squadron is not in a position to conduct airmobile patrols).

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108	8	2	816.5	8-33	See serial 41.
109	8	2	816.8	8-35	Delete "disposed" - insert "deployed".
110	8	2	817.8	8-37	Delete sub-sub paras 8a to 8d inclusive. (They are irrelevant to the discussion of nuclear weapons). Renumber sub-sub-para 8e, 8.
111	8	2	818.6	8-39	The terms break-in, dog-fight, and break-out are new and not appropriate.
112	8	2	818.8	8-40	Last sentence implies that it is the responsibility of subordinates to communicate to the superiors. The reverse is correct.
113	8	2	818.13	8-41	Delete last sentence. The commander should never use his eyes and ears to escort POW.
114	8	3	820.3	8-45	Last sentence. Delete all after "battle".
115	8	3	820.4	8-45	Delete lengthy discussion of grouping. It is well covered in Section 2.
116	8	3	820.1	8-44	Delete first sentence. If the circumstances are unimportant why include them?
117	8	3	821	8-47	Delete "Generally" from title.
118	8	3	822	8-48	Delete "Special requirements of" in title.
119	8	3	822.2	8-48	Delete all after first sentence - otherwise sub-para reads like the building of an army.
120	8	3	823	8-49	This para is out of place. It would be better before para 822.

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121	8	3	823.5	8-50	Third sentence. Delete "to mystify and".
122	8	3	827	8-58	Delete and incorporate into para 822.
123	8	3	830.1	8-61	Speculative use of nuclear cannot be envisaged. Delete sentence.
124	8	3	832	8-63	Para 832 should be deleted, but with the information inserted into paras 833 or 834 as applicable.
			833	8-64	Para 833 should be included in Section 2 after para 819.
			834	8-65	Para 834 should remain in Section 3.
125	9	1	901.1	9-1	Delete all after first sentence. Add second sentence "Within each are essential elements of the other".
126	9	1	901.3	9-1	Re-write first sentence as follows: "There are many advantages of a defensive deployment".
127	9	1	901.5.d	9-2	Delete. The chapter does not deal with it.
128	9	1	901.5.e	9-2	As above.
129	9	2	908.2	9-22	Last sentence. Delete "may dictate". Insert "will influence".
130	9	2	912.1	9-34	As stated line 6 - add "to" between "aim" and "channel".
131	9	2	912.5	9-35	Last line or para 5 delete "just" insert "for".
132	9	2	912.11	9-37	Is "positional" or is "area" defense the term in common usage?
133	9	3			A paragraph on administration is required.
134	9	4			As for serial 134.

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(a)	(b)	(c)	(d)	(e)	(f)
135	9	5	932.1.b	9-86	Fifth line delete "officer". Insert "commander". Delete lines 6 and 7, beginning "Reserved demolitions" and ending "bypassed quickly". This sentence is too restrictive. Res dmIs can also be used at other locations. In line 9 - delete "They" and insert "Reserved Demolitions".
136	9	5	932.2	9-86	In line 12 add "written" before "orders*must be issued".... In the last line after "agreed" add word "to".
137	9	5	932.4	9-87	Delete the second sentence and insert the new sentence "It is normally an engineer section commanded by a non-commissioned officer but may be larger."
138	9	5	932.5	9-87	In the first sentence add after "send liaison officers" the words "to the demolition site".
139	10	2	1002.1	10-2	In the third sentence delete the word "minor" as barriers other than water or minefields may not be "minor".
140	10	2	1003.1	10-2	In the last word of the sentence delete "breaching" and insert "breach".
141	10	2	1004.1	10-3	As above.
142	10	2	1005.2	10-5	In first sentence delete "determine" and insert "determined".
143	10	2	1005.2.c	10-6	Add "including anti-tank ditches," after "ditches".
144	10	2	1006.2.a (1)	10-8	Delete "effect" and insert "affect".

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(a)	(b)	(c)	(d)	(e)	(f)
145	10	2	1006.3	10-9	In the second sentence delete "shallow divers", insert "shallow water divers". In the second last line delete "the" before the word "technical". In the last line delete "crossing" insert "crossings".
146	10	2	1006.4.b	10-10	Delete the last sentence in its entirety. Insert "The ferrying is normally carried out by engineers but may be carried out by infantry. In any case it must be done by soldiers not committed to the assault, as must a number of tasks in connection with the operation; a sub-unit may be formed for this operation."
147	10	2	1006.7 1006.8 1006.9	10-12 to 10-15	The information in these paragraphs may vary significantly according to different national methods and this should be so stated. This "Canadian" doctrine varies considerably from German Comd and control of an assault water crossing.
148	10	2	1007.5.a	10-18	Delete the last sentence and substitute the fol sentence, "For each route required through the obstacle it will be normal to attempt to clear two or more lanes."
149	10	3	1010.1.e	10-22	It is suspected that there is no more chance of an airmobile op achieving this than any other type of op. The requirement for tps to be trained for this type of op and the additional log problems should also be listed.
150	10	3	1011.1.c	10-23	A proviso that perhaps should be added here is that this mobile reserve will be lightly armed unless supported by attack helicopters.

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(a)	(b)	(c)	(d)	(e)	(f)
151	10	3	1011.1.e	10-23	The term "marginal weather" is relative and very misleading in this text. Both fr and en grd forces can react in worse weather than airmobile tps.
152	10	3	1011.2.g	10-24	In any airmobile operation into or near the FEBA the airlift of vehicles is highly questionable for two reasons: (1) If MTH type helicopters are used with vehicles internally carried then the problem stated in serial 49 is valid; (2) If UTTH type helicopters are used with light vehicles carried externally then they are very vulnerable since they must: (a) fly much higher; (b) fly much slower; and (c) will use much more fuel.
153	10	3	1013.4.b (2)	10-28	Mortars should also accompany such a force but any slung loads such as artillery would make the op very hazardous.
154	10	3	1014.3.a	10-31	Co-ordination will still be required in the obj area to ensure full indirect and direct (close air) fire sp continues throughout the op.
155	11	7			1 R22eR Study Week package 77 will be forwarded to NDHQ DLO ASP.
156	12	1	1201	12-1	Here is defined the basic overall tactics/threat of forces facing NATO. Preceding this should be a short para explaining where this info/int comes from and arr in the fd, ie: the provision

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(a)	(b)	(c)	(d)	(e)	(f)
					coming down from higher formations which is strategic int and tac/cbt int derived from tps in contact.
157	12	1	1202.2.a	12-2	This is an "int collection plan". The way it is written could be misunderstood as an overall collection plan for our own or en use.
158	12	1	1202.2.b	12-2	"Electromagnetic emissions" should read "electromagnetic spectrum" and a third discipline should be included "human int".
159	12	1	1202.3	12-3	This should relate to the "int appreciation" whereby factors will lead to "en courses of action". Through the "int cycle" we then can determine his "capabilities" and "intentions".
160	12	2	1205	12-5	The opening para should incl the initial step within the int cycle, "Comd's Direction" as that ident the "int problem" and, if not done, the next step is the "int appreciation", and subsequently "int requirements", "collection plan", etc.
161	12	2	1206.3	12-7	Major services could be better gp and defined as: (1) <u>Electromagnetic Spectrum</u> (a) SIGINT (i) cryptanalysis (ii) sig and comm analysis (iii) DF (iv) tfc analysis

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(a)	(b)	(c)	(d)	(e)	(f)
					(b) Ground Surveillance Radars (i) Remote Sensors (ii) Weapons Loc Radars (c) <u>Imagery From Overhead Platforms</u> (i) Photography (ii) IR Sensors (iii) SLAR (iv) Laser Sensors (d) <u>Human Intelligence</u> (i) Recce Units (ground and air) (ii) Tps in Contact (iii) Interrogation of PW (iv) Long-range ptls
162	12	2	1207.1.a	12-12	Add the words "...in groups of related items i.e. log, map, ORBAT cards, ORBAT collation and charts".
163	12	2	1207.1.b	12-12	Add the words "...pertinence, reliability, accuracy, urgency and comparison.
164	12	2	1207.1.e	12-12	Add the words "...and to draw the conclusions i.e., identification, activity, and significance.

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(a)	(b)	(c)	(d)	(e)	(f)
165	12	2	1208.1	12-13	A follow-on to line one should mention, "disseminate to: Comd, Own tps, Higher Fmn, Flank Fmns, and staff."
166	14				<p>This chapter is written as if it is meant for use as a Commanders Aide-Memoire on EW. There is far too much reference to "The Commanders" obligations.</p> <p>Section 1 should state that EW is an actual extension of the tactical battlefield and that Commanders and their staffs must be aware of the EW environment if their forces are to survive and be successful. Commanders acting on advice from their Signal Officers will be responsible for operational decisions concerning EW as a tactical weapon.</p> <p>The remainder of the chapter should be written in general terms to provide the reader with a good understanding of the EW environment on the tactical battlefield. The overall content appears adequate for CFP 300.</p>
167	16				ATP 27 should read ATP 27(a). ATP 27(a) may be replaced by, or at least be secondary to, the new source doc ATP 33/3. Perhaps this should be shown. ATP 40 is being, or has been, replaced by ATP 33/1.
168	16	2	1603.4.c	16-5	The type of sorties described here would appear to be close air sp rather than interdiction.

.../23

PAGE 23
TO ANNEX A
TO 2900-1 (OPS)
DATED 22 MAR 78

SERIAL	CHAPTER	SECTION	PARA	PAGE	COMMENTS
(a)	(b)	(c)	(d)	(e)	(f)
169	16	3	1606	16-9	We disagree with the sentence "It (the FSCL) should be established as close to the forward elements as possible, consistent..." The FSCL should be estb somewhere near the max range of organic army wpns, primarily corps arty. This puts the FSCL approx 15 to 25 km ahead of the FLOT. There must be manoeuvre room over which army comds have some degree of con over supporting fires (ie, air strikes).
170	16	3	1607.1	16-10	Unless en air defence is suppressed and local air superiority established then ea of the "may" situations become "will" situations. Airborne FAC's <u>must</u> operate at very low level. The airborne FAC will seldom operate at a safe distance from the FEBA. Any advantage from being airborne would be negated by the distance. Assume that the "land force forward observer" to mean any ground troops observing the target and having the nec comms.
171	16	2	1607.3	16-11	FO's here should read FOO's and not the observer mentioned in para 1607.1.
172	16	2	1607.4	16-11	Care must be taken when talking about helo ops in adverse/marginal weather conditions. Adverse weather should be changed to read "in weather unsuitable for visual attacks by fighters yet with sufficient visibility for helicopter ops.



National Défense
Defence nationale

2910-1(Land)

Canadian Forces College
215 Yonge Blvd
Toronto, Ontario
M5M 3H9
21 Mar 78

National Defence Headquarters
Ottawa, Ontario
K1A 0K2

Attention: DLP

COMMENTS ON FIRST DRAFT - CFP 300
CONDUCT OF LAND OPERATIONS

References: A. Your 2910-CFP300(DLP) 9 Jan 78

B. My CFC 158 201430Z Mar 78

1. Enclosed are the comments received from members of the Directing Staff on assigned chapters of CFP 300.
2. As discussed with your staff, no attempt has been made to collate all the comments because of the necessity to meet the deadline you requested.
3. The extent of the comments and observations reinforce the recommendation made in Reference B that adequate time be made available to study all comments received and incorporate them in a second draft. It is felt that it would be premature to distribute an interim edition until all comments have been taken into consideration.

NDPM/SCDDN 3-3-2

Referred to

Transmis à

MAR 28 1978

File No

Dossier No

Charged to

Chargé à

J. R. Beveridge

Colonel

for Commandant Canadian Forces College

Encls.

MEMORANDUM

ORAFS 2900-3 (DLOR)

21 March, 1978

DLP

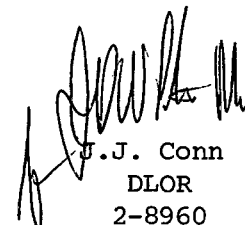
Attn: Maj R.G. Graham

COMMENTS - FIRST DRAFT CFP 300

CONDUCT OF LAND OPERATIONS

References: A. 2910-CFP 300 (DLP) 9 Jan 78 (plus attachment)
B. Telecon Maj Graham/Maj Peters AM 20 Mar 78

1. Enclosed is the copy of 1st draft CFP 300 forwarded to DLOR under cover of reference A.
2. In accordance with reference B DLOR is returning the actual draft copy in which various of the members of DLOR have made numerous marginal notes. For obvious reasons no attempt has been made to consolidate these numerous notes. It is hoped they will be of use in arriving at an interim edition of the manual.
3. The delay in actioning reference A is regretted.


J.J. Conn
DLOR
2-8960

CFP 300

FIRST DRAFT

CONDUCT
OF
LAND OPERATIONS

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RBS(43)

PREFACE

The land force of a nation is organized, trained and equipped for sustained operations in the land environment and, in conjunction with the maritime and air forces, to defeat the enemies of the nation.

Land warfare has two characteristics that merit special attention: the staggering complexity of land operations and the overriding importance and influence of the human element in war. The manoeuvre of even a single battalion involves the carefully orchestrated movement of hundreds of vehicles and weapons and more hundreds of individual men. Each of these men is offered innumerable excusable opportunities to become lost, to delay or to opt out completely from the proceedings. What prevents men from opting out; what sustains them throughout a series of actions which go against all man's normal common sense and instinct for survival, is personal and unit pride. A man continues to function in defiance of all logic because he believes that his comrades expect it of him; because of his perception of the standard of conduct expected in his squadron, company, or battery.

The techniques and procedures described in this manual sound basically simple. The reader must bear in mind the fact that they must more often than not, be carried out by tired, frightened, hungry, intensely uncomfortable mortal men. Special attention should be paid to Chapter 6.

CAVEAT

Land forces involved in military operations will encounter a wide range of conditions that will affect not only the scale of conflict but also the environment in which it takes place. There is an almost infinite

variety of conditions that will affect the scope of operations; some may be geographical, climatic or scientific; others will arise from political or economic factors or from the nature of the enemy. In addition, restraints may be placed on the use of weapons. It follows that the conduct of land operations cannot be made amenable to absolute rules.

Important among recent influences upon the conduct of war has been the development of nuclear weapons. The unrestricted use of these weapons, in view of the magnitude of their effects and their increasing availability, could make the conduct of land operations unnecessary or even impossible. The discussion of the use of such weapons in this manual, and the tactical guidance given in the text are generally confined to mid-intensity war, under which land operations appear to be practicable. Before embarking on a study of this manual, officers should, therefore, read carefully Chapters 2 and 13.

Because of these variable influences and the uncertainty regarding the use and effects of mass destruction weapons, this manual should be used only as a guide to action. It does not deal with any particular war or enemy, in any specific geographic area, nor does it deal with a particular level of command. Rather, it sets out those principles by which all parts of the land forces in conjunction with the maritime and air forces work in combination and which seem to be sustained by the accumulated history of war. The application of the principles stated in this manual must therefore depend upon whatever conditions apply at the time and to the level of command concerned.

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BARTLEY

PAVELICH

CFP 300

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TO RCCWC/NDHQ OTTAWA

INFO RCCPG/CLFCSC KINGSTON

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NDHQ FOR DLP

SUBJ: REVIEW OF CFP300

REF: A. YOUR 2910-CFB 300(DCP) 9 JAN 78

B. TELECON SIMPSON/HUTCHINSON 28 FEB 78

1. CFP300 HAS BEEN REVIEWED AND DETAILED COMMENTS FORWARDED SEPARATELY BY MAIL

2. IT IS AGREED THAT THIS IS A CRITICAL MANUAL. THIS COLLEGE IS THEREFORE CONCERNED WITH PLAN TO RUSH PRINTING AND DISTRIBUTION. TO SERVE ITS PURPOSE THIS MANUAL MUST BE FIRST CLASS AND WILL BE ACCEPTABLE ONLY IF TIME IS MADE AVAILABLE FOR DUE CONSIDERATION OF COMMENTS RECEIVED FROM ALL SOURCES

3. IT IS FELT THAT MUCH EFFORT HAS BEEN DEVOTED TO THIS MANUAL BUT SIGNIFICANT IMPROVEMENTS ARE REQUIRED. IT DOES NOT FLOW WELL AND IS FAR TOO LONG. TO EFFECTIVELY SERVE AS

CHIEF
LAND
DOCTRINE AND
OPERATIONS

MAR 21 1978

DLP4

① DLP

another view
for info - will discuss when
all countries heard from.

HA
DLP4
21 Mar 78

PAGE 2 RCCBJQA 107 UNCLAS

A CAPSTONE MANUAL MUCH OF THE REPETITION AND DETAIL SHOULD
BE REMOVED AND RELEGATED TO RELATED CORPS MANUALS SUCH AS
ARMD REGT IN BATTLE, INF BN IN BATTLE ETC

4. IT IS EVIDENT THAT THIS MANUAL IS AN ATTEMPT TO PRODUCE,
AN AMALGAM OF WRITINGS FROM CFP 165, CSC PUBS, FM 100-5 AND UK
RUBS. THE DISTILLATION PROCESS HAS CREATED CONTRADICTIONS IN
TERMINOLOGY AND PHILOSOPHY AND FAILS TO ADEQUATELY DEFINE
DOCTRINE IN THE CANADIAN CONTEXT

5. IN SUMMARY IT IS THE POSITION OF THIS COLLEGE THAT CFP 300
IS NOT ACCEPTABLE AS WRITTEN. THE PRINTING AND DISTRIBUTION
SHOULD BE DELAYED TO ALLOW THE NECESSARY TIME FOR A THOROUGH
REVIEW OF ALL COMMENTS. THE PROBLEM OF ASSIGNING AN OFFICER
TO THIS PROJECT IS OBVIOUS BUT THE IMPORTANCE OF THIS MANUAL
DEMANDS THAT NDHQ ARRANGE FOR AN AUTHOR ON A FULL TIME
BASIS TO REWRITE IT

BT

MEMORANDUM

20 Mar 78

SSO Land

FIRST DRAFT - CFP 300
CONDUCT OF LAND OPERATIONS

References: A. 2900-1 (Land) over 2910-1 16 Feb 78

B. My memorandum 14 Feb 78

General

1. I still hold to the contents of Reference B, as I think this key manual is too wordy and in many instances repeats unnecessarily sections from other manuals or training pamphlets.

2. The following points are related to my responsibilities as outlined in Reference A.

Comments

3. Chapter 4 - Section 1. Specifically, para 401(1) expresses the problem in an overly simplistic manner, and should not be included as it is written in a publication which will be distributed worldwide. I recommend that this paragraph spend more time on describing in general terms the two groups and their functions on the modern battlefield.

4. Chapter 4 - Section 2.

- a. Para 402(1). Recommend deletion of first sentence and inserting: "Armour's part in land warfare is characterized by highly mobile operations in which a variety of armoured vehicles are employed."
- b. Para 402(2)(a). Delete sentence and insert after Tank Units. "These units have the roles of destroying the enemy in coordination with other arms, and of disrupting the enemy's plans by operating in his rear areas."

.../2

- 2 -

c. Para 403(2). Delete all detail and insert:

"2. Equipment and Organization

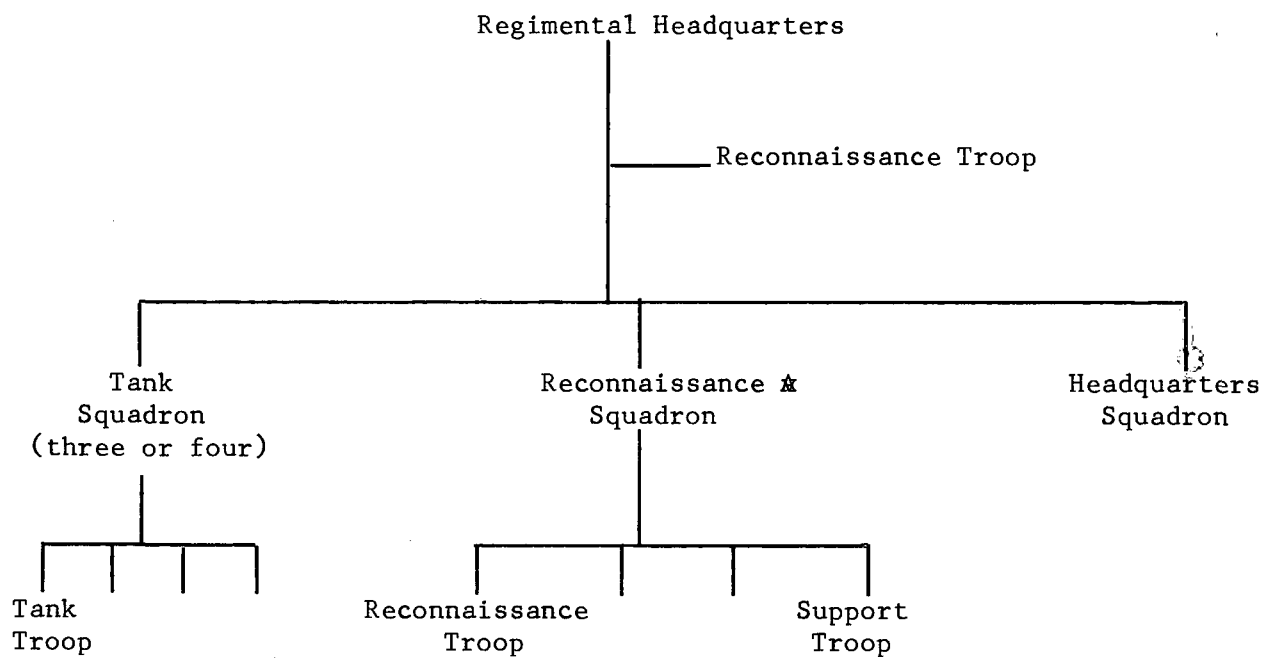
- a. The main battle tank is the principal equipment of tank units. The modern main battle tank is a compromise between the desirable features of tanks of all weights. Its main armament is capable of firing a variety of ammunition-armour piercing, HEAT, HESH, Smoke and Canister which can be employed against targets ranging from enemy tanks, other armoured vehicles to personnel. It also mounts two machine guns which are useful against soft skinned vehicles, personnel, and slow flying aircraft.
- b. The main battle tank's armour protects the crew from small arms and machine gun fire and shell fragments. In addition it provides a measure of crew protection in an NBC environment thus permitting operations in contaminated areas often in advance of other arms. It has good cross-country mobility, and within minutes can be prepared for crossing water obstacles using schnorkelling equipment. It is well equipped with radio sets, day and night sights and navigational aids.
- c. The basic tank unit is the regiment, composed of squadrons and troops as shown hereunder. Regimental headquarters can operate well forward in command tanks. The reconnaissance troop attached to regimental headquarters perform close reconnaissance tasks on behalf of the tank unit. The reconnaissance squadron operates independently and performs close and medium reconnaissance tasks on behalf of the formation headquarters, such as the headquarters of a brigade group. The tank squadrons are organized to permit independent operation and they can also accept command of sub-units from other arms, such as an infantry company or platoon. Headquarters squadron provides the administration and logistics support to the unit."

.../3

- 3 -

Figure - 3

Tank Unit Organization



★ Operates independently, usually for formation headquarters.

d. Para 403(3)(b). Delete first two lines and insert the following: "b. Tank forces consume large....".

e. Para 403(3)(f).

(1) First line - add after infantry, "and artillery".

(2) Second line - delete "other arms" insert "infantry and engineers".

.../4

- 4 -

- f. Para 404(2). Recommend a line diagram of a divisional reconnaissance regiment be inserted after sub-para 2(b).
- g. Para 422(1)(a). Add at the end of this sub-paragraph: "Helicopters often work as part of a ground/air team with elements of the reconnaissance squadron".
- h. Para 427(2). Second line, delete "shock power" and insert "destructive power and shock effect".
- j. Para 428(5). It is important here to explain the difference between the Canadian (accepted) approach of a DS battery per battle group within our brigade group, and how the division allocates its artillery.
- k. Para 430. A new sub-paragraph 5 should be added describing in general terms how control is effected, e.g. how do commanders control their forces during the movement and execution of assigned tasks.

5. Chapter 6

- a. Para 603(2)(d). Add a new sentence as follows:
"Because of faster reaction times involved in preparing and fighting on the modern battlefield, this factor is increasingly important."
- b. Section 3. This discussion of the elements of tactics is not very revealing and could be dispensed with. It contains information of the type that is suited for training pamphlets and other manuals, such as our CSC series. At the very most, the discussion should be reduced to a list of factors to be considered.
- c. Section 4 - Para 620(5). Where is para 5!
- d. Section 7 - Para 633(3). The point should also be made that there is an air element forming part of the fire support coordination center (FSCC).
- e. Section 7 - Para 634. There should be mention of naval gunfire support when discussing amphibious operations.
- f. Section 7 - Para 635. Add a new sentence as follows:
"To assist with the function of cooperation with civil authorities, staff dedicated to this purpose form part of land force organizations at the division and higher levels of command."

.../5

- 5 -

- g. Section 9. Additional information such as presented in CSC 202, Chapter 8 should be included. At the very least, some discussion of the organization and responsibilities of the staff and personnel conducting psychological operations should be added.

6. Chapter 7

- a. Section 3 Para 715. The term "Essential Information Requirements" should replace "Essential Elements of Information".
- b. Sections 4 and 5. These two sections should be combined into one entitled "Deployment Procedure", and reduced in length.

7. a. Section 911 Para 5. Delete third sentence as this creates impression of employing armour in a piecemeal fashion and suggests a delaying operation.

- b. Section 911 Para 6(b). Delete in first line the words "should be grouped with anti-tank weapons and" as this statement does not apply on the modern battlefield where long range anti-tank weapons are used.

- c. Section 911 Para 8(b). Delete second sentence. Mechanized infantry and armour must be so grouped and positioned to permit optimum exploitation of firepower and mobility, using anti-tank sub-units as fire bases. Therefore the three should not as a rule be grouped together.

- d. Section 913. Most of this should be re-written to emphasize the planning factors, and to explain in more detail what the loaded statement of paragraph 2 suggests.

- e. Section 914(3)(f). The word "anchored" should be deleted or explained in more detail.

- f. Section 916(3). An additional contra/measure entitled bridgehead line should be added, either in this chapter or in the chapter on offence.

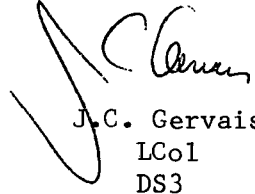
8. Chapter 15

- a. The use of miles should be discontinued and kilometers applied, if this chapter is to be retained.

.../6

- 6 -

- b. Much of the information contained herein can be eliminated as it is stated much more eloquently in other training pamphlets and manuals. As it is presented, the information is much too general and simplistic in nature to be of use to even the most uninitiated officer. Deletion is recommended, notwithstanding the caveat expressed in the Preface.


J.C. Gervais
LCol
DS3

SECTION 5 - THE NATURE OF CONFLICT

109. GENERAL

1. Conflicts between nations may vary from mere disagreements and conflicts of interest to basic and irreconcilable differences in national ideologies and objectives. The former are often subject to resolution by arbitration or concession and do not necessarily result in hostilities between the nations concerned. The latter type of conflict may be considered a form of war whether characterized by the employment of military force or by the application of national power short of military force.

2. The intensity of military operations will vary in proportion to the conflict of interest of the opposing nations or factors. The intensity, scope, and duration of wars also depends upon the extent to which the belligerents will make sacrifices to achieve their objectives.

110. INTENSITIES OF CONFLICT

1. High Intensity Conflict. When little or no restraint is exercised by the belligerents, a conflict is usually considered to be of high intensity. Both sides are prepared to employ the full range of weapons and resources available to them. In such a conflict nuclear weapons could be used from the outset, or the conflict would be initiated by conventional weapons.

2. Mid Intensity Conflict. If the vital interest of opponents are not immediately threatened a mid intensity conflict may occur. This is armed conflict fought with limited objectives under definitive policy

*use the official
definition -*

limitations as to the extent of destructive power that can be employed and the extent of geographical area that might be involved. Tactical nuclear weapons may be used but mid intensity conflict differs from high intensity in as much as the possibility of escalation beyond the use of tactical nuclear weapons is not present. Mid intensity automatically escalates into high intensity when one of the belligerents is prepared to employ the full range of weapons.

3. Low Intensity Conflict (Type A). When a country acting independently, or mutually with friendly nations, conducts operations to prevent the internal seizure of power or changes to established order by illegal, forceful means, the conflict is considered to be low intensity (Type A). The country, or countries, seek to establish, regain or maintain control of land areas or populations threatened by guerilla action, insurgency, rebellion, dissidence, communal violence, civil disturbance or other tactics.

4. Low Intensity Conflict (Type B). When a country, or countries, conduct operations in an area of political or armed conflict for the purpose of maintaining or restoring the peace other than by the application of offensive armed force, the conflict is considered to be low intensity (Type B). Offensive armed force is not used except under extreme circumstances when only the minimum force necessary is applied.

SECTION 6 - THE NATURE OF MILITARY POWER

111. GENERAL

has the ability to apply force ^{to assist} in the implementation of national policy and ^{for} in the

attainment of national objectives. The effectiveness of military power is measured by its capability to support the national objectives.

Military power is subordinate to and must be compatible with national policies and objectives.) ~~Military forces, the functioning element of military power, must be capable of exerting physical force in a manner and on a scale that will insure the attainment of these goals.~~

112. CHARACTERISTICS OF MILITARY FORCES

1. Military forces consist of men organized, equipped, and trained to conduct military operations. They ^{tend to} reflect the objectives of their nation, its international commitments, and the nature of the threat it faces. Thus, no two nations provide themselves with precisely the same types of forces or organize for combat in precisely the same manner. In nations where the predominant threat is internal, the forces may be ^{well} organized, ^{and equipped} principally to maintain order and promote stability. 2. ^{alliances can} Allies and members of ~~coalitions~~ ^a ~~often~~ attain some degree of standardization in weapons and materiel, in general organization, and in doctrine. They may even rely on one another for certain specialized ^{support} ~~functions~~, such as nuclear weapons ~~support~~ or logistic ~~support~~.

113. MILITARY POWER

1. In the pursuit of its national objectives, Canada has ^{made} specific commitments to its allies ^{and to international bodies} and certain other nations. As a consequence, the Canadian Forces must not only be capable of insuring the security of Canada, but must also be designed to:

- a. ~~deter aggression at any level;~~

b. defeat aggression ~~wherever and in whatever form it may occur;~~
~~and~~

c. support both military and non-military programmes of Canada
and, selectively, those of its allies.

2. To meet these broad and complex requirements, Canada maintains
sea, land, and air forces that can, in conjunction with its allies:

a. defeat aggression, short of high intensity, in a manner that
reduces the risk of the conflict expanding to that level. A
portion of the forces that provide this capability is deployed
overseas; the remainder is held ~~in reserve~~ in Canada. The
latter ^{can} reinforces the deployed forces or intervenes rapidly in
threatened areas where Canadian forces are not regularly
stationed;

b. meet the logistic requirements created by the various intensities
of war by strategically positioning stockpiles of supplies;
and

c. sustain themselves in combat, building up rapidly to required
levels by mobilizing high-quality reserve forces and employing
a sound training base.

114. EMPLOYMENT OF MILITARY FORCES

1. General. Military force may be employed in ~~any intensity~~ of conflict.

Force, or the threat of force, is common in relations between nations

^{locally} when ^{these are} major conflicting ⁱⁿ national objectives are ~~involved~~. However,

military forces cannot effectively apply force, or credibly threaten to apply it, unless they can do so selectively. The type and degree of force available must be compatible with the nature and setting of the conflict at hand and the objectives sought. Forces, strategy, doctrine, and weapons should possess flexibility^{of application} that enables them to serve national policy ~~in any contingency and at any selected~~^{at selected} intensity^{to be} of conflict. However, limitations on the degree of force^{should} applied^{to be} do not diminish the force and vigor with which military operations are executed.

2. Flexibility and Adaptability in Employment

- waffles* { a. Canadian military forces must be able to operate effectively across the entire spectrum of war, in any area where conflict may occur, and under any foreseeable restraints, employing military power selectively in accordance with assigned missions and prescribed limitations. The force applied must be sufficient to achieve the assigned objectives. The ~~forms~~^{intensity} of conflict ~~involved in these situations~~ may vary widely, as follows:
- do not understand!*

- (1) Peacetime ^S Situations in which tension or violence might any time increase in scope to a more intense form of conflict. Peacekeeping and internal security operations are very much part of the peacetime situation.

- (2) Mid Intensity operations may occur in many ^{permutations} combinations^{location} of locale, intensity, duration and participants. These ~~situation~~^{situation} can could be non-nuclear war, with little or no threat of nuclear conflict; non-nuclear war, in which nuclear operations are a clear and imminent threat; or limited, tactical nuclear war. In each case, the Canadian Forces

will be employed in ^{the} a manner ^{best} best calculated to achieve the national objectives and to prevent mid intensity operations from ^{escalating} spreading to high intensity.

- (3) High Intensity operations growing from ^{one} a lower intensity, or initiated with a sudden nuclear weapon exchange.

b. A wide range of political and military considerations determines the limitations on the use of military force in war. It is impractical, however, to develop new types of forces or weapons after the enemy has initiated their use, or national authority has modified original restraints. The Canadian Forces should be able to adapt to any intensity of conflict ~~instantly~~. They must, therefore, ^{exhibit} have ~~an existing~~ multi-capability. ~~They must be organized, equipped, and trained for immediate and successful deployment.~~ The following doctrine applies to the employment of multi-capable general purpose combat forces.

- (1) The disposition of any military force depends on the commander's assessment of the threat, to include the danger of nuclear attack, the requirements of the mission, and the means and time available to effect the disposition required. Evaluating the risks involved, the commander determines the extent to which the force will disperse, and the location and state of readiness required of all his resources.
- (2) Basic limitations on the use of military force may be imposed at the national level. Nevertheless, within such limitations, field commanders are allowed some latitude.

To exercise this discretion properly, these commanders should be thoroughly conversant with the national objectives, ^{and the basis for any which} ~~underlying whatever~~ restraints have been applied.

3. Operational Readiness

- a. The destructive power of modern weapons and the speed with which they can be employed have increased the importance of readiness. All regular and reserve forces and their ~~material~~ ^{military resources} must be maintained in a readiness condition commensurate with their assigned ^{roles and} ~~mobilization~~ missions.
- b. Accurate, complete, and strategic intelligence is vital both to operational readiness and to success in military operations. Detailed intelligence on actual or potential theatres of war must be available to commanders at all levels and must include intelligence on enemy dispositions, composition, strength, recent and present significant activities, peculiarities and weaknesses, capabilities, and probable courses of action. Timely and thorough assessments of these factors are of particular importance. It is essential to avoid ^{being} ~~surprise~~ by sudden changes in the scope, type, or intensity of conflict. Contingency planning should be complete and current, with particular attention given to base development in designated contingency areas of the world. *the that we did!*
- c. The readiness of combat force for deployment can be ^{improved} ~~increased~~ by prepositioning ^{of resources} ~~certain items or complete unit equipment~~ in strategically advantageous locations.

4. Employment in Combined Operations

- a. In combined operations, two or more nations commit their ^{national} military ~~and other~~ strengths to the attainment of a ^{single} ~~common~~ objective. These objectives ^{will be} ~~are generally~~ similar to, if not identical with, ~~the~~ national objective of each participating nation.
- b. The success of combined military actions depends on mutual purpose, ^{and} ~~mutual~~ confidence, and sound organization and planning. These require the existence of flexible and diverse military power. ^M ~~Both~~ membership and particularly leadership in multi-national actions normally require the commitment of military forces, ~~that can contribute to meeting the threat under any of a wide variety of circumstances.~~

SECTION 7 - THE NATURE AND ROLE OF LAND FORCES

115. GENERAL

1. Land forces are organized, trained, and equipped for sustained combat operations in the land environment. This environment consists of earth's land surfaces and the contiguous water boundaries and layers of air. Land forces, therefore, include ground units, certain ground/air systems and waterborne elements.

2. The Department of National Defence is organized on the premise that land, sea, and air power are interdependent elements to be applied under unified direction and command toward the attainment of Canadian and alliance objectives.

COMMENTS

CFP 300

CHAPTER	SECTION	PARAGRAPH	COMMENT
3	2-310	2	Definition of land combat support includes Civil Affairs. Technically Civil Affairs should be included in combat service support.
	5-325	7	Policy should read Police. (Table of Contents contains same error).
	5-326	1	The term <u>field depot</u> is a carryover from the UK system and is used throughout the publication. It is recommended that the term be deleted and replaced by either <u>storage facility</u> or <u>storage area</u> . Both terms provide greater flexibility. (& are what we will be adopting in our revised version of 205).
	5-326	1	Delete: Corps Support Command throughout the manual. Insert: Corps Service Command so we will all be "on net".
	5-326	3a.	The establishment of an Advance Section HQ has been discussed at some length. Actually no such "animal" exists. The proper concept will provide for an additional TAACOM in the Advance Section to effect command & control in this area. (TAACOM Base & TAACOM Advance).
	5-326	3b.	Delete depots (See 5-326-1)
	5-326	3c.	Delete: All references to RP throughout the publication. Insert: Supply Point (Sup Pt) Proper NATO Terminology based on US LOFC.
	5-327	1	Definition of combat zone is inconsistent with current doctrine. It does not include Force or Army maintenance areas which are behind the Corps Rear Boundary and are part of the Comm Z.
	5-327	22	Delete: "Army transport" Insert: "theatre transport"
	5-327	3	Delete: "Platoons are provided on the basis of one per brigade." Insert: "Supply points are established on the basis of one per division - consistent with recommendations made above."

CHAPTER	SECTION	PARAGRAPH	COMMENT
3		3	Delete: Second line workshops - these are normally at division level. Insert: Third line workshops - Corps.
8	5-327	44	Both first and second line workshops could be located in the DAA not only first line.
	5-328	3	Delete: "Air Vehicles"? Insert: Air resources
		5	-It is recommended that all reference to HQ Comm Z be deleted. TAACOM will effect the Comd & Con required in either the base section or advance section when established. -Delete: "Corps Ordnance Depots (as much as I hate to) Insert: Support Groups -Last line of paragraph is superfluous. It is recommended that it be deleted.
		6	Delete: "RPS are sited by Corps" Insert: Supply Points are sited by Corps HQ in consultation with COSCOM & the division concerned. Delete: RP Platoons Insert: Supply Points
	Figure 3-2		Delete RPs, Bde Svc Bde & Fd or Branch Depots Insert Supply Point & DISGP and SP GP.
	5-327	7	<u>Last line</u> delete: Conveniently located DP insert: Supply Points
	5-327	9	<u>First line</u> delete: first sentence (awkward) insert: Routine demands for all commodities are submitted daily. Special demands are submitted at any time when stocks are urgently required. delete: "filled" insert: "met" delete: "nightly" insert: "scheduled"

CHAPTER	SECTION	PARAGRAPH	COMMENT
3	5-329	4	The entire paragraph should be rewritten. The author is mixing operational stocks (basic load-maint load) with reserves. Lowest level at which reserves will normally be held is at Corps and occasionally at Div if authorized.
6	5-330	far	The whole problem of <u>casualty evacuation</u> has to be looked at again from a College point of view. Unfortunately we are not that <u>far</u> along in our revision of 205. I therefore recommend that we do not provide comments on this part at the moment but perhaps reserve the right to do so later on.
	5-331	3 & 4	<p><u>Repair & Recovery</u> Revised concept (X, Y1, Y2, Z) should be incl in this section.</p> <p>Delete: Div Tp & Maint Coy Corps Adm Area</p> <p>Insert: DISGP Maint Coy Corps Rear Area</p>

Rewrite Para 401

1. Everyone who serves with or in the land forces will be called upon to face danger, due to the very nature of modern land warfare operations. There are however, certain branches of the land forces whose primary role is to advance into danger. These forces contribute directly to the destruction and defeat of the enemy by engaging him ~~in~~ in close combat. These ~~combat~~^{fighting} elements are classified as "the arms".

CHAPTER 4

THE ARMS

SECTION 1 - INTRODUCTION

401. GENERAL

1. (1) Everyone who serves in a land environment or with the land forces may be called upon to face danger regardless of their classification or their employment (2) due to the enemy nature of land operations since war on land is a hazardous endeavour. However there are certain elements of the land forces whose primary major task is to advance into danger. These elements contribute directly to the defeat and destruction of the enemy by engaging that enemy in close combat using their firepower and mobility. These fighting elements are referred to as the "arms".

(1) replace phrase with "will" be called upon etc

2. The arms are divided into two groups:

a. The Combat Arms. These ~~are the~~ branches ~~that~~ are the basis of combat power ^{Composed of} the primary fire and movement elements :
Armour, Artillery and Infantry.

and

AD — ?

b. The Combat Support Arms. These ~~are the~~ branches ~~that~~ contribute on occasion directly, but more often indirectly, to combat power : Engineers, Signals, ^{Aviation} and Air.

addition

Tactical.

SECTION 2 - ARMOUR

402. GENERAL

1. Armour conducts highly mobile land warfare characterized by a predominance of mounted combat through the use of armoured vehicles. Armoured units are particularly suited for offensive action within the context of offensive or defensive operations where their ability to concentrate quickly, deliver a heavy weight of firepower and disperse

rapidly can be exploited. Armour is rarely employed without artillery or infantry support and so habitually fights as part of a combined arms team.



2. Armour is normally organized into two types of units:

- a. Tank Units. These units have the role of closing with and destroying the enemy, using firepower, movement and shock effect in co-ordination with other arms.
- b. Reconnaissance Units. These units have the basic role of conducting reconnaissance, security and economy of force missions.

403. TANK UNITS

1. Tank units are the offensive element of armour on the battlefield. Under favourable conditions, they will be the major source of offensive power in the land force and to get full value this offensive capability must be exploited wherever possible. However, their effect will not be fully realized unless they are employed with the other arms.

2. Equipment and Organization

- a. The main battle tank, is the principal equipment of tank units, although it sometimes receives the support of lighter or heavier models.
- b. The main battle tank is a compromise between the desirable features of tanks of all weights. Its main armament can kill

SECTION 4 - INFANTRY

409. GENERAL

1. The role of the Infantry is to ^{provide} ~~create~~ the battlefield framework through its physical control of ground and its destruction of the enemy in close combat. It accomplishes this by the skilful ^{application} ~~use~~ of firepower and ^{by} ~~manoeuvre~~ by day or night in any weather or terrain.
2. This ^{primary} ~~basic~~ role will be affected by the nature and intensity of the operations, the climate and terrain of the theatre and the political restrictions that may be imposed on the military use of force.
3. All types of infantry battalions, be they ~~light~~, parachute, motorized ~~or mechanized~~ ^{or armoured} are trained and equipped to fight on foot ^{and all} ~~In the essen-~~ ~~tials all types of battalions~~ have similar organizations. What differs is their means of transportation, the number and type of weapons available and the acquisition of certain specialized skills; ~~by the infantryman~~ such as the ability to handle armoured personnel carriers or a knowledge of mountain skiing.

410. EQUIPMENT AND ORGANIZATION

1. The ~~basic~~ weapons of the infantry are ~~personal~~ small arms, grenades, machine guns, mortars and anti-tank weapons, ~~of varying ranges~~. ^{To permit the infantry to execute its role effectively, it} ~~In addition, the infantry~~ is equipped with communication ~~systems~~, surveillance and night vision devices, and ~~sufficient~~ vehicles ~~to perform their tasks~~. The weapons of the infantry ^{provide} ~~allow it to develop~~ direct and indirect firepower out to several thousand metres from where the troops are deployed, while the communications, surveillance, ~~and~~ night vision equipment and the vehicles permit the firepower to be coordinated, controlled and flexibly employed.

2. The basic infantry unit is the battalion which is organized into companies, platoons and sections. The battalion provides:

- a. close combat forces found in the rifle companies;
- b. a command and control element found in a headquarters;
- c. a combat support element found in weapon platoons; and
- d. a combat service support element found in an administrative company. ~~or platoon~~

Brought together in a battalion structure, these components contain
3. A ~~unit organization~~ ~~possesses~~ the command, communications, fire support and administrative resources to make it self-contained for limited periods of time. ~~In addition, these components can also be~~ ~~these resources are also~~ ~~distributed~~ ~~that a~~ ~~battalion may break down further~~ ~~into self-contained~~ ~~company groups~~ ~~or smaller~~ ~~for specific missions.~~
In addition, these components can also be ~~so that~~ ~~be sub-divided or grouped~~ ~~companies~~ ~~groups~~ ~~for specific missions.~~

411. CHARACTERISTICS AND EMPLOYMENT

1. All infantry battalions possess the following characteristics:

- a. Mobility. On foot the infantry battalion is capable of moving at a slow speed over any type of terrain, in all types of weather, by day or night, carrying for short distances enough support weapons and ammunition to ~~execute~~ ~~achieve~~ limited tasks. This basic mobility and speed of movement may be enhanced by the addition of wheeled vehicles, oversnow vehicles, tracked vehicles, boats, helicopters or fixed wing aircraft, ~~depending on the task~~ ~~Difficult~~ ~~terrain and weather may restrict the~~ ~~severe, adverse~~

battalion's mobility and speed ^{but is unlikely to halt it totally.} ~~when conditions are severe but~~
~~they will not stop a well-trained unit.~~

b. Firepower. The infantry battalion has a large number of short range small arms ^{and} ~~an~~ ^{weapons together with} anti-armour ~~capability~~ ^{and} a base of indirect fire. Its organic firepower ^{can} ~~may~~ suffice in low intensity conflicts, but as the situation escalates ^{toward limited war conditions} ~~the~~ the battalion cannot undertake sustained operations without the ~~additional~~ fire support provided by armour, artillery, ~~and~~ ^{aviation and} tactical air.

c. Communications. The infantry battalion is well equipped with radio communications which ^{permits} ~~facilitate~~ the rapid passage of information and orders, ~~when radio can be used.~~ In conditions of electronic warfare or of radio silence, the battalion is capable of maintaining communication, albeit at a slower rate, by means of telephone, runner, dispatch rider, ~~or~~ personal contact ^(and liaison officers?)

d. Flexibility. The combination of the infantry battalion's mobility, firepower, communications and organizational structure ^{provide great} ~~give it~~ flexibility, ~~to cope with almost any situation or type of terrain.~~ The battalion, ^{and} ~~or~~ its sub-units, ^{or it} ~~can~~ can operate independently for limited periods of time, ^{or it} ~~can~~ can be grouped with other arms and ~~can~~ function effectively in any intensity of conflict. ~~The~~ ^{Various} forms of transport can be used to move the infantry to, ^{over} ~~on~~ the battlefield, but it will ^{normally} fight the enemy on foot or from a dug-in position.

- e. Vulnerability. The infantry is ~~extremely~~ vulnerable to enemy actions; ~~from~~ ^{from conventional or indirect} direct ~~fire~~ ^{to the effects} area fire, chemical or nuclear weapons. ~~Even the~~ ^{Armoured} personnel carriers provide only limited protection and on foot the infantry soldier is seriously exposed. To minimize this inherent vulnerability, the infantry battalion must be expert in rapid movement, ⁱⁿ the clever use of ground, camouflage ^{and} concealment and ^{in its capability to dig} ~~the art of digging~~ quickly. Ground is ^{instrumental} ~~vital~~ to the infantry's ^{role} in both offensive and defensive operations. The ^{pre-eminent} ~~amount~~ ^{degree} of cover, concealment and protection the ground provides ^{relates} ~~directly~~ ^{to the infantry's} ~~affects its tactics~~, the use of its weapons, ^{and} the speed with which it can ^{accomplish its tasks} ~~get things done~~.
- When dug in, the infantry battalion is relatively immune to ^{conventional} hostile fire, though its weapons may be ^{periodically} neutralized. ^{However} Once the ^{conventional} enemy fire has lifted, the troops can emerge from the ground ready to fight. ^{to permit his leading elements to close,}

2. The employment of infantry depends to a large extent upon ^{its tactical} ~~the~~ mobility ^{As} ~~the~~ characteristics of the various types of infantry. ^{As} The ultimate aim of the infantry is to defeat ~~task~~ ^{is to engage} the enemy at close quarters and to defeat him, if necessary, by hand-to-hand combat, ^{it follows} ~~this means~~ that the infantryman must be brought to where his short range weapons can be effective, ~~and~~ ^{This} will usually demand that he ~~must~~ dismount from his transport to fight. The slow rate of dismounted infantry movement ^{increases their vulnerability,} ~~decreases the shock effect,~~ and when this is reduced, ~~the infantry is left with much hard fighting to do.~~ ^{which can} ~~This disadvantage~~ can only be ^{partially} offset, ~~to a degree~~, by the careful and imaginative use of ground, ~~and~~ fire support, and, where possible, by ^{transporting} ~~moving~~ the infantryman as close to his objective as possible.

3. ~~Infantry~~ Dismounted infantry have a special place in operations that take place in close compartmented terrain. This includes ~~towns and~~ ^{urban areas}

~~the~~ the forest, ~~the~~ and the jungle ~~of~~ and other the mountains, areas where the fields of observation and fire are short. ^{Accordingly,} ~~The diminished shock effect is not as significant in close terrain but a particular premium is placed on infantryman to be physical fitness, concealment and leadership to surprise the enemy.~~ ^{and imbued with initiative and offensive spirit.} ~~and~~ Wise in the use of camouflage ~~and well equipped~~

4. Airmobile or parachute infantry is ~~able to overcome some of the~~ ^{characterized} disadvantage by the speed and unexpectedness with which ~~it~~ ^{they} can be deployed into the battle area. Often ~~it~~ ^{they} can land ~~close to the enemy~~ ^{or on top of position, thereby achieving surprise} and temporarily reducing ~~the effectiveness of enemy resistance~~ ^{Results out of proportion to the forces committed can thus be realized} ~~opposition temporarily, so allowing operations to be launched deep into enemy territory.~~ However, airmobile or parachute infantry ~~is limited to~~ ^{are} the weight and quantity of support which can ~~be~~ ^{be} land with ~~it~~ ^{them.} This restriction requires them to often fight without tanks and other forms of heavier support. ~~This fact reduces the staying power of these types of infantry units and tends to restrict the length and scope of purely airmobile or parachute operations.~~ ^{and demands that their tasks be restricted in time and in scope.}

Normally, ^{after} Such operations require a link up between the airborne forces ~~and~~ ^{the} ground forces, ~~with their heavier support,~~ as soon as possible after the commencement of the operation.

5. Mechanized infantry, mounted in armoured personnel carriers ~~and armoured infantry,~~ ^{most} mounted in a mechanized infantry combat vehicle, can overcome ~~many~~ of the disadvantages of ~~shock~~ ^{their} dismounted or airborne infantry, particularly in open terrain. Because of ~~the~~ ^{mechanized and armoured} heavier vehicles and equipment, ~~mechanized infantry units are less~~ ^{mobile strategically than} ~~less strategic mobility than~~ the other types of infantry units. ~~and it~~ ^{They also} require ^{Over} carries with it a larger maintenance overhead. ~~On~~ ^{and armoured units are} suitable terrain, possessing as it does a cross-country performance equal to the tank, mechanized infantry ~~is~~ ^{able to close with the enemy at a speed and with a degree of protection which greatly multiplies} ~~its shock effect.~~ ^{their effectiveness.}

6. It must be emphasized that although the infantry has a ~~limited~~ capability for independent operations in conflicts of lower intensity, it will be most effective when it is integrated with armour, artillery, engineers, ^{aviation} and ^{air} resources into a closely knit fighting team. This is particularly so in mid-to-high intensity conflict ^{technical} ~~with~~ ^{against} a sophisticated and well-equipped enemy.

SECTION 5 - ANTI-TANK UNITS

412. GENERAL

1. In conflicts where the enemy possesses large ^{tank} ~~armoured~~ forces and the ground is suitable for their ^{employment} ~~deployment~~, anti-tank defence will be one of the most serious problems ^{to be resolved by} ~~facing~~ a commander. To defeat ~~the~~ a major ^{tank} ~~armoured~~ threat, the commander must develop a ^{comprehensive,} ~~single~~ co-ordinated ^{anti-tank plan.} ~~plan~~.
2. The commander's anti-tank plan will co-ordinate all available resources that can assist to delay, impede and finally defeat the armoured threat. ^{The} ~~This~~ plan ^{must provide for} ~~will include~~ the acquisition of intelligence, attack ^{by} ~~aviation~~ ^{and} ~~close~~ support aircraft, the development of natural obstacles, the deployment of man-made obstacles and the integrated fire of all anti-~~armour~~ ^{both} ~~armour~~ weapons, ^{both} direct and indirect.
3. Land anti-armour weapons include the tank main gun, the guided missile, the precision guided munitions of the artillery, direct fire cannon, rocket launchers, ~~and~~ anti-tank grenades, ^{and} ~~as well as~~ ^{emplaced} or remotely delivered mines. The longer range weapons are distributed throughout a formation to the appropriate combat and combat support units while the shorter range ones are issued to all units for local defence and protection.

4. Formations may also include special anti-tank units which will provide the basis of any formation anti-tank plan.

413. EQUIPMENT AND ORGANIZATION

1. A formation anti-tank unit will be armed with a long range anti-tank guided missile that can engage tanks at ranges of several thousand metres as well as short range weapons for close in protection. It will be equipped with armoured cross-country vehicles and suitable communications.

2. Anti-tank units may be organized as independent companies or as anti-tank battalions. The former will normally operate as part of a brigade or brigade group and the latter will normally be a division or higher formation unit. Both the independent company and the battalion will be self-contained ~~with~~ with their own command structure, communications and administrative elements. Companies will consist of a number of platoons, ~~and~~ a battalion will normally contain several anti-tank companies, each of which will be capable of semi-independent action for limited periods of time.

414. CHARACTERISTICS AND EMPLOYMENT

1. The allocation and sighting of ^{all armour} ~~anti-tank~~ weapons is a critical part of ^{the anti-tank resources must therefore} ~~matter in the anti-tank battle. Control over their allocation should~~ be exercised at the highest practicable level of command, so that they ^{can} ~~will~~ be deployed in the areas of greatest threat in accordance with the commander's plan. ^{other} An essential component of any anti-tank plan is the use and development of obstacles. Obstacles confer their greatest benefit when they are covered by fire, and the two plans must be co-ordinated.

2. The allocation and siting of the anti-tank weapons ~~should also~~ ^{must} take account of their ~~major~~ characteristics. The ^{relatively long range} ~~of the guided missile~~ ^{mounted in an armoured cross-country vehicle} makes it ~~particularly~~ suitable for ~~delaying~~ ^{as well as in defence main force} operations in open country, ~~Its mobility is also significant, especially as~~ ^{battle area} the weapon will be mounted on an armoured vehicle. The guided missile is more easily concealed than most other anti-tank weapons, and it has a greater ability than the gun in engaging moving targets at longer ranges.

SECTION 6 - ENGINEERS

415. GENERAL

1. The roles of engineers require that they be deployed throughout a theatre of operations from the most forward parts of the combat zone to the rear of the communications zone. Their major role is to maintain the mobility of our own forces by overcoming obstacles; by road construction and maintenance; and by the provision of air landing facilities. They also must reduce the mobility of the enemy by creating and improving obstacles; by demolitions, including the use of atomic demolition munitions; and by assisting in the construction of field defences.

2. In addition, engineers perform a large number of combat service support functions such as the establishment of water points and the production of water; assistance with major camouflage projects; bomb disposal; the construction and maintenance of camps and barracks in the rear areas, including the provision of utilities for them; rail and port transportation; the supply of engineer stores; engineer survey and the provision of maps, assistance in decontamination operations and in rear area damage control.

425. AIR TRAFFIC CONTROL

The employment of a large number of aircraft in a variety of tasks requires close supervision. Tactical aircraft in the forward area must be subjected to a minimum of control so as not to interfere with their primary function. This control will normally be exercised by radio from unit or sub-unit headquarters and through air force control channels. Flight paths must be adjusted to avoid artillery and mortar fire and nuclear strikes. Aircraft which are operating further to the rear will be more closely controlled by conforming to pre-arranged corridors and flight plans. The air traffic control system includes a staff, communications, aircraft instrumentation and ground installations, such as radar and radio beacons. This will provide for instrument flight by the aircraft and for the necessary liaison with the air defence system.

SECTION 9 - THE ARMS IN CO-OPERATION

426. GENERAL

~~Firepower~~
Firepower provides the central core around which land forces - armoured, infantry, artillery, anti-tank, and air defence units - are built. The units of these arms are largely homogeneous in character, their organization being based on a single major weapons system or a combination ^{of systems} ~~of them~~. Full effectiveness is not achieved until the arms are used ^{together} ~~in combination~~ and ^{balanced} ~~in the best~~ proportions.

427. RELATIONSHIP AMONG THE ARMS

1. The artillery, with its long range, variety of ammunition, and wide network of observers and communication, is able to bring very heavy fire upon the enemy over a wide area. Its destructive capacity, especially with nuclear weapons, ^{will be a major contributor to battlefield} ~~may often be mainly responsible for success.~~ ^{however,} ~~But~~ it cannot do this effectively without the protection afforded by the tank, infantry, anti-tank, and air defence units. In addition, the artillery's ability to extend its fire offensively over a wide and deep area is dependent upon the tank and infantry close-combat battle teams ^{that} ~~force~~ ^{rearward, thereby creating} the enemy ~~and to clear~~ new areas for deployment of the guns and missiles.

2. In the close-combat battle, the freedom of the tanks to apply their ^{fire} ~~shock~~ power depends very largely on the protection of ^{the} ~~infantry~~ ^{the} ~~the~~ anti-tank ^{weapons} ~~weapons~~ and ~~upon~~ the neutralizing effect of ^{the} ~~artillery~~ ^{and AD}. Similarly, the infantry battle will rarely succeed without ~~the benefits of tank, and~~ artillery, ~~fire and the~~ anti-tank, and air defence ^{fires}. It must also be borne in mind that the effectiveness of these weapons systems is enhanced by ~~information, capacity of move, and cohesion~~ ^{mobility} ~~the support~~ provided by reconnaissance, engineer, and signals units.

3. All ~~the~~ arms are partners in the integrated team and none should be regarded as having an inferior role to play. This fighting team must be regarded as a single and cohesive whole with each weapon being ~~used~~ ^{employed} ~~in accordance with its characteristics, and the conditions of the battle.~~ ^{to exploit its} The effectiveness with which the team fights depends upon a number of factors. It is, first of all, essential that all commanders within each arm have a thorough understanding of what the others can and cannot do, and of the best way to use their weapons. Equally important is the need

for officers and men to have confidence in each other. ^{mission} Finally the arms must be grouped ^{with} in the ^{correct} ~~best~~ proportion ^{based on their} ~~for the~~ ^{and the} range of conditions ~~they may meet~~. ^{they will encounter in successfully achieving their mission}.

428. GROUPING

1. The fully integrated fighting team may be established as a fixed organization at the brigade, brigade group, and division levels of command. Although the composition of each may differ slightly, these are the first levels at which ^{meaningful} ~~any~~ integration occurs. Divisions, brigades, or brigade groups, are organized as predominantly tank or infantry ~~combat~~ organizations.

2. Within these fixed establishments commanders have ~~a~~ great ~~deal of~~ flexibility in ~~the way they~~ group ⁱⁿ their units for a specific task. The basic structure of units and formations enables them to be ^{sub-divided} ~~broken down~~ or built-up easily. However, in exercising this flexibility, commanders must remember the importance of maintaining ~~some~~ stability in organization and command structure. Mutual confidence and co-operation depend in large part upon familiarity, consistency of method, and simplicity.

3. It is therefore desirable to establish a regular association among units and sub-units of different types and to maintain this association in grouping whenever possible. The normal organizational structure and chain of command should be disrupted only when it is essential to do so.

4.3 Groupings will be based upon ^{two of the} ~~the~~ combat arms ^{either} ~~armour and infantry~~ - each ^{supported by artillery}. Added to these will be elements of the combat support arms according to the need. When they are formed at ~~the~~ unit level, ~~of command~~, based upon

armoured regiment or infantry battalion, they will ~~usually~~ be referred to as battle groups. For groupings below ~~the~~ unit level, ~~the term~~ ^{they will be referred to} as combat teams ~~is used~~.

5. Artillery support for battle groups will normally be provided from the direct support artillery available at formation level. Specific artillery sub-units will be designated to provide direct support for a particular battle group ^{which} ~~and this~~ will be exercised through the artillery commanders and forward observation officers allotted. On occasions it may be necessary to ^{place} ~~include~~ an artillery unit or sub-unit ^{under command of} ~~with~~ a battle group by ~~placing it under command of the battle group~~ commander.

429. FACTORS AFFECTING GROUPING

1. General. The grouping of any force depends on the mission, the ground, the enemy and the friendly forces available.

2. Mission. A force whose mission is to penetrate deeply into enemy defences and rear areas is likely to require a preponderance of tanks; so also is a force which is undertaking a pursuit. In these circumstances the psychological and shock power of the tank are exploited, ^{However} ~~but an~~ ^{allocation} ~~reasonable balance~~ of other arms will ^{also} ~~be~~ needed ^{to provide the force balance} ~~for their own special capabilities~~ ~~roles~~. On the other hand, operations to cross an obstacle or to break into very heavy enemy defences are likely to create a special need for artillery, infantry, and engineers. The destructive effect of artillery, possibly using nuclear weapons, will reduce the enemy defence more quickly. In the early stages of an obstacle crossing operation, infantry will be needed to secure a bridge-head until the heavier weapons can be brought across the obstacle, especially water obstacles.

3. Ground. In very close country which is heavily wooded and overgrown, and where fields of observation and fire tend ~~to be~~ ^{are} short, the tank and APC are at a disadvantage. The same is true of built-up areas ^{jungles and mountains} where infantry, after dismounted, are likely to be the predominant arm and to form the major part of a ^{balanced} ~~combined~~ force, ~~and in mountains and jungles~~ where routes may be few, narrow, and easily dominated from areas which are relatively inaccessible. However, in more open country where the going is firm and fields of observation and fire are longer, tanks and mechanized infantry can both be used to advantage. The longer ranges will allow the tank main armament to be used to greater effect and this may result in a reduced need for infantry.

4. Enemy. The grouping in any area of the battlefield or for any particular action must take account of the composition, strength, and deployment of the enemy. Where he is strong in tanks and mechanized forces, the grouping must lay stress upon tanks, anti-tank weapons and, especially in the defence, engineers. Where ~~the~~ ^{an} air threat ^{exists} ~~is high~~, care must be taken to include air defence units. The grouping for the attack, for example, must depend to some extent too on the nature of the enemy defences. If they are well co-ordinated and prepared, composed of obstacles and thick anti-defences, infantry and engineers will be needed in large numbers. ^{As such the} ~~The whole~~ pace of the operation ^{will} ~~is likely to~~ depend upon them, unless nuclear weapons are to be used.

430. COMMAND AND CONTROL

1. Provision for the command of mixed forces of armour, infantry, and the other arms exists at the brigade, division, and higher levels. These headquarters possess the staff and communications to exercise effective control. However, when grouping is done below the brigade level, it is necessary to make specific arrangements for command of ~~the~~ force. battle groups and combat teams.

2. Normally command should be delegated to the commander of the arm that is dominant in the grouping. Consideration should also be given to the nature of the mission; which arm is expected to set the pace of the operation and ^{to} bear the brunt of the fighting; and ^{to} the relative experience of commanders. Whoever is selected, it must be ^{crystal} ~~quite~~ clear to everyone that he is the appointed commander.

3. Within the command, provision must also be made for the effective direction of each of the participating arms at each level of command. Each of the two combat arms, armour and infantry, should also have their own commanders who, subordinate to the battle group commander, can lead and command their own troops.

4. Great care must be taken to establish clear and simple communications between the arms commanders and these must be linked at each level of command.

CHAPTER 14

ELECTRONIC WARFARE OPERATIONS

SECTION 1 - GENERAL

1401. The commander must view the electromagnetic environment as a battlefield extension where a different type of combat takes place. This invisible but very real struggle is Electronic Warfare (EW).

1402. Electronic Warfare has three facets:

- a. Electronic Countermeasures (ECM) consists of jamming and deceiving enemy command and control nets, intelligence nets and weapon systems using electronic emitters. ECM must be considered and employed as another weapon on the battlefield.
- b. Electronic Warfare Support Measures (ESM) consists of the interception and direction finding of electronic emissions to provide target acquisition data for jamming of these emissions and the application of other forms of combat power.
- c. Electronic Counter-Countermeasures (ECCM) consists of electronic tactics used to protect our emitters from the enemy's ECM and ESM efforts.

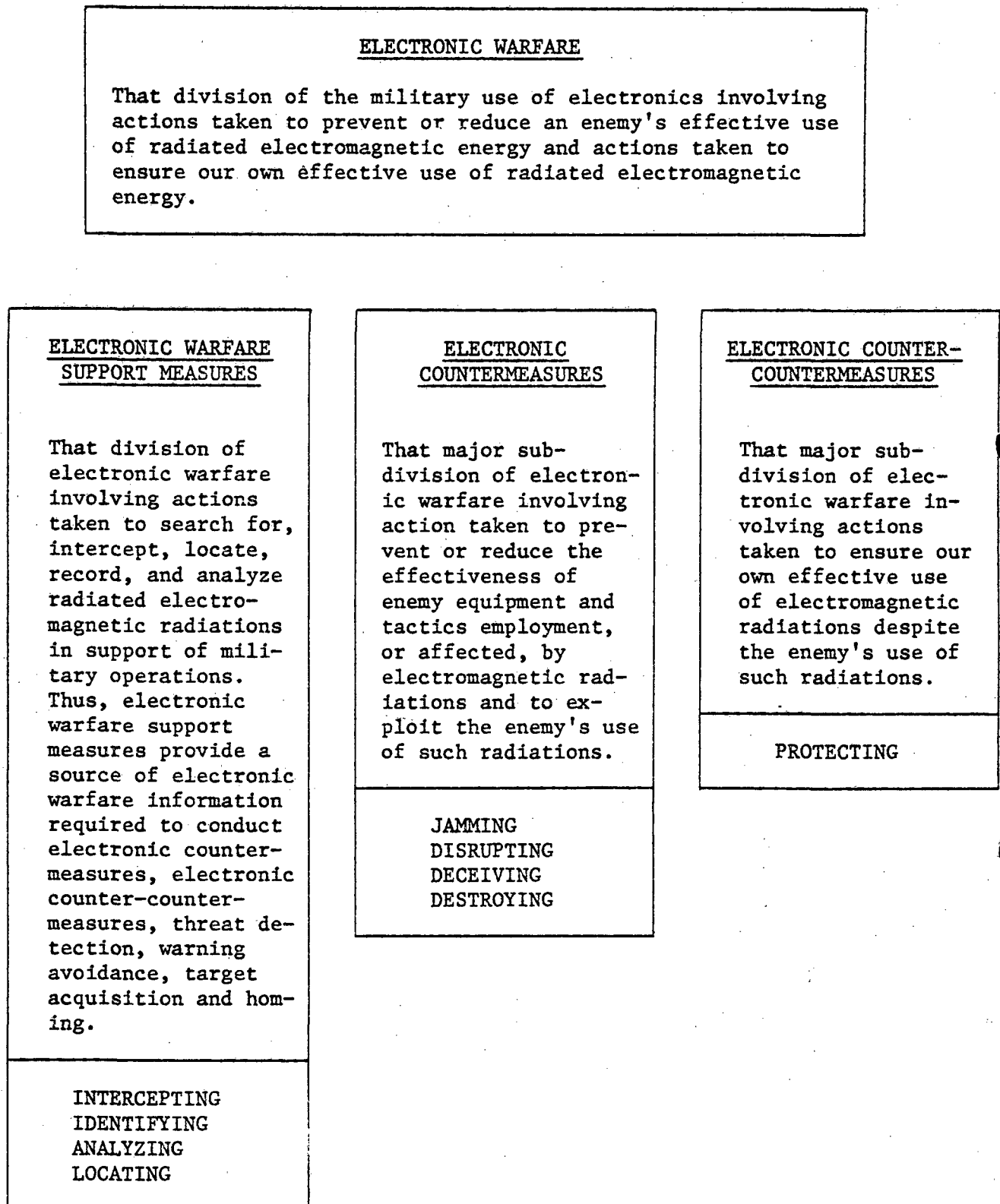
② One Maj Comment this entire chapter —

CFP 322(9) second draft now printed and should be consulted to produce rewrite this chapter.

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SECTION 2 - DISCUSSION

1403. The relationship is shown in this chart:



NOTE: These functions are thoroughly interwoven to provide the EW fabric.

SECTION 2 - COMMAND AND CONTROL

1404. The commander must understand the enemy's use of electronic systems. He must see these systems as a target array in which each enemy ^{radio} net or weapon system using electronic emitters has a relative importance. He then evaluates each with respect to its value to the enemy or its contribution to his combat power. Nets must be further sorted to show the commander those options which may be effectively employed to destroy or disrupt them.

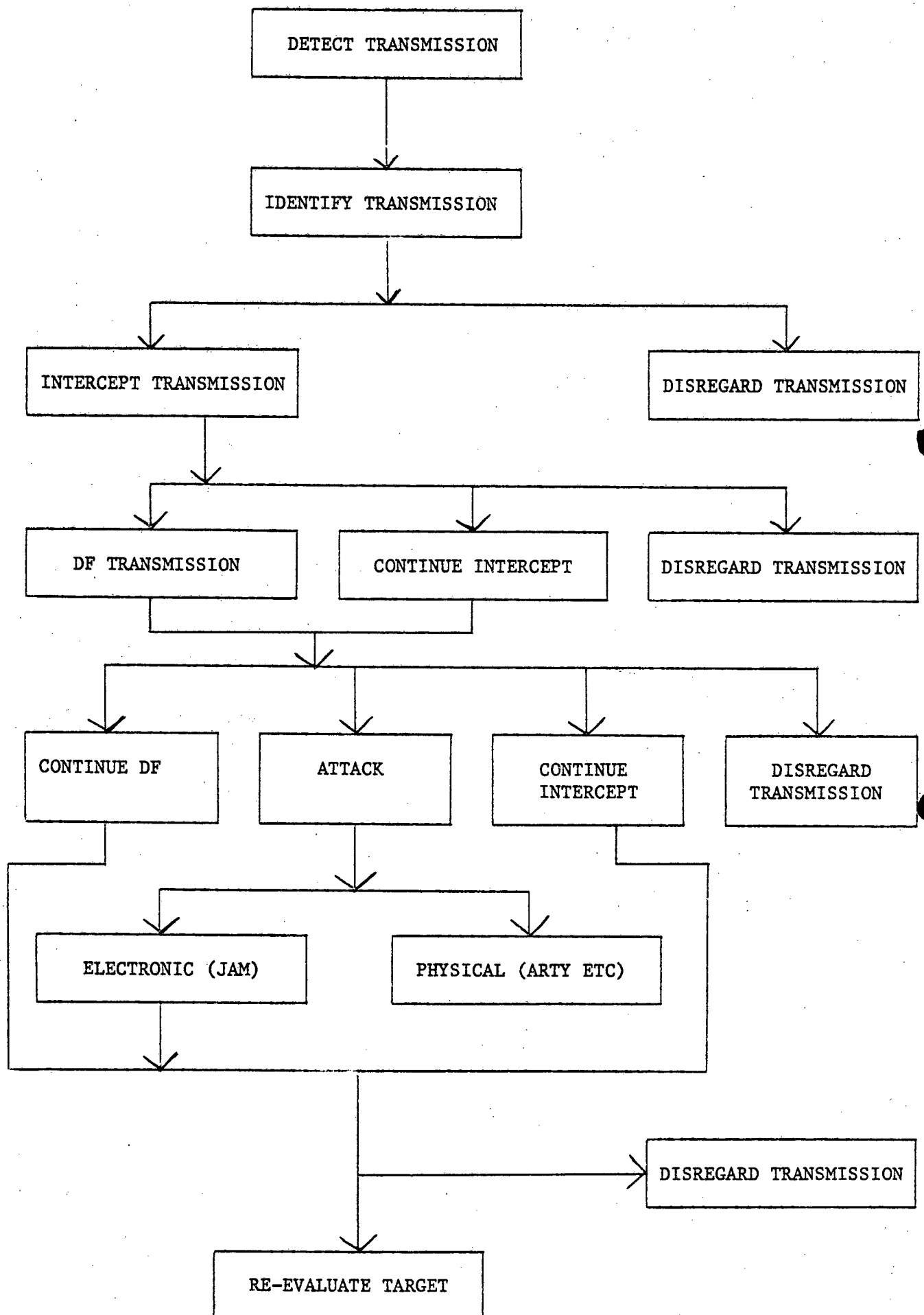
1405. The corps commander allocates EW and intelligence resources to support the battle plan. He is concerned with severing or exploiting enemy command and control between division and higher levels. The division commander severs or exploits enemy command and control between division level and lower levels. Co-ordination of EW assets is especially important, however, because EW is dependent on radiated power and distance. It is the responsibility of the senior commander to co-ordinate overlapping target areas.

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1406. The tactical commander focuses on battlefield EW operations. To accomplish this, he is supported by a staff and organic EW resources. He selects EW target priorities in accordance with the threat to his command and with regard to the target's vulnerability to EW. Enemy communication links that connect regiments to divisions, and forward operations posts to regimental and division command posts are of particular importance because these links control the enemy's scheme of fire and manoeuvre.

1407. The enemy's use of low power, high frequency and very high frequency, tactical communications may dictate the deployment of ground-based, high frequency EW assets in forward areas. EW units must therefore accompany brigades and battalions, and be equipped ^{with cross-country armour protected vehicles for} ~~and trained to deploy within~~ ^{deployment within} sight of the line of contact.

1408. The EW system may look like this:



NOTE: At each decision point, EW, OPS and Int Staff are involved in the decision-making process.

1409. Direction finding and target acquisition are ~~also~~ components of ^{ESM}EW and applied to determine the approximate location of emitters. These locations provide valuable information for targeting command posts, key control points, and weapon systems. They assist in determining enemy intentions by providing a picture of the battlefield.

1410. As can be seen, once the enemy emitter is found, identified and located, this information flows to the co-ordination centre where an interface occurs between intelligence, operations, and EW. Here an ^{ECM} decision is made whether to jam, destroy, or exploit for intelligence. If the decision is to listen for intelligence purposes, at some point this decision must be re-evaluated -- that is to continue listening or jam. Commanders should identify certain nets that have high tactical value to the enemy but have little or no intelligence value. Enemy fire direction nets usually meet this criteria and should be jammed routinely. As such, when these nets are identified and located, they are automatically jammed and the co-ordination center is so informed. In other cases, the commander may direct that certain targets, such as enemy jammers, be attached routinely once identified and located.

1411. When making these decisions, commanders must understand that certain communications cannot be jammed or if jammed require an inordinate amount of power to be effective.

1412. The commander must continually keep in mind that jamming must complement his concept of operations. Jamming will only be effective for short periods of time until the enemy takes evasive action or executes countermeasures such as shelling the jammer.

1413. Jamming assets are used to:

- a. disrupt key command and control nets, thus reducing the enemy's ~~power~~ ^{operational capability} in critical sectors;
- b. provide deception;
- c. deny the enemy the ability to react to change on the battlefield, i.e. commit reserves -- change direction;
- d. reduce the effectiveness of enemy fire support;
- e. deny the enemy use of his air control nets; and
- f. disrupt the enemy's flow of critical supplies -- (ammunition and POL).

1414. Commanders must also remember that jammers are targets. Because of the large amount of power and heat they radiate, jammers are easily identified by enemy intercept and locating equipment. If jammers are to operate effectively and survive, they must be ^{armoured} protected, highly mobile ^{in cross country} and their missions must be capable of being shifted from jammer to jammer.

1415. Commanders at all levels must be aware of ECCM in order to adequately protect themselves and their troops from enemy ECM and ESM activities.

1416. A command post or weapon system cannot survive on the modern battlefield if it is easily identified and located by the characteristics of its electronic emitters. Their survival is dependent on good defensive EW tactics which conceal ^{shield emitters} ~~emitters~~ or deceive the enemy as to their identity and location.

1417. The commander has several means available to manage the electromagnetic spectrum:

- a. The Communications-Electronics Operating Instructions (CEOI) ^{is} are used to assign specific frequencies to specific elements of a command. A frequency changing CEOI is highly effective in defeating hostile ESM activities by increasing the difficulty of identifying targets for exploitation.
- b. Emission Control (EMCON) is used by the commander to restrict use of the electromagnetic spectrum to certain critical systems or prohibit use altogether (partial or complete silence). This tactic prevents the enemy from collecting data on our emissions during a specific period and eliminates the probability of unintentional interference by friendly emissions with those from critically important systems.
- c. Manipulative Electronic Deception (MED) is employed to alter an electromagnetic profile of a unit weapon system or to simulate a national one to support a commander's counter-surveillance or operations security (OPSEC) plan.

1418. EW is perhaps the only element of combat power that, subject to the constraints of security and governmental regulations, can be used in peacetime for training exactly as it would be used in war, without causing casualties to personnel or damage to equipment. Commanders must conduct tactical exercises in the same EW environment that they can expect in war.

SECTION 3 - COMBAT SERVICE SUPPORT

1419. General. Success in execution of the EW operations depends on adequate support. The normal logistics and maintenance support activities must function as designed in order that adequate systems be available to facilitate planned employment. The execution of EW requires proper functioning and interface of a variety of people, systems and procedures. This must be clearly identified, established, and rehearsed.

1420. The commander should also consider locating his elements so as to provide shorter communications links, thus making jamming more difficult.

1421. Ground mobile EW elements must be mounted in ^{armour} highly protected vehicles that are ~~compatible with~~ and of equal mobility to the other elements of the combined arms team - they must be able to survive on the modern battlefield.

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CHAPTER 6

CONSTANT FACTORS IN COMBAT

SECTION 1 - GENERAL

601. INTRODUCTION

^{Ever present}
This Chapter discusses some of the considerations and factors that affect all military operations. ~~They are the constants in that~~ ^{Although these may be classified} ~~as constants, their application is variable. A prime example of this is that they are ever present. In the main they are variables. One exception~~ ^{are} ~~is in the principles of war, which, do not themselves change, however,~~ ^{although they} ~~are applied~~ ^{are applied} their application does change according to the judgement of the commander.

His general responsibilities are discussed in this section. The principles of war are his basic guidance to the pursuit of his mission. The elements of tactics, which is at the very core of his concern, are discussed in Section 3. Various other aspects of his concern are discussed in more detail in subsequent sections of this Chapter ~~and more fully elsewhere in this manual.~~

602. DEFINITIONS

1. General. ^{are} Operations ~~involve~~ the process of carrying on combat; ^{and retrograde} that is, offence, defence ^{to} accomplish the mission. These operations include movement and/or manoeuvre and combat service support. Operations are classified generally according to whether the initiative lies with enemy or friendly forces. However, ^{this} the classification is somewhat arbitrary as the initiative seldom ^{rests} ~~lies~~ on the same side at all levels.

- a. Offensive Operations. Offensive operations are initiated with appropriate means in order to ~~reach the enemy~~, impose one's will upon him and inflict upon him sufficient casualties to defeat him and force him to yield terrain; thereby

providing the capability of achieving decisive success.

Offensive operations imply having an initial superiority, at least locally, over the enemy. This superiority may include strength, armament and material resources, morale, quality of training, the strategic and tactical situation and initiative.

- b. Defensive Operations. Defensive operations are undertaken to ~~deny the enemy~~ ^{imposing his will upon us}. ~~Materially, this requires us~~ ^{to bar the way to the enemy or to break his attack.} Fire, ^{him} manoeuvre and the choice of terrain are used to stop the enemy well forward and to destroy him in given areas. Defensive operations are to be conducted in a dynamic manner by resorting whenever possible, at least locally, to offensive operations.

2. Manoeuvre. Manoeuvre involves the employment of forces on the battlefield, using the combination of fire and movement to achieve a position of advantage over the enemy in order to accomplish the mission. Successful manoeuvre requires flexibility in command and control, avoidance of stereotyped patterns, appropriate organization and combat service support.

3. Movement. Movement is that part of operations in which forces move about the battlefield. Non-tactical movement is conducted when contact with the enemy is unlikely. Tactical movement is conducted when contact is probable. When contact is made, tactical movement becomes manoeuvre.

4. Combat Service Support. Combat service support is the support provided to combat forces, primarily in the field of administration and logistics, to permit combat forces to successfully accomplish their mission.

603. COMMAND

1. A land force commander is responsible for the design for battle and the plan to be adopted. In any plan for battle, he must decide where he will establish his point of main effort. This is the point where the decision of the battle is sought or expected. It is achieved primarily by the concentration of ~~troops or firepower, or both~~ ^{Combat power}, but may also ^{be achieved by} ~~require~~ the designation of smaller sectors involving allocation of boundaries, the employment of reserves, and deciding the priority for tactical air support and supply. It may be enhanced, particularly when using weaker forces, by the use of speed, surprise and deception. The plan, and particularly the point of main effort, can only be decided after the commander has made his appreciation of the situation. The ^{arising from his appreciation will} ~~plan should~~ normally include the distribution of forces, fire support plan, boundaries, control lines, combat support, movement, intelligence, tactical security, rear area security, logistics, liaison, air space control, air defence control, and if appropriate civil-military co-operation and damage control.

2. Appreciation of the Situation. The ^{AIM} mission is predominant. Some factors which the commander will take into consideration in formulating his appreciation of the situation are the enemy, the environment, political constraints, time and space and available resources.

- ^{AIM} ^{AIM}
a. The Mission. The ~~mission~~ is the task together with its purpose. It must be stated in terms which are specific enough to ensure complete understanding of the task to be accomplished, but which are sufficiently broad to permit the commander considerable freedom in determining his course of action. As the operation progresses, modification and changes

^{aim}
in the mission may be necessary. As the situation becomes fluid, the ^{aim}mission may be correspondingly broadened with increased reliance being placed on the initiative of subordinate commanders.

- b. The Enemy. The enemy to be taken into consideration is not only the enemy in contact but also the enemy who could, on land, sea or in the air, oppose the achievement of the ^{aim}mission for the duration of its execution. Information on the enemy is seldom complete as his intentions, including the threat of NBC weapons, are most often unknown. ^{Nevertheless,} all his capabilities must be examined. When the enemy's intentions are obscure the commander should try to determine the enemy's most probable course of action. If this is not possible the commander should assume that the enemy will take the course of action which will be most detrimental to his mission, sometimes referred to as "worst case" planning.
- c. The Environment. The environment includes the terrain, the time of day, weather conditions and the population. The aim of the appreciation is to evaluate the influence the various elements of the environment have upon both one's own and the enemy's operations.

- (1) The terrain, time of day and weather conditions affect operations by the alternatives they offer for observation, fire, movement and the use of natural and artificial obstacles, all of which can be modified or degraded by the use of NBC weapons.

(2) The population, its location and attitude, may have a marked effect on operations. The main factors to consider are urban development, and its hindrance to movement, and modern mass communication media.

- d. Time and Space. Time and space includes time available, actions to be completed and the distances involved.
- e. Available Resources. Available resources include not only those specifically allocated to the commander to fulfil his mission but also the support he is likely to receive from higher echelons and/or adjacent units, both tactically and logistically. This may include support from air and naval forces. The success of any operation will depend largely on the well co-ordinated support and supply of the forces committed. Reserves, both in forces and materials, are an important, and often the last, means a commander has to influence the course of the battle ~~and~~ to bring about a decisive result. The location of the reserves depends primarily on the point of main effort and the degree of their mobility and must be selected to avoid committing them prematurely.

3. Exercise of Command. A commander exercises command by:

- a. the issue of directives, orders and instructions. Where possible these should be given personally so that the commander can impress his personality upon his subordinate commanders, but often they must be written, or confirmed in writing. Written or graphic orders are of particular importance in multi-national operations. Particularly ^In written orders, the mission statement should be precise and firm;

- b. short and clear orders, often by radio, during operations, to ensure constant control and the capability to adapt to changing circumstances;
 - c. the calling for of reports, from which necessary information can be collated and used and passed on to higher, lower and lateral echelons;
 - d. supervising the operations and ensuring his presence at the decisive time and place; and
 - e. appropriate use of liaison officers to ensure accurate exchange of orders and other data.
4. Combat operations must be considered under the threat of the possible employment of NBC weapons. This threat may at any time change into combat under NBC conditions. Commanders and units must therefore bear in mind that combat effectiveness must be extensively preserved should these weapons suddenly be employed.

SECTION 2 - PRINCIPLES OF WAR

604. INTRODUCTION

1. Success on the battlefield is achieved by an effective combination of a number of factors: tactics, leadership, organization, equipment, fighting spirit, and even chance. "luck" Tactics are governed by certain common sense precepts which are similar in many ways to those which guide everyday life. A commander begins by informing himself as fully

as possible about the problem he faces. ^{He} will, if he is wise, limit his aim to suit his resources. He will then weigh the factors which bear upon his problem and arrive at a balanced statement of the pros and cons of the various courses open to him. He must at the same time, take into account the possible schemes of his opponents, without letting his judgement be upset by fear of their action. Finally, if he is a man of character, he will stick by the decision he has made, make a plan, and carry it through. He must remain alert to changing circumstances and be prepared to adjust to them if necessary.

2. In ^{every} ~~any~~ tactical operation, ~~great or small~~, it is the duty of every commander, whatever the size of his command, to define clearly to himself the aim which he seeks to attain and thereafter to allow nothing to distract him from it. His next duty is to apply to his task the common sense rules which have guided all fighting since the earliest ^{days of warfare} ~~days, rules which the boxer, for example, learns and follows instinctively in the ring.~~

3. He must begin by acquiring and developing the resources of energy and spirit which will give him the physical means and the determination to see the struggle through. He must always endeavour to surprise and distract the enemy, since an enemy thrown off his guard by an unexpected blow or a skilful feint is at a serious disadvantage. To be always alert and to keep his guard up is instinctive to every boxer; so must constant watchfulness and protection be instinctive to every commander of troops.

4. Yet, a commander must, as every boxer knows, "lead" to win the fight; offensive action is essential sooner or later if the enemy is to be defeated. At the same time he must have the mental flexibility and

flexibility

agility of action to be able to change his point of attack quickly or to switch to a defensive posture and then attack again.

5. It is obvious common sense to concentrate all available means, physical, moral, and material, on the task in hand; and consequently to reduce to a minimum the forces necessary for other purposes such as distracting the enemy's attention or parrying his blow. Finally, as hand and foot and eye have to work together in the boxer, so can the power of military force be applied fully only if all parts work ~~in~~ *together*.
combination.

605. BACKGROUND

1. For over two thousand years commanders and military thinkers have set down their thoughts on the conduct of war. These ideas have been the concentrated essence of what they found to be essential to the achievement of success. The ideas have varied from person to person in number and mode of expression. They have, for example, been stated as general propositions in philosophical discourse or they have been set out more formally as in the one hundred and fifteen maxims of Napoleon.

2. Attempts have been made over the years to distil this accumulated wisdom and to codify it. This has resulted in most armies' evolving a set of ~~fixed~~ *principles* for the conduct of war, which, derived as they are from experience and practice, cannot be regarded as immutable. As experience and practice change through technical and social developments, so also can these ~~principles~~ *principles* be expected to change.

3. It must be borne in mind, too, that they can be applied only according to the circumstances of the moment. Often, some of them must

be ignored because they will be contradictory, and one cannot indulge in one of them except at the expense of another. The problem for a commander will be to know where ^{and when with what} to put the emphasis at any given moment.

606. PRINCIPLES OF WAR

1. The Selection and Maintenance of the Aim. In the conduct of war

as a whole and in every operation of war it is essential to select and clearly define the aim. The ultimate aim is to ^{impose your own will upon the enemy} ~~break the enemy's will~~ to fight. Each phase of war and each separate operation must be directed towards this supreme aim, but ^{for execution} will have a more limited ^{purpose} ~~aim~~ which must be clearly defined, simple, and direct. Every plan or action must be tested by its bearing on the chosen aim.

2. The Maintenance of Morale. Success in war depends more on morale

^{This has remained generally valid throughout the history of warfare.} than on physical qualities. Numbers, armament, and resources cannot compensate for lack of courage, energy, determination, skill and bold offensive spirit, which springs from a national determination to ^{prevail} ~~conquer~~ over the enemy.

3. Offensive Action. The ultimate ^{imposition of one's will upon the} ~~overthrow of the enemy~~ ^{ultimately} ~~demands~~ ^{demands} offensive action. A successful defence, unless followed by offensive action, can result only in averting defeat. Moral advantage is with the offence, for it tends to confer ~~the~~ initiative and freedom of action.

4. Security. A ^{sufficient} ~~sufficient~~ degree of security is essential to obtain freedom of action to ^{execute one's plans. This is} ~~launch a bold offensive in pursuit of the selected~~ ^{fulfillment of the aim is essential}

^{installations and} ~~aim~~. This entails adequate defence of ~~vulnerable bases and other~~ interests that are vital. Security does not imply undue caution and avoidance of all risk, for bold action is essential to success in war. ^{and flexible} ~~On the contrary,~~ with security provided for, unexpected developments are unlikely to interfere seriously with the pursuit of a vigorous ^{pursuit} ~~offensive~~ of the aim.

5. Surprise. Surprise is a most effective and powerful influence in war, and its moral effect is very great. Every endeavour must be made to surprise the enemy and to guard against being surprised. By the use of surprise, results out of all proportion to the effort expended can be obtained, and in some operations, when other factors are unfavourable, surprise may be essential to success. Surprise can be achieved strategically, tactically, or ~~be exploiting new materials~~ ^{technologically}. The elements of surprise are secrecy, concealment, deception, originality, audacity, and rapidity.

6. Concentration of Force. To achieve success in war it is essential to concentrate forces ^{both} moral and material, superior to that of the enemy at the decisive time and place. Concentration does not necessarily imply a massing of forces, particularly in general war, but rather having them so disposed as to be able to combine to deliver the decisive blow when and where required. Concentration is a matter more of time than of space.

7. Economy of Effort. Economy of effort implies a balanced employment of forces and a judicious expenditure of resources with the aim of achieving an effective concentration at the decisive time and place.

8. Flexibility. Modern war demands a high degree of flexibility to enable prearranged plans to be altered to meet changing situations and unexpected developments. This entails good training, organization, discipline, communications, staff work and, above all, that flexibility of mind and rapidity of decision on the part of commanders at all levels which ensures that time is never lost. It calls for physical mobility of a high order, both strategic and tactical, so that our forces can be concentrated rapidly and economically at decisive places and times.

9. Co-operation. Co-operation is based on team spirit and entails the co-ordination of the efforts of all units to achieve the maximum combined effort from the whole. Above all, good will and the desire to co-operate are essential at all levels. The increased dependence of one force upon another and upon the civilian war effort has made co-operation between them all of vital importance in modern war.

10. Administration. Disregard of the principle of administration has led to failure in the past, and is much more likely to do so in the future because of the increased complexity of modern weapons and equipment. No operational plan is likely to succeed unless great care is devoted to the administrative arrangements for giving it effect. Administrative arrangements must be designed to give the commander maximum freedom of action in executing the operational plan. ^{As a result} ~~and~~ ~~the~~ administrative organization must be as simple as possible. The commander must have a clear understanding of the administrative factors that may affect his activities and, within his sphere of authority, implement administrative procedures that will enhance his ability to conduct effective operations.

SECTION 3 - THE ELEMENTS OF TACTICS

607. GENERAL

1. At its very core tactics is the performance of tactical functions by a human organization in the circumstances. An enemy, time, and space on the ground are subsumed in tactics. Each situation is subject to influences of the various elements inter-acting to bear on the mission assigned to a commander at any level. The factors that influence his course of action derive from these elements. In this section each

element is isolated and discussed in relation to the others. Their presentation is arranged to facilitate explanation rather than to reflect relative importance. The elements are discussed in the order:

a. Human organizational elements:

- (1) Command and Control.
- (2) Information and Intelligence.
- (3) Communications.
- (4) Logistics and Administration.

b. The tactical functions:

- (1) Protection.
- (2) Fire.
- (3) Movement.

c. Circumstantial elements:

- (1) Enemy.
- (2) Ground.
- (3) Conditions.

2. The aim of this section is to discuss the way in which these elements inter-act to generate the factors influencing tactical decisions.

608. COMMAND AND CONTROL

1. Command is authority vested in an individual for direction, co-ordination and control. The authority is normally defined organizationally and varied by grouping according to specified command relationships. Control is the fact of checking and directing action as well as the means to that end. The relationship between command and control may be clarified with the analogy that command writes the music whereas control directs the orchestra.

2. The organization for the command and control of armies involves their complex division along conventional lines to create ^{functional} establishments. The ^{adaptation} adaption of established military resources to a particular problem and moment involves organizational adjustments that are accomplished by grouping resources ~~for tasks~~. Both the groupings and the ^{problems} ~~tasks~~ change with circumstances, ^{hence} so the organization ^{must be} ~~is~~ adaptable. However, these decisions depend on information and intelligence as their basis, and on the communication of information, intelligence, and orders for control.

609. INFORMATION AND INTELLIGENCE

These are the basis of command and control decisions for the direction, co-ordination and control of forces in the changing circumstances of operations. The commander's initial plan rests, necessarily, on assumptions that may be proven wrong. It is imperative that his information be corrected as quickly as possible so the plan can be adjusted.

610. COMMUNICATIONS

Communications is simply the passage of ideas from one person or place to another. The ideas may be information, intelligence or orders. Their passage is vital to the functions of command and control. The means of passage is important, ^{and} ~~but~~ alternate means must be arranged to ensure against enemy interference. The responsibilities for establishing communications and liaison are:

a. between superior and subordinate headquarters:

- (1) from the top down in the establishment of telecommunications links;
- (2) from the bottom to top when despatching liaison agents (agencies);

b. between neighbouring units from the left to the right; and

c. from the supporting to the supported unit.

611. LOGISTICS AND ADMINISTRATION

The sustenance of individual and organizational life are included in logistics and administration. Their importance to operations is such that their successful and continuing accomplishment are conditions of operations. Logistics is the science of planning and carrying out the movement and maintenance of forces. Administration is the management and execution of all military matters not included in tactics and strategy; primarily in the fields of logistics and personnel administration.

612. FIREPOWER

1. Firepower is the means with which military forces strike the enemy. It is effective only when co-ordinated. Direct and indirect fire is supplemented by aerial means to produce concentrations that kill the enemy or destroy his will to resist. Fire is concentrated in terms of both space and time. Observation, or target acquisition, is the key to effective fire, for it enables the fire to be applied where the enemy is, instead of where he might be. Planning enables fire effects to be concentrated in great weight very quickly and to be dispersed, shifted, or concentrated again in short periods of time over wide areas. Destruction is ^{best} generally accomplished ~~only~~ with direct fire, ^{and} neutralization ~~with selective~~ ~~destruction~~ with indirect fire. However, Indirect fire can respond quickly over a large area without movement of the weapon, and its position is less likely to be compromised by firing. The movement of the ^{direct fire} weapon slows down the ^{ability} ~~response of direct fire weapons to orders~~ to concentrate their fire. However, those that are protected with armour and have long firing ranges are able to concentrate fire reasonably quickly. Short-range direct fire weapons are limited by their need to be close to their targets. Once engaged, their fire can be redirected elsewhere only locally ^{and} with delay. Aerial weapons can be very accurate and effective, and can reach otherwise inaccessible targets. However, they may ^{not} be ^{due to weather and situation} available when required by land forces, ^{so} their response is uncertain. ~~the~~
2. Co-ordination of fire involves the application of a wide range of resources to a wide range of targets of different types distributed over a large area. Each commander's fire plan is arranged ~~so its command can~~ ^{the protection forces} ~~so that it~~ ^{can} survive with its own resources. It is then thickened and supplemented with fire from outside sources. In its execution, ~~the~~ initial engagements are normally made with ^{long-} ~~big~~ range indirect fire weapons. Subsequently other weapons open their fire as early as it is likely to be effective.

613. MOVEMENT

Movement is simply the changing of positions. Tactical movement is made to allow, or improve, the effects of the fire striking the enemy, to obtain protection from the effects of enemy fire, or a combination of these purposes. Military organizations include a variety of movement means with different capabilities of speed, vulnerability to ground, protection, and firepower. The commander's challenge is to use them in combinations that ~~suit the circumstances~~. *suit the circumstances and fulfill his ~~own~~ mission.*

614. PROTECTION

1. Protection is simply the shielding or warding off of dangers. In a tactical sense ^{protection} ~~it~~ is the commander's responsibility. It is by protecting his force that he preserves it for ~~the~~ striking ~~at~~ the enemy. Some protection is inherent in the physical properties of equipment, but above the organizational levels where those measures are effective, protection is the product of deliberate decisions and organized resources. Protective measures are provided or arranged according to the enemy's capabilities and the command's vulnerabilities. They are applied to the command, ^{to} information, ^{to} material and ^{to} personnel. When the requirement is excessive in the circumstances it is disciplined on the basis of probability. Protective measures must not detract from accomplishment of the mission. Most routine protective measures, that form part of standard procedures, are effective in a variety of threats in a wide range of circumstances. Those that are less general might be applied from time to time according to the circumstances, in order to effect economics.
2. Deception is an active protective measure that involves the co-ordinated manipulation of information calculated to deceive the enemy. To be effective it must be co-ordinated at the highest level.

615. ENEMY

*and probably the most
important element of tactics,*

The enemy is the most dynamic variable of the circumstances, for knowledge of even his intentions is unlikely. However, knowledge of his ideas, organization, equipment, doctrine and training provide definition of his capabilities. They are limits of means within which his objective is confined, and they are relatively static in the ^{time-}live-frame of tactics. Of more immediate concern are his dispositions and their changes, for they indicate his intentions and enable him to be struck and avoided in the tactical battle. The enemy, too, will be seeking opportunities to strike, move, and protect himself in the circumstances. He, too, will be seeking advantage in the changes of circumstance, both natural changes and those that he creates.

616. GROUND

1. Ground is ^{a vitally} ~~perhaps the most~~ important element of tactics. On the one hand it serves the function of control, on the other hand it exerts a dominant influence on both fire and movement.
2. The spatial definition of a mission is expressed by boundaries, control lines, positions and objectives, identifiable on both the ground and the map and essential to control. These control measures define where the mission is to be accomplished.
3. The commander's area of responsibility is subject to the influences of ground on both fire and movement. Observation and fire effects are enhanced and degraded by topography, vegetation, and buildings which may provide one or both of cover and concealment. Movement of men and vehicles is affected by the bearing capacity of the soil, gradients,

water, and the transport network. Even in the local area of the smallest tactical command there are wide varieties of ground influences on fire and movement. Thus, the elements of a tactical command will fight in different types of ground. When moving they will experience rapidly changing ground conditions.

4. In general, the closely compartmented terrain of woods and built-up areas will so limit fire and movement that long-range weapons and vehicles will forfeit the advantages they enjoy in more open ground. In close terrain it will also be more difficult for all forces and weapons to be co-ordinated. The battle may disintegrate into a number of isolated actions. In more open ground, when visibility increases beyond the range of infantry weapons, the effects and the possibilities of co-ordinating fire and movement are enhanced, and long-range weapons and ~~mobility~~ ^{movement} means are more effective.

5. Access on the ground may be unrestricted or confined to road networks of varying density and quality. Available routes may be restricted through defiles where they may afford protection to movement or increase its vulnerability. When the ground does not restrict movement the road network may be useful as a reference for the control of both fire and movement.

6. Protection afforded by ground is the reciprocal ^{to} of its influence on fire and movement. Changes in the ground's influences on fire, movement, and protection are induced by vagaries of weather, visibility, and the application of effort over time.

617. CONDITIONS

1. Conditions prevail and are changed over time, which serves the function of control on the one hand and as a resource on the other. In its application to control, time is used to specify when, by when, for what duration, or in what order tasks are to be accomplished. It should be noted that sequence is not necessarily the same as priority, which is ^{importance} ~~important~~ at the moment. Opportunities are simply conditions with advantage, usually transient ^{and} sometimes fleeting ~~advantages~~. Opportunities can be created, or they can emerge coincidentally to be discovered. The important thing is that opportunities be exploited with priority being given to those that will make the greatest contribution to the accomplishment of the mission.

2. Opportunities emerge in changing conditions, whether the change is controlled or uncontrolled. Visibility limitations, for example, interfere with fire and movement, and reach command and control by complicating co-ordination. Advantage can frequently be found in these conditions, but it is even more likely that it can be created by the rapid change of prevailing or predicted conditions. Smoke and illumination are means that permit controlled and quick change.

3. Conditions of ground are subject to change seasonally due to weather, and due to man's efforts. The effects of natural influences can usually be predicted with fair accuracy, but sufficient variations occur to provide some opportunities. The changes induced by man's efforts are subject to control and include all the improvements that can be wrought by the command in the time available. More changes will be desired than are possible, so it is essential that all the resources of time, men and material be organized and applied, economically, to those changes that are likely to produce the greatest opportunity.

618. CONCLUSION

Tactics is mainly confined to the tactical functions in the circumstances. However, beyond its central core it extends widely, pervading every aspect of the command's activity.

SECTION 4 - LEADERSHIP IN BATTLE

619. GENERAL

1. Most men do not willingly embark upon dangerous enterprises.

They must be led by a brave and competent leader if they are to face the dangers and succeed in spite of them. In time of crisis a man's performance will be determined by the extent to which his leader has won his trust and confidence. Discipline alone will not supply the whole answer, any more than will threats or promises.

2. War remains a contest between men, regardless of the scale or complexity of the weapons and equipment they use. It is the direction of these men in the struggle that really matters; the rest of the paraphernalia of the battlefield will go where the men take ^{it} ~~them~~.

3. The leading of men, then, must be the prime occupation of an officer in battle. Indeed, it is the specific task with which he is charged in his commission. The principal goal of all officers must be the development of their leadership ability.

4. Leadership begins by winning the hearts and minds of men. This process takes many forms, all of which involves a close study of human

nature. The methods used are largely dependent upon the character of the prospective leader. There is little space in this manual for a discourse on all the qualities of a leader and commander; ^{however,} the subject, ~~however,~~ ^{should be} is fundamental and ~~is worthy of~~ ^{is} fully study^{ied} by all officers. What follows in this section is a brief discussion of the more important qualities required of a leader in battle.

620. BASIC QUALITIES OF LEADERSHIP

1. Integrity. This is a fundamental part of character which underlies all of the other qualities of leadership. It is expressed through truthfulness and honesty, both with oneself and with others. It includes uprightness, which will withstand temptations and reveal and reject hypocrisy. It gives the leader a sense of justice and fair play. ~~Finally,~~ Integrity in a leader opposes duplicity or any form of underhandedness. Integrity may not have been possessed by all the great leaders of the world, but it is, nonetheless, essential to leadership within the democratic society in which we live.

2. Courage. This is a vital requirement in a military leader. There are two types of courage. They make different demands upon the individual and have different effects. Physical courage will help the leader to operate in the face of the gravest danger. It will not remove his fears, but will enable him to control them, to suppress them. The result is twofold: it permits the leader to concentrate and get on with ~~the business at hand~~ ^{his mission} and it sets an example of stability and composure to his men which will reassure them and help them to overcome their own fears. Without courage, the leader will not himself be able to face and withstand the dangers of battle and his men will soon succumb to the same fear. A courageous leader is cool and composed under pressure, for he knows that no man will follow a leader who panics. Moral courage has

a different quality. It combats mental hazards and strain rather than the danger of physical harm. War challenges one's adequacy to cope with an endless stream of problems and situations; it questions one man's right to make decisions involving the lives of others; it brings with it an awesome responsibility for the exercise of faultless judgement. The strain caused by such inner doubts and fears can only be withstood by fortitude and mental durability or, what it is more often called, moral courage.

3. Strengthening Courage. Native courage, both physical and moral, can be strengthened. Firstly, there is a relationship between courage and physical condition. A weakened physical state will reduce one's courage and it is important, therefore, that soldiers be kept in a high state of physical condition and that unnecessary physical discomforts be avoided. Confidence is also important. Confidence in one's men and their weapons will strengthen physical courage. Confidence in the ability of one's self and one's superiors will generate moral courage.

4. Self-confidence. This is another vital characteristic of leadership. It is gained principally through knowledge of one's profession and the ability to put such knowledge into practice. There is no substitute for a thorough and up-to-date familiarity with the ^{mechanical conduct} ~~mechanics~~ of war; an attribute which has been shared by every great commander in history. The acceptance of mounting responsibility will tend to increase confidence in one's self. This self-confidence will develop into initiative and decisiveness.

Words missing

important is that the decision be taken in time; that there be no vacillation following consideration of the situation. Finally, there must be no wavering after the decision is taken. Men look to their leader for decisions. If these are habitually wrong, delayed, or constantly changing, confidence in the leader will soon be lost.

6. Insight. In studying a situation, the right course of action will not always be immediately apparent. Professional knowledge also requires insight; the ability to cut through detail to expose the root ~~crux~~ of a problem. It will be enhanced even further by imagination and, when called for, by audacity and boldness.

7. Organization. The effectiveness of a decision is also dependent upon its implementation. Leadership demands an ability to organize, and the exercise of judgement between what is and what is not practicable; in short, common sense. Organization will also depend upon a leader's ability to inspire the confidence of his men in his decision and to gain their enthusiastic support of it. Energy and perseverance will be required to sustain the leader in the task at hand, and to set an example to his men.

8. Resiliency. A leader must have the physical stamina and the mental and moral durability to overcome the stress and strain of physical hardship and mental anxiety. On one hand may be the physical strain of sleeplessness, hunger, and cold; on the other, the anxiety caused by uncertainty, doubts, and responsibility. A leader must also be resilient, able to bounce back without discouragement when his plans go awry, or even fail, as happens in war.

621. LOWER LEVELS OF COMMAND

1. At the lower levels of command, where an officer is in close contact with his men, the qualities of leadership discussed above have a particular application. They also bear directly on morale, as discussed in Section 5, which should be studied in conjunction with this section.

2. The junior leader must lead his men forward. When danger is directly threatening the lives of men, their sense of duty and discipline will help, but it will not of itself sustain them. Ultimately, men will go forward only if they are led and when they know that the officer leading them is a man in whom they can confidently place their trust. Then, and only then, will duty, comradeship^{esprit,} and discipline play their full part in drawing them forward behind their leader.

3. To fulfil this demanding role certain aspects of leadership must predominate. Physical courage is essential, as is professional competence in the handling of the job at hand. Decision becomes, in fact, resolute action. The junior leader must do something, do it quickly, and pursue his chosen course of action with energy and determination. Even an incorrect decision can be survived but never inaction or half-heartedness.

4. In assessing a situation from his position in the battle, the junior leader will often see much confusion and be beset by many uncertainties. Nevertheless, it is his task to set an example of calmness and determination. His responsibility is to establish order and to take decisive action through clear-cut orders and with driving energy.

622. COMMAND AT THE HIGHER LEVELS

1. At the higher levels of command, from brigade level upwards, the qualities of leadership required of the commander ^{assume} ~~take on~~ a different aspect. At this level the commander will less often be able to influence the men who are in contact with the enemy. Most of his orders will be relayed through other commanders. His personal observation of a situation will often be limited and must be supplemented by advice from the staff and subordinate commanders. His decisions will affect more people and greater events, and cover a longer period of time. His responsibility for planning is increased.

2. A senior commander cannot do without any of the qualities of leadership discussed earlier. But certain qualities become especially important to him. Because his judgement must be sound, he must have a high standard of professional knowledge. He must be a master of decision and able to inspire confidence and energy in those ^{commanders} who will carry it out. He must be able ^{to} analyse events quickly, always with an eye to the future; to anticipate the course of a battle; and to look ahead with the highly developed imagination and the intuitive perception which the good commander possesses. He must be able to judge correctly between periods when caution is the watchword ^{and} ~~at~~ moments when boldness will prove decisive.

3. The exercise of command is always accompanied by anxiety but this tends to increase with one who creates plans and issues orders at the higher levels. An overly-sensitive man may find the strain unbearable. The commander at the higher level requires the courage to issue the orders and the mental robustness to withstand the strain which will attend their execution.

623. RELATIONSHIP WITH OTHERS

1. A commander must develop a proper relationship with his subordinate commanders and men. His success as a leader will depend upon the degree of mutual confidence which exists between them. This can only be developed if they are known to each other. The strength of the commander's personality is something to be shared by all. Senior commanders, especially, should make a conscious effort to be seen and understood ~~and~~ to speak to their men and junior officers, so that they may be known, respected, and admired.

2. The Commander must observe and study his officers and men to be constantly informed of their strengths and weaknesses. By knowing what they are capable of he can gain their best performance without overtaxing them. This requires fine judgement, for he must not underestimate the extraordinary endurance of well trained and well led troops. A thorough knowledge of subordinate commanders is important for on it depends his assignments to them and the degree and manner of his supervision. One may have to be held in check, another pushed; one left more to himself, another carefully watched. A knowledge of the personalities concerned is vital to such an analysis. For their part, subordinate officers must recognize in their commander something stronger than themselves. The keys to such strength are: personal bravery; integrity; professional knowledge; determination; ~~and~~ a combination of correct decisions and ~~the~~ firmness of purpose, and the courage to see them through against all odds.

3. With allies, the commander should aim for the same relationship that exists within his own force. Political problems and certain restrictions placed on the employment of allied troops can ^{often} make this more difficult to achieve. There may be differences, too, of language, culture, organization, equipment, and tactics. Such differences are most easily overcome if the approach to problems is on the basis of military merit. Thus the most common connecting link between the allies is emphasized. The basis for discussion ^{then} becomes military knowledge. The commander will inevitably find that his acceptance by allies is dependent upon their assessment of his military judgement. Tact and patience will also play their part, as they do in all dealings with personalities.

4. The commander must foster a spirit of team-work with his staff without lessening his position of authority. Loyalty, mutual confidence, and a delegation of responsibility are the basis for a good working relationship within a HQ. The staff requires some authority to get its work done. The commander must delegate authority to free himself of detail. A commander should also be consistent in his policies, standards, and attitudes so that the staff can make decisions which it knows are in accord with his ideas.

SECTION 5 - MORALE

624. THE QUALITY OF MORALE

1. In war the hardships, discomforts, and dangers which men face act upon them in different ways. In some men their character and moral stature increase and grow stronger in proportion to these hazards and often lead them to acts of great daring, courage, and selflessness. In

other men these stresses lead to a deterioration of character which results in a surrender to fear and fatigue and, in the most extreme cases, ~~they may sink~~^{deterioration} to sub-human ~~levels~~^{acts}. They may also become unable to think rationally and acquire the instincts of the herd, becoming paralyzed by fear or gripped by unreasoning panic.

2. Morale is a mental and moral quality peculiar to human beings which allows them to recognize their duty to themselves and to each other, and to persist in it through discomfort, hardship, and even the dangers of certain death. High morale is not contentment, ~~or~~ fitness, ~~or~~ toughness, ~~or~~^{or} qualities which derive essentially from physical attributes, ~~or conditions~~. It is the product of a mind with a conscience which endows men with the capacity and, often, desire to overcome fear, fatigue, discomforts, and dangers and to carry on with the ~~set~~ mission.

3. There are few aspects of war upon which more has been written than the problems of morale. All the great commanders have made their contribution on the subject, and this section is no more than a distillation of a great many opinions. One must read widely on the subject and, as Field Marshall Lord Wavell once suggested about the study of war, "get at the flesh and blood of it". There appear to be four major factors which influence morale, and a number of contributory ones. The major ones are:

- a. leadership;
- b. discipline;
- c. comradeship; and
- d. self-respect.

625. LEADERSHIP

In some respects fear is the dominant characteristic of the battlefield. All men are afraid at one time or another ~~and~~ to a greater or lesser extent. In moments of fear they tend to band together and look for a person to give decisions. Some men become too weak to stand alone, and seek a leader. Fear makes men sluggish and indecisive and unable to decide or to act for themselves. The prime qualities which they recognize in their leader are his ability to cut through this "fear paralysis" - the quality of decision - and his ability to remain imperturbable in a crisis. These and other qualities of leaders have already been discussed in Section 4.

626 DISCIPLINE

1. One of the objects of discipline is to assist in conquering fear, fear which is engendered by the sight of dead and wounded on the battlefield and fear which gnaws at the mind through the long periods of monotony that exist in war. Discipline demands and instills the habit of self-control. Man becomes aware of danger when he feels himself opposed to something more powerful than himself, something for which his own strength is inadequate. Therefore it is important for a man to lose his individual feelings in the collective strength of the platoon, battalion, or division to which he belongs. He becomes part of a larger and stronger unit, when he is part of a group.

2. The problem is, then, to unify men into a group or unit under obedience to orders. Discipline seeks to instil a sense of unity by compelling them to obey orders as one man, for men learn to gain confidence and encouragement from doing the same as their fellows. This will

assist them to obey orders when all their instincts cry out for them not to be obeyed, as in times of stress and danger. This kind of discipline implies a conception and acceptance of duty to his platoon or larger group. The sentry, although exhausted, remains awake out of sense of duty. This sense is instilled by discipline - a willingness to obey orders as a matter of course, because it is a duty to do so. Only very rarely does it embrace such abstractions as freedom and democracy. These are the sphere of the politician.

3. Such discipline is only achieved by hard training, which includes much repetitive attention to minor detail and a refusal by the leader to accept anything but perfection. Inevitably the fear of the consequences of indiscipline will influence a man's behaviour, but this should not be substituted for the sense of duty which derives from an understanding of what is being done and why.

627. ²COMRADSHIP

1. However inspired the leadership and however perfect the discipline, the morale will remain hard and unsympathetic if the warmth of comradeship is not added to it. War, though a harsh business, is not necessarily a grim one. Men must still laugh and joke together and must get fun out of life even in times of danger. This spirit of comradeship must begin at the very lowest command levels, and the importance of encouraging men to band together has been mentioned.

2. Comradship is based on faith, affection, and trust which produce an atmosphere of mutual goodwill and inter-dependence. It will not be fostered among men and sub-units which are constantly being switched about from one command to another without very good reason. A man who

has served among friends for a long time will be helped by them to face the trials of battle, and all around him he will feel reserves of courage and purpose upon which he can draw. The comradeship which stems from stable organizations and groupings provides an atmosphere of warmth and strength when most needed. ~~These characteristics are in The Regimental System is based on these considerations~~

628. SELF-RESPECT

Reference has already been made to the sense of duty to one's self which discipline instils. This is but another way of referring to the quality of self-respect; that is, a determination to maintain personal standards of behaviour. Such an attitude is acquired by soldiers who refuse to become slovenly or careless in either personal or military habits and whose personal integrity demands that they give the attention to detail which discipline demands. If the necessary high standards have been instilled in the group by the officer and NCO, then personal pride and self-respect will maintain them. Such an attitude stems from having been given responsibility and from being treated as ^{an individual} ~~a person~~ by his leaders.

629. CONTRIBUTORY FACTORS

1. There is a wide variety of other factors which contribute in greater or lesser degree to high morale, depending upon the ^{individual} ~~person~~. Devotion to a cause, for example, is often cited as having a major effect on morale. The instinct for self-preservation is a strong ^{factor} ~~one~~ - probably the strongest ^{one} there is. Most men are more preoccupied with their own personal, local, and parochial problems than with the wider ones of the nation. This being so, high morale will more often result from the main factors discussed earlier. Though it may not be essential

for a soldier to feel a burning sense of the justice or rightness of the cause for which he fights, he cannot be positively opposed to it and operate effectively. Experience suggests that the saying that a soldier "must know what he fights for and love what he knows" is largely rhetoric.

2. Success in battle, regimental pride and tradition, personal happiness, propaganda, keeping troops informed, good administration, and welfare are other factors which contribute to high morale. However none of them has an influence on it as great as that exerted by leadership, discipline, comradeship, and self-respect. *The Regimental System of the CF is designed to foster and preserve these requirements.*

SECTION 6 - TACTICAL PROTECTION AND SECURITY

630. GENERAL

1. A commander must protect his forces against surprise and against the effects of enemy and friendly weapons in order to preserve his freedom of action and to maintain the effectiveness of his force.

Tactical security results from protective measures taken by a command to protect himself against any act or influence including espionage, sabotage and harassment. At the same time a commander must not allow the implementation of protective measures to interfere with the accomplishment of the mission and must carefully balance the advantages of being over-cautious against those that may be gained by taking acceptable risks.

2. Tactical protection and security is obtained by:

- a. Cover. Measures necessary to give protection to a person, plan, operation, formation or installation. These measures are active, or passive, they may include the use of protective elements and surveillance.

b. Concealment. The protection from observation or surveillance.

It may be achieved by camouflage, night movement, use of terrain, and discipline in the use of telecommunications, sound and light.

c. Deception. Measures designed to mislead the enemy by manipu-

lation, distortion, or falsification of evidence to induce him to react in a manner prejudicial to his interests. Such measures may enhance other actions taken against the enemy.

Deception is an integral part of any tactical operation and is of particular importance in operations vulnerable to enemy interference. Deception measures vary from concealment and radio silence to the use of phoney minefields, false radio and radar traffic, and feint actions. To be effective,

deception measures ^{must} ~~should~~ be undertaken in accordance with an overall plan ~~and should be established~~ at the highest tactical level. ^{In addition,} ~~The~~ deception plan should include the assessed effects on the enemy.

d. Safety Measures. Measures and procedures Both technical and tactical, ^{are required} ~~the purpose of which is~~ to protect friendly troops and equipment from the effect of their own weapons. The following are particularly important:

(1) Organization of liaison and/or recognition means between units, especially at night, and with ~~the~~ air and naval forces.

(2) ~~Give~~ ^{Advance} warning to units in order to give them ^{to protect themselves,} time for ~~protection.~~

Use

- (3) ~~Utilization~~ of co-ordination and/or control lines in order to keep friendly troops out of range of the effects of their own land, air, sea or nuclear fire.

e. Defensive Measures. ^{These} ~~Measures which~~ are used to counter the effects of enemy ^{weapon systems} ~~capabilities~~. They cover a wide range ^{of capability,} including air defence and NBC defence. As with safety measures, they can be technical or tactical, ^{such as:} ~~and the following are~~ examples of such measures:

- (1) Warning troops of hazards.
- (2) Protection through the use of terrain, natural or artificial shelters, ^{and} ~~or~~ digging-in.
- (3) The use of protective elements ^{such as} ~~^~~ sentries, outposts, and covering forces. The need to deploy protective elements is governed by the threat, the ground and visibility conditions. If protective elements are attacked, they can only sustain combat for a limited time to allow the main forces to react. If additional time is needed, other units must be committed.
- (4) Dispersion to disrupt enemy information collection and ^{own troop} ~~reduce~~ [•] ~~vulnerabilities~~ ^{es}.
- (5) Frequent relocation of units, headquarters and facilities.
- (6) Maintaining close contact with the enemy, possibly overlapping his dispositions.

- (7) Anti-aircraft protection and self-defence.
- (8) Electronic countermeasures (ECM) and electronic counter-countermeasures (ECCM).
- (9) Protection against the effects of NBC weapons.

f. Counter-intelligence Measures. These measures may be categorized as either offensive or defensive in nature. Defensive measures are designed to conceal information from the enemy, *and* ~~they~~ may include ^{such} measures ~~such~~ as personal security, light and noise discipline, censorship, and camouflage. Offensive measures are designed to ^{deny} ~~block~~ enemy attempts to gain information or engage in sabotage or subversion. They may include counter-reconnaissance, counter-sabotage, counter-espionage, counter-subversion and use of smoke.

631. RECONNAISSANCE AND PROTECTIVE ELEMENTS

1. The acquisition of information on the enemy and the environment is a constant task for commanders at all levels in every type of operation, whether a force is moving, ~~moving~~ or stationary. This information is acquired primarily by surveillance. Reconnaissance has two purposes; it provides the essential information from which intelligence can be developed while at the same time helping to protect the force by giving early warning of changes in the situation. The tempo of operations has a direct influence on the need for reconnaissance. The inter-relationship of information gathering and protection in the context of tactical security is complex and must be clear at all command levels.

2. To protect his force and gather information, a commander at ^{all} ~~any~~ level~~s~~ will deploy protective elements. These protective elements can be described according to their primary task;~~any~~

- a. Screen. An element whose primary task is to observe, identify and report information and only fights to protect itself.
- b. Guard. An element whose primary task is to interpose itself between the enemy and the main force and fight to gain time, in addition to observing and reporting information.

3. Depending on the tactical situation, which includes the proximity of the enemy, the environment, the time available and the nature of his own forces, a commander may provide reconnaissance/protective elements to his front, flanks and rear to achieve tactical security and freedom of action. In the variety of operations conducted, the reconnaissance/protective elements may be given distinctive names according to their purpose or deployment, such as advance guard, flank guard and rear guard. Regardless of name, these elements essentially perform the dual function of providing both information and protection.

4. In certain situations a commander may not be able to acquire the information he needs by observation only, but will have to fight to obtain it by the use of fighting patrols, raids or larger scale offensive operations. In such cases, these actions will be taken in accordance with the principles stated in the chapter dealing with offensive operations.

5. A reconnaissance in force is an operation designed to discover and/or test the enemy's strength to discover information. Although its primary purpose is reconnaissance, weaknesses may be discovered in the enemy dispositions which, if promptly exploited, would permit tactical success. If the situation must be developed along a broad front, a reconnaissance in force may be conducted using strong probing actions to determine the enemy situation at selected points. Since a reconnaissance in force is used when the knowledge of opposition is vague, a well-balanced combined arms force is normally employed.

SECTION 7 - COOPERATION WITH AIR AND NAVAL FORCES
AND CIVIL AUTHORITIES

632. GENERAL

1. Military operations are of a joint and integrated nature. Therefore the land forces ^{must} ~~have~~ constantly ~~co~~ co-operate and co-ordinate with air forces and, in some cases, with naval forces. This co-operation between land, air and/or naval forces is obtained:

- a. at the higher levels of command through the grouping of these Services under a single command and/or through the development of joint plans which ^{detail} ~~indicate~~ the common aims to be ^{achieved} ~~reached~~ and assign to each Service their respective missions; and
- b. at lower levels through the establishment of liaison teams.

633. CO-OPERATION WITH AIR FORCES

1. The land force may support the air forces by contributing to the protection and defence of air force installations against ground and air attacks. Additionally, land forces can support tactical air operations by suppressing enemy forward air defences.

2. The air force supports land forces primarily through:

- a. counter air operations;
- b. air interdiction operations.
- c. close air support operations;
- d. tactical air reconnaissance operations;
- e. tactical air transport operations;
- f. electronic warfare operations; and
- g. air defence suppression.

3. Fire support requires close co-ordination between land, air and sea forces when it is delivered close to ^{the ground forces} ~~the enemy~~. Such co-ordination is ensured ~~by the~~ by the establishment of a fire support co-ordination line short of which the air forces may attack surface targets only on authority of the land forces, and beyond which they may operate at their own initiative within their assigned mission. Further guidance may be found in ATP-33. An air space control system must be implemented

to prevent mutual interference among air space users. Further guidance may be found in ATP-40.

634. CO-OPERATION WITH NAVAL FORCES

In the general conduct of a land campaign, naval and land forces can provide mutual support and protection. Naval installations may be given security by land units, and naval air, surface and sub-surface forces can provide strategic control of maritime routes of communication as well as tactical support of land operations within the effective range of the naval force. An amphibious operation may be conducted to seize sufficient land area for a subsequent land campaign, attack the enemy's rear, contain enemy forces, occupy important terrain or to support other land operations. In amphibious operations the naval forces transport and supply the land forces; during land operations naval aviation may take part in the support of the land forces as a reinforcement of air forces. Further guidance may be found in ATP-34.

635. CO-OPERATION WITH CIVIL AUTHORITIES

1. When military operations are conducted in a friendly country where the government is still functioning, the sovereignty of that nation must be respected by all military forces. Co-operation at the equivalent nation, state and local government level is imperative and will contribute ^{directly} ~~immensely~~ to the success of military operations. Unco-operative actions can and will lead to misunderstandings which could possibly hinder their success. Full disclosure to civil authorities of classified details of military operations is not expected, but informing appropriate officials of where and when operations are planned or contemplated will permit them to assist in the expediting of military operations and relieve the suffering of the civilian population in such areas as:

- a. Control of population movements to include refugees.
- b. Identification and procurement of resources, i.e. materiel, POL, personnel, land areas, etc.
- c. Security of certain areas, such as power stations, bridges, railways, etc.

SECTION 8 - ELECTRONIC WARFARE

636. GENERAL

The effectiveness of military forces is ^{critically} ~~increasingly~~ dependent ~~the electro-magnetic spectrum.~~ ^{is} upon electronics. Consequently, it ~~becomes~~ ^{is} an essential task for every commander to control to the necessary degree his electronic emitting systems and to deny the enemy the use of information which can be gathered from these sources.

637. SCOPE

There are three divisions of electronic warfare:

- a. Electronic Warfare Support Measures (ESM).
- b. Electronic Counter-measures (ECM).
- c. Electronic Counter-Countermeasures (ECCM).

2. Electronic warfare is discussed in detail in Chapter 14.

SECTION 9 - PSYCHOLOGICAL WARFARE

638. INTRODUCTION

1. Psychological warfare is the planned use of propaganda and other measures, designed to influence the opinions, emotions, attitude, and behaviour of enemy, neutral, or friendly groups in support of current policy and aims, or of a military plan. More simply, it is a form of war in which the target is people's minds and the ammunition is ideas, words, and print. It is a broad subject, which ranges from the highest levels of national or international government ~~right~~ down to the lowest tactical levels in the field. Of necessity, treatment of the subject here can only be in general terms.

2. Psychological warfare is a supporting weapon and cannot achieve success alone. Still, its value has been ^{proven} ~~proved~~ in the past and its scope is likely to increase in the future. Many situations short of war revolve about winning the support of the population, a struggle for which psychological warfare is admirably suited.

^{Defensive}
3. ~~Defence~~-psychological warfare is also important. It may involve use of programs directed at friendly forces. More important are conditioning of personnel in the methods used by the enemy and the maintenance of high morale. ~~Defensive measures will not be further dealt with here.~~

639. TYPES OF PSYCHOLOGICAL WARFARE

Psychological warfare may be divided into three general types. Strategic psychological warfare is directed against all people within the enemy's sphere of influence, both the armed forces and civilians.

Responsibility for it will usually lie with the highest political authorities. Tactical psychological warfare is directed primarily at the enemy armed forces in the battle area. It aims to break the enemy's fighting spirit and thereby directly influence the tactical battle. For example, it would try to create a feeling of hopelessness which would lead to surrender. Such operations at the tactical level are likely to be conducted under military control. The third type of psychological warfare, usually called consolidation operations, is directed entirely at the civil population in both forward and rear areas. It is intended to take ^a more direct ^{impact} effect on military operations than strategic programs by influencing civilians near the battle area. It is of particular importance in internal security and counter-guerilla operations. It includes measures taken to counter enemy propaganda. Consolidation operations will more likely be conducted under civilian government direction, though they may be a joint civil and military venture.

640. CONDUCT OF TACTICAL PSYCHOLOGICAL WARFARE

1. The objectives of psychological warfare are a matter of policy which will be controlled at the highest level of command in the theatre of operations. This is necessary to ensure the consistency of the programmes and their compliance with political policy. It also makes the most economical use of available resources.
2. Psychological warfare cannot be waged without good intelligence ^{together with a detailed understanding of all} of the ~~right kind~~. First, there must be a basic knowledge of the mentality and condition of the people against whom it is directed ~~and~~ aspects of their daily existence such as, national customs, superstitions, and tribal or regional characteristics. ^{This information will} ~~Much of this may~~ be acquired in peace and by non-military means. ~~Then,~~ ^{then} there must be detailed information

of the operational area. This will be collected largely through normal battlefield sources. Its analysis will differ, ~~though~~, because its object is to discover the mental outlook of the enemy more than his material situation. Consideration of all available intelligence will reveal the mental vulnerabilities of the enemy. From these will be chosen the theme best suited to achieve the objective.

3. The means of dissemination will result from analysis of such factors as the target, the theme, and the physical and cultural aspects of the country. Great care is needed to fit the program to such local conditions as language and the degree of literacy. The most common means of dissemination for tactical use are leaflets, which may be spread by aircraft, shells, mortar bombs, or vehicles, and ^{by} loudspeaker broadcasts, from aircraft or ground vehicles. Others available are radio, television, pamphlets, and films. Use may also be made of POW, especially to verify what has been disseminated by other means.

CHAPTER 7

COMMAND AND CONTROL

SECTION 1 - COMMAND

701. GENERAL

The authority vested in an individual to direct, co-ordinate, and control military forces is termed "command". This authority, which derives from law and regulation, is accompanied by commensurate responsibility that cannot be delegated. The commander alone is responsible for the success or failure of his command under all circumstances.

702. DEGREES OF COMMAND

Within NATO there are several degrees of command. Definitions of the following degrees of command are at Annex B:

- a. Full command ^{which can} only applied nationally,
- b. Operational command, and
- c. Operational control.

703. AUTHORITY

In discharging his responsibility, the commander exerts authority to direct those actions and to establish those standards that ensure accomplishment of his mission. In so doing, the soundness of his judgment and the principles and techniques that he employs determine the effectiveness of his leadership.

704. THE HUMAN ELEMENT

Despite advances in technology, the man remains the most essential element on the battlefield. The commander must be acutely sensitive to the physical and mental condition of his troops, and his plans must take account of their strengths and weaknesses. He must make allowance for the stresses and strains the human mind and body are subjected to in combat. His actions must inspire and motivate his command with the will to succeed under the most adverse conditions. He must assure his troops that hardship and sacrifice will not be needlessly imposed and that their well-being is of primary concern to him.

705. EMPLOYMENT OF SUBORDINATES

The accomplishments of the command are the sum of the accomplishments of its component elements. Each subordinate commander and staff member is an effective instrument in the hands of the commander. The degree of skill and understanding with which the commander employs his subordinates is reflected in the operations of his command. Subordinates must be carefully trained and motivated, and full advantage must be taken of their individual qualities and capabilities.

706. TECHNIQUES

1. The successful commander assures the accomplishment of his aim through personal presence, observation, and supervision. However, he does not over-supervise. While his direct personal touch with subordinates is essential to effective command, he must establish policies within which his staff can take action during his absence. He fosters initiative and self-confidence in subordinate commanders by permitting them appropriate latitude within the scope of their responsibilities.

2. Modern warfare demands prompt action, decentralization, and a high degree of individual initiative. Detailed instructions must frequently give way to broad direction that subordinates can interpret and implement.

707. CHAIN OF COMMAND

The successive commanders through which command actions are channeled form the chain of command that extends downward from superior to subordinate. Effective military operations demand strict adherence to the chain of command. Violation of the chain of command usurps the prerogatives of the intermediate commander concerned and abrogates his authority without a commensurate reduction of his responsibility.

708. BYPASSING THE CHAIN OF COMMAND

Under unusual or extreme conditions, such as the imperative need for speed of action or when communication with intermediate units is lost, the commander may bypass levels of the chain of command. The senior commander bypassing the chain of command assumes responsibility for the order he has given to a subordinate commander. In such an event, the normal chain of command must be re-established at the earliest opportunity and the intermediate commanders informed of the action taken.

709. INITIATIVE

On occasion, the loss of communications may preclude a subordinate commander's receiving specific orders or direction. In this event, he is expected to deduce the action required based on his knowledge of the existing situation ^{in relation to his mission} and act on his own initiative.

710. CONTINUITY OF COMMAND

Commanders at all levels must make adequate provision for uninterrupted perpetuation of the chain of command. The succession of command must be prescribed for all contingencies, ranging from the temporary absence of the commander to the loss of the commander and staff.

SECTION 2 - HEADQUARTERS ORGANIZATION AND OPERATION

711. GENERAL

1. An ^(HQ)headquarters is the collective name for the personnel and equipment required to assist a commander in the exercise of command. The first basic requirement ^{for HQ}is for communications. ^{This}They may vary in scale from the runner of a platoon commander to the sophisticated electronic equipment of a formation headquarters. The next requirement is for assistance to the commander. A platoon commander has a platoon sergeant ^{assist}to help him. At higher levels of command, greater responsibilities lead to a greater need for assistance, and the personnel provided are called the staff. The term 'staff' is normally used at formation level and above; it implies that the officers are specially trained for their jobs.

2. All the other elements of an headquarters, whatever its size, exist primarily to support the communications and staff provided for the commander. Transport, protective parties, kitchens, and other administrative services, though necessary, are incidental to the basic purpose of the headquarters. Therefore, the organization, location, and layout of the headquarters will be largely dependent upon the maintenance of

communications, the location of subordinate formations being commanded, and the efficient functioning of the commander and his staff.

712. THE STAFF

1. There is but one staff, having one purpose ^{to} to assist the commander, and the troops under his command, in the accomplishment of their ^{Mission} tasks.

This assistance is provided in several ways. The staff foresees requirements; provides information and advice necessary for decision-making; is responsible for the detail in the orders and instructions issued for the commander, and for the co-ordination required for the execution of plans; and supervises the execution of orders and plans.

2. If the staff is to do its job it must not only possess technical competence but it must understand and carry forward the commander's intentions while serving the interests of subordinate units and formations with loyalty and discretion. Staff officers act only in the name of the commander; they do not act on their own authority.

3. There are two main branches of the staff at division level and below, the operations branch and the administrative branch. These branches may be sub-divided into more functional cells - intelligence, personnel, logistics at lower levels of command, while at higher formation level each functional cell may become a separate staff branch because of the technical expertise and specialized skills required. The operations branch and the administrative branch are co-ordinating staffs. In addition, commanders are provided with personal staff and with arms and service advisers.

4. The staff work for and with the commander, and ultimately ^{they} ~~he~~ must function under his direction. On the other hand, the commander cannot become preoccupied with his staff without loss of effectiveness elsewhere. Therefore the job of co-ordinating the work of the staff is normally assigned to a chief of staff or, at lower levels of command, to the senior operations branch staff officer.

5. A deputy commander is provided at formation level to allow the commander to concentrate on certain critical parts of the operation and to allow him to delegate other aspects as he sees fit. It is important that the deputy commander not become involved in the detailed supervision or co-ordination of the headquarters or the staff; this is clearly not his responsibility and he must take care to avoid becoming a "de facto" chief of the staff.

6. Arms advisers are the commanders of the combat arms and combat support arms who have the dual function of commanding their own troops and advising the commander on matters concerning their arms. They are normally located at the headquarters of the formation they support and usually accompany the commander on his reconnaissance. They have direct access to the commander and also direct access to their branch superior at the next higher headquarters on technical or purely branch matters. While arms advisers ^{do} not necessarily command all elements of their branch in the formation, they are responsible for the overall co-ordination of all branch resources.

7. Service advisers are the commanders of combat service support units or may be officers especially appointed, such as a judge advocate. Service advisers perform the same general function as arms advisers and have the same right of direct access to the commander and to their

branch superiors at higher headquarters. They normally work through and receive their orders from the administrative staff as their advice is NOT X usually so direct and continuous as that of the arms advisers. Service advisers also have access to subordinate formations or units on matters *Concerning* the technical employment of their branch or combat service support function.

8. The staff must have a good working knowledge of the capabilities and limitations of both the arms and the services and must keep the arms and service advisers fully informed. All should be advised of forthcoming operations or plans as early as possible so that their advice can be timely. However, the staff must be careful not to interfere with their internal or technical workings.

713. OPERATION OF THE HEADQUARTERS

1. The operation of an headquarters is governed by the requirements to provide for the commander, to maintain communications, and to permit the work of the staff. It will often be difficult to fully satisfy the demands of each requirement, but whatever the circumstances, the requirements of each must be considered. For instance, an ideal working area for the staff is of no value if communications cannot be maintained; nor can the staff be expected to work on a mountain peak, regardless of the high standard of communications it may provide. So, too, the commander's desire to be forward or to move frequently must be tempered by the difficulties which may result to the remainder of the headquarters and its ability to function effectively.

2. Compromise will not solve the whole problem. The organization must also be flexible enough to operate in different ways. For example,

if the commander must go forward, then this must be possible without disrupting the whole headquarters. If the headquarters must move frequently, then adequate communications must be provided. ~~for this~~ to satisfy this requirement.

3. Flexibility in an ~~headquarters~~ ^{HQ} may be obtained through functional grouping. There is only one headquarters at each level of command, but it need not always be sited as a single entity or in the same way.

Normally, at least a portion of the administrative staff will be sited farther to the rear than the operational staff. At the division level of command, the headquarters may split into two components; main, ~~the~~ ^{which is} the operational headquarters and rear, ^{which is} the administrative headquarters. The purpose of such deployments is to permit each part of the headquarters to be near its main centre of interest and to provide it with better communications. Further advantage accrues from simplicity of siting, movement, concealment, and protection.

4. A commander may find it necessary to locate himself further forward than is ~~practicable~~ ^{desirable} for the whole of his operational headquarters. For a short time, he may go forward with a tactical ~~headquarters~~ ^{HQ}, the operation of which is further discussed in Art 714. If he must stay forward, then it is best to move the headquarters forward but on a reduced scale. What is left behind ceases to function as ~~an headquarters~~ ^{an HQ as there}. ~~There~~ can be only one ~~headquarters~~. To divide it in an attempt to operate two operational headquarters is to invite confusion and loss of control.

5. Where a deputy commander is not provided, a commander should always designate an alternative commander in case he becomes a casualty. At the unit level this means keeping the deputy commander briefed on impending operations. At higher levels of command, the headquarters itself becomes increasingly significant. ^{At unit level and above it is} ~~It is~~ normally necessary to designate an alternative headquarters.

6. The location of an ~~an~~ headquarters depends upon several factors. The function of command tends to draw it forward to be near the scene of action and where communications with its subordinates will be ^{function} good. A rearward pull is exerted to satisfy the demand for a ~~good and secure~~ protected working area for the staff. In either case, consideration must be given to concealment and protection and to communications of all types - electronic, ground, and air. Circumstances and the personality and habits of commanders will dictate the solution, but there can be no compromise of the vital need for communications forward to immediate subordinates.

7. The internal layout of an headquarters must be carefully organized. Its hub will be an operations centre consisting of staff officers and ^{the} necessary signals vehicles. Confusion and distractions in this area must be avoided by the control of traffic and visitors and by the removal of administrative and rest areas from the operations centre. Concealment and local defence must ^{always} be considered.

8. Movement of an ~~an~~ headquarters ^{will} ~~may~~ be common, either to allow it to keep pace with the battle or to seek ~~its own~~ protection. Moves must be conducted skilfully often using the "step-up" technique to minimize their disruptive effect and are best conducted during periods of low activity. Communications must ^{always} be maintained and secrecy and concealment practised.

9. An headquarters is an attractive target to the enemy and must be protected. The chief means of protection are through concealment, movement, and local ground defence. Concealment will require careful use of ground, ~~and~~ camouflage and electronic security. Concealment from the electronic locating devices of a sophisticated enemy is difficult

regular Movement

and may necessitate movement once a day, if not more often. If nuclear weapons are in use, ~~this~~ will be mandatory. An headquarters should always have an alternative site to which it can move in an emergency. Local defence must always be provided and may involve assistance from another unit.

714. THE TACTICAL HEADQUARTERS

1. If a commander is to see, and be seen, and be at the critical point in the battle, as he should, his movements must be carefully regulated. It is wrong for him never to leave his headquarters, but it could be disastrous if overall control were lost during his absence from the headquarters.
2. The tactical headquarters allows the commander to move about the battlefield without prejudice to the control exercised through main headquarters. ^{to permit this and} Communications are vital. ^{As} the absolute minimum, the commander must never be out of communication with his own main headquarters and his immediate subordinates. Whenever possible, he must also maintain direct contact with his immediate superior. Members of his staff will be required to assist with communications and to keep the main headquarters informed of all action taken by the commander. One or two liaison officers and a small protective party will also be needed. The tactical headquarters may also include one or two advisers, such as the artillery or engineer commanders.
3. The tactical headquarters is normally formed in ground vehicles. Helicopters may also be available and can ^{also used} be ~~very~~ useful. In any event, a tactical headquarters of vehicles should always be provided. Air and ground transport may often be used in combination to gain the benefits

of both. If helicopters are used by themselves care must be taken to ensure adequate communications and protection.

SECTION 3 - INFORMATION AND INTELLIGENCE

715. GENERAL

Information and intelligence are integral parts of all operations. In order to prepare, execute and control ~~the~~ operations, the commander requires intelligence on the enemy and the environment which is timely, reliable and as complete as possible. The intelligence required for ~~any~~ every ^{To acquire it, the commander must} type of operation is basically the same, ~~and is outlined below~~. It is ~~necessary to~~ establish an area of main effort for the collection of ^{This will be based on the priorities inherent in the operation to} information. ~~This area will necessarily be dictated by the priorities~~ ^{acquire} ~~given by the commander.~~ ^{(E} The Essential Elements of Information ^{new term} ~~to ensure~~ ^{E-} ~~the~~ fulfilment of ^{will} his various intelligence requirements ~~to~~ ensure the accomplishment of his mission. The collection effort must be made early, then continuously, to ensure that intelligence is available to the commander at the proper time.

716. INTELLIGENCE REQUIREMENTS

The collection of information and the development of intelligence on the enemy should be a continuous process in space as well as time. The intelligence requirements cover the area of interest which extends beyond the zone of action of the unit concerned. Intelligence required includes:

a. Enemy. Required intelligence on the enemy can be categorized under:

- (1) Enemy capabilities, that is, actions within the enemy's ability to implement, referring to his organization, equipment, tactics, strength, morale, and location.
- (2) Enemy vulnerabilities, that is, enemy conditions capable of being exploited by friendly forces.
- (3) Enemy probable courses of action, or courses of action within enemy capabilities and likely to be implemented.
- (4) Enemy course of action to which intelligence points as the most likely to be implemented.

b. Environment. The need for information on the environment including terrain, weather and population.

717. SOURCES AND AGENCIES OF INTELLIGENCE

All available sources and agencies must be utilized for the collection of information, even though the source may not be under the direct control of the commander.

SECTION 4 - DEPLOYMENT PROCEDURE

718. GENERAL

1. Deployment procedure is the whole process by which a commander makes his reconnaissance and his plan, gives his orders, and deploys his troops for battle. The three basic steps in the process are:

a. reconnaissance and planning;

b. issues of orders; and

c. deployment.

2. These steps are common to all levels of command and to all types and are often referred to as "battle procedure".

of units. However they will vary in complexity according to the level of command and the number and types of units which must be deployed.

Although the basic constituents of deployment procedure are similar in all units, the detail of executing them varies among the different types. This section should be studied in conjunction with Section 5 and the various corps manuals.

719. RECONNAISSANCE

1. Before undertaking an operation a commander will already possess a body of general information about the situation and the ground. He must then focus his attention on the particular problem at hand and, ideally, he should reconnoitre the ground personally, observing what he can of the enemy and of the disposition and condition of his own troops.

2. As dispersion increases, and especially if nuclear weapons are being used, such personal reconnaissance may be impossible at some levels of command because of the time required. Helicopters can be of help as they will allow a commander to visit various viewpoints and critical areas. When a personal view of the area is not possible the commander must make full use of maps, air photographs, and any other sources of information available. If there is time he should order reconnaissance units and other troops to perform specific missions which will give him the answers to particular questions.

3. Throughout this period of reconnaissance the commander will be considering his appreciation and his plan. For this reason he should, if possible, be accompanied by any technical advisers who may have special knowledge relevant to the operation. For example, the artillery commander should almost invariably accompany him and, for operations which involve the crossing or creation of obstacles, the engineer commander should also be present.

720. ORDERS

Once the plan is made, orders to implement it must be issued to all subordinate commanders. The technique for doing this is dealt with in some detail in Section 5 and in the various corps manuals. It is sufficient to point out here that they must be clear and simple if they are to be understood by commanders who may be tired ~~and hungry~~ and who have been under the constant strain of battle for some time.

721. DEPLOYMENT

1. Deployment is the extension or widening of the front of a military unit extending from a close order to a battle formation. For example, an infantry section in a single file can bring only limited fire to bear to its front. However if the section is deployed from single file into an extended line formation its effective fire to the front is greatly increased. Similarly, an engineer squadron which is to build a bridge must be brought together with the bridging equipment at the proposed site and dismounted before it can ~~do its job~~ ^{commence work}.

2. It is important to note that during and following the act of deployment there is some loss of control, especially in tank, infantry,

and artillery units. The resultant increase in dispersion and wider frontage make it more difficult for a single commander to exercise control, and he must rely upon his subordinate commanders to a greater extent. Changes of direction become more awkward because of the increase in the number of separate axes of movement, ^{by} ~~and~~ the passage of obstacles, defiles, and difficult country may become complicated by the different rates of movement which will result or by the need to redeploy.

3. Once a force has deployed it is, to some extent, committed to a specific line of action, and it may have to redeploy before it can meet a new situation. Therefore deployment should not be begun until the best course of action is clear and a suitable grouping has been arranged. Although deployment may begin at some distance from the enemy, at successively lower levels of command it should be carried out progressively as the best course of action becomes clear to each commander in turn. When little is known about the enemy and his locations, only minimum deployment should be carried out. ~~Alternatively~~ ^{Regardless} ~~yes, at least~~ some deployment must be carried out if a force ^{to be protected and} is ~~not~~ ^{is} be surprised by the unexpected presence of enemy.

722. ORGANIZATION AND CONDUCT

1. Speed of reaction is essential in battle, and smooth and efficient deployment procedure will help to produce it. Although the procedure cannot be given the precision of a drill, much of it can be reduced to almost standard methods of operating which, if understood by all, will reduce the time needed to deploy. Some of the principal steps which can be taken are as follows:

- a. Standard Deployment Groupings. At every level of command, an Reconnaissance Group and an Orders Group can be formed, each of which is of relatively stable composition. These groups are responsible for the planning, issue, and receipt of orders. The composition of the main body of a force can also be standardized to some extent and it may be further sub-divided into fighting and administrative echelons.
- b. Early Warning. ^{a Warning Order} This means early issue of ~~warning orders~~ which tell of the impending operation, its nature, the general area in which it will be conducted, the time and place for the Orders Group to meet and receive orders, and the tentative times for the movement of all or part of the main body. This last step is most important if the main body is to be properly prepared for battle and to begin moving in time.
- ? "Concurrent Activity"
- c. Simultaneous Action. As many of the basic steps as possible or desirable should be carried out at the same time. While the Reconnaissance Group is engaged in reconnaissance, ~~until~~ the Orders Group and the main bodies can be on the move towards their appointed rendezvous and the battle area *respectively*.
- d. Movement. Speed and simplicity in the movement plan, together with carefully thought out and realistic timings, direct routes, good route signing and, if necessary, the deployment of advance or harbour parties will all assist movement.
2. As a matter of principle there should be no long pauses in the process of battle procedure. Units and formations should flow into battle rather than do so in a series of spasms.

SECTION 5 - PLANNING AND ORDERS

723. INTRODUCTION

Planning and orders form part of the sequence of events called deployment. This section of this chapter should be studied in conjunction with Section 4.

724. PLANNING

1. Planning is simply the analysis of a problem leading to a decision on the course of action to be taken. ^{- sometimes referred to as anticipatory decision making} The problem may be real or imagined.

If it is real, planning culminates in orders and action. If it is imagined it leads to possible courses of action and may be called contingency planning. ^{then} Its purpose is to simplify and hence speed up decision-making and action should it be necessary.

2. Planning is a progressive and continuing process. It progresses downwards. When one commander completes his plan and announces his decision, his subordinates begin their planning, and so on. The reverse of this is an indication of faulty leadership. Planning is continual in that, during the course of current operations, plans at the higher levels are developed for future operations and for all foreseeable contingencies.

3. Contingency planning is a vital aspect of command. The commander must constantly look ahead in an attempt to foresee situations before they arise. His planning keeps pace with, but ahead of, operations in progress. Thus he avoids being taken by surprise. He need not react to the enemy to the detriment of his mission, ^{but} ~~Above all~~, because he is prepared, he can give a quick decision without ~~the~~ being ~~the~~ hurried.

decision

4. The staff, too, must plan ahead. The speedy execution of a quick decision is often dependent upon advance preparation by the staff.

Therefore, the commander must keep his staff informed of his ^{thoughts and} intentions.

The commander and ^{his} staff may then plan concurrently, ~~and along the same lines.~~

5. Administrative planning is of equal importance. The commander must keep abreast of the administrative situation. A plan is worthless unless it is both tactically and administratively feasible, and administrative preparations often take more time than operational ones. Hence, the administrative staffs must be given an early start on their planning.

725. SEQUENCE OF PLANNING

1. There can be no plan without an aim or a mission, and this intent must be clear and thoroughly understood by all concerned. If there are any limitations in the mission, or upon the means which are to achieve it, these must be known beforehand.

2. The mission must remain dominant in the mind of the commander. Neither the enemy nor circumstances must be allowed to divert him from this ~~task~~ ^{mission}. All aspects of the situation bearing on ^{its} accomplishment of ~~the mission~~ must be examined, ~~but~~ ^{and} equally important, factors which do not bear on ~~the mission~~ ^{it} must be discarded.

3. Planning is based on information. It is of different kinds and may come from many sources. These are discussed in detail in Chapter 12. Through his headquarters, the commander will maintain an up-to-date picture of, his own troops and material resources, the location, strength, and actions of the enemy, the ground, obstacles, and weather, and much other information dependent upon the level of command and the circumstances

of the particular situation. This and other aspects of planning, often called an appreciation, are more fully discussed in other manuals relating to ~~some~~ specific levels and types of command.

4. The commander should always give consideration to his personal knowledge of the enemy. His experience and military judgement should be applied to such ^{considerations} ~~things~~ as enemy intentions and habits, over and above intelligence estimates submitted by the staff. War is, after all, a battle of will between the opposing commanders, ^{and as such} ~~The commander~~ ^{he} is best qualified to draw conclusions about the enemy command.

5. The commander should make a personal reconnaissance whenever possible, ^{and} usually accompanied by selected staff officers ~~as~~ advisers. Both ground and aerial observation should be exploited. Reconnaissance should not neglect our own troops. It is by seeing and talking to subordinate commanders and the troops that the commander can best estimate their capabilities and gain the advantage of local knowledge.

6. After a thorough study of the situation, the commander will decide on his plan. He must then act on it. ~~Especially~~ ^{are} ~~at~~ the lower levels of command, he may issue brief verbal orders almost immediately. In more deliberate operations, he may have to allow his staff time to complete their detailed planning before orders ^{are} ~~can be~~ issued. ^{However,} ~~A~~ subordinate commanders need not wait on the staff. They must be given timely notice of the scope of the operations so that their own planning may begin.

726. ORDERS

1. For the purposes of this publication, an order is the direction given by a commander to his subordinates. In practice, of course, there

are different types of orders to meet the wide variety of circumstances ^{for} ~~under~~ which ^{the} ~~a~~ commander will give direction. Thus, we have standing and routine orders, administrative orders, warning orders, movement orders, and so on.

2. This Chapter is concerned with tactical orders, including what in practice are called operation orders and operation instructions. An operation order is issued when the commander's plan is detailed enough for him to assign specific tasks to his subordinates and when he intends to maintain control over all of the forces engaged. His orders will often be detailed, ^{and} ~~but they are~~ subject to change, such as regrouping of forces, as the battle develops. On the other hand, an operation instruction is most often issued to a particular commander for an independent operation. It deals with a task in general and allows the recipient to plan the operation in detail. It contains a fixed allotment of resources to the subordinate commander and a delegation of responsibility to him for their employment and co-ordination.

3. Operation instructions may also be used in place of operation orders for an operation involving a number of subordinate commands. However, lack of a detailed plan for the whole of an operation does not of itself call for issue of an operation instruction rather than an order. So long as the commander can continue to regroup, reassign, and co-ordinate his forces he should issue operation orders to them. To do otherwise would be to deliberately sacrifice overall control of the battle. Therefore, an operation instruction should be issued only when circumstances demand that the commander place unusual responsibility upon his subordinates.

4. Orders may be issued either orally or in writing. Oral orders may be given by the commander in person, by radio, by telephone or through a liaison officer. Each method has its place in battle. Time will often *determine the most appropriate method -* ~~decide the means to be employed.~~ If urgent action is necessary, then orders must be ~~got out~~ ^{issued} quickly. It may be that time demands brief instructions by radio, however desirable it may be to do or say more. A complete and detailed order is worthless if it arrives too late *to cater for the situation at hand.*

5. When time permits, detailed orders may best be given in writing. Written orders reduce the chance of error and provide a source of reference to the recipient. They are often used in conjunction with oral orders, and they need not contain all the information given verbally; nor need the verbal orders cover all the information issued in writing. The method adopted in any situation is usually a compromise between time and completeness.

6. The principal channel for orders is from commander to commander; *being left to* the staff ~~deals~~ with detail in amplification of the orders. Whenever possible a commander should deliver his orders to his subordinates in person. If the state of operations or communications makes it impossible for him to deal personally with all his subordinates, he should try to give orders personally to whatever subordinates he can and to his remaining subordinates by ~~some other means.~~ ^{another method}

7. Liaison officers are a vital part of a commander's machinery of command. To be of value they must have the complete confidence of their own commander and of his superiors and subordinates. Orders sent or received by a liaison officer are orders from or for the commander. ~~and~~ *They* must be presented with tact, but with the force and meaning of the originating commander.

8. A commander should go forward to give his orders. An Orders Group at the commander's headquarters should be called only for the most deliberate of operations. Subordinate commanders should never be called back in the middle of an action. When possible, the rendezvous selected for orders should also provide a view of the ground where the action will take place. This is ~~especially~~ vital at the lower levels of command. Consideration should also be given to protection and ease of access to the rendezvous.

9. Before orders are given, subordinate commanders should be ~~made~~ familiar with the ground. Ideally, features to be mentioned in the orders should be pointed out to them on the ground. When this is ^{not} possible a map, sketch, model, or photograph of the ground ^{should} ~~may~~ be used.

10. Oral orders are a personal business. Established formats for their presentation are useful, and the paragraph sequence should be followed. But in giving oral orders a commander must not feel bound in detail to a format at the expense of ease of expression. The important thing is that he be understood. Any delay in understanding an order detracts from its ^{"effectiveness"} ~~force~~. Clarity and simplicity of presentation are what count. Various aids and techniques, such as sketches and models, may be used to illustrate the plan, ^{but} there must be a need for their use, and they must suit the need. Otherwise, they will only complicate understanding of the plan.

11. Orders should be an expression of confidence and determination by the commander. His is not just any plan. It is the plan which must and will work. Much will depend upon the faith which his subordinates have in his judgement. The order will have more impact if his ~~whole~~ personality is brought to bear ^{on its delivery}.

12. The commander should show confidence in his subordinates too. The orders he gives them must not infringe on their own level of responsibility. Some aspects of co-ordination, such as air support, may have to be regulated at a high level, but care must be taken not to interfere unduly with the tactical plans of subordinate commanders.

13. It will often be difficult for a commander to give oral orders directly to his subordinates, especially in mechanized operations. He may then have to rely increasingly on giving orders to individual subordinates and on using radio communications. The effect of orders under such conditions is very much dependent upon a wide knowledge of the commander's mission and his outline plan. Subordinate commanders may then use their initiative in applying the commander's intentions to their own particular circumstances. It is important, then, that the commander prepare in advance for difficulties of communication. He must provide a long term mission and outline plan that is understood at least two levels down *for as long into the operation as possible*.

14. Even in mobile operations, the commander should speak directly to his subordinates whenever possible. To do this, he must go forward to them. He can then give orders which, even if only to one subordinate, are given in the light of particular circumstances. By being able to point things out on the ground and on the map, the commander can give more precise instructions than would be possible by radio. Thereafter, he needs to pass by radio only sufficient information for co-ordination of his command.

15. Orders by radio are quite simple if the commanders are within sight of one another, or there is no movement involved, as is often so at platoon or company level. From battalion level upwards it becomes

increasingly more difficult. Whatever the level, proper radio voice procedure and brevity must be maintained. To indicate direction or locations can be troublesome, but this can be largely overcome by the proper codes and pre-arranged reference points. *Secure speech devices will greatly assist in this requirement.*

16. Commanders should speak directly to one another when orders are being given on the radio; the use of intermediaries, whether staff officers or radio operators, increases the chance of misunderstanding, lessens the force of the order, and can lead to lengthy transmissions. It is the subordinate commander who will best know the mission of his superior. It is ^{therefore} much easier if the two most knowledgeable persons are in direct contact, *thereby reducing to a minimum the possibility for misunderstanding.*

727. COMMAND DURING BATTLE

1. A commander's job does not end with the giving of orders. Having made a decision, he must pursue it resolutely. His drive and energy will have a decisive influence on the conduct of the battle. The example he sets can inspire his troops and give confidence to his subordinates.

2. There can be no compromise of the mission. The commander, in his supervision of subordinates, will ensure that the tasks assigned them are being carried out. On the other hand, he cannot remain oblivious to changing circumstances. He must regroup his forces and adjust tasks as necessary. But this is his responsibility, ^{for} if subordinates are left to alter their own tasks as a result of a change in the tactical situation, the mission may be lost sight of.

3. Unjustified interference in the affairs of subordinates will damage their confidence and upset the machinery of command. ~~But~~ ^{However} there

may be occasions when the authority of the commander must be felt. In a crisis, the commander must act, intervening personally at a lower level of command if necessary. Thereafter, he should restore normal command as soon as possible. Any intermediate headquarters which have been bypassed must be informed of the action taken.

4. The commander needs a personal picture of the action and a clear idea of the problems being faced by his subordinates. This is the only way he can keep his ideas up to date and adapt his plans to changing circumstances. Rarely can this be accomplished from an headquarters in the rear. Reports received second-hand do not often provide the information he needs for his decisions. The commander must go forward to see for himself and to talk to his subordinates on the spot. This is especially important in fast-moving operations.

CHAPTER 8

OFFENSIVE OPERATIONS

SECTION 1 - GENERAL

801. INTRODUCTION

1. Ultimate success in battle is ~~usually~~ achieved by offensive action. Even when on the defensive a commander must take every opportunity to seize the initiative and carry the battle to the enemy in order to seek an advantageous decision. A commander's primary aim is to impose his will on the enemy commander and the enemy forces. This is primarily achieved by destroying the enemy's capability within his area of responsibility.

to resist friendly force actions

2. Offensive operations are undertaken for one or more of the following purposes:

a. To ^{attitude} ~~wear down~~, repulse or destroy the enemy forces.

b. To ^{gain} ~~capture of~~ ~~the~~ ground.

c. To gain information or develop the situation ?

d. To deprive the enemy of his resources *to resist*

e. To ^{focus} ~~direct~~ the enemy's attention from other areas or activities.

f. To ~~pin the enemy down~~ ~~to~~ prevent his regrouping ^{engaging} *by fixing him*

3. In offensive operations concentrating superior combat power at the critical time and place with the employment of strong mobile exploiting forces is usually required to achieve decisive results. The concentration is of the effects of the ^{firepower and mobility} ~~various arms~~ rather than of the troops themselves. The effects ^{of these capabilities} are concentrated in time from positions dispersed over ranges that suit the circumstances. ^{These} ~~The place of concentration~~ ^{are the} ~~any moment to~~ ^(s) point of main effort, and ^{can be} ~~it is~~ shifted by the commander as circumstances ^{require} ~~change~~. ~~The~~ Concentrations and their relocation require troop mobility, accurate and responsive fire, and good communications.

4. ^{Offensive} ~~The operations discussed in this Chapter~~ are characterized by ^{possession of} ~~the~~ initiative; the commander who undertakes offensive operations determines the place and time of ^{concentrating to} ~~striking~~ his enemy. However, ^{initiative} ~~this destruction~~ is ^{imprecise} ~~arbitrary~~ to the extent that ^{it} ~~the initiative~~ does not rest with all levels of command of either friendly or enemy forces at any moment. Offensive operations ^{can be} ~~are~~ conducted within a defensive context; ^{eg,} ambushes and counter-attacks, ~~for example, air defensive operations are conducted within an offensive context, exemplified by intermediate objectives.~~

5. The types of offensive operations considered are those agreed by NATO: the approach/advance, the attack, the exploitation, and the pursuit. The circumstances distinguish them. The approach, or advance, is conducted when contact with the enemy has not been established, or has been broken. In either case the operation aims to make contact with the enemy, possibly at a place of his choosing. The attack may follow an advance directly, or it may be initiated following a protracted defence, but its uncertainties are reduced by some specific knowledge of the enemy. An attack aims at the elimination of enemy resistance within a specified objective area. Both the exploitation and pursuit seek to ^{relying that} ~~derive advantage from success~~; but the exploitation is more limited in ~~making than~~ space than the pursuit.

The exploitation is ^{normally} made on the initiative of a ^{the} ~~lower level~~ of commander, within the limits of his own resources, whenever he sees and seizes an opportunity. ^{The} ~~An exception is made in case~~ ^{to this characteristic is made when} exploitation is expressly limited ^{by a superior commander.} ~~in which case he must obtain authority to undertake a pursuit.~~

The imposition of a limit of exploitation enables a higher commander to retain control of his force. ^{on the other hand is normally directed by} ~~Pursuit is made on the authority or order~~ of the higher commander. It differs in conduct from the advance because it seeks to maintain contact, rather than restore it. In this respect, knowledge of the enemy's condition permits the pursuit to be conducted more boldly than the advance. The difference between the advance and the pursuit ^{can also be} ~~is~~ expressed ~~also~~ in terms of preparation; the advance is ~~deliberate~~ deliberate, whereas the pursuit is hastily organized to take advantage of a fleeting opportunity.

802. TYPES OF OFFENSIVE OPERATIONS

1. General. Offensive operations can be divided into:

a. The Approach/Advance to Contact.

b. The Attack, which can be sub-divided into:

(1) The Hasty/Quick Attack.

(2) The Deliberate Attack.

c. Exploitation and Pursuit.

d. There are several ^{special} ~~additional~~ types of offensive operations; i.e. raids, feints, diversions, demonstrations and reconnaissance in force. ~~Other~~ Generally, ^{have} ~~these are~~ limited objectives, ⁱⁿ ~~limited~~ scale, ^{or} ~~limited~~ time ^{and are} ~~are~~ specially designed ^{are}

operations which follow the basic considerations set forth in ~~describing~~ hasty and deliberate attacks.

2. The Approach/Advance to Contact. Advance to contact is an offensive operation designed to gain or re-establish contact with the enemy. It is characterized by decentralized control and by quick attacks off the line of march. Subordinate commanders must be prepared to act boldly within clear directives in order to surprise the enemy, to keep him off balance and to exploit success. The degree of control required is largely determined by the imminence of contact and the terrain. The advance to contact terminates when enemy resistance requires the deployment and co-ordinated effort of the main body.

3. Every intelligence and security means is employed so that the units of the main force will be committed under the most favourable conditions. The preferred method of movement is to advance on a broad front using the techniques of the tactical column or the approach march.

4. Figure 8-1 illustrates a typical organization for an advance to contact.

- a. The composition, size and operations of the covering force may influence the entire course of battle. Their mission is to ^{determine} ~~discover~~ the enemy's ^{dispositions} ~~situation~~ and to prevent unnecessary delay of the main body. A highly mobile, well-balanced force is required to attack and destroy enemy resistance, secure and hold key terrain, and contain forward enemy units.
- b. The advance guard is used to expedite movement of the main body, to maintain contact with the covering force, and to

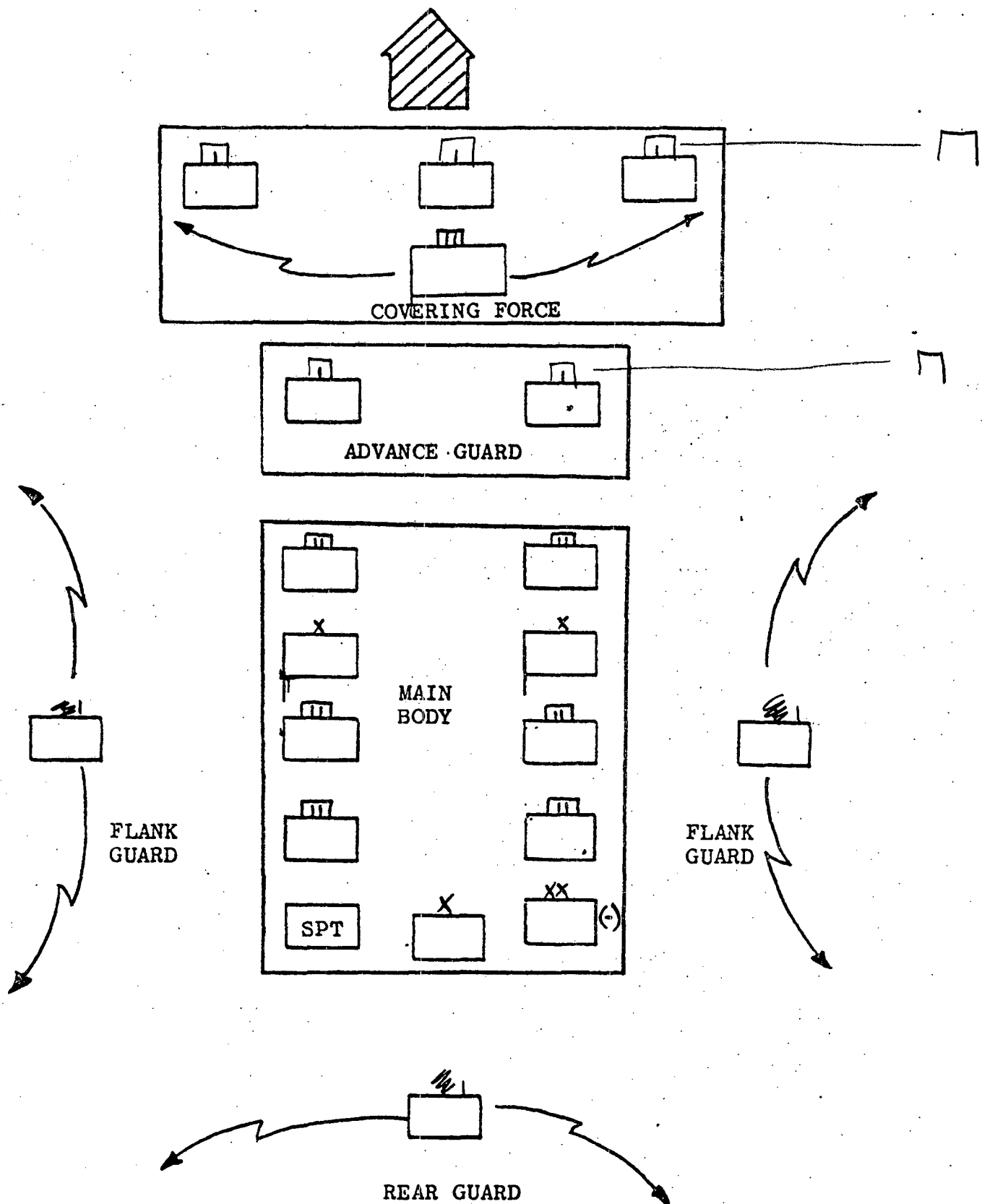


FIGURE 2-1 AN EXAMPLE OF DEPLOYMENT FOR ADVANCE TO CONTACT (DIVISION SIZE FORCE SHOWN)

provide security to the immediate front of the main body.

The main body contains the ^{majority of the} ~~main~~ combat power of the force.

Units of the main body are organized into combined arms

elements and are so positioned in the advancing columns to

permit maximum flexibility for employment during ~~the~~ movement

^{Commitment}
or after the establishment of contact with the enemy.

- c. Flank and rear guards protect the main body from ground observation and surprise attack. They should be strong enough to defeat minor enemy forces or to delay strong attacks until the main body can deploy. Observation, surveillance and close co-ordination with air reconnaissance contributes to the security of the main body.

5. An advance to contact may be made at night or during periods of reduced visibility, thereby offering security from enemy observation.

~~However~~, ^{under these conditions but} the problems of identification and orientation increase. ~~These~~ ^{reduced} ~~problems~~ can be ~~overcome~~ ^{by} by training and the establishment of standing operating procedures for route marking, identification of checkpoints and key personnel, and ^{application} ~~the firm exercise~~ of command and control. Conditions of reduced visibility ^{will demand} ~~provide protection from enemy air and special weapons and restrict enemy observation, but as this factor may also result in a failure to establish contact~~ increased reliance is placed on non-visual reconnaissance and surveillance means.

6. The advance to contact often results in a meeting engagement; ^{that is} ~~when~~ ^{static or mobile} the advancing force, incompletely deployed for battle, engages ~~an~~ enemy, ~~static or mobile~~ at an unexpected time and place. The principal characteristics of meeting engagements are limited knowledge of the enemy, ~~and~~ minimum time available for ~~the~~ commander to develop the situation, ~~and~~ formulate plans

^{supervise execution}
and ~~execute plans~~. The basic principle in conducting a meeting engagement is the seizure and retention of the initiative. By retaining the initiative, ^a the commander can subsequently adopt the best course of action to accomplish his mission. The success of such action depends considerably on the speed of reaction.

7. Hasty Attack. This type of attack is characterized by trading preparation time for surprise. In order to maintain momentum and retain the initiative, minimum time is devoted to ~~deliberate~~ ^{elaborate} planning and the forces used for the attack are those which are readily available. A hasty attack seeks to take advantage of the enemy's lack of readiness and involves boldness ^{speed, and} surprise ~~and speed in order~~ to achieve success. It ~~denies~~ ^{denies} ~~before~~ the enemy ^{the} ~~has had~~ time to identify and counter the main thrust of the attack. ~~If momentum is lost,~~ ^{quick attacks fail,} ~~deliberate attacks~~ ^{usually become} ~~may be necessary.~~

8. Deliberate Attack. This type of attack is characterized by the ~~elaborate~~ ^{elaborate detailed} planning and co-ordination of all available resources ^{at all levels.} The deliberate attack normally involves overcoming major resistance. When a highly organized, well-fortified enemy position must be destroyed or penetrated, a deliberate attack is required. Preliminary operations may be necessary either to gain contact or to ~~develop the situation~~ ^{set the enemy off-balance}. A successful deliberate attack can result in exploitation/pursuit. This possibility must be considered in planning and executing ~~the former~~ ^{the deliberate attack}.

9. Exploitation. Exploitation is an offensive operation which usually follows a successful attack, ^{it} ~~and~~ is designed to disorganize the enemy in depth ^{and} ~~is~~ characterized by rapid advance ^{against} lessening resistance. This offensive operation seeks to destroy the enemy's ability to reconstitute and organize a defence or ~~to withdraw in good~~ ^{conduct an orderly withdrawal} order ~~when on the point of collapse~~. The psychological effect of an

exploitation creates confusion and apprehension throughout the enemy command, reduces the enemy capability to react, lowers morale and may in itself be decisive.

on a large scale

10. Exploitation is usually initiated when the enemy force is having recognizable difficulty in maintaining his position. This condition is indicated by decisive gains by friendly forces, less ^{ening} enemy resistance with *increased numbers of* and more prisoners captured and equipment abandoned. Once begun, the exploitation is executed relentlessly to deny the enemy any respite, ~~from~~ *thus denying him the opportunity for reorganizing his forces* ~~offensive pressure in the drive to the objective~~ *into a coherent defensive posture.*

11. Exploitation forces are normally assigned the mission of securing objectives ~~deep~~ in the enemy rear. The force clears only enough of its ~~sector~~ *zone* to permit its advance, while follow-up and support forces ~~normally~~ *seize key terrain* eliminate bypassed enemy forces, and secure lines of communication ~~and~~ *Follow-up forces* ~~key terrain~~ *These forces* should, where possible, possess or be provided with the *and fire power* mobility equal to that of the exploitation force.

12. Exploitation continues day and night, regardless of weather. Reconnaissance elements, ^{on the} both ground and ^{with the} air, ^{activities} keep commanders informed of enemy ~~action~~. Only those reserves necessary to ensure flexibility ~~of~~ *operations*, continued momentum of the advance, and ~~minimum~~ essential security are retained. Actions of the exploitation force are characterized by boldness, prompt use of available firepower, and rapid and unhesitating employment of uncommitted units.

during exploitation
13. The force commander's aim *is* to reach his objective with the maximum strength as rapidly as possible. Control is vital to prevent over-extension of the exploitation force.

14. ~~The resources of~~ ^A air, airborne, mobile and aviation forces should be used whenever possible to ~~increase or~~ maintain the momentum of ^{the} exploitation.

15. Pursuit. A pursuit is an offensive operation designed to ~~catch~~, ^{find, fix and} ~~cut off or~~ destroy an enemy force attempting to escape. It may develop from a successful exploitation wherein the enemy force is demoralized and his ~~units are beginning~~ ^{defensive coherence is beginning} to disintegrate under relentless pressure. A pursuit may also develop ~~in an operation in which~~ ^{where} the enemy has lost his ability to operate effectively and attempts to disengage. Whilst a terrain objective may be designated, ^{in pursuit, the ultimate purpose is to destroy} ~~the destruction of~~ the enemy force ~~is the primary objective~~.

16. In the conduct of a pursuit, direct pressure against retreating forces is maintained relentlessly, while enveloping forces sever the enemy lines of ~~escape~~ ^{withdrawal}. Maximum use should be made of ^{air,} airmobile and airborne elements ^{during the pursuit}.

17. Pursuit operations are conducted aggressively and are characterized by decentralized execution. Commanders ~~should~~ ^{must} remain well forward to provide impetus to the operation and take decisive action. ^{To ensure success, the} ~~Pursuit is~~ ^{will be demanded} ~~pushed to the~~ utmost limits of endurance of troops and equipment ~~during~~ ^{and operations will continue unabated during daylight and darkness} ~~both daylight and darkness~~. Continuity of combat service support is ^{critical if pursuit is to be conducted successfully.} ~~vital to the success of this type of operation.~~

803. FUNDAMENTALS

1. The fundamentals of offensive operations ^{as follows:} ~~are discussed in the~~ following paragraphs.

§ 2. Firm Bases are required for the ^{assembly, preparation,} launching and support of ^{offensive} attacking forces. ~~Security~~ ^{offensive} Security must also be established from time to time during the ~~attack~~ ^{offensive} operation so that critical ground is effectively controlled before the ~~attack~~ ^{operation} goes further. In the first instance the firm base may be the responsibility of other forces. If not, the ^{offensive} attacking forces must secure their own firm bases.)

§ b. Reconnaissance is continuous and must obtain as much information as possible in the time available. Reconnaissance for a deliberate attack will seek out comprehensive information about the ground and enemy ^{dispositions} ~~deployments~~. However, a hasty attack involves the risk of sacrificing knowledge for speed ^{in order to achieve} ~~to gain~~ surprise or exploit ^{an enemy weakness.} ~~some other advantage.~~

§ c. Speed and Violence are employed to prevent the enemy's co-ordinated recovery and response. Firepower is concentrated in great weight on known and suspected enemy positions. Movement is made close to supporting fire and at the best possible speed, and every effort is made to maintain the momentum of the ^{action} ~~attack~~ by exploiting local success.

§ d. Depth is required, both in the organization of the ^{offensive} attacking forces and in the selection of their objectives. The organization of depth in the ^{offensive} attacking force permits their power to be concentrated, and allows the quick exploitation of weaknesses in the enemy defence. The selection of deep objectives contributes to the maintenance of momentum and enables the attacker to strike the enemy where his defences are less well organized and more sensitive. Objectives should be chosen at the very limits of the ^{offensive forces'} ~~own~~ capabilities.

§ e. Surprise is achieved ^{by} by concealment and deception; striking at an unexpected time or place, or from an unexpected direction; and by

taking advantage of ~~any~~ changing and ~~unusually~~ limiting circumstance.
The advantages of easy movement over some approaches must be considered against the advantages of surprise over more difficult approaches.

§ Reserves of every resource are required at every command level.
The reserves are the resources that enable a commander to exert influence beyond that of the initial plan. Reserves of troops and fire can be applied to opportunity more quickly than those already committed can be redirected. Reserves of time can be no less useful. The retention of reserves permits unexpected success to be exploited, and unforeseen difficulties to be simply overcome.

804. SIGNIFICANCE OF GROUND

Although the destruction of an enemy can be assigned as an offensive mission, it is ^{more} usual for ground objectives to be designated. The ground is important for the advantages it offers in observation and concealment, cover and fire effects, and in ^{access} ~~excess~~ and its control. The presence of obstacles may limit the ^{offensive plans} ~~plan of attack~~ by limiting the choice of axes, reducing the speed of manoeuvre, or ^{overly} complicating ~~the~~ execution of the ~~entire~~ plan. When an obstacle crossing is anticipated, information ^{must} ~~can~~ be collected in advance, and forces and equipment grouped so the manoeuvre is subject to minimum delay ^{and} ~~or~~ interruption. In general, ^{during offensive operations,} obstacles are avoided if possible, and ground offering ~~critical~~ advantages is seized as early as possible. ~~during offensive operations~~

805. AIR SITUATION

Large scale offensive operations will not be possible without air superiority or ^{air parity.} ~~unless the enemy can be met on equal terms in the air and~~

~~be prevented from intervening.~~ Small scale and local attacks may be practicable, however, and in these, special attention should be given to night operations. When ~~the air~~ ^{resources are} ~~strategy~~ ^{they} available ~~it~~ should first be applied to maintaining the protection of the attacking force.

806. EXECUTION OF OFFENSIVE OPERATIONS

1. Offensive operations are characterized by fire and movement, so combined ^{coordinated and} ~~and~~ controlled that they create a preponderance of combat power ^{This will produce} ~~which culminates in~~ a powerful and violent assault at decisive points. ~~which is critical to the success of offensive operations.~~ Once ~~the~~ ^{an} attack is launched, flexibility and speed in the employment of combat power are paramount. The attack is usually conducted by a series of rapid advances and assaults by fire and movement until the final objective is secured. The attack is executed vigorously and all favourable developments are exploited. If any portion of the attack lags, its weight should be shifted to the area that offers the greatest opportunity for success. ^{Commander's} ~~Actions~~ may include redeployment to reinforce or maintain the momentum of the attack, ^{red deployment} ~~to~~ defeat enemy counter attacks or ^{red deployments} ~~to~~ provide security. Continuous momentum ^{however} ~~must~~ be maintained and the attack must not be delayed to preserve the alignment of units or to adhere rigidly to the preconceived plan of attack.

2. Attacking forces must move as rapidly as possible between areas of enemy opposition, particularly in a nuclear environment, where close contact must be maintained with the enemy to prevent him from employing nuclear weapons against forces in direct contact. When enemy resistance is encountered, the leading elements, supported by fire, attempt to overrun and destroy the enemy rapidly. Should a more deliberate attack be required, additional forces and fire support are committed in a short, violent and well-co-ordinated assault to destroy the enemy. ^{In certain circumstances} ~~The~~ leading element may be ordered to by-pass to maintain momentum.

3. Security forces, firepower and reserves are employed to protect

exposed flanks and gaps between units without sacrificing the momentum

of the attack. By-passed enemy forces must be ^{so} contained ^{as to prevent them interfering with} ~~or be kept~~ ^{friendly force}
~~under surveillance pending subsequent elimination.~~ ^{activities} Protection from ^{pending subsequent}
~~elimination~~

ground attack may frequently be required for support units when areas to

the rear of attacking echelons have not been ^{secured.} ~~cleared.~~ The primary

purpose of the reserves is to maintain the momentum of the attack ^{rather than}
~~elimination of by-passed enemy forces.~~

4. Consolidation of ^{an} ~~the~~ objective is carried out in accordance with

the commander's future plans. This is done with minimum forces if the

momentum of the attack is to continue without delay.

5. Infiltration is a technique in which a force, avoiding contact,

moves as individual or small groups over, through, or around enemy

positions. Elements of the force move at irregular intervals to avoid

detection and engagement by the enemy until it is to their advantage.

Infiltration is made easier by poor visibility and rough terrain. It is
^{with the aim of disruption the enemy's command and control functions}
normally carried out by non-armoured forces. [^] An attack following infiltra-

tion, may surprise, paralyze and disorganize the enemy force. Such an ^{operation}

~~attack~~ will be most effective when supporting another attacking force.

6. The attacker can achieve significant advantages [/] by initiating or

maintaining offensive operations at night or under conditions of poor

visibility, ^{in that} ~~as~~ they offer an opportunity for deception and surprise.

These operations follow the principles of the attack but special attention

must be paid to:

a. maintaining direction;

b. control measures;

- c. simplicity of plan;
- d. thorough reconnaissance;
- e. the equipment and training of troops;
- f. the limiting of objectives to match resources; and
- g. the possible use of the infiltration techniques.

7. Once a daylight attack has achieved momentum, operations should be continued through the night or under conditions of ^{poor} ~~bad~~ visibility without respite. Earlier success can be followed up to continue the destruction of the enemy forces, maintain pressure and prevent the enemy from disengaging or reorganizing his defences.

807. ORGANIZATION OF THIS CHAPTER

In addition to the
~~Following this~~ general section on offensive operations, this Chapter includes sections on each of the attack and the advance. The discussions centre around the deliberate attack and the advance to contact, with amplification as necessary to cover variations on these themes. Amplification in the section on the attack includes hasty and night attacks. Amplification in the section on the advance includes circumstances ^{for} ~~of both~~ establishing and maintaining contact. Exploitation at the local level is included in the attack discussion: at higher levels it assumes the character of an advance. The final section discusses the administrative aspects of offensive operations.

SECTION 2 - ATTACK

808. GENERAL

1. The aim of an attack is to defeat the enemy. ^{It is realized by so} ~~by~~ disrupting his force ~~so~~ that he surrenders or withdraws. It is achieved by manoeuvring troops and their firepower to cause physical damage to the enemy in close combat or by placing troops in position where, by the threat of their fire, the enemy is persuaded to surrender or withdraw. The manoeuvre that takes place increases the ^{application} influence of ~~the~~ firepower ~~by its shock~~ effect on the enemy, ^{as well as} ~~and it~~ assists ^{ing} the attacker to evade enemy fire.

2. An attack is part of the cycle of battle. It may be undertaken hastily ^{ly} to exploit an opportunity, or it may be undertaken as a deliberate operation.

3. An attacker ^{by nature has} enjoys a freedom of action and moral stimulus ^u which ^{XSp-U-} he must seek to maintain throughout the operation. ^A At the same time, ^{because of} ~~he~~ manoeuvre, he must expose himself to enemy fire and suffer some loss in the accuracy of his own direct fire. This disadvantage must be overcome by rapid and forceful offensive action against the enemy and by full use of darkness, deception, smoke, and other conditions that ~~may exploit~~ ^{give advantage to the attacker. the enemy's weakness.}

809. FORMS OF MANOEUVRE

1. General. During an attack, the attacking forces are manoeuvred to gain an advantage over the enemy, to close with him, and to destroy him. The attack may be directed against the front, flank, or rear of the enemy and may be conducted from the ground, ~~or~~ from the air, or a ^{from a}

both means.

combination of ~~forms~~. The choice of a specific form of manoeuvre is influenced by the mission, enemy, terrain, weather, troops available, level of command, and time and space. The basic forms of manoeuvre are:

- a. frontal attack;
- b. flanking attack;
- c. envelopment/turning movement; and
- d. penetration.

This Figure 8-2 depicts this
2. Frontal Attack. ~~The frontal attack is an offensive manoeuvre, which~~ *has* ~~which the main action is directed against the front of the enemy.~~ *position.* It may be used to fix the enemy in position ~~to~~ *or* to support another attacking force, ~~it may also be used to overrun and destroy a weaker enemy in place.~~ *place.* ~~position.~~

3. This ~~form of~~ manoeuvre may be employed when the attacking force is opposed by a weak and disorganized enemy ~~when~~ *and* the attacking force has overwhelming combat power, when time and situation may require immediate reaction to enemy action, ~~or~~ when the mission is to fix the enemy in *place* position to assist in other forms of manoeuvre ~~or deceive him.~~ *when deception is required to support operations elsewhere.*

This manoeuvre
4. Although a ~~frontal attack~~ strikes the enemy's front, it does not require all attacking forces to be employed in line or to be conducting a frontal attack. During the manoeuvre, the attacking forces seek to create or take advantage of conditions that will permit a penetration or envelopment of the enemy position. Unless conducted in overwhelming strength, the frontal attack is not usually ~~decisive~~ *conducted* but may be necessary

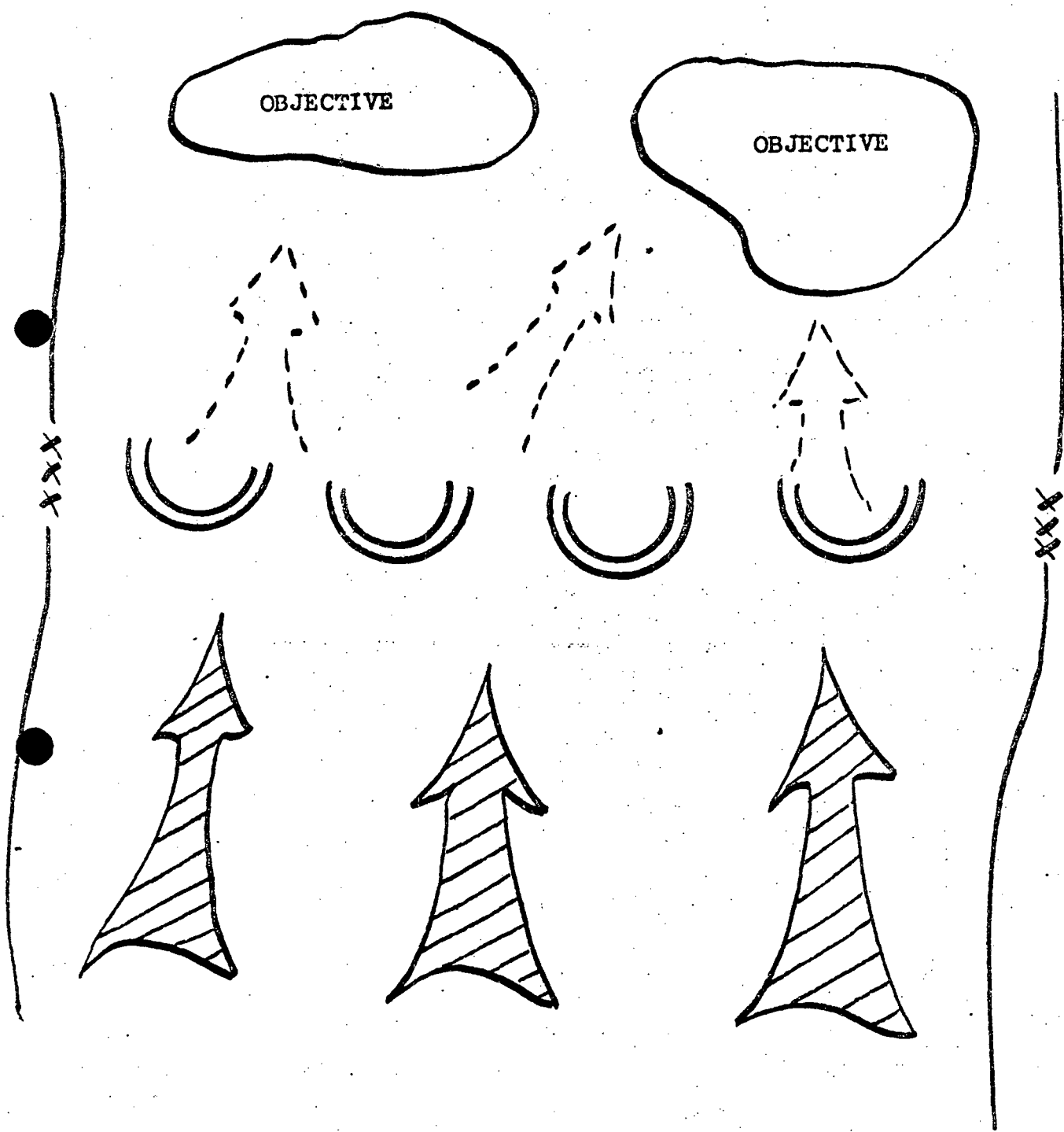


FIGURE 2-A AN EXAMPLE OF A FRONTAL ATTACK

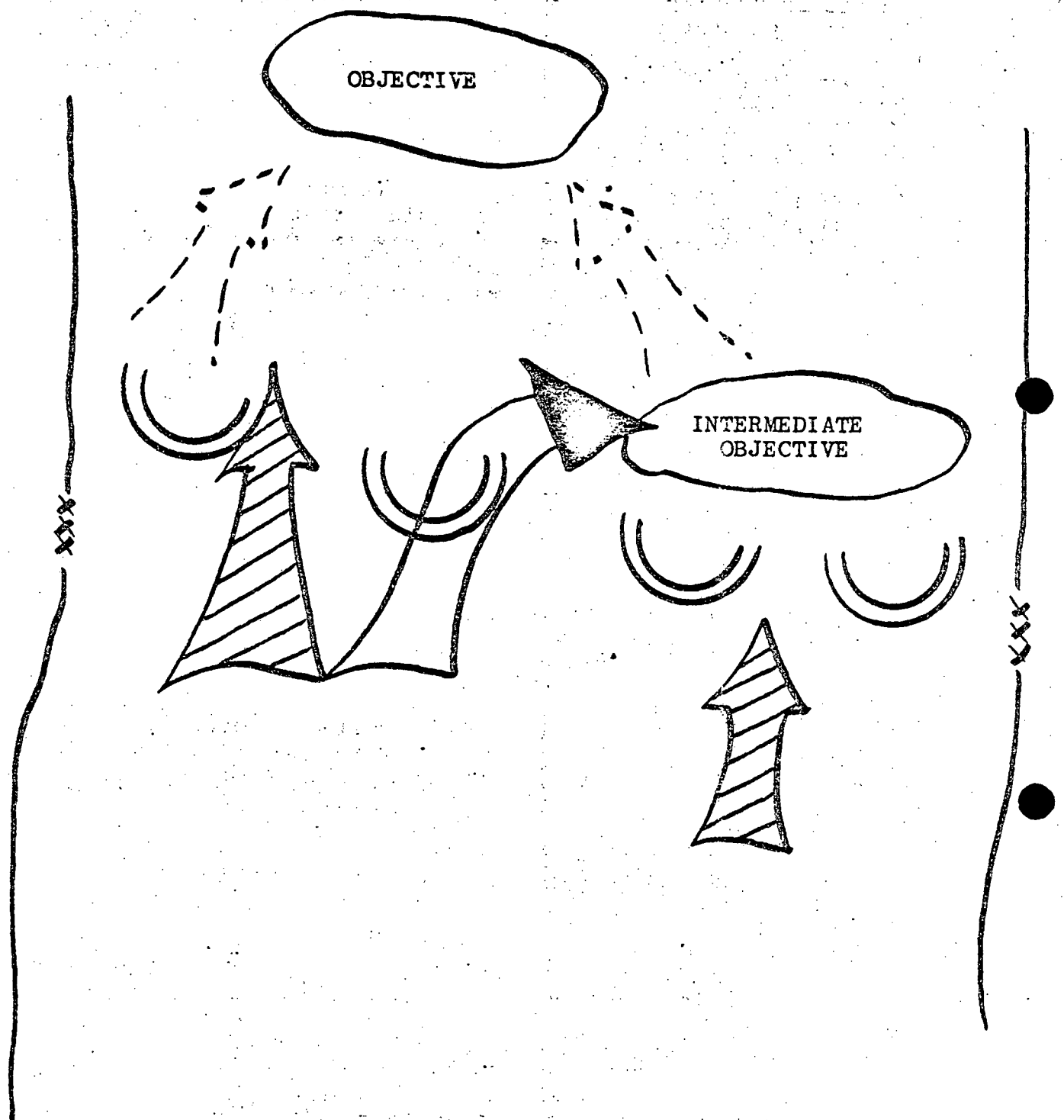


FIGURE 8-3 AN EXAMPLE OF A FLANKING ATTACK

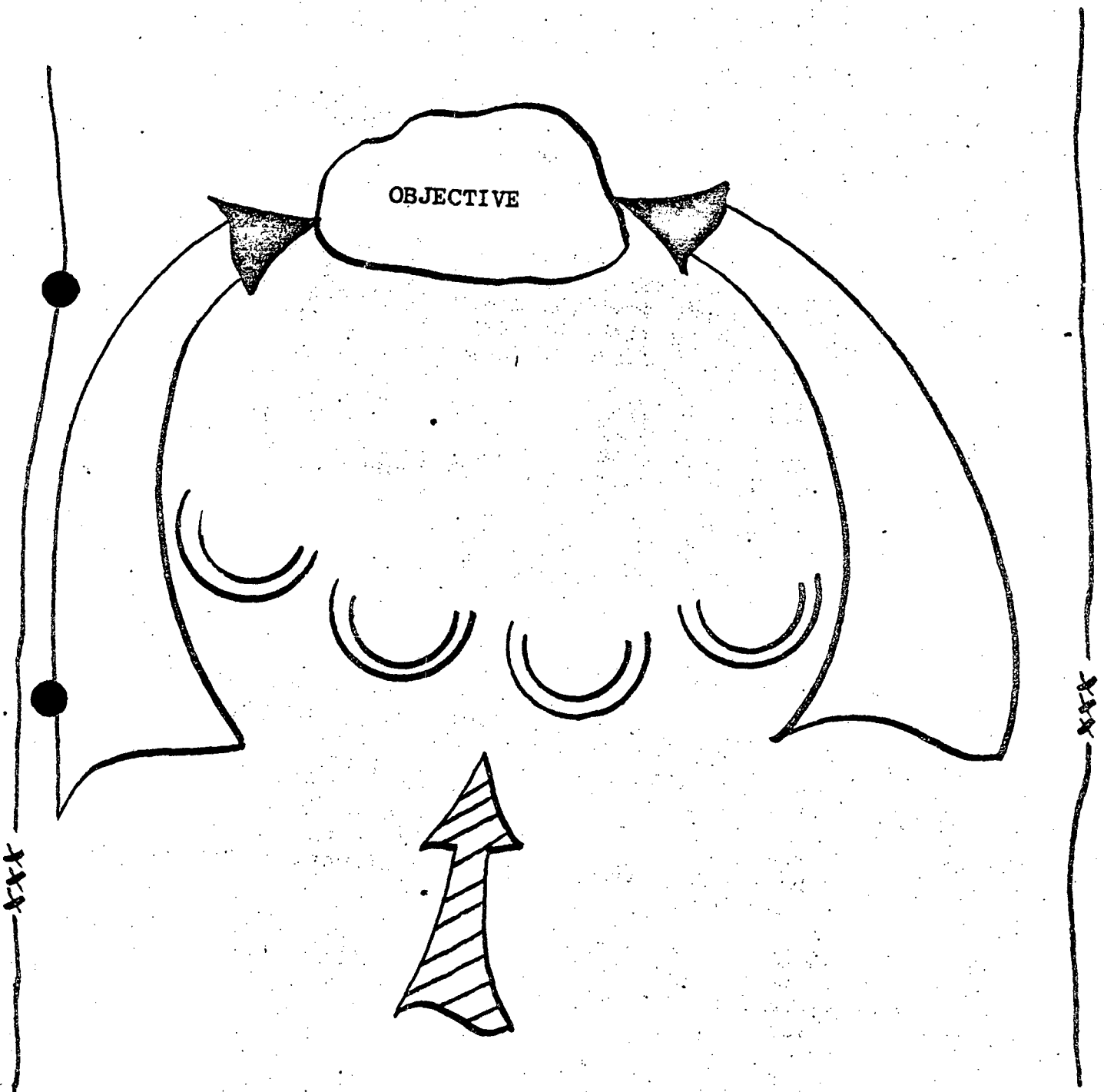


FIGURE 8-4 AN EXAMPLE OF AN ENVELOPMENT (DOUBLE)

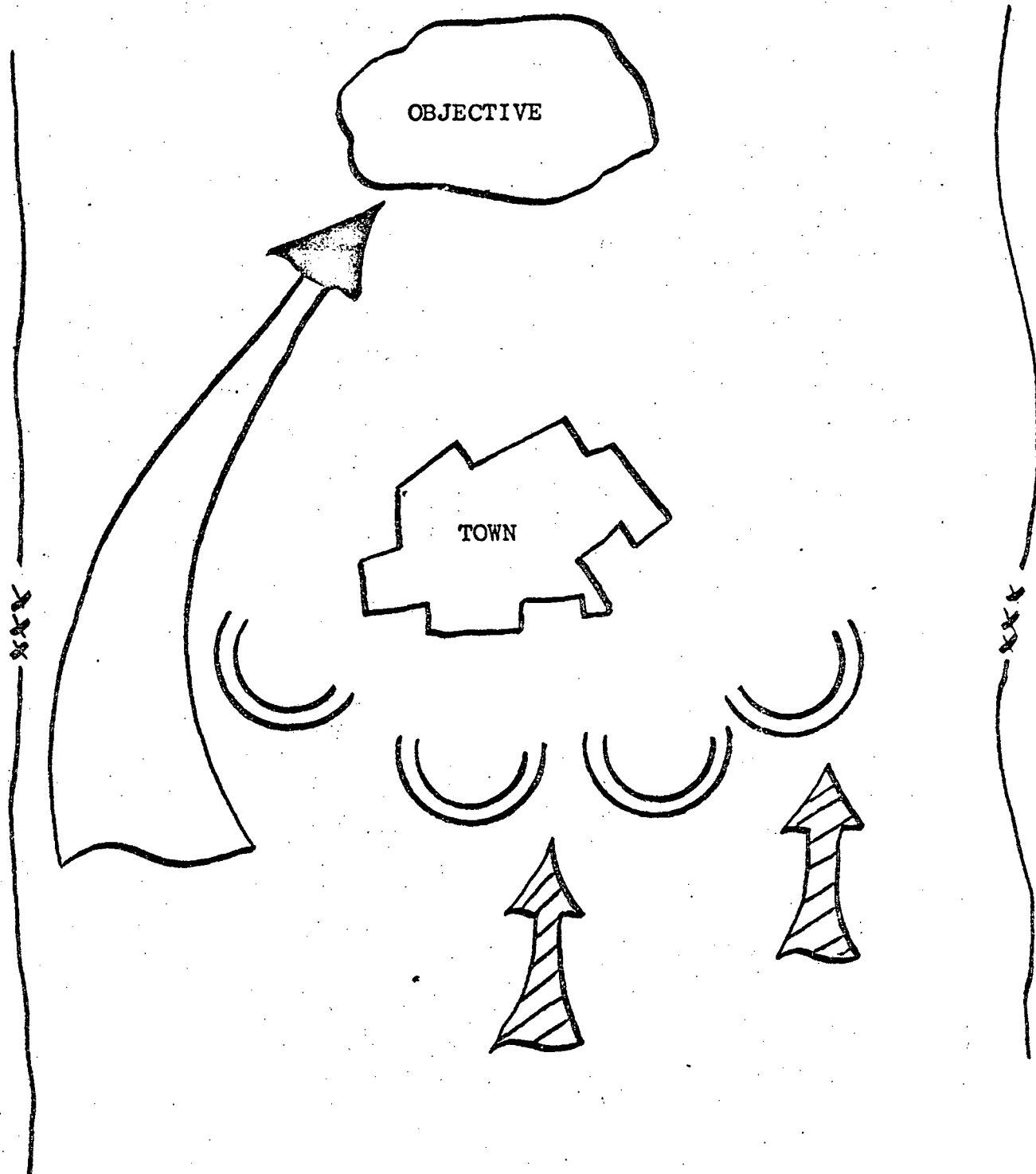


FIGURE 8-5 AN EXAMPLE OF A TURNING MOVEMENT

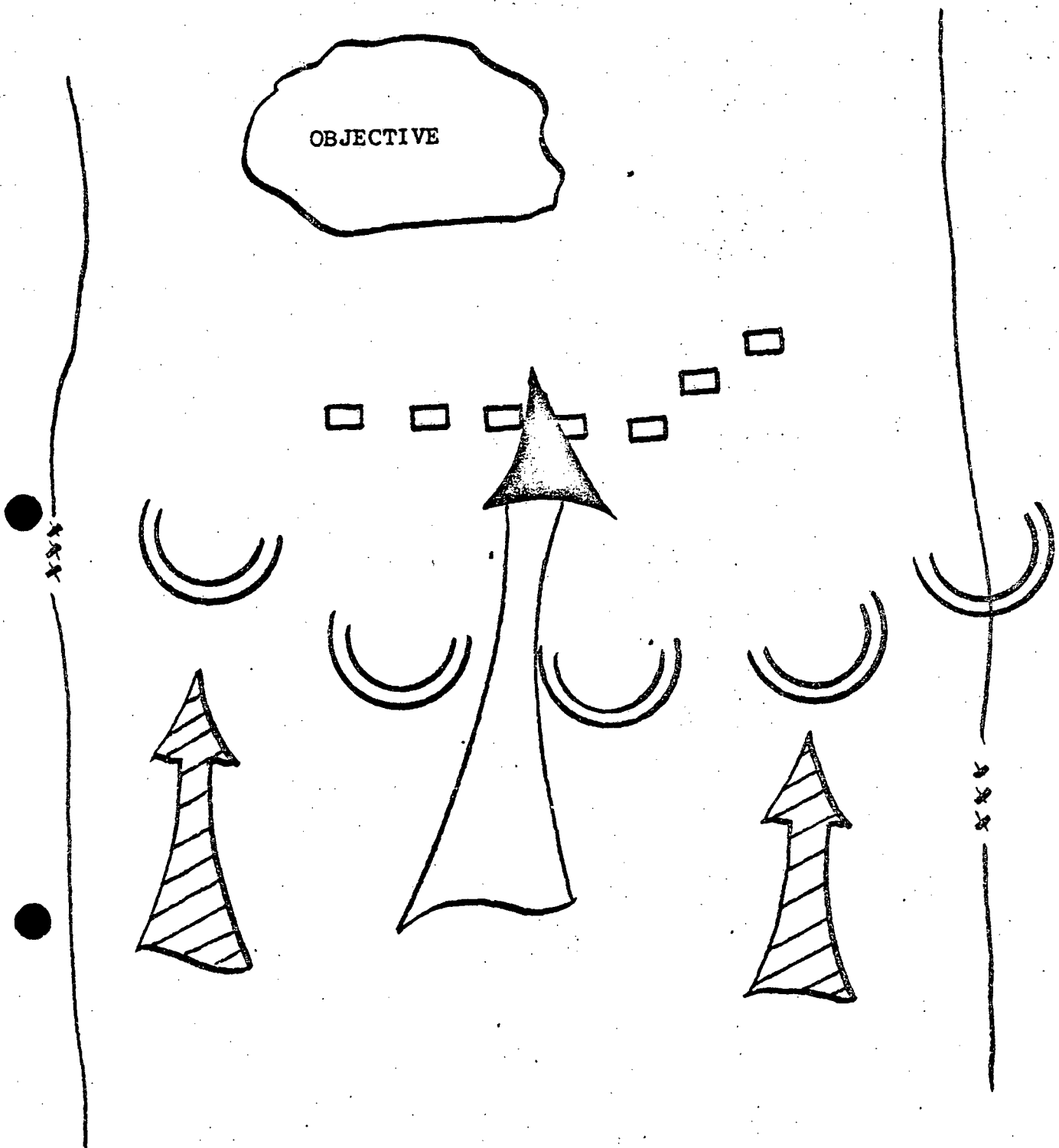


FIGURE 8-6 AN EXAMPLE OF A "PENETRATION"

to support the commander's plan of manoeuvre. The adoption of the frontal attack as ^{the} ~~a~~ ^{manoeuvre} main ~~attack~~ is normally justified ^{only} at higher levels of command.

Figure 8-3 depicts

5. Flanking Attack. ^{This manoeuvre is which is} ~~The flanking attack is an offensive manoeuvre~~ ^{position.} directed at the flank of an enemy. It may be used to strike the enemy at a more vulnerable point than his front, to sever lines of communication, to ~~force regrouping and to deny~~ ^{defensive mutual support} ~~of force him to regroup~~. By this form of manoeuvre, surprise is ^{usually} readily obtainable, thus permitting a reduction in the normally accepted ^{combat} ~~ratio~~ ^{power ratios} ~~of forces~~ for a successful attack. The adoption of a flanking attack as a main attack is ^{usually} ~~normally~~ preferred to a frontal attack at lower levels of command.

6. Envelopment. ^{occurs when} ~~This is an offensive manoeuvre in which~~ the main attacking force(s) pass ~~by~~ ^{top} around one or both sides or over the enemy's principal defensive positions. Its aim is to ~~either~~ secure objectives to the enemy's rear which will subject the enemy to destruction in his principal defensive positions, or to make these positions ^{defensively} untenable.

7. Figure ^{a double} 8-4 illustrates an example of ~~a~~ envelopment, in which a supporting attack fixes the enemy to prevent his escape and ~~to~~ ^{to his front, thereby forcing} to reduce his capability of reacting against the main effort, ~~forces~~ him to fight in two directions simultaneously. In some instances, supporting attacks may deceive the enemy as to the location or existence of the main attack. The success of an envelopment is dependent largely on the ability of the supporting attacks to fix the enemy.

8. ^{envelopment} The ~~manoeuvre~~ is accomplished by striking the enemy on an assailable flank or by avoiding his main strength en route to the objective. Superior mobility and surprise are highly desirable. ^{resources} ~~Aircraft~~ are ^{usually necessary for} ~~particularly valuable in~~ increasing the mobility of the enveloping force.

9. When a particular situation permits a choice of the form of manoeuvre, envelopment is preferred to penetration as it ^{employs} offers a better opportunity to apply combat power to the greatest advantage.

10. Forces conducting an envelopment should be deployed in depth ~~and~~ with flank security forces to avoid exposure to envelopment themselves.

11. Turning Movement. ^{Depicted in Figure 8-5, this} The turning movement is an offensive manoeuvre in which the attacking force ^{envisages the} ~~passes~~ ^{passing} around or over the enemy's principal defensive positions to secure objectives deep in the enemy's rear. This action ^{obliges} forces the enemy to abandon his position or divert major forces to meet the threat. The attacking force seeks to avoid contact with enemy forces while en route to a position from which to attack the designated objective. A supporting attack may be required to fix the enemy, as in the envelopment. Since the force executing the turning movement is usually out of supporting distance of the other ^{ground} elements of the force, it must be sufficiently mobile, ~~and~~ ^{and well supported by air resources} strong to operate independently. Mobility, including air mobility, superior to that of the enemy, as well as secrecy and deception, enhances the likelihood of successful accomplishment of a turning movement.

12. Penetration. ^{Depicted in figure 8-6 this} Penetration is an offensive manoeuvre ~~which~~ seeks to break through the enemy's defensive position, widen the gap created, and seize objectives in depth, thus destroying the ^{coherence} ~~continuity~~ of the enemy's defences.

13. A successful penetration requires the concentration of superior combat power at the point selected for breaching the enemy's defences. It is appropriate ^{employed} when strong fire and combat manoeuvre forces are available, ~~and~~ when the enemy is overextended or when his flanks are

unassailable. Where ~~4~~ multiple penetration^{have} ~~has~~ been achieved, the attacking forces may converge on a single deep objective or they may secure independent objectives. The penetration having the greatest possibility of success should be exploited. Once the enemy position has been breached, additional forces may be committed to widen the gap, destroy the defending forces, and exploit the initial success~~es~~.

14. ^{A penetration attack}
~~Figure illustrates an example of a penetration. The main~~
^{usually}
~~attack is~~ made on a relatively narrow front and is directed towards the main objective. Supporting attack(s) widen the gap and prevent the enemy's commitment of his reserve.

810. STAGES OF THE ATTACK

1. General. The troops that are to carry out the attack must be assembled, grouped appropriately, and allowed to make any necessary preparations, including the issue of orders. Coincident with this, to save time, they must be moved towards the enemy. Movement must continue, and the troops must be deployed to meet the enemy in the close-quarter battle or assault. Finally they must secure any objectives they were required to capture and, when necessary, pause to reorganize or secure firm bases for further attack or exploitation. These constitute the basic stages of an attack and may be described as:

- a. assembly and deployment;
- b. assault; and
- c. reorganization and exploitation.

2. Assembly and Deployment. This stage involves the movement of the troops to the battle area, the issue of orders, the completion of any special preparations including liaison, and the initial deployment of the troops. Ideally these steps should occur quickly, smoothly, and without pauses or interruption. As much preparation as possible should be done in the original locations. If plans are simple and groupings are habitual ones, it may be possible to issue all orders by radio and eliminate any pauses. When this cannot be done, the troops may be passed through assembly areas and subsequently, through forming-up places where the initial deployment takes place.

3. Assault. The assault begins when initial deployments have been completed, and deployed forces advance beyond the security of their firm base. It may comprise three phases of action: the break-in, the dog-fight, and the break-out. The break-in is a phase of movement, under cover of supporting fire, that brings assaulting elements within the ranges from which their own weapons are used to cover their movement. The dog-fight is the actual assault, when supporting fire is lifted from the objective for reasons of troop safety, and the troops conducting the assault actually destroy the enemy resistance on the objective ^{using personal weapons.} The break-out occurs when the resistance in the objective area subsides sufficiently to permit the reorganization to begin.

4. Reorganization and Exploitation. This phase of the battle has a ^{characteristics.} ~~character~~ both defensive and offensive. The attacking force will suffer casualties and some disorganization ~~roughly~~ in proportion to the intensity of the fighting. Its administrative resources may also have been depleted or reduced. Therefore it will in all likelihood be necessary for the assaulting troops to pause and reorganize and to take steps to secure the ground they have captured. This is an essentially defensive step.

At the same time the plan should provide for exploitation beyond the new firm base to maintain contact with the enemy and continue pressure on him. The plan for this stage ~~should~~^{must} be made before the attack begins.

811. PLANNING GENERAL

1. Success in the attack depends on the concentration of superior combat power at the decisive time and place. Over the duration of any attack the decisive place will change from time to time; wherever ~~it is~~^{located} known as the point of main effort. Elsewhere, only the means necessary to deceive the enemy and to prevent or hinder his interference with the attack are employed. The designation and change of the point of main effort are the commander's prerogative. ~~His use~~^{The designation} of a point of main effort ~~designation~~ allows him to exploit opportunities that emerge during the conduct of the attack, and ^{to} quickly and simply ~~to~~ communicate the related changes from his initial plan.
2. Plans should provide for the exploitation of any favourable advantage that develops during the offence. This will normally require the commander to retain a mobile reserve of troops and ^a plan for fire support to exploit success.
3. Offensive forces should always try to achieve surprise. It can be gained by deceiving the enemy and by choosing an unexpected time, place, direction and form of manoeuvre. Cover and deception operations aid in achieving surprise.
4. Plans must provide for adequate combat support and combat service support to sustain the operation.

5. Alternative plans^{and objectives} should be considered in the planning of offensive operations.

6. ^{Every} Any offensive operation requires adequate preparation. The physical concentration of troops prior to an attack should be kept as brief as possible. ~~Specifically, the~~ Co-ordination of fire support throughout the operation is critical.

7. Attack planning involves development of co-ordinated movement and fire plans. Subsequent sections are devoted to each of these aspects of the overall manoeuvre plan: movement plan; fire plan; and co-ordination.

812. RECONNAISSANCE

1. Reconnaissance will provide the information that enables a commander to decide whether an attack is possible. Reconnaissance efforts must be intensified ⁱⁿ on a co-ordinated plan if the commander is to obtain the detailed information needed for planning the attack. This effort will be limited by the time and resources available. ^{but should include} ~~Attention should be paid to~~ the following:

- a. Troops in contact with the enemy, especially infantry, should be assigned definite patrol tasks co-ordinated at formation levels of command. They must endeavour to obtain detailed information concerning troop locations and to find where there are gaps in enemy^{dispositions and} fire. No fire^{or defensive} plan is perfect, and time will be well spent discovering where it is least effective.
- b. Efforts should be made to locate gun areas and reserves so that they may be neutralized by the^{attack} fire plan ~~for the attack~~.

- c. Reconnaissance must also be concentrated on obtaining the most up-to-date information about the ground and obstacles. Constant air photo coverage should be maintained of the area. Often it will be ^{necessary} ~~helpful~~ to order special patrols so that engineer and tank officers can assess specific areas.
- d. Special attention should be given to enemy nuclear delivery systems. In the forward area these will normally be located in gun positions and will come under the surveillance of reconnaissance there. However, air reconnaissance and airborne surveillance devices must be used to locate long-range weapons.
- e. The fullest ^{possible} ~~use~~ should be made of airmobile patrols by all troops on reconnaissance tasks.

813. MOVEMENT PLAN

- 1. General. The plan of manoeuvre is based upon the choice of objectives to be captured and upon the axes to be used by the attacking troops. Both are influenced by considerations of the frontage and depth of the attack.
- 2. Frontage and Depth. The frontage and depth of the assault must be consistent with the maintenance of control and momentum. This raises conflicting considerations ~~such as the following~~ ^{only} which the commander ~~can~~ ^{can} ~~must~~ resolve, such as :

- a. An attack on a wide front with as many points of assault as possible will increase the opportunities for finding gaps in the defences through which the main efforts ^{can} ~~should~~ be ^{exploited} ~~pushed~~.

As the front becomes wider, however, control becomes more difficult. Changes in direction are more complicated and take longer, and it becomes less easy to achieve quick concentrations of ~~troop~~ ^{combat power}

b. For a given number of ^{forces} ~~troops~~, the depth of the attack must depend upon the frontage. When an attack aims to penetrate very deeply it may be necessary to carry out the assault in phases, using fresh ^{forces} ~~troops~~ for each. The same may be true when enemy defences are dense or when the ground imposes special burdens upon men or vehicles. If the momentum of the attack is to be maintained some restriction in frontage will be necessary.

c. A deployment in great depth has disadvantages. It tends to slow an operation by the need to deploy fresh forces. It also increases the congestion on routes and complicates the movement plan and traffic control arrangements. If nuclear weapons are being used, this imposes a necessity for maintaining large intervals in columns and for the most careful timings.

3. Choice of Objectives. Formations, units, and sub-units, should be assigned ground objectives which they are to capture. These objectives should provide observation and fire positions that facilitate domination of the defender, or they should possess some other tactical significance that forces the defender to surrender, withdraw, or otherwise ~~change his~~ ^{conform to the}

^{attacker's mission} ~~plan~~. The following should be considered:

- a. For ease of control, objectives should be specified clearly and exactly, and orders should include a clear statement of the tactical aim to be accomplished there. At the same time, formations and units must be allowed freedom to adjust the dispositions of troops when they arrive at the objectives. The situation there will rarely be as it was visualized during the planning.
 - b. When an attack involves a deep penetration it may be necessary to choose a series of objectives which must be captured in succession by ~~pre~~planned groupings. When this occurs the attack should be broken into phases, after each of which it may be necessary for fresh troops to deploy and assault. However, this slows the forward progress and offers the enemy opportunities to counter-attack, especially if nuclear weapons are used. Therefore the principle must be for troops to press on to the limits of their endurance maintaining pressure on the enemy. Even when phases are planned, it would be desirable and not wrong for troops to continue beyond their assigned objectives if they are still able to do so.
4. Choice of Axis. A commander should assess the possible axis for the attack to find the combination of characteristics that best suits the circumstances, bearing in mind the following:
- a. The axis must initially lead to the chosen objectives. For simplicity they should do so as directly as possible, with few changes of direction. Once troops have deployed, and especially at night, changes in direction complicate control and reduce the momentum, even with night driving and navigational devices.

- b. Although obstacles and difficult ground tend to slow the assault, they may offer significant opportunities for surprise, *when successfully used.*
- c. Cover from view and protection from fire will be ^{vital} important, *thus* ~~and~~ the axis ^{chosen} must be wide enough to allow sufficient deployment for the ^{full} development of ^{the} firepower *available.*

5. Aiming for surprise by choosing the line of least expectation, the commander must also bear in mind the need for speed and the influence of time and space. These often conflicting requirements must be resolved.

814. FIRE PLAN

1. The object of the fire plan is to assist the attacking forces to maintain their mobility and momentum of attack. To achieve this the fire plan is designed, to disrupt the enemy defences prior to the attack, to neutralize, during the assault phase, those enemy guns, mortars, and other weapons most likely to interfere with our assaulting forces at the time when they are most vulnerable, and to provide protective fire against counter-attack during the reorganization phase.

2. The term fire plan can be ^{broadly} applied, ~~broadly~~, to the use of all weapons, but is normally applied only to those whose detailed use can be planned before the attack begins. The fire of tanks and infantry as part of the close combat battle cannot normally be planned to any extent prior to the assault, nor guaranteed once the battle has been joined.

Therefore, the fire of artillery, possibly supplemented by aircraft, ~~and missiles~~, affords the principal means of dominating enemy weapons, ^{however} ~~but~~, when other weapons are not required in their primary role and their fire can be guaranteed, they should be included in the fire plan. In certain operations it will be possible to include naval gunfire in the fire plan.

and mandatory

3. At whatever level the attack is initiated, the commander of the assaulting force will make the detailed tactical plan and will state what the fire plan is required to achieve. This will be translated into fire orders by the artillery commander at that level.

4. A fire plan may consist of any combination of preparatory bombardment, counter-bombardment, covering fire and ~~the~~ protective fire for the assaulting ^{forces} ~~troops~~. Preparatory bombardment refers to the tasks undertaken before the attack to weaken the enemy's resistance by demoralizing personnel, inflicting casualties on equipment, destroying defensive works, and disrupting communications in the battle area. Counter-bombardment is concerned with the location and engagement of enemy indirect fire weapons to neutralize or destroy them. Covering fire neutralizes the enemy during the ^{attack} ~~assault~~ and prevents him from interfering ^{attacking forces.} ~~with it~~. Protective fire is used to protect the attacker from enemy counter-attack, especially during reorganization.

5. Effective preparatory bombardment and counter-bombardment programmes ^{with} non-nuclear weapons, involve heavy expenditures of ammunition. A preparatory bombardment with insufficient resources may jeopardize surprise while only neutralizing the enemy for a short time. Under such circumstances it is usually better to concentrate the available resources on covering fire or, on occasion, ~~it may be valuable~~ to carry out a brief but intense preparatory bombardment on carefully selected targets before the attack opens. A counter-bombardment programme may involve all available artillery, ^{and} ~~so~~ tactical air ^{delivered} weapons, both nuclear and non-nuclear, to engage, in turn, all hostile batteries which can ^{fire} ~~be~~ on the ^{offensive forces.} ~~front of operations~~. In the attack, an effective counter-bombardment programme must either precede preparatory bombardment and covering fire or be carried out ^{at} their expense. If it precedes them it may disclose

←

Concurrently

the frontage of assault. If nuclear weapons are being used counter-bombardment may be the most important aspect of the fire plan. ~~a constant counter-bombardment programme will normally be maintained and nuclear weapons may be allocated to it.~~ All these factors must be considered in preparation of preparatory bombardment and counter-bombardment programmes, but the methods used must never be stereotyped.

6. Covering fire should be planned in conjunction with the assault and the exploitation. Fire tasks should be chosen to neutralize known enemy in front or in the flanks of the assault. The fire must begin as the assault forces come within range of enemy weapons and should be switched to other targets only when the position is being assaulted or when the enemy can no longer interfere effectively.

7. The commander is faced with conflicting considerations in planning the control of fire. He may, on the one hand, seek maximum flexibility in a programme that is on call. In this method the engagement of targets occurs when the commander calls for it. Alternatively, he may adopt a timed programme whereby the fire is brought down at a pre-arranged time.

8. An on-call programme depends upon the efficiency of communications or visual signals and is susceptible to interruption by electronic countermeasures. The results may be serious if either of these fails. It is, on the other hand, relatively economical in ammunition and allows a commander to achieve maximum surprise in applying the fire.

9. Regardless of interruptions to communications, a timed programme will take place as planned. It has the virtue of reliability. At the same time it may prove to be relatively uneconomical in that some fire ~~will~~ ^{may} not be needed. In addition a wholly timed programme is unlikely to meet the uncertainties, delays, and unexpected situations which will *invariably* arise *once forces are committed*.

10. A combination of the two methods will usually be ^{the prudent} most ~~satisfactory~~.
As much fire as possible should be timed, but provision should be made
in the plan for having any timed tasks repeated on demand. Under nuclear
conditions when dispersion is great, it may be difficult to plan in
detail beforehand. Much will then have to be left to the initiative of
forward observers and officers of ~~forward~~ ^{the} units ^{in contact}.

11. Artillery protective fire will be required for the reorganization
stage of the battle to protect any firm bases which are established.
The planning of these fire tasks should be done before the operation
begins, although the tasks may need some adjustment when the assaulting
^{forces}
~~troops~~ arrive on the ground.

815. CO-ORDINATION PLANNING

1. General. The co-ordination of attack planning cannot overlook
the co-ordination of the preliminary movements. ^{However, the planning} ~~but~~ must really focus on
the manoeuvre between the start line and the objective. ^{This is the critical} ~~These are the~~
^{part of the operation} ~~critical controls~~, for ^{its} ~~they~~ define the limits of responsibility of
assault elements; what must be done, where, when, and by whom. Control
measures should be kept to a minimum in the interests of simplicity but
the co-ordination of fire and movement will be assisted by the use of a
start line, boundaries and objectives. Other control measures may also
be required. Various control measures are described below:

a. Assault line

b. Start Line ~~(Line of Departure)~~. This should be clearly
recognizable on the ground, normally at the forward edge of
any FUP or fire base. Assaulting troops should cross this
line at H-hour and all other timed activities should be
planned in relation to this time. When troops are not deployed
and are moving on a single axis a start point may serve as
well. SLs must be secure from direct enemy
[&] observation and fire.

- c. Boundaries. Boundaries delineate responsibilities of units and formations and ensure that sectors are covered in an assault. A force has freedom to manoeuvre at will within its boundaries provided that it adheres to any ^{assigned} timings ~~it has~~ ~~been given~~. It is a commander's responsibility to assess the ground within his boundaries and decide which areas should be searched or occupied by troops. *Coordination ^{of activities} with forces flanking outside bound each boundary is mandatory.*
- c. Timings. The basis around which timed activities are planned is the time of crossing the start line ^{which is the} H-hour. Rates of movement must be estimated conservatively, taking account of the ground, enemy and the state of assault forces and their equipment. When timed manoeuvre is planned the plan must be broken into small parts separated by opportunities to adjust subsequent parts of the programme.
- d. Report Line. This is an arbitrary line drawn on the map for control purposes but which is of no tactical value. Report lines should be easily recognizable on the ground. They are usually allotted nicknames *for ease of reference.*
- e. Other control measures that may be useful in offensive manoeuvre co-ordination are:
- (1) assembly area,
 - (2) attack position or forming up place,
 - (3) axis of advance,

- (4) direction of attack,
- (5) phase line,
- (6) intermediate objective,
- (7) contact point,
- (8) co-ordinating point/junction point,
- (9) checkpoint,
- (10) zone of action,
- (11) fire control measures,
- (12) nuclear safety line,
- (13) limit of exploitation, and
- (14) point of main effort.

f. Communications. The key to effective command and control of forces in the offence is flexible and secure communications capable of supporting maximum operational requirements. Communication support is based on such fundamental principles and considerations as the provision of the alternative signal means and locations, the restriction of signal means to users for which they are intended and maximum communications security. The threat of EW has emphasized these principles. Command

posts must be located to facilitate communications with subordinate, adjacent and higher headquarters, prior to and during operations and to include the exchange of liaison officers, signal instructions and equipment.

816. GROUPING AND TASKS OF THE ARMS

1. Grouping^{is} the arrangement of transient associations of complementary organizational elements under a single authority for a particular task. ^{It is} the means by which the effects of the various arms^{and services} are concentrated. Differences in rates of mobility and weapons ranges allow concentrations of effects at different places in short periods of time. The initial grouping must be completed prior to the launching of the assault stage of the attack. If the attack plan requires regrouping during the assault, it is normally phased, and units are placed in the order of march in ~~the~~^{the} sequence ~~they~~ they are likely to be required. Groupings should be small enough to be easily controlled, and troops that are unlikely to be required should be placed at the rear. The transient character of groupings must be emphasized, for it is by adaption of the groupings to the circumstances that local success can be enlarged.

2. Tanks. In suitable ground and where other mechanized forces are also available, tanks should set the tempo of the attack. Objectives, axis of advance, and timings will be planned to ^{exploit} ~~the~~ the tank's characteristics. If sufficient tanks are available they will also provide the framework of the grouping. Their tasks may be regarded as threefold:

- a. Some tanks, accompanied by infantry and engineers, should be allocated the task of penetrating the enemy defences, as deeply as possible, at the chosen points of assault. Bypassing

resistance, they should move quickly and directly to their allotted objectives. By cutting communications and disrupting gun areas and administrative units they will cause the enemy to deploy reserves. Such attacks should aim to cause as many casualties and as much confusion as possible.

- b. Other tanks, grouped with the necessary support, will be required to engage in any close-quarter battle that takes place; this may occur before a penetration can be achieved or it may occur simultaneously on the flanks of it. These tanks are likely to fight a relatively slow-moving battle that seeks to overcome enemy ~~anti-tank troops and infantry~~ who may be dug in.
- c. Finally, enough armour should be held in reserve to reinforce success in either of the two previous tasks and, if needed, to form a protective anti-tank screen on the flanks of the penetrating force when anti-tank weapons are not available.

3. Infantry. Where mechanized movement is ^{retarded} ~~hampered~~, infantry will usually set the pace of the attack. Infantry may also provide the basis of the grouping if they are in larger numbers than tanks. Regardless of which arm sets the tempo, the tasks of the infantry fall into categories similar to those of tanks:

- a. Some infantry should ~~try to~~ infiltrate the gaps in the enemy ^{defensive posture} ~~to~~ get in his rear. If they are mechanized they will accompany the tanks and can protect them ⁱⁿ ~~when~~ close country ^{and in conditions of reduced visibility} ~~is encountered or at night~~. They will assist in overcoming enemy positions that are holding up the tanks. Dismounted

infantry should pursue the same aim; however, the depth of the penetration is likely to be ~~less~~^{restricted} and the tempo of the operation slower. Whenever a close-quarter battle occurs infantry will be required for it. They and the tanks must co-operate closely, either killing the enemy or driving him off his ground so that he can no longer interfere with the penetration.

- b. Some infantry should be held in reserve and will be needed to accompany tanks. They will also be required to secure firm bases ~~from time to time~~ and to assist anti-tank weapons in protecting the flanks.

4. Anti-Tank Troops. If the attacking force must secure its own firm base before the operation, anti-tank ~~troops~~^{forces} with infantry should provide the framework of it. In an attack by mechanized forces, anti-tank ~~troops~~^{organizations} should also be grouped with tanks and infantry and move well forward to be ready to assist them. Their presence will help secure firm bases during the attack or provide flank protection for them during the penetration.

5. Artillery. The deployment of the artillery will normally be controlled at the highest practicable level. However, when dispersion is very great and when opportunities suddenly arise to advance long distances, some artillery may be grouped at subordinate levels. This is particularly so if SP guns are available; artillery sub-units may then be placed under command of battle groups for movement.

6. Engineers. Engineers will be required in all stages of the attack. If major obstacles are to be overcome, their commitment will be

particularly heavy, and this will demand firm control over their allocation. Consideration should be given to the following:

- a. Some engineers should move well forward behind the assault ^{elements} to deal with obstacles as they are met. In mechanized formations they should be grouped with assaulting tanks and infantry. In addition engineer reconnaissance parties should be well forward if the enemy defences are based on a system of obstacles.
- b. Route maintenance will be essential throughout the battle area. Special efforts must be made to clear and maintain routes forward from assembly areas. In addition, some engineers must be available to open routes behind the assault ~~troops~~ ^{forces} and to prepare ~~from~~ airfields and landing strips for aircraft.
- c. To work effectively, engineers must be protected, and those accompanying the assault should be grouped with infantry who can establish a secure base for them.

7. Reconnaissance Units. Reconnaissance units will have three main roles in the attack:

- a. If enemy dispersion is very great it may be necessary for assault forces to move to close contact in an approach march, with advanced guards and a covering force deployed. If so, reconnaissance units or sub-units should form part of them.
- b. They should be deployed as part of the protection for firm bases and the rear areas. This will require them to maintain ~~OPs and~~ both standing and mobile patrols.

- c. Depending upon the depth of the penetration they may be needed for the flank protection of assault forces.

8. Air Defence Units. These should be disposed early to protect the assembly and deployment of the attacking troops. They should then be grouped so that they can ^{accompany} follow the assault and maintain protection over it. It will be especially important to post them at defiles and at crossings over obstacles.

9. Aviation Units. Airmobility offers great possibilities for seizing ground in the enemy's rear and they should be used, when possible, in conjunction with the ground assault. Aviation is also invaluable for moving troops to seize vital ground during the attack, in flank protection, resupply, and casualty evacuation. Particular use should be made of reconnaissance and liaison aircraft to assist in controlling the attack.

817. INFLUENCE AND EMPLOYMENT OF NUCLEAR WEAPONS

1. Because of their movement, the attacking forces are increasingly liable to detection, and any loss of momentum that results in long delays will make them susceptible to destruction by enemy nuclear weapons. The smallest check to movement must be met by vigorous offensive efforts to overcome or bypass the cause of it.

2. Although increased dispersion will leave gaps in the defence, it will often be dangerous for the attacker to create large troop concentrations that can exploit these gaps. This will be an acute problem at obstacles or defiles where movement tends to become ^{concerted and concentrated.} ~~concentrated~~. The attacker may have to accept some complication of his manoeuvre plan to

allow his forces to concentrate for the briefest possible period and then disperse for protection.

3. A counter-bombardment programme before an attack will be of prime importance if enemy nuclear delivery systems are to be located and neutralized or destroyed before the attack begins.

4. The attacker can use nuclear weapons to create gaps in the enemy defences, to prevent the movement of enemy reserves, and to secure flanks. However, if manoeuvre is to follow any nuclear plan, care must be taken not to inhibit it excessively by ground damage and radiation.

5. When nuclear weapons are used they will provide the major element of the attacker's fire. If satisfactory results are obtained from these strikes the need for any extensive close-quarter battle by tanks and infantry may be appreciably reduced and, in some areas, eliminated. The purpose of the offensive manoeuvre will be to capitalize on the effects of the nuclear weapon.

6. If the opposing forces are in close contact before the attack and nuclear strikes are to be made against forward enemy, it will be necessary to take precautions to ensure the safety of the attacking troops. Either they will have to be withdrawn from contact ~~and~~ behind a safety line, or the ground zero, yield, or height of burst for the strike must be changed.

7. Care must be exercised in the choice of ^{nuclear} targets and in the choice of weapon yields and height of burst if excessive ground damage is to be avoided. ✓ If there are, for example, heavily built-up or wooded areas, the results of the strike may cause serious obstacles. The resultant

delays may offset the advantages gained from the nuclear strike. Consideration must also be given to the influence on operations of residual radiation and fallout.

8. In the plan of the attack special consideration should be given to the following:

- a. Assembly and Deployment. Special care must be taken to disperse during this stage of the attack to protect the forces involved. The amount of dispersion that can be accepted will depend upon the speed at which units and formations can then concentrate at their various points of assault.
- b. Movement. Special attention to traffic control will help to ensure a smooth flow of the attacking units. In addition, the rates of movement and intervals should allow gaps in columns that can compensate for unforeseen delays. It will be more important to maintain a steady rate of movement with few delays than a high speed.
- c. Axes. Some concentration of troops in the areas of assault is inevitable. However, axes should be kept as widely separated as possible up to the time of assault, and they should diverge again as soon afterwards as is practicable.
- d. Reconnaissance. The plan should allow for post-strike reconnaissance using both ground and air means. In addition, assaulting troops must be prepared to conduct their own detailed reconnaissance as they advance. Engineer reconnaissance parties should be well forward in the planned order of march.

- e. Control of Fire. If nuclear weapons are being used the authority to fire them must be delegated to as low a level of command as possible, provided that proper arrangements are made for liaison with flanking units or formations.

818. CONDUCT OF THE ATTACK

1. General. The various stages of the attack have already been discussed, and the point has been made that control during the attack is exercised at the lowest levels of organization. The preparations are aimed at facilitating effective and decentralized control. The reserves retained by commanders at all levels are their ^{principal} means of insuring against the unforeseen during the assault, ~~when they are the only uncommitted resources, and those resources are severely limited.~~ Central control is not really restored until the reorganization. The following discussion attempts to identify outlets for the initiatives of those committed in an attack.
2. Assembly and Deployment. This stage covers all the preparations prior to H-hour, the crossing of the start line. Its purpose is to permit the attack to be launched as planned, physically arranged, ~~and~~ organized ^{and} ~~in the way most likely to produce success.~~ If delays are imposed during the preparations they should be planned to occur in circumstances that allow those delayed to do their waiting in the relative security of rear rather than forward ~~concentration~~ areas. If the assault is to go well it is important that this first stage be conducted smoothly and that the assaulting troops be properly launched.
3. During this stage the troops are vulnerable, and surprise may be lost if the enemy detects this preliminary movement. Therefore the

assembly and deployment should be timed to be as brief as possible, and unnecessary concentrations of troops should be avoided. Much time can be saved if the groupings to be used are habitual ones and if orders are issued by radio. However, if the plan is ~~very detailed~~^{complex} and requires ~~detailed~~ ~~much~~ co-ordination of movement and fire, more deliberate assembly and deployment may be needed. Time allowances must permit ~~for~~^{for} co-ordination ~~within groupings~~^{at all levels}. Assault and follow-up elements are distributed as required for the initial assault as planned.

4. Supporting elements are positioned so their support can be applied as required. Moves of artillery fire units are planned so their fire can support the attack up to and including the reorganizational stage. This may involve forward deployment of fire units before H-hour, their move during the assault, or both. It may involve advance deliveries of ammunition to those gun positions. Engineer units and equipment are deployed according to when and where their assistance will be required to maintain the attack's momentum.

5. Administrative support arrangements to support an attack must reflect the likelihood that consumption of ammunition, ~~and~~ vehicle fuels *and casualties* will be high, ~~and casualties high~~. Medical arrangements will include provision of facilities well forward, ~~both~~ ready to handle early casualties and ~~ready~~ to deploy further forward *simultaneously*.

6. Assault. The assault starts with the leading assault forces cross the start line at H-hour, deployed as planned. Their initial movement may be made under cover of supporting fire and against little or no resistance; its aim is to allow assault forces to break-in to ranges from which their ~~own~~^{integral} weapons can be ~~employed~~^{effectively}. The break-in ends ~~and~~ for each organizational element when supporting fire is diverted from

↑
The asset line is reached; that is when

~~When This occurs at the asset line and the~~

~~This is the commitment~~

~~of the dog fight.~~

is termed the

its objective for reasons of troop safety and that element begins to fight its way forward with its own resources, ^{This phase of the attack} ~~in the dog-fight. The~~ ^{and at} dog-fight, ^{During the dog-fight} ~~is~~ the very core of the assault, ~~when~~ every assaulting commander, and indeed every individual, has the duty to contribute what he can to ^{successful} ~~the achievement of the mission~~ ~~maintaining the unity of his command in the execution of its mission.~~

After passing the asset line, battle drills become ^{the key} ~~the~~ to success.

7. ~~A Each individual contributes to the unity of his organization by~~ ^{through} ~~maintaining contact with those on either flank. The contact must be~~ ~~maintained before the attack~~ ^{these drills, which are developed and} maintained by voice when visibility is interrupted. ~~As casualties occur~~ ^{They hinge on unity of action, and demand that} ~~the contact is required to be restored between survivors. Every individual~~ ~~has the duty to shoot, move, and communicate, to hold the organization~~ ^{to} together ~~and~~ accomplish its purpose.

8. Commanders of assault elements have the duty to lead, or drive, their commands forward, maintain contact with equivalent flanking commands, and to co-ordinate ^{fire} support for their command. This last duty obliges them to communicate with their superiors from whom they obtain support.

9. The limited perception of those engaged in the dog-fight must be appreciated. Their mental maps are confined within the boundaries of the lowest level of command and extend to include the objective. The important details at any moment include targets within range of the command's weapons, and sources of danger beyond. The scale of time is similarly isolated; the important ^{concern} ~~thing~~ being which target to engage next. The objective is the end of the time scale. This very limited view means that their descriptions of events are highly subjective and their receptiveness to information is confined to the immediate and local. These facts should influence the staffs of headquarters whose

function is the distribution of information and support. Repeated requests for ^{SITREPs} ~~sitrops~~ ^{needless} ~~will serve as distractions~~ ^{or be ignored} ~~information will be~~ ^{As such, forward} ~~Commanders~~ ^{can be expected to provide information} ~~provided~~ to justify support when it is required, and should not ^{additional}

be harassed by superior HQs or commanders ~~at the~~ during this ~~period~~ ^{crucial} period.

On the other hand,

10. / The provision of support in response to subjective descriptions of events is ^{usually} unsatisfactory. It is improved by well-developed personal relationships that enable the reports to be tempered by a knowledge of the reporter. ~~More importantly, knowledge of events must be derived by first-hand observation.~~ When the targets outnumber the fire units, the commander determines priorities. His duty is to keep himself accurately enough informed to decide them. *This demands that he be ~~be~~ well forward when knowledge of events can be derived from first-hand observation.*

11. The dog-fight continues until assault elements break-out of heavy and detailed resistance in the vicinity of their objectives. At the moment of local success, the break-out is achieved. It is characterized as the time of greatest vulnerability, when the assault troops react to the sudden decline in the pressures of intense activity. The burden *at this stage* remains with the low-level leaders to anticipate an enemy counter-attacks and to ^{drive?} ~~goad~~ ^{being} their troops into readiness *to repel them.*

12. Reorganization and Exploitation. In general, the reorganization is conducted as a defence, ^{However it must be} perhaps only briefly, ~~but for~~ long enough to enable ~~the~~ control to again be centralized. Assaulting troops will normally have reached the limit of their endurance, and they will need rest and replenishment before any further move. Exploitation, therefore, is best undertaken by fresh troops drawn from the reserve. However, it must be borne in mind that the deployment of fresh troops will cause delay, and these troops will not be as familiar with the ground. Therefore the initial assault troops should advance as far as they can *be led or driven.*

13. Once on their objective the assault troops must first isolate the remaining enemy and mop them up, gathering POW together and placing them under escort. Reconnaissance sub-units are often useful for this task if large numbers of prisoners have been taken.

14. Some assault units, having been designated in the plan, should at once fan out to secure the approaches into the objective area and prepare to deal with ~~any~~ enemy counter-attacks. They should, at this stage, be joined by anti-tank and air defence units. Commanders and their artillery advisers must also verify the planned deployment and artillery fire plan on the ground and make any adjustments needed.

15. The dangers of counter-attack are considerable at this stage, and it is important that the attacker be prepared for it. He may have no option but to occupy at least some positions previously held by the enemy until he can prepare his own. It may be dangerous to do this because they will be known to the enemy. It will be especially so if nuclear weapons are used. Therefore battle positions which cover the approaches should be prepared as soon as possible, and protective detachments ~~posted~~ ^{deployed}.

16. An outline plan for exploitation should have been made before the attack began. Briefly, during reorganization, regrouping should take place; at the same time commanders must get forward quickly to verify their plans for continuing the attack. It should go without saying that any commander of assault troops who finds his command able to continue moving forward should do so without hesitation unless a limit of exploitation has been ordered. His superior must then ensure adequate arrangements to follow up the advance and provide fire support for it.

819. NIGHT ATTACK

1. General. A decision to attack at night or in conditions of bad visibility involves the acceptance of both advantages and disadvantages. The advantages of the cover of darkness are considered against the

limitations it imposes on manoeuvre. Apart from the detailed influences of darkness and reduced visibility, discussed in the following paragraph, the most important characteristics of any plan for a night attack is simplicity, *regardless of whether night viewing aids are on widespread issue.*

2. Protection. At night care must be taken to prevent any unexpected interference with the attack. The assembly and deployment of the assault force is a particularly critical period, and it must be covered by protective ~~troops~~ ^{forces with} and other surveillance means as part of the firm base. In a long attack where information about the enemy is scanty it may be necessary to deploy protective detachments to give early warning of the enemy during the advance.

3. Grouping and Deployment. Grouping should be carried out before the attack in the usual way. The final deployment of close combat units should be left until the last moment when the enemy are located in detail. Excessive deployment early in the attack may result in a loss of control.

4. Choice of Objectives. The size and depth of objectives should be limited at night. Much will depend upon the difficulties of ground movement and the standard of training of the troops. The seizure of objectives in the enemy's rear will have a demoralizing effect upon him at night. Care must be taken when the assault is to be phased with fresh ^{forces} ~~troops~~. Movement of this kind at night causes confusion, ^{and it is} usually ~~it is~~ preferable that the foremost assaulting ^{forces} ~~troops~~ press ahead, without pauses, to the deepest possible extent.

5. Axes. It is dangerous to undertake complicated manoeuvres at night; unexpected obstacles, enemy, casualties, fatigue, and vehicle

breakdowns all introduce confusion into a move. In principle, axes for night attacks should be as free of obstacles as possible, be easily identified, and lead directly to objectives. These however are also the axes which are most likely to be covered by enemy fire. A compromise is essential, and full use must be made of fire support, night driving and navigational aids, battlefield illumination, silence, and other devices to overcome the difficulties.

6. Timings. Rates of movement at night will be slower than by day ~~in spite of~~ ^{despite} the aids available. Any aspects of the attack that are timed should be planned with a liberal allowance for unforeseen delays.

7. Fire Support. Fire support of a night attack is arranged as for any attack. However, a silent attack may be made to achieve greater surprise. The planned fire support of a silent attack is unfired until the assault troops' movements are detected by the enemy. The initiative of opening fire is left to the enemy, but the plan is made and followed normally from their initiative.

SECTION 3 - THE ADVANCE

820. GENERAL

1. The circumstances in which the advance occurs are unimportant. They may occur at the outset of a war, when the opposing forces are widely separated and must establish initial contact, or they may follow ~~the~~ ^a successful disengagement ^{by} of the enemy. The advance seeks to make contact as quickly as possible. In this respect the advance is contrasted to the pursuit which seeks to prevent the enemy's disengagement. ^{Otherwise the} The

advance and pursuit are similar in many respects. ~~They are~~ ^B both conducted with speed in conditions of uncertainty. Each is organized so the maximum amount of information is obtained at lowest cost in terms of ~~troops~~ ^{forces} committed early. Each is terminated with an encounter battle, or a series of encounter battles conducted by protective elements. The advance includes encounter battles; it terminates when the main body of the force must be committed.

2. The pursuit is an advance that is hastily organized when the enemy is seen to be in a state of disarray. This disarray permits the pursuit to be organized and conducted more boldly than the advance. The hasty organization of a pursuit is but one facet of its boldness. It must be conducted boldly as well, for the encounter battles will usually involve hastily prepared enemy defences. Their quick destruction will prevent their co-ordination and development.

3. The encounter battle may be conducted in an atmosphere of uncertainty when information about the enemy is scarce and inaccurate. Further, the enemy may have equal tactical initiative and may be under full control and organized for any eventuality. Even in the context of a major attack, some elements of an attacking force may be moving towards enemy who are not accurately located and whose exact strength is not known. As the attack progresses the attacker will have to deploy and prepare for what will amount to an encounter battle; ^{which is} sometimes referred to as a "meeting engagement".

4. Uncertainty about the enemy must not prevent a commander from planning in a definite and determined fashion. He must set his forces specific tasks and allot them the objectives they are to attain; he should also group the various arms so that they may meet most of the

initial situations that may arise. This planning and grouping must try to strike a balance between two conflicting needs. On the one hand it must be sufficiently centralized so that the commander can act quickly and decisively while retaining the flexibility to regroup as unexpected situations arise. On the other hand he must allot to his subordinates enough resources of the right kind to give them initiative to capitalize on favourable situations that occur locally.

5. Some caution must be exercised until information about the enemy is available and a tactical opportunity arises. If an advantage is to be gained, however, the operation must be characterized by bold offensive action. Forward ^{forces} troops, particularly, must act with speed and audacity to secure areas of tactical significance and thus hasten and protect the movement of the main force behind them. Reconnaissance troops, complemented by air reconnaissance, must press forward quickly and must be widely extended so that they are able to provide comprehensive information for a commander.

6. The degree of contact to be established with the enemy will vary. In its simplest form, contact between two forces may consist of the first meeting between light reconnaissance detachments widely spread over the battle area. As the opposing forces come closer together, more weapons can be brought to bear until the main bodies are in contact at small arms range and all weapons are deployed. It is in the development of contact from its simplest to its fullest stage that an encounter battle, or a series of them, will take place.

821. ORGANIZATION GENERALLY

1. A force advancing towards an encounter with the enemy may be deployed into a number of parts:

a. A Covering Force. This may be formed as the most advanced protective element to operate across the ^{entire} ~~whole~~ frontage of the advancing force.

b. Advance Guards. These should be formed on each major axis of advance to protect the main body moving on that axis.

c. Main Body. These are the main elements.

d. Flank Guards and Rearguards. These may be deployed by any main body according to the need.

2. It is, at all times, the responsibility of forward ^{forces} ~~troops~~ to maintain contact with the enemy. It will not be usual to deploy a covering force and advance guards until contact between opposing main bodies is ^{provide space for their} ~~broken sufficiently to leave room for the deployment of these~~ ~~protective elements.~~ X

3. The composition of the leading protective elements is important because their initial engagement may determine the future course of battle. The initiative will be retained if the enemy forces are located quickly and dealt with in strength.

4. In this phase of battle the main role of a covering force is to gain information about the enemy. It may also be given the tasks of

overcoming minor resistance, ~~ability~~ seizing and holding defiles, crossings over obstacles, and ^{securing} ~~other~~ ground of tactical significance. Its capacity to perform these roles and to fight for information will depend upon the allocation of resources to it. Bearing in mind the tasks of advance guards, flank guards and rearguards, a commander must exercise discretion in how widely he disperses his fighting strength. It will often be necessary to restrict the ^{capability} ~~capacities~~ of one more of the protective forces.

822. SPECIAL REQUIREMENTS OF FLANK GUARDS AND REARGUARDS

1. A covering force and advance guards must have a strong all-round reconnaissance and fighting capacity if they are to ^{locate} ~~find~~ and overcome the enemy and obstacles. Flank guards and rearguards, if they are needed, are essentially defensive; they must prevent the enemy from interfering with the main body.
2. To carry out their role, flank guards should be based upon mobile reconnaissance elements supported by artillery and anti-tank weapons. As far as possible they should receive their artillery support from the main body of the artillery, and unless the distances are very great, only FOOs need to be deployed with flank guards. It may be necessary to include an infantry element in the flank guard. Engineer detachments will also be required if it is intended to ^{employ} ~~use~~ obstacles or demolitions ^{for protection}. ~~to any extent.~~ Aircraft are particularly valuable in view of the distances which may have to be covered. Air reconnaissance can assist in determining which are the most critical points on the flank, and transport helicopters will enable protective detachments to be moved quickly to threatened areas.

823. PLANNING

1. General. The advance and the encounter battle must be planned in a spirit of boldness and conducted with audacity and vigor. There must be a real desire to get ahead and to disorganize the enemy and defeat him. As well as making contact with the enemy, the objectives to be seized or dominated should include centres of communication, defiles, crossings over obstacles, airfields, landing grounds or drop zones, and any ground of tactical value.

2. Rapidity of action is vital if the momentum is to be maintained; the time from the first meeting of reconnaissance detachments until the enemy is driven off or by-passed must be kept as short as possible. Covering forces must first make determined efforts to obtain details of the enemy's strength and layout so that valuable time is not wasted by the advance guard in the successive deployment of inadequate forces in abortive attacks. The time taken for each commander to make a plan and deploy his troops may waste minutes and even hours before the requisite strength is deployed. The necessary quickness and boldness will be achieved only if commanders are well forward where they can see the situation for themselves and either give orders or urge their subordinates on.

3. An advance by night as well as by day will provide advantages, especially if the enemy is withdrawing. The maintenance of pressure on the enemy will help to deny him use of the night hours to reorganize and maintain his forces, and it will also reduce the effectiveness of his fire. The passage of obstacles and defiles may be safer at night, and there will be opportunities to surprise the enemy. At the same time it must be remembered that movement is more difficult by night than by day,

^{forces} and ~~troops~~ must be well-trained ^{for these operations,} ~~is/ops~~ even when night ^{viewing} ~~driving~~ devices and illumination are available.

4. Frontage. In deciding what should be the frontage of the advance, five main factors should be considered: the ground; information about the enemy; the presence of obstacles; the state of lateral communications; and mobility. In close country for example, the difficulties of control and observation of the enemy suggest relatively narrow frontages. In more open country and when lateral communications are good, frontages can be wider. This is especially true of ^{forces} ~~troops~~ having a good cross-country performance in relation to the enemy and a capacity to concentrate quickly.

5. Generally, the advance should be conducted on the widest possible front. The advantages are several. It will help to mystify and mislead the enemy as to the force's true intentions and will make it difficult for him to position reserves. A wide frontage reduces the length of moving columns and shortens deployment times when the enemy is met. It reduces the chances of bypassing undetected enemy and makes it easier to find gaps in his deployment. The chances of finding suitable crossings over obstacles are increased, and with appropriate separation, greater protection from nuclear weapons is obtained.

6. Against these must be set certain disadvantages. As the front becomes wider a considerable measure of deployment results although very little may be known about the enemy. Control tends to be more difficult, and changes of direction and redeployment to meet an enemy on the flank are slower and more complicated. By deploying the most forward ^{forces} ~~troops~~ widely and holding the main body in a more concentrated fashion, this difficulty can be ^{counter-balanced.} overcome to some extent. However, this tends to

offset the advantage of shorter columns and may simplify the enemy's tasks of infiltrating to upset the advance.

7. Routes. As many routes as possible should be used, and minor routes and cross-country movement will often offer more advantages than the main well-travelled routes. They are less likely to be defended in strength and ~~any~~ obstacles on them may be less elaborate. Cross-country movement will normally be slower than road movement, but it may offer greater opportunities for surprise.

8. AxPs of Advance and Boundaries. When two or more units or formations are advancing side by side, boundaries between them should be specified. Junction points along these boundaries at which contact is to be made by adjacent troops may also be detailed. Advancing troops have liberty to manoeuvre at will between these boundaries although the main effort will usually be focused on the selected axis of advance.

9. Bounds and Report Lines. Full use should be made of bounds to ensure that tactically significant ground is systematically secured as the advance progresses. Report lines are particularly helpful in maintaining control.

10. Rates of Movement and Timings. Commanders must avoid imposing too many restrictions on rates of movement and timings. Covering forces and advanced guards should be encouraged to get on at their own best speed as long as they do not become ^{overly} ~~too far~~ separated from the main body. However, the numbers and types of units and transport will make it necessary to impose some restrictions on movement in the main body. There should be some control over the time and distance intervals between units, and it will be necessary to specify times for halts if order is to be maintained.

11. Order of March. The order of march should be based upon the anticipated order in which units and equipment will be needed during the advance and upon the expected frequency of the need. Engineer reconnaissance parties, for example, should be well forward while most administrative units can be near the rear of columns, because they will usually be needed either at the end of the move or at clearly defined stages in it.

824. CONDUCT OF COVERING FORCE

1. The covering force should move forward quickly and systematically from one tactical feature or bound to another, securing one before moving on to the next. As each bound is secured, detachments or patrols, including reconnaissance helicopters, should immediately be thrust forward to the next. When a defile or a crossing over an obstacle is to be secured, it will often be advantageous to use helicopters to deploy small infantry parties on the defile or crossing and thus allow the covering forces to move ahead with ~~the~~ minimum ~~of~~ interruption.

2. The speed with which the covering force moves will depend particularly upon the ground and the degree of search they have been ordered to carry out. In close country or where there are many obstacles the speed will be slow. If every building and every tactical feature is to be searched the advance must necessarily be slow. Normally the covering force should not be used to search for enemy in this kind of detail; they should not take the time to dismount and examine every bush and every basement unless the enemy has disclosed himself. ^{Liberal} Use of speculative fire during by recon forces will greatly assist in their movement.

3. Reconnaissance helicopters should range ahead with their ground elements to discover any major signs of enemy presence. The ground force can then be directed to particular areas where more detailed

search should be made. The commanders of covering detachments should study the map and the ground carefully as they advance and try to single out those areas that deserve detailed and possibly dismounted scrutiny. Fullest use should also be made of reconnaissance by the air forces, and suitable communications should be established between them and the covering force.

4. Although the advance of the main elements of a force will be centered on the chosen axis, the covering force should not be so restricted.

It must, of course, give close attention to the axis upon which the ^{follow-up elements} ~~Following~~ troops are moving. However it should also range widely across the ^{entire} ~~whole~~ formation frontage, reconnoitring side roads, cross-country going, and areas that might afford cover or tactical advantage to enemy troops and seeking out obstacles and crossings over them. It is particularly important that engineer reconnaissance parties operate ^{be readily} ~~as extensively~~ ~~as possible.~~ ^{available}.

5. Information from the covering force must be obtained early enough to allow the advance guard, ~~especially~~, time to react. This will depend to a large extent upon the distance ahead at which the covering force operates. The commander of the covering force should be given some indication of roughly how far ahead ^{This distance is to be} ~~he is expected to be~~.

6. The distance between the covering force and the advance guard should not be so great as to allow major enemy forces to interpose themselves between them undetected. An advance guard must also be able to get ahead quickly to support the covering force. Yet, the distance must be great enough to allow the covering force to search widely without delaying the columns behind it. ^{This} ~~The~~ distance will be influenced by the enemy and by the available communications and administrative resources.

7. On first contact with the enemy the covering force must return the enemy fire at once with every available weapon, even when detailed enemy locations are not known. This immediate fire will enable them to press against the enemy to find out where he is and, just as important, where he is not. The reconnaissance detachments must probe forward on a wide front, trying to infiltrate and find gaps in the enemy's deployment and seeking his flanks. The covering force should detach such ^{elements} ~~troops~~ as are needed to contain the enemy and to obtain information of his immediate layout, while other elements are ordered to move widely around the flanks and to penetrate in depth.

8. The covering force must also pass back information about the nature, weight, and source of the enemy fire so that the advance guard commander can form an early estimate of the force needed to defeat the enemy. Such action will obviate the need for several attacks by inadequate forces, which only waste time and cause unnecessary casualties.

825. CONDUCT OF ADVANCE GUARD

1. The advance guard, sub-divided into a ^{Vanguard} ~~van~~ guard and main guard, and the covering force should be well deployed by the time the main body begins to move. Although the move of an advance guard should in principle, be on a broad front, it must concentrate its ^{forces} ~~elements~~ on the axis being used by the main body, which it protects while reconnaissance detachments maintain surveillance over subsidiary routes. The number of advance guards will depend upon the number of axes and the ^{advance} ~~width of the~~ frontage.

2. The advance guard commander should choose his bounds before the advance begins, and as the van guard secures a bound the main guard can ^{close} ~~come~~ up to it. When conditions more closely resemble those of a pursuit,

there should be few pauses on bounds. ^{during this operation} The aim must be to press ahead without delay.

3. The remainder of the advance guard can be distributed in column along the axis ready to deploy when they are needed. They will move from bound to bound behind the van guard without getting so close to it as to interfere with minor operations or without becoming committed to battle unexpectedly and losing their flexibility of action. The commander of the advance guard should move at the head of the main guard and he should make full use of liaison helicopters to visit the van guard and to reconnoitre forward.

4. Tanks and reconnaissance detachments of the van guard should move at their best speed on the axis, searching both sides of it ^{while} ~~and~~ moving from bound to bound. If the infantry are mechanized they should accompany the tanks, especially in close ground, and the whole must operate under a ^{single} ~~unified~~ commander. When the infantry are on foot it will usually be quicker for them to move on the axis and to deploy from it only when the need arises. It may not be possible for the tanks to move as quickly or to range as widely as they otherwise might. An artillery FOO should be with the van guard commander, prepared to call for fire from the guns at a moment's notice. Possible enemy positions and other potential artillery targets should be selected beforehand so that pre-arranged concentrations can be brought down without delay when contact is made.

5. It is the duty of an advance guard to move quickly and act boldly to prevent the main body from being delayed. At the same time the commander in the main body must appreciate the time it takes to overcome enemy positions, and he must not allow the main body to follow so closely that it is continuously being checked by advance guard

actions. The main body should stay far enough behind to allow the advance guard to do its job but must not allow a large gap to occur that might permit the enemy to get between the two forces.

6. The degree of search to be carried out on either side of the axis will limit the rate of advance. In issuing orders about this the commander will rely heavily upon the information provided by air reconnaissance and by the covering force. If it is necessary to carry out very detailed search, ~~then even~~ mechanized infantry ^{will} ~~may~~ have to dismount and operate on foot. Ideally the advance guard should encounter only enemy who have already been located by the covering force, and when the advance guard ^{deploys} ~~comes on the scene~~, reconnaissance ^{forces} ~~troops~~ ^{elements} should have the enemy under surveillance. It is at this point that an encounter battle may begin.

7. If the engagement has resulted from the collision of two advancing forces then quick shock action is most likely to achieve decisive results. The enemy will be most unnerved by immediate and violent fire from every available weapon. This should be followed by an assault which, while it may lack subtlety, is determined and audacious. In most tactical situations frontal attacks are unlikely to succeed unless they are launched with ^{combat power} ~~an~~ overwhelming superiority of fire. However, this ^{can be a qualified judgement,} ~~may be made~~ ^{with that an} ~~exception provided that the assault~~ ~~is~~ launched with speed and suddenness ^{may} ~~achieve~~ the necessary ~~shock effect~~ ^{result due to its shock effect.}

8. When the enemy has been withdrawing or if his troops have been in position for some time, both speed and subtlety will usually be needed if he ^{is to be overcome.} ~~is to be driven off~~. Enemy rearguards are likely to be carefully sited to achieve delay; they will have a well-organized defensive fire plan, and they will have made maximum use of obstacles. However, it is

also likely that they will be small forces and not widely deployed.

More care must be taken to avoid pre-arranged enemy fire and to circumvent obvious obstacles and defiles. If this is not possible or is likely to be too slow then greatest dividends are likely to result from an immediate ~~flanking movement~~ that seeks to get around the enemy and astride the axis behind him.

9. When the enemy has been occupying a defensive deployment for some time the difficulties will be greater, and he will be sited in strength, and depth, and supported by the fire of all arms. The deployment of the main body will usually be required if the advance is to be continued. Before such a position is encountered the enemy protective detachments should be driven in by the advance guard.

10. It is the duty of the van guard to clear the axis for the continued movement of the advance guard and to act offensively until given other orders. When contact with the enemy is first reported, the commander of the advance guard ^{must} ~~should~~ immediately move well forward to assess the situation for himself. In this way he may be able to discern whether time can be saved by using the full advance guard against the enemy from the outset. He must bear in mind that it will take longer to deploy the full advance guard, ^{thereby adding delay in itself} ~~and some added delay may result.~~

11. Whatever the circumstances leading up to the battle it is here that boldness and suddenness of action are required. If the advance guard is mechanized, the tanks and APC-borne infantry should take advantage of their armoured protection and cross-country speed to get round a flank, ~~and~~ into the enemy's rear. When the ground is unsuitable for this action or when apparently impassable ground intervenes, dismounted infantry should be used without hesitation for the same purpose. The advanced

guard commander ^{may} ~~should~~ also consider the quick use of helicopters to place small forces behind the enemy ^{air and providing the AD situation is favourable} ~~This should be done in conjunction~~ ^{if the use of helicopters is possible, they should be employed} with a determined ground assault.

12. Artillery fire should be brought to bear from the first moments of contact on pre-arranged targets. This fire can then be adjusted by FOOs as more detailed information about the enemy is obtained. It is here also that engineers may be needed, and when contact is first made ~~with the enemy~~, engineer units must be ^{ready} ~~available~~ to ^{move} ~~be called forward~~ into action.

326. CONDUCT OF MAIN BODY

The main body should be able to advance unimpeded during the encounter battle, ^{only} ~~and~~ this will be possible ^{behind the advance guard} if they are not following too closely ^{and are not interfered with by the en.} The commander should come forward to appreciate the situation for himself without interfering with the advance guard commander. By so doing he will be better able to estimate the future course of operations, and he can order any preliminary action that might be needed in the main body. If the main body or any elements of it ^{must} ~~should~~ halt they ~~should~~ adopt a protective deployment; They should particularly anticipate the possible use of nuclear weapons by the enemy at this point and ^{appropriate} ~~take such~~ protective measures ~~as they can~~.

827. FLANK GUARDS

A flank guard should ^{detach} ~~throw out~~ its own smaller protective detachments, and since early warning is so important, it should deploy reconnaissance forces as far to the flank as possible. Particular use must be made of air reconnaissance, supported by ground elements. Moving by bounds from one critical area to another the flank guard commander

should establish defensive positions astride possible enemy approaches using infantry and anti-tank detachments supported by artillery. They must remain in position while any threat exists and move on only when the reconnaissance elements indicate that it is safe to do so. If the flank guard becomes heavily engaged, it may be necessary for the commander in the main body to detail a fresh flank guard until the original one can be disengaged.

828. COMMUNICATIONS

1. Those characteristics of the advance that affect communications are the continued and rapid movement of HQ, the long distances between HQ, and the increased importance of the rapid and accurate flow of information about the enemy from forward elements. Radio will be the primary means of communication. The extended ranges will necessitate the use of rebroadcast detachments, careful siting of HQ, and a high standard of operating. The correct composition of radio nets and the careful positioning of liaison officers will ensure the flow of timely information about the enemy to the appropriate commanders. The relative importance of security and speed of communications will depend on the speed of movement and the need for surprise. The rate of movement of the force may preclude the establishment of radio relay trunk communications, but radio relay detachments must be suitably positioned in the order of march to permit rapid establishment of trunk communications when the force deploys.

2. As the operation develops from the advance into the ^{Counter}encounter battle there is an increased danger from ^{enemy electronic measures, particularly jamming.} ~~vulnerability to communications~~ ^{this} jamming. At ~~that~~ stage the enemy may have less need of intelligence from intercept while our own troops, who are still dependent on net

radio, will have an increased requirement to pass information and orders. Pre-arranged anti-jamming drills are vital.

829. TACTICAL AIR SUPPORT

1. All forms of tactical air support will have an influence on the encounter battle. Of particular and immediate interest to the advancing troops will be air reconnaissance and close air support. First priority will be given to reconnaissance, and once contact is made with the enemy, support will be called for if the aircraft are available.
2. Air photographs should be available before the advance begins, and continuous coverage should be sought as it progresses. Daily tactical reconnaissance to search ahead of the covering force should also be used, and it may often be helpful to conduct reconnaissance after nuclear strikes. Close air support missions will be difficult to plan beforehand, and initial reliance will be placed on immediate support if the air effort is available.
3. Communications for demanding air support should be deployed to commanders of main bodies. In addition any FAC available should be deployed to covering forces, advance guards, and van guards. Covering forces and advance guards must be carefully briefed on the various air/ground means of recognition. The location of the FSCL must be known by the forward troops as well as by the pilots. It is also important that troops carry the necessary coloured smoke and fluorescent panels for easy identification from the air.

830. INFLUENCE AND USE OF NUCLEAR WEAPONS

1. Lack of accurate information may hamper the use of nuclear weapons. Fleeting targets will be located but the time needed to check troop safety and for troop warning will cause delay when offensive action with non-nuclear means would be adequate. However, even with scanty information the speculative use of them could have great effect. Good judgement must be used because of the restrictive results of ground damage and residual radiation.

2. If they are already in use or if their use is contemplated, there should be a clear delegation of authority to do so before the advance begins. If possible the advance guard commander should be authorized to fire at least some yields in the interest of speed, and he must have full information about any nuclear strikes planned by a higher HQ. It is equally important that the weapons and the means of delivery be available well forward. Any long delay in firing will tend to nullify the advantage gained from their use. The early identification of targets will depend upon the covering force, and it may be necessary to arrange special communications so that weapons delivered by aircraft, gun, or missile can be employed.

3. Once nuclear weapons have come into use, the general ^{Pace} ~~place~~ of the advance may become slower because of ground damage and residual radiation. Radiation monitoring will be a prime task of the covering force and engineers must be well forward to overcome obstacles.

831. PURSUIT

1. The basic guidance for the conduct of the pursuit is the same as for the advance and encounter battle with two major exceptions. The pursuing force must accept risks which it might not take in other operations when the enemy's situation is not known. It must be willing to bypass enemy elements and drive deep into his rear areas, disrupting HQ, administrative installations, and gun areas without excessive concern for its own flanks and rear.

2. Secondly, the ^{entire} ~~whole~~ tempo of ~~the~~ operation must be accelerated. This will be achieved partly by taking risks and moving fast. It will also be assisted if higher commanders delegate authority and give their subordinates broad direction and freedom of action. Plans in too much detail will only slow the operation.

3. The operation should be conducted on a broad front aimed at deep objectives. The pursuing force should use every possible axis of advance, probing to find gaps in ^{disposno} ~~the~~ enemy or areas where he can easily be overcome. As these gaps are located and penetrated by leading troops, the effort should immediately be switched to them. This will create ^{open} flanks ⁱⁿ ~~among~~ the remaining enemy ^{positions, thus allowing} ~~and~~ will allow the pursuer to get behind him, ^{thus} ~~turning~~ his flanks and isolating him in pockets. The commander must then decide whether to destroy them or to press ahead with the advance.

4. Tanks and reconnaissance units set the pace for the operation, and they must be used boldly, ~~and well forward~~. Leading battle groups should be based on tanks accompanied by some supporting infantry and anti-tank weapons. Some artillery may also be decentralized to accompany these battle groups ^{to} ~~and~~ provide ^{them} quick support ~~for them~~. At the same

time, formation artillery resources must be staged forward early in the pursuit to maintain a heavy weight of support if resistance is met.

5. The enemy will use every device to hinder and delay the pursuit; *remotely deliverable* and scattered mines, felled trees, and demolitions will probably be encountered in profusion. Therefore it will be essential to deploy engineers well forward and to accept some loss of centralized control over them.

6. The continuous and rapid movement of formation and unit HQ and the extended distances between HQ will make communications difficult. Extended ranges will necessitate the use of rebroadcast detachments, careful siting of HQ, and a high standard of operating. Radio will be the primary means of communication; signal traffic will be restricted to the essential minimum. Because of the accent on speed of movement and the enemy's reduced capability to counter our operations, security will ~~be~~ *OK* be less important than rapidity of communications.

The success of the operations will be dependant

7. ~~Everything depends~~ upon maintaining the momentum of the pursuit. By constantly seeking out gaps and by the prompt regrouping of units that become disorganized, the pressure must be maintained. If they are well forward commanders can, by their example, inspire the troops to fresh efforts.

832. GENERAL

1. In planning and executing offensive operations, consideration must always be given to the capability of administrative elements.

- a. Administrative installations and units must be located where they can best maintain the combat units. Centralized control

of logistical support is normal. However, control may be decentralized or administrative support elements may be attached to supported elements when ~~support~~ control is difficult, ^{as} in the case of a subordinate force executing an independent operation).

- b. The combat force must be provided with adequate combat service support to maintain the momentum of the attack without interruption. Use ^{must} ~~is to~~ be made of external logistical support agencies to reduce the load on local elements. Critical resupply, particularly fuel and ammunition are to be held ready to move in support of the operation. Support resources ^{must be well} ~~are kept~~ forward to ensure timely supply and evacuation and to relieve tactical commanders of such administrative matters as civil affairs requirements and control of prisoners of war. During fast-moving actions, such as the exploitation and pursuit, use of captured enemy supplies and materiel, particularly transportation and fuel, may ease the burden on the supply system and increase ~~unit~~ mobility.

833. ADMINISTRATION IN THE ATTACK

1. Like the defensive battle, the attack and pursuit are likely to contain elements of the encounter battle and disengagement as well. The problem then for the administrative plan is to maintain the flexibility to meet these changing circumstances, at every level of command and at unexpected moments.
2. In the early stages of an attack it will be possible to provide administrative support from the relatively static area of the firm base.

As the attack progresses and penetrations are made, administrative units and resources must be grouped so that they can readily follow up the assault. In a long assault where successive firm bases are secured, the administrative system must be able to adapt its grouping and move forward to join firm bases.

3. Specific attention should be given to the following:

- a. Ammunition expenditures may be high initially, especially in artillery natures. If a severe battle to break into the enemy defences is expected it will ~~usually~~ be wise to dump *artillery and mortar* ammunition in the forward area ~~for artillery~~.
- b. Unit administrative echelons must be fully replenished before the attack, especially if an obstacle is to be crossed, ~~and~~ this will usually be done in assembly areas. As these resources are used during the attack, formation staffs must hold stocks ready to go forward on demand to replenish units. This will normally occur during reorganization.
- c. If exploitation followed by pursuit is likely to occur, the forces designated must be maintained throughout the operation. It may be advantageous to attach administrative transport to these units or formations and carry forward stocks of all commodities with them.
- d. TC is of vital concern if any obstacle or built-up area is encountered. TC sub-units must be deployed immediately behind the assault troops *and follow them up closely.* ~~to follow them.~~

- e. In built-up areas casualty evacuation will be slow and difficult. Extra medical resources ^{must} ~~should~~ be deployed forward to assist units in collecting and evacuating casualties from the area.
- f. If the attack ^{is an} ~~is an~~ outstanding success POW and enemy casualties will place a heavy burden on administrative resources. ^{and forces to} Plans ^{to} cope with these problems must be prepared. It is particularly important that POW cages be established well forward so that fighting units are not ~~too~~ preoccupied with long escort tasks.
- g. The fullest use should be made of heavy lift helicopters to rush supplies forward and to evacuate casualties on return flights. The siting of medical units and helipads ^{must} ~~should~~ be carefully co-ordinated. These needs must be carefully balanced against the tactical requirement that will arise when the pursuit is undertaken.
- h. Special arrangements may be needed to look after civilian refugees, especially near large built-up areas. This will impose problems of personal care, safety, movement, security, ~~accommodation~~ and ~~feeding~~ feeding.

834. ADMINISTRATION IN THE ADVANCE

- 1. Requirement for Stability. Administrative functions, to be performed efficiently, require an atmosphere of comparative quiet and stability. If administrative units are moved too frequently a major loss in efficiency results. A commander's problem is to maintain the pace of the advance without excessive loss of administrative efficiency.

2. Timing of Moves. Only part of the fighting elements will be committed in the early stages of an advance, and the administrative load will not remain uniform throughout a formation. A commander should take advantage of this to close certain administrative units and allow them to move forward to new locations. He should, in addition, ensure that fighting units are made administratively self-contained for as long as possible.

3. Supplies. If pack rations are available, units can be made self-contained for several days. In a long advance, however, arrangements should be made to provide hot meals with fresh rations as often as possible.

4. POL and Ammunition. When POL consumption is high, ammunition expenditure tends to be lower than usual, and in terms of transport required the two ^{needs} may roughly balance each other. However, once again, units will be to some extent self-contained, and this should allow the necessary resources to be staged forward. In the early phases of an advance, ammunition should be needed only by the covering force, advanced guard, and artillery, ^T and this will allow stocks to be re-established farther forward. It will ^{also} be necessary to provide a small stock of ammunition well forward at all times, either by deploying mobile ^{supplies} stocks on vehicles or by ensuring rapid delivery by helicopter when needed.

5. Stores. As long as the tempo of the fighting is low and only parts of a force are committed, it should be possible to move stores forward without interruption. Small stocks of selected items must be available on the same basis as POL and ammunition, but much of the stores organization can usually be closed down to move forward when it is necessary.

6. Repair and Recovery. In an advance there will be an increase in the rate at which vehicles break down or become ~~stuck~~^{immobile}, and repair and recovery facilities must be widely and effectively distributed. Attention should be paid to the following:

- a. The axis of advance must be kept clear if the momentum is to be maintained, and units must not be deprived of essential vehicles and their loads for long periods. In principle, the recovery of breakdowns should always be forward, in the direction of the advance, to a convenient place where repair teams and units can work on them. It is equally essential that such repair facilities should be so deployed that they can work forward.
- b. Units should deploy their own repair and recovery teams to recover breakdowns and try to repair them in situ. If the repair is beyond the unit's capacity, mobile repair teams from formation resources can be brought forward. Equipment collecting points along the axis should be ~~also~~ planned and established as the advance progresses. When repair cannot be effected ~~in these locations,~~
here the casualty must be recovered to a workshop.
- c. Before an advance begins a commander must ensure that some of his repair and recovery resources are freed of work so that they are ready to move forward quickly. ~~and~~^{Additionally} some workshops must be given high priority in the move of the main body. ~~As well as~~
~~addition to~~ the mobile repair teams deployed forward, recovery posts must also be established at ^{such} critical points ~~such~~ as obstacles and defiles so that vehicle casualties can be cleared from the axis quickly. The siting of recovery posts ~~must~~
~~should~~ be ^{Coordinated} ~~considered in conjunction~~ with the TC plan.

7. Evacuation and Treatment of Casualties. Evacuation and emergency treatment facilities should be widely distributed throughout columns.

Unit medical personnel, at the aid station, can initiate life-saving treatment for most cases without elaborate preparation. They can also perform some treatment during brief halts in the move. ^{However} Their evacuation resources are limited, ~~however~~ and they should be closely followed or augmented by ^{medical} ~~extra~~ resources from ^{Additional} ~~the~~ parent formation. Casualties among the covering force and advance guards will receive initial treatment at unit level. ^{Additional} ~~Added~~ evacuation resources, either ground or air, must be attached to these components or ^{be} quickly available. Before an advance begins, ^{specified} ~~certain~~ medical units must be cleared of patients and placed in reserve, ^{thereby permitting them to move} ~~thus they may be moved~~ forward ^{early} ~~early~~ with the main body and ^{to} ~~quickly~~ set up ~~at~~ new locations. In addition some helicopters should be earmarked for casualty evacuation, to be ready on call ^{to the} ~~forward~~ forward troops. Where possible evacuation routes should not follow the axis of advance.

8. Traffic Control. ^{Military Police} ~~Provost~~ should be attached to the advance guards and should move immediately behind them. They can sign the route as they move forward and control traffic when deployment occurs, ^{they} can also reconnoitre harbour areas. Traffic posts should be established at obstacles and defiles, and these should if possible, incorporate a recovery post as well.

9. Prisoners of War. POW collecting posts should be established along the axis close to other administrative facilities such as traffic, recovery, or casualty collecting posts. They must be kept well forward so that units may hand over responsibility to formation ^{escort resources} ~~provost~~ early. Cages must be established under ^{Military Police} ~~provost~~ direction until further evacuation of the POW is possible. If they are set up near other administrative facilities it will be simpler to obtain escorts and returning transport for them.

10. Water. Water points must be established well forward as the advance progresses as directed by engineers. If water is scarce, ~~then~~ it may be necessary to deliver it from the rear with other supplies.

11. Administrative Transport. It is desirable to restrict the number of vehicles in the forward area, especially in the covering force and the advance guard. ~~and~~ ^{accomplished} this can be ~~done~~ by staging the move of ~~some~~ administrative echelons well back in the main body. The move forward of this transport should be co-ordinated to make the most efficient use of space on routes. However, it is essential that, ^(for the covering force and the advance guard) ~~and advance guard,~~ the echelons be kept well forward [↓] where they can give immediate support to their units.

12. Vehicle Replacement. Vehicle losses will tend to be high because of breakdowns and enemy action. It is essential that key vehicles be replaced quickly. ~~and~~ ^{no} this will be of vital importance in tank, reconnaissance, and other mechanized or motorized units. Vehicle delivery resources must be staged well forward behind the advance so that ^{no} undue delays ~~are~~ ^{are created in this resupply activity.} ~~not caused.~~

CHAPTER 10

OTHER ACTIONS

SECTION 1 - INTRODUCTION

1001. GENERAL

This Chapter describes a number of types of action that may be undertaken within the context of other operations or in conjunction with other ^{them} operations. Each is the subject of a separate Section ~~of this~~ Chapter as follows:

Crossing and Breaching of Obstacles	- Section 2
Airmobile Operations	- Section 3
Airborne Operations	- Section 4
Amphibious Warfare	- Section 5
Operations in Enemy Controlled Territory	- Section 6
Defence of Coastal Areas	- Section 7
Encircled Forces	- Section 8
Relief of Combat Troops	- Section 9

SECTION 2 - CROSSING AND BREACHING OF OBSTACLES

1002. DEFINITION

1. Crossings and breachings are undertaken to enable friendly forces to move to the far side of an obstacle, which may be a water obstacle, a minefield or some other ~~minor~~ natural or artificial barrier, to continue operations and to fulfill their mission. They will normally be opposed by the enemy.

2. The aim ^{must be} is always to maintain the momentum of the advance and to deny the enemy time to consolidate his defences. (Crossing and breaching operations are normally conducted within offensive operations, and ~~must be conducted as such~~ ^{and breaching may also be necessary} ~~Crossings may take place in the rear combat zone after bridges have been destroyed, as well as rearward passages during defensive operations and retrograde operations.~~

1003. TYPES

1. If it is impossible to secure intact a means of surmounting or bypassing an obstacle, i.e., a bridge or a minefield gap, the advancing commander will have to attempt a hasty or a deliberate crossing/breaching.

2. Hasty Crossing/Breaching. In mobile operations when the enemy has had insufficient time to prepare the defence fully, the crossing or breaching is planned and conducted as a continuation of the ^{advance} operation ~~which is underway~~ (normally an attack). In order to take full advantage of such a situation, obstacle crossing and/or breaching equipment must ^{quickly} ~~be~~ ^{available} ~~well forward and readily available~~ to avoid delays at the crossing site. A hasty crossing/breaching is characterized by minimum loss of

momentum at the obstacle line, speed, surprise, minimum concentration of forces, and decentralization of control of specific crossing times ~~for~~ ^{to} subordinate forces. Hasty crossings/breachings are feasible when the crossing areas are lightly held by the enemy or are undefended. Reconnaissance and intelligence are essential for the success of this type of operation, but to avoid losing momentum, this will often take the form of a quick tactical or map reconnaissance. The force must, situation ^{should} ~~and terrain permitting~~, try to cross the obstacles with its own means before engineers are ~~employed~~ ^{committed}.

3. Deliberate Crossing/Breaching. This type of crossing requires extensive planning and detailed preparations and should only be implemented if the tactical situation does not allow a hasty crossing.

1004. CONSIDERATIONS AFFECTING ALL CROSSINGS AND BREACHINGS

1. Prerequisites for Success. The basic requirements for a successful crossing or breaching are:

- a. the determination to get across;
- b. good intelligence, particularly engineer intelligence;
- c. adequate and timely reconnaissance;
- d. the necessary equipment being available;
- e. a simple plan with good communications which provides flexibility to exploit success;

- f. good timing, preparation and traffic control;
- g. a deception plan if time allows;
- h. local air superiority over the crossing site; and
- j. an element of surprise.

2. Vulnerability. Once the commander has decided to make a crossing, he must make a plan which takes into account the possibility of enemy interference even if contact with the enemy has not been made. The most vulnerable stages of a crossing are (not in sequence of vulnerability):

- a. The reconnaissance of the site.
- b. The positioning of the equipment.
- c. The initial stages of the crossing.
- d. The first wave at the exit.

3. The Bridgehead. This is the area of ground to be gained on the enemy's side of an obstacle.

- a. It should be of sufficient size and extent that it can:
 - (1) accommodate and facilitate manoeuvre without congestion;
 - and

- (2) provide sufficient space and terrain to permit defence of the crossing site(s) *and the bridgehead.*

4. The NBC Threat. The possible use of weapons of mass destruction *will dictate:*

- a. ~~There must be a~~ ^M maximum dispersal of crossing sites.
- b. Troops and their equipment must cross obstacles as quickly as possible.
- c. ~~There must be the~~ ^M minimum concentration on either side of the obstacle.

5. Helicopters. The use of helicopters can considerably speed up the crossing or breaching, both in reconnaissance and in carrying troops and equipment across the obstacle. Airmobile forces may be used to secure crossing sites ~~intact~~, or limited bridgeheads. Additionally, helicopters can be used to move or erect crossing or breaching equipment ~~in inaccessible areas in a short time frame.~~ *Helicopter operations are possible only in ^{very} favourable air/AD circumstances*

1005. CROSSING MINOR OBSTACLES

1. General. The majority of natural obstacles in Central Europe are less than 22 meters wide. Many gaps are therefore within the crossing capabilities of equipment held within land force units. These crossings ^{can} ~~could~~ be achieved with short spans of fixed bridging, armoured engineer equipments or improvisation.

2. Categories of Minor Obstacles. The types of minor obstacles, which are not necessarily an obstacle to ~~determine~~ soldiers on foot, but will certainly affect the mobility of vehicles are:

- a. rough ground;

- b. soft and marshy ground;
- c. ditches;
- d. vertical steps;
- e. slopes;
- f. woods;
- g. craters;
- h. minefields; and
- j. *NBC (non-blank) effects*
~~those created by the employment of nuclear and chemical~~
weapons.

3. Conduct

- a. Combat troops should be used to secure the area around the site itself, to prevent enemy interference with ~~short range weapons~~. They will have to cross the obstacle using any crossing means available.
- b. The enemy approaches should be covered by ~~friendly~~ long range anti-armour weapons.
- c. An artillery fire plan should ~~be made to~~ include fire to cover the bridgehead ~~which will~~ be established. It should also include a plan to produce smoke either to protect the crossing or to mask the enemy positions.

d. Multiple crossings may have to be carried out simultaneously ~~if required by the tactical situation~~. Multiple crossing on a broad front aid the deception plan by confusing the enemy as to the main point of attack, ~~and provide an opportunity for discovering undefended crossing sites.~~ *At this ^{however} leads to dispersal of firepower.*

e. As soon as the crossing has been completed, equipment should be recovered ready for re-use. With the bridgelayer this is a quick process as the bridge can be picked up from either end, but for other equipments considerable time and effort may be required. If the equipment is to remain in position for use by follow-up troops, it must be quickly replaced ~~in the leading formation~~ so that the advance can continue.

1006. CROSSING WATER OBSTACLES

1. General

a. When a ~~forward~~ unit approaches a water obstacle ~~it may be~~ *and is* forced to pause, ~~but should be deployed in depth to provide forces to maintain the impetus of the assault.~~ *Holding areas should be planned in advance, ^{will permit ready dispersal} so that a unit is able to disperse.*

b. The enemy will require a large force to cover the whole of a water obstacle by day and night; this may mean that the defence cannot be sited in depth. If the attacker can destroy or neutralize those mutually supporting posts that have observation and can bring direct fire to bear on the crossing sites, the others become vulnerable to destruction in detail. Once the defender fails to dominate the water-course it

BS.

becomes "dead ground" ~~and can be used freely~~; the defender usually being forced to site his position well back from the obstacle.

2. Planning Considerations

a. To plan a water crossing a commander will require:

- (1) an understanding of the way in which the enemy can effect the operation. This he will gain from the combat intelligence provided by his intelligence staff; and
- (2) knowledge of the effects of topography on his crossing capabilities, notably the suitability of the site for the type of crossing proposed. This will, in the main, be provided from engineer intelligence.

b. A crossing has a number of phases. The phases ^{are not} ~~do not imply~~ that a stop ^{separate} ~~will be made after each of them~~. Rather, momentum will be maintained by keeping the operation fluid - one phase blending into the next, ~~to avoid congestion of men and equipment~~. The phases are:

(1) Reconnaissance.

(2) Assault. To establish a bridgehead of sufficient size to allow bridging, rafting, swimming or fording to take place.

(3) Build-Up.

(4) Consolidation and expansion of the bridgehead into a firm base from which to break out.

(5) The Break-Out, which is not considered further in this Chapter, as it is effectively dealt with in the Offense Chapter.

3. Reconnaissance. Information on the crossing site, approaches, exits, and bank conditions can be obtained by reconnaissance ~~from boats or amphibians~~. Where units are in contact with the enemy, surface swimmers and shallow divers can be used. The equipment which they require for their task includes gap measuring devices, clinometers for measuring bank slopes, instruments for measuring the depth and speed of the river and for examining the river bottom. The location of enemy mines, laid either on the banks or in the water, should be determined by the technical reconnaissance. Alternative sites for both swimming and fording crossing should always be reconnoitered.

4. Assault

a. This task will fall primarily on the infantry. Infantry/engineer planning must take account of the following:

(1) The allocation and security of assembly areas and boat off-loading points. The latter should be as far forward as possible.

- (2) The need for routes forward to these areas and from them to the river.
- (3) The carrying or towing of boats to the river.
- (4) The importance of allowing time in the planning for these infantry tasks, especially if the operation is at night.
- b. The infantry will be supported by direct and indirect fire from the home bank provided by other infantry units, armour, and artillery support systems. An ~~initial~~ assault by infantry in APCs may ^{not} be tactically ^{practical} ~~difficult depending on the nature of the water obstacle and its approaches and exits~~. The commander will decide ^{whether to} ~~the feasibility of using~~ infantry in ^{will use} APCs, or ~~ferried in~~ assault boats, or a combination of both. ~~Assault boat ferrying may be accomplished using paddles for a silent crossing, or outboard motors if silence is not required.~~ The ferrying must be done by soldiers not committed to the assault, as must a number of other tasks in connection with the operation; ^{a separate force} ~~a sub-unit~~ is formed for these purposes.
- c. As soon as the assaulting infantry have cleared sufficient ground on the far side to allow bridging and rafting to begin, support weapons must cross with ~~all~~ speed to be in position ^{to meet an} ~~before the enemy can mount a counter-attack~~.
- d. ^{will} Engineers and artillery observers accompany assaulting infantry ~~to provide support as required~~.

5. Build Up

- a. In the build up stage, forces eliminate the threat of direct fire onto the crossing sites ^{so that} ~~to permit employment~~ of rafts, barges and other discontinuous crossing means ^{can} ~~to be~~ employed.
- b. For a crossing to be made in the shortest possible time, swimming or fording may take place before or simultaneously with bridging and rafting, ~~depending on the situation~~. A flexible plan and good traffic control are required. The risk of the loss of some vehicles may have to be accepted in a night crossing, ~~and there~~ will always be delays in extricating all vehicles from the river.
- c. Some of the follow-up echelon vehicles may cross the river by swimming. If the assaulting infantry have crossed dismounted, areas will be required for their APCs on the ^{near} ~~far~~ bank. Vehicle commanders will be needed in addition to drivers for bringing forward the empty APCs. APCs may be used to carry across the second and third waves, support weapons ^{or} ~~and~~ reserve ammunition.
- d. Air defence for the crossing site(s) ^{is crucial} ~~must be planned~~.

6. Consolidation

- a. The tactical aim of the consolidation is to prevent observed fire onto the sites to permit use of bridges which must be defended against air attack ultimately leading to unrestricted use of the bridges and elimination of direct enemy influence. *ward!*

- b. In an opposed river crossing operation the assault wave will probably make use of darkness to effect the crossing. The most likely time for the enemy to attack the bridgehead is at first light, by which time the build up must have produced a force on the far bank capable of withstanding counter-attack. Tanks and anti-tank weapons will be essential to this force and if they are unable to ford they must be moved across the obstacle by raft or bridges. The enemy may counter-attack, however, at any time after he has identified the crossing an appropriate force must therefore be established in the bridgehead as early as possible. This must include anti-tank weapons.
- c. The bridge and rafting sites should be within the bridgehead seized by the initial assault so that work can start as soon as possible. Ideally, construction should start at night to achieve a measure of protection. The selection of the site for crossing should be such that the chances of its discovery by the enemy are reduced to the minimum, and its defence against air attack and enemy underwater attack secured. It is unlikely that a bridge will remain intact for more than a short period in daylight. Therefore, plans should include arrangements such as splitting the bridge into rafts, and its rapid dispersal.

7. Command and Control

- a. The movement of bridging equipment, troops, tanks and vehicles in a crossing operation through assembly areas, over the obstacle and their dispersal on the far side, must be strictly

controlled. The control headquarters must make the best use of the resources available and provide a flexible organization able to react to any changes in the tactical situation and the means of crossing.

- b. The control and movement of the bridging is the same as for other engineer stores. The allotment of bridging and its move forward to formations is controlled by the ~~senior~~ engineer commander at the highest tactical headquarters; the staff of the control headquarters are responsible for its ~~further~~ *tactical control employment*

- c. The basic requirements for control are:

- (1) a simple plan with clear orders;
- (2) a crossing control organization; and
- (3) a traffic control organization.

- d. Orders should state:

- (1) who authorizes the start of the amphibious crossing and the site preparations;
- (2) who authorizes the engineers to start work on the construction of bridges and rafts;
- (3) the level at which the use of boats, rafts and bridges is to be controlled in each phase of the crossing; and
- (4) who controls the traffic to and over the various crossing sites.

8. Movement Control During the Assault Crossing

- a. During the initial assault across the obstacle, the assault force commander controls all movement in the area.
- b. After the initial assault, crossing areas are established. Apart from crossing sites, and space for crossing equipment, the following areas are allotted:
 - (1) Assembly Area. Here vehicles are prepared for swimming and preflotation servicing is carried out.
 - (2) Waiting/Dispersal Areas. These areas provide space where vehicles can be halted and dispersed to avoid congestion in case of delays at the crossing site. There may be a number of these areas depending on the situation. This is the area where screens or splash boards are put up or raised.
 - (3) Holding Areas. These areas are waiting spaces near crossing areas to handle vehicles should a sudden interruption occur in the movement of traffic across the water obstacle. Holding areas are normally sited just outside the crossing areas in locations with access to all principal roads leading to the crossing sites.
 - (4) Staging Areas. These areas are waiting spaces for convoys designated to cross the water obstacle and are located far enough from the obstacle to facilitate re-routing and use of alternate roads to crossing sites.

- c. At a mutually agreed time, or as directed, the crossing control group assumes responsibility for defence and movement control in the crossing area from the assault force commander.

9. The Crossing Control Group. This is normally provided by a formation or unit not committed to the assault. The tasks of the crossing control group are:

- a. clearance of the home bank, if this has not been done already;
- b. organization of the boat off-loading point, where the assault boats are taken off their transport. This should be as far forward as possible;
- c. control of the movement forward of the assaulting infantry;
- d. manning the assault boats and ferrying, in particular returning empty boats to the home bank for succeeding waves;
- e. construction of infantry rafts, if these are to be used; and
- f. providing fire support from the home bank.

10. Traffic Control. A comprehensive traffic control organization must be established by the senior headquarters controlling the crossing. This organization is required to switch vehicles between crossing sites to prevent concentration on the sites and approach routes. The traffic organization requires its own communications, recovery facilities deployed along the routes and medical support at crossing sites.

1007. MINEFIELD BREACHING

1. General. Forward units will normally use their own resources to breach ^{small} minefields of ~~limited depth~~ and to clear nuisance mines and other minor obstacles. When a major minefield of a ~~considerable depth~~ is encountered, breaching will necessitate a separate ^{plan} ~~phase in deliberate~~ ~~attack~~ and specialized equipment will be required.

2. Planning Considerations. For a minefield breaching operation to be successful, it must include:

- a. detailed reconnaissance to find out the extent and composition of the minefield;
- b. a well-defined chain of command with good communications;
- c. a breaching force properly trained and rehearsed in its task;
and
- d. a tactical plan in which:
 - (1) the enemy is denied the ability to bring direct fire onto the breaching area,
 - (2) local protection is provided for the breaching force,
 - (3) final objectives are seized which are sufficiently far beyond the breaches to allow follow up forces to pass through the minefield unhindered; and

(4) sufficient lanes are opened and, in a deep obstacle, laterals produced to allow the bridgehead to be built up and forces deployed more quickly than the enemy can concentrate against them.

e. a traffic control organization which can pass vehicles rapidly through the minefield once the lanes have been opened and, if necessary, be capable of switching vehicles should the need arise.

3. Reconnaissance. Detailed information about enemy minefields can be obtained from many sources, including captured documents, prisoners of war, and ground reconnaissance supplemented by aerial reconnaissance. This may only be possible for those minefields within the patrolling limits of forward units. Many hours must be spent in patrolling or individual reconnaissance to build up a complete picture of the enemy minefields; where these are under close observation by the enemy the reconnaissance must be carried out by night. Reconnaissance patrols are found from all arms, but especially engineers. Their task is to find out the extent of the obstacle and its nature so that the breaching force knows where to begin and end its task and any problems it may meet.

4. Preparation. It is desirable that a breaching operation be preceded by thorough preparation and rehearsal including familiarization in carrying out the operation in full NBC protective clothing. The need to conduct a breaching operation must be foreseen so that a breaching force can be assembled and prepared in plenty of time. This must be done very early if the speed and momentum of the advance is to be maintained; a breaching operation should not be improvised because, if it is, it may well fail.

5. Conduct

- a. The task of the breaching force is to open up one or more routes for the attacking force through the obstacle, and thereafter to keep them open. For each route through the obstacle it will be normal to attempt to clear two or more lanes close together.
- b. If hand breaching methods are to be used the assaulting infantry must go through the minefield first, to establish a bridgehead on the far side which can cover the work of the breaching parties. Paths through the minefield may be made by other equipment or existing lanes may be used.
- c. The fire plan for the operation should be designed to neutralize enemy OPs and positions which dominate or overlook the breaching area.

6. Command and Control

- a. All the components of the breaching force may be placed under command of a breaching force commander. The assaulting infantry (as opposed to the protective infantry in the breaching force) will invariably remain under brigade or divisional command. The breaching force itself will also operate under brigade or divisional control. A breach commander will be appointed for each route, and lane commanders appointed for each lane.

- b. Where there are several obstacles in depth, one breach commander should be given the task of making the lanes through all the obstacles on one route. This is preferable to giving to one commander the responsibility for the first obstacle, and to another the responsibility for all the lanes through the second obstacle, and so on, because with severely limited lateral communications, at least in the initial stages, one breach commander would find it extremely difficult to control two or more routes through the same minefield simultaneously. Movement is essentially forward and backward, along a single route and therefore it is tactically and technically sounder to have one commander controlling each route.
- c. Good communications, which should be duplicated, are essential in any breaching operation. They must enable the commander to know the exact progress of the breaching of each lane so that he can order units/formations to assault, or make any necessary adjustments to his plan with the minimum delay.
- d. A good traffic control organization is required to control movement through the minefield. Vehicles passing through the lanes are vulnerable to enemy fire; their movement must be regulated to ensure that there is no bunching and that they disperse rapidly once through the minefield. The organization must also ensure that vehicles are ordered to move through the lanes as soon as they are open and must be capable of switching serials between lanes in order of priority as the need arises.

1008. COMBAT SERVICE SUPPORT

1. In any crossing or breaching operation the fighting echelons will unavoidably be separated from their full combat service support backing. Only those vehicles which are essential to the conduct of the operation should be allowed over or through the obstacle in the early stages. It is very important that ammunition and fuel replenishment vehicles be given priority that will provide the resupply at the precise time required. Helicopters provide an effective initial link-up with combat elements during early stages of the operation.

- a. The medical plan must include collection arrangements for casualties forward of the obstacle and for their evacuation against the forward flow of traffic. Helicopters are valuable in this role.
- b. Recovery facilities must be included in the traffic control plan to ensure that all routes, particularly defiles and crossing places, are kept open. A recovery vehicle (or vehicle with winch) should be positioned on the far side of the obstacle at the earliest opportunity to ensure that immobile vehicles are cleared from the crossing exits or lanes. Forward repair teams (FTs) will be required in the bridgehead to deal with damaged vehicles and equipment.

MEMORANDUM

2910-CFP 300 (CPD)

8 Mar 78

CHIEF
LAND
DOCTRINE AND
OPERATIONS

MAR 9 1978

DLP

4
FIRST DRAFT CFP 300 -
CONDUCT OF LAND OPERATIONS

Ref: A. 2910-CFP 300 (DLP), 9 Jan 78.

1. In response to Ref A in which you request comments by 1 March concerning the above noted subject, having read the document I have no observations to make.

J.A. St-Aubin
J.A. St-Aubin
MGen
CPD
5-7744

Dick

LCol Gord Simpson CFCSC called Subject CFP 300. They have all been involved in land phase of course and have not had a chance to look at CFP 300. They want to comment. Land phase ends tomorrow. They would like another month and therefore to extend deadline to 1 Apr.

Please call back and leave message (LCol Simpson at lecture this am) as to whether they can have extra time or not.

Comment: It seems to me their comments are important and they have to have the time to make them

WR4
160830

DLP 4-3-

Pet

1. Will you cfm with Al Lajambe
that FMC Production Process will
be aval for two weeks (?) in apr
to produce 800 copies of CFP 300?

Find out if mag cards or fair copy
are best for him.

2. Try and get a date late in Apr -
past 15th - as both 4CMB6 & CFC will
be late with comments.

②

DLP 4

Black bookish made

15 Apr 15 May.

May Cmb no

good 8 1/2 x 11

fair copy required



DLP 4

20 Feb 78

③

DLP 4-2

note pls



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DLP4

MEMORANDUM

2910-CFP 300 (D Log Ops 4)

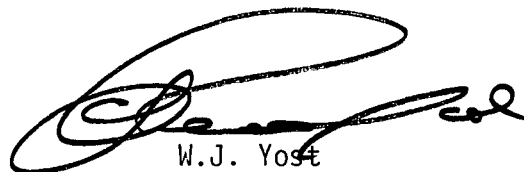
6 Mar 78

DLP

FIRST DRAFT CFP 300 -
CONDUCT OF LAND OPERATIONS

Ref: A. 2910-CFP 300 (DLP) 9 Jan 78

1. CFP 300 (First Draft) Conduct of Land Operations has been reviewed and detailed comments are attached.
2. As a general critique it is observed that those sections and chapters relating to administration and logistics functions suffer from lack of definition and common application. Terms such as Administration, Logistics, Maintenance and Combat Service Support are used interchangeably and indicate that the content is a compendium of various national systems which have been utilized within Canadian teachings since 1964. It is recommended that Combat Service Support be the common term applied to administration and logistics functions at Corps level and below. This is supported by the definition and application being followed in the Land Force Combat Development studies.
3. There is confusion at times in the whole publication as to what type of concept is being written ie a general one for an allied force, or a Canadian adaptation. It is presumed the results of the Land Force Combat Development studies will be the medium that will finally update and amend this publication.



W.J. Yost
BGen
DGMAP
6-1220

Attachment:

ANNEX A

TO: 2910-CFP 300 (D Log Ops 4)

DATED: 6 MAR 78

OBSERVATIONS - CFP 300 (FIRST DRAFT)

Page	Para	Observation
1-4	104.3	Suggest change "aims" to "goals" as this para not consistent.
1-17	116.4 116.5	This section pertains to roles. Roles are not addressed in these paras.
3-2	301.3	Last sentence is confusing. Question its need at all.
3-2	301.4	Suggest heading Administration and reworded accordingly. Second sentence to read, "...combat service support units to conduct" rather than, "... administration units...", and delete "the fighting elements".
3-3	301.5	Replace "maintenance" with "administration".
3-3	301.5b	Unclear wording.
3-7	306.1	Amend "decentralized execution" to "decentralized executive authority".
3-9	309.1	In keeping with the tone of preceding paras suggest "Canadian" be deleted.
3-9	310.1	Third sentence appears to indicate a go it alone concept which is opposite to the dictum of the second sentences "minimum duplication of effort".
3-20	323.2	Question the need for "Canadian".
3-20	323.2 323.3	323.2 refers to maintenance areas while 323.3 refers to a Base and Advance section. Previous methodology with which everyone is familiar with is Rear and Forward Maintenance Areas (RMA & FMA). Recommend this latter terminology be used throughout.
3-21	324 325 326 327	British system. Terms are mix of British and US eg ordnance is used in British (ex-Canadian) sense whilst Combat Service Support is also used; a US term originally. Again maintenance areas are referred to. Suggest use of RMA and FMA when mentioning areas of the COMMZ. Delete term "ordnance" with "supplies" or other rewording.
3-24	326.1	Delete "... Canadian..." to end of sentence. Insert "... Canadian Corps Combat Service Support elements are replenished".
3-25	326.2c	Delete "Combat" insert "Corps".
3-26	327.3	After "Corps Support Command" insert "area".

.../2

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Page	Para	Observation
3-26	324	Change heading of this chapter to "The Service Support System"
3-27	328.5	Delete "ordnance" insert "supply".
3-27	328.6	Replace phrase, " , from Replenishment Point forward... base," with " , to Replenishment Point and back to base,".
3-28	Figure 3-2	Figure should be headed "Concept of Normal System ...". Supply line should be inserted from RP to DSG/Svc Bn block.
3-29	328.7	Last sentence should mention the sub-units referred to as those deployed in Bde/Bn areas.
3-30	329	Definition of Reserves is wrong. Reserves established to replace combat consumption and satisfy needs during any break in the pipe+line. Relationship to emergency is misleading.
3-31	329.4	Second sentence. Combat reserves <u>do</u> form part of the system as they must be rotated.
3-24	331.3	Third line workshops are basically the same as second line. Perform overflow work from second line and support of DIV/ Corps units.
3-24	331.5	BER equipment <u>cannot</u> be cannibalized as an automatic right. Cannibalization must be controlled.
4-34 to 4-37	Sect 8	This section only considers helicopters, CF5, C130, Buffalo should also be addressed. We are skirting the issue of air traffic control and the threat of hand held missiles and low altitude AA fire in the forward area.
5-5	504.1	Role appears incorrect. Suggest "accidents" be added to second sentence.
5-7	507	Last sentence. Suggest "as required" rather than "as available".
5-7	508	Transfer of PWs to base camps is misleading.
5-8	511.1	Delete "and supplies" from end of second sentence.
5-9	511.2a	Delete "routinely". Delete "unit administrative echelons" and insert "Delivery Points".
	511.2b	First sentence, delete "stores" insert "supply".
5-10	511.3 511.4	"Supplies" and "Stores" in the context given are redundant terms. We now address Combat Supplies, consumables, repair parts, clothing and general stores, vehicles and equipment, engineer stores, medical dental materiel.

Pa	Para	Observation
5-12	512.2	General and specialist are roles not classifications.
	512.2b	Delete "their".
	512.2d	Not always "units". This is a direct lift from a UK publication eg "Tipper"?
5-13	513	Delete "at all levels" in first sentence.
5-15	151.1	Engineer responsibility to establish water points Medical responsibility for testing.
518	519.4	Delete "water supply".
5-19		Rear area security should be addressed in more detail, also engineer damage control.
8-65	833.3a	Mention should be made of risk of dumping in a mobile battle. Must be based on prior estimate of expenditure.
	833.3d	Traffic Control during operations is an Ops function not Adm.
8-66	833.3e	PWs are an Ops responsibility up to Div at least. The cages may well be in an Adm area.
10-33	1015.2	The contention that an air mobile force could rely on air resupply must be placed in the proper context. Self- sufficiency would be required for a coup de main for example.

MEMORANDUM

2910-CFP 300 (DMPR-2)

1 Mar 78

DLP

①
FIRST DRAFT CFP 300 -
CONDUCT OF LAND OPERATIONS

Refs: A. 2910-CFP 300 (DLP) 9 Jan 78
B. 2910-CFP 300 (DLP 4-2) 30 Mar 77
C. Land Forces Combat Development Committee
decision of 7 Feb 77

1. The first draft of CFP 300 has been reviewed as requested.
2. As you are aware, CFP 313(1) Medical Services in the Field is now being revised. As the result of a decision reached between CLDO and the Commander FMC, the responsibility for the revision was switched from the Surg Gen Branch to the Comd Surg FMC. It is understood that the first draft of the revised CFP will be circulated in the near future. For this reason, it would be inopportune to comment on the general field medical support aspects of CFP 300. When the Surg Gen Branch has seen the revised CFP 313(1), we will be in a better position to provide an objective and meaningful analysis of the general field medical portions of CFP 300. Perhaps this would be possible when the second draft is circulated. In the meantime, a review of the first draft indicates that while there are some minor inaccuracies in terminology (eg. it is a "field surgical" not "forward surgical" team - see Article 330.3), the general thrust of the articles dealing with field medical services are consistent with the doctrine contained in the first edition of 313(1) and as understood by the Surg Gen Branch.
3. The NBC defence portion of the draft engenders the following comments and recommendations:

② DLP4-2

Action fbs.

MA

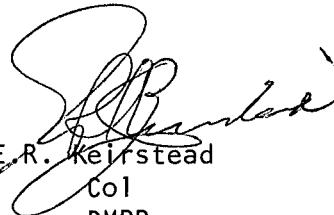
dlp4/

1 Mar 78

.../2

- 2 -

- a. Article 1310.11. The third sentence should be re-worded as follows: "Individual protective measures, including the taking of prophylactic medication, are most important". It is important to mention our only form of "medical defence".
- b. Article 1311.5. It is suggested that the statement "..... vaccination and other immunization measures must be carried out" is incomplete. This implies that immuno-prophylaxis is a satisfactory defensive measure. Infact, only a few micro-organisms can be processed as an immunizing agent, and a weapon employing organisms with molecular changes or in enormous quantities would be indefensible. Accordingly, a qualifying sentence should be added.


E.R. Keirstead
Col
DMPR
2-2392

CHIEF
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DOCTRINE AND
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MAR 2

MEMORANDUM

2910-CFP 300 (DMEP)

1 Mar 78

DLP4-3

FIRST DRAFT CFP 300 -
CONDUCT OF LAND OPERATIONS

Ref: A. 2910-CFP 300 (DLP) 9 Jan 78 - First Draft CFP 300

The first draft of CFP 300 Conduct of Land Operations has been reviewed by DGMEO in accordance with Ref A. Attached at Annex A are DGMEO comments.



D.C.H. Francis
LCol
DMEP
2-8385

Attachment:

Annex A - DGMEO Comments on
First Draft CFP 300 - Conduct of Land Ops

ANNEX A

TO: 2910-CFP 300 (DMEP)

DATED: 1 Mar 78

DGMEO COMMENTS

FIRST DRAFT CFP 300 - CONDUCT OF LAND OPERATIONS

SERIAL	REFERENCE	OBSERVATIONS	RECOMMENDATIONS
1	313.3	Fd Engr Sqn is no longer the correct term for the engr org in sp of BG.	Amend to read: Cbt Engr Regt.
2	405.2	Term "remotely delivered mines" is not current.	Amend to read "scatterable mines".
3	416.1	Our terminology with reference to the field engineering organizational breakdown in the divisional concept and in the independent BG concept should be outlined in some detail here ie. Fd Sqn versus Fd Engr Sqn, Cbt Engr Regt versus Fd Engr Regt and composition of each.	
4	422.	There is no mention of tactical aviation ability to lay scatterable mines.	
5	511.4.c.	Fd defence stores are no longer handled by engineer units in Canada.	
6	515.	No mention that engineers operate WPs.	
7	620.5.	First half of para missing on page 6-22.	
8	630.2.c.(3)	Covering force is mentioned, but not defined as to level of command at which this term applies.	

MEMORANDUM

2910-CFP 300 (DLO-2)

PA →

Feb 78

DLP 4.

FIRST DRAFT CFP 300
CONDUCT OF LAND OPERATIONS COMMENTS

Ref: A. 2910-CFP 300 (DLP) 9 Jan 78

The a/m draft has been reviewed with comments att at Anx A.

J.J. Morneau
Col
DLO
2-3718

LCol A Geddry/DLR/6-4102/cac

ANNEX A

TO 2910-CFP 300 (DLO 2)

DATED FEB 78

DLO COMMENTS OF FIRST DRAFT CFP 300

GENERAL

1. As one tries to digest the total manual it appears as if there is a fair amount of repetition. For instance command and control and administration keep coming up under different chapters. Consideration might be given to a two part manual, one part for operations and another for administration.
2. It might be opportune at this time to substitute "army" for the expression "land forces" throughout the manual.

SPECIFIC

3. Chapter 3. Section 1. Manoeuvre, not mobility needs to be discussed in this section. Manoeuvre and firepower are the two key elements of combat, for without one the other cannot stand alone. The ability of a commander to use and exploit manoeuvre has frequently throughout history, been a deciding factor in the rise and fall of empires. Mobility on the other hand is a factor which affects manoeuvre, along with many other variables. The commander can have all the mobility in the world, but if he is not inclined to the art of manoeuvring he will face difficult times indeed.
4. Chapter 3. Page 3-3. Command and Control. Something must be said about the "Command" aspects of "Command and Control". Command is the imposition, through one's subordinates, of the commander's will on the battlefield and consequently on the enemy, by the timely application and exploitation of firepower and manoeuvre.
5. Chapter 3. Section 3. Para 313.3 Mention should be made of air defence.
6. Chapter 4. Section 2. Para 404.2. Recce units can be equipped with tanks (US/USSR).
7. Chapter 4. Section 9. Para 426. Manoeuvre must also be mentioned as part of the central core around which army forces operate.
8. Chapter 5. Section 1. Para 502. A clear listing of the principles of administration would be helpful.
9. Chapter 6. Section 2. Para 604. The value of this para is doubtful. It discusses command and leadership and might be situated in a more appropriate section.
10. Chapter 6. Section 3. Para 613. Movement. This para should be dedicated to manoeuvre. One gets the impression that this para is primarily oriented to the defence.

ANNEX A

TO 2910-CFP 300 (DLO 2)

DATED FEB 78

- 2 -

11. Chapter 6. Section 3. Para 614. Protection. Protection can be obtained by timely manoeuvre and should be so stated.
12. Chapter 6. Section 6. This section is difficult to situate in this chapter. It seems too detailed for inclusion here. It should be limited to general points since the subject seems to be adequately covered in Chapter 9.
13. Chapter 7. Section 2. Para 712.5. The observations made here should be deleted in toto. The relationship between a commander and his deputy is a function of personalities and what may work under one "team" may not work under another.
14. Chapter 7. Section 5. 726.4. Provision must be made for orders to be issued via the electronic medium e.i. readouts, etc.
15. Chapter 9. Section 2. 914.4. Some characteristics of the counter attack must be mentioned. Aggressiveness, initiative, maximum effort, everything up, are some which should be mentioned.
16. Chapter 11. Section 5. There are two distinct types of cold weather warfare. Those north of the tree line, where there is little snow and where shelter is not readily available; and those operations south of the tree line, where trees and large accumulations of snow make shelter relatively easy to develop. Some of the main differences between these two areas are mobility, concealment and survivability. These factors will greatly influence a commander's concept of operations. In another vein it might be mentioned that the force which most exploits nature's harshness to advantage will carry the day.

MEMORANDUM

2910-CFP 300 (DLO-2)

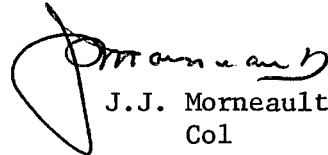
28 Feb 78

DLP 4

FIRST DRAFT CFP 300
CONDUCT OF LAND OPERATIONS - COMMENTS

Ref: A. 2910-CFP 300 (DLP) 9 Jan 78

The a/m draft has been reviewed with comments att at Anx A.


J.J. Morneault
Col
DLO
2-3718

ANNEX A
TO 2910-CFP 300 (DLO 2)
DATED FEB 78

DLO COMMENTS OF FIRST DRAFT CFP 300

GENERAL

1. As one tries to digest the total manual it appears as if there is a fair amount of repetition. For instance command and control and administration keep coming up under different chapters. Consideration might be given to a two part manual, one part for operations and another for administration.

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6. Chapter 4. Section 2. Para 404.2. Recce units can be equipped with tanks (US/USSR).

7. Chapter 4. Section 9. Para 426. Manoeuvre must also be mentioned as part of the central core around which army forces operate.

8. Chapter 5. Section 1. Para 502. A clear listing of the principles of administration would be helpful.

9. Chapter 6. Section 2. Para 604. The value of this para is doubtful. It discusses command and leadership and might be situated in a more appropriate section.

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- 2 -

ANNEX A
TO 2910-CFP 300 (DLO 2)
DATED FEB 78

11. Chapter 6. Section 3. Para 614. Protection. Protection can be obtained by timely manoeuvre and should be so stated.
12. Chapter 6. Section 6. This section is difficult to situate in this chapter. It seems too detailed for inclusion here. It should be limited to general points since the subject seems to be adequately covered in Chapter 9.
13. Chapter 7. Section 2. Para 712.5. The observations made here should be deleted in toto. The relationship between a commander and his deputy is a function of personalities and what may work under one "team" may not work under another.
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16. Chapter 11. Section 5. There are two distinct types of cold weather warfare. Those north of the tree line, where there is little snow and where shelter is not readily available; and those operations south of the tree line, where trees and large accumulations of snow make shelter relatively easy to develop. Some of the main differences between these two areas are mobility, concealment and survivability. These factors will greatly influence a commander's concept of operations. In another vein it might be mentioned that the force which most exploits nature's harshness to advantage will carry the day.

MEMORANDUM

2910-CFP 300 (CMDO)

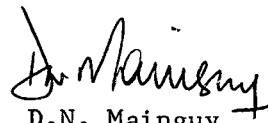
28 Feb 78

DLP 4

FIRST DRAFT CFP 300 -
CONDUCT OF LAND OPERATIONS

Ref: A. 2910-CFP 300 (DLP) 9 Jan 78

1. CFP 300 (Draft) has been reviewed and this Branch is in agreement with the naval aspects of this document.


D.N. Mainguy
RAdm
CMDO.
2-7455

CHIEF
LAND
DOCTRINE AND
OPERATIONS
MAR 3 1978

MEMORANDUM

2910-CFP 300 (DCEO 2)


27 Feb 78

D Freq

PROJECT UPDATE

Please note the following project status.

<u>PROJECT</u>	<u>MILESTONE</u>	<u>TARGET</u>	<u>COMPLETED</u>
78Q056	007	20 Feb 78	16 Feb 78
78Q056	008	22 Feb 78	21 Feb 78
78Q056	009	01 Mar 78	21 Feb 78
78Q056	010	01 Mar 78	21 Feb 78


E.R. Campbell
Maj
DCEO 2
5-1434

E.R. Campbell, Maj/DCEO 2/5-1434/ljb

DEPARTMENT OF NATIONAL DEFENCE



MINISTRE DE LA DEFENSE NATIONALE

CANADIAN LAND FORCES COMMAND AND STAFF COLLEGE

COLLEGE DE COMMANDEMENT ET D ETAT-MAJOR DES FORCES TERRESTRES CANADIENNES

CHIEF
LAND
DOCTRINE AND
OPERATIONS

MAR 1 1978

SC 2900-1 TD 8021
FORT FRONTENAC
KINGSTON, ONTARIO
K7K 2X8

24 Feb 78

National Defence Headquarters
Ottawa, Ontario
KLA OK2

NDRMS/SGDDN 3-32

Referred to
Transmis à DLP

Attention: DLP 4

MAR 1 1978

COMMENTS FIRST DRAFT
CFP 300 CONDUCT OF LAND OPERATIONS

File No
Dossier No. 2910-CFP 300

References: A. NDHQ 2910-CFP 300(DLP) dated 9 January 1978
B. Conversation LCol's Quinn/Hutchinson 21 Feb 78
C. NDHQ 2910-CFP 300(DCEO) dated 20 Feb 78

1. Comments on CFP 300 have been completed in detail by Chapter by the College directing staff members with teaching responsibilities for material contained in the Chapter.
2. As discussed at Reference B, no attempt has been made to collate the comments - they are forwarded as written.
3. Comments on "Signals" content were passed verbally to DCEO and included in Reference C.

E.C. Quinn
Lieutenant-Colonel
for Commandant

Enclosures: 14

AM

② PA
Attachments
held by DLP4
for photocopy.
JH
DLP4
2 Mar 78

OFFICE OF THE
JUDGE ADVOCATE GENERAL



CANADA

CABINET DU
JUGE AVOCAT GÉNÉRAL

MEMORANDUM

2910-CFP 300 (D Law/A)

NOTE

23 Feb 78

DLP

FIRST DRAFT - CFP 300
CONDUCT OF LAND OPERATIONS

References: A. 2910-CFP 300 (DLP) 9 Jan 78
B. First Draft - CFP 300
C. Telecon Col Dangerfield/LCol Swainson 22 Feb 78

1. I have reviewed Ref B with D Law/I.
2. This document is fairly general in nature and consequently I have very few general comments on the paper as a whole. However, Canada has signed Protocols relating to the protection of victims of international and non-international conflicts, and I will be making some observations in that regard on Ref B.
3. Art 517 does not reflect the present role and status of legal officers, and I would suggest that the present Art 517 be deleted and the following inserted:

"Usually there will be Legal Officers attached to Divisional Headquarters and in some circumstances to Brigade Headquarters. Their responsibilities, in general, will be to provide legal advice to Commanders, review summary trial proceedings and act as prosecutors, defending officers, and possibly judges or judge advocates at courts martial. JAG officers and men would be attached to the Division or Brigade Headquarters for administration, discipline etc. but not for duty."
4. While I have no comment from a legal point of view on Art 1301, I am of the opinion that it is not accurate with respect to the possession of nuclear weapons. However, you may have other reasons for wording this article in the way you have.
5. On 12 Dec 77 Canada signed the following Protocols, both of which are attached hereto for your assistance:
 - a. Protocol Additional to the Geneva Conventions of 12 Aug 49, relating to the protection of victims of international armed conflicts (Protocol I); and

.../2

- 2 -

- b. Protocol Additional to the Geneva Conventions of 12 Aug 49, relating to the protection of victims of non-international armed conflicts (Protocol II).

By signing these Protocols, Canada agreed with their content and we will probably ratify them later on. When these Protocols are ratified, they are binding on Canada internationally. In the meantime, I would suggest that they constitute a statement of Canadian policy with respect to the conduct of military operations by this country.

Door NOT closed.

6. In the context of these Protocols the following suggestions are made:

- a. I suggest that an additional paragraph be included at the end of the prefix as follows:

"On 12 Dec 1977, Canada signed the following Protocols:

"a. Protocol Additional to the Geneva Conventions of 12 Aug 49, relating to the protection of victims of international armed conflicts (Protocol I); and

"b. Protocol Additional to the Geneva Conventions of 12 Aug 49, relating to the protection of victims of non-international armed conflicts (Protocol II).

By signing these Protocols, Canada agreed with their content, and they will probably be ratified in the near future. When these Protocols are ratified, they will be binding on Canada internationally. In the meantime, they constitute a statement of Canadian policy with respect to the protection of victims of international and non-international armed conflicts. Therefore, the provisions of these Protocols should be kept in mind by all personnel when reading this Publication."

When?
Unknown!
Geneva Convention
book 30 yrs.

- b. Art 82 of Protocol I - Legal Advisers in Armed Forces - provides as follows:

"The High Contracting Parties at all times, and the Parties to the conflict in time of armed conflict, shall ensure that legal advisers are available, when necessary, to advise military

.../3

- 3 -

commanders at the appropriate level on the application of the Conventions and this Protocol and on the appropriate instruction to be given to the armed forces on this subject."

I suggest that the above be incorporated as a quote from Protocol I as a second paragraph to Art 517 of Ref B. The first paragraph is recorded in para 3 of this Memo.

- c. I suggest that the following paragraph be added to Art 209 of Ref B:

"The basic principles of the law of war: military necessity, humanity, and proportionality, can in most cases be equated with analogous principles of war such as the selection and maintenance of the aim, concentration of force, and economy of effort. For example, wilfully killing or injuring non-combatants is not only contrary to the laws of war, it is also a waste of military effort which should be directed at enemy combatants."

- d. Arts 607 - 618 of Ref B deal with the elements of tactics. It is suggested that some reference should be made to the presence of non-combatants as a factor in decisions on the use of fire power. This reference could be included in Art 612 or 616, or as a totally separate article.
- e. Art 630(2)(c) deals with forms of deception. While most forms of deception are legally acceptable, Art 37 of Protocol I outlines the prohibited forms of deception, and you may wish to add the whole of that article to what is already included in Art 630(2)(c) of Ref B.
- f. Arts 813(3), 814, 908 and 911 are concerned with choice of objectives and fire plans on offence and defence. Art 51 of Protocol I deals with the protection of civilian populations. It is suggested that the whole of Art 51 be included as a new Art 728 of Chapter 7 of Ref B.
- g. Art 916(3) deals with various control measures and firing boundaries for defence planning. It is suggested that a reference to lines surrounding heavily populated civilian areas might appropriately be included in the article.

.../4

- 4 -

- h. Art 1206(6) deals with the interrogation of prisoners of war. The following two sentences should be added to the end of that sub-paragraph:

"A POW is not obligated to give any information other than his name, rank, date of birth, and service number. He shall not be mistreated under any circumstances."

- i. Art 1707 refers to internal security and in sub-paragraph 3 with interrogation of prisoners. I suggest that you add the following sentence to the end of sub-paragraph 3 of Art 1707:

"Under no circumstances will persons being interrogated be mistreated".

7. Ref B is returned herewith.



A.K. Swainson
LCol
DLaw/A
2-4114

Enclosure.

2910-CFP300 (DCEO)

National Defence Headquarters
101 Colonel By Drive
Ottawa, Ontario
K1A 0K2

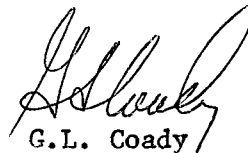
23 February, 1978

Commandant
Canadian Forces Command and Staff College
215 Yonge Boulevard
Toronto, Ontario
M5M 3H9

Attention: LCol G. Simpson

CFP 300 REVIEW


Enclosed you will find for your information the DCEO input on the subject. Regrettably you were not included on the original correspondence.



G.L. Coady

Lieutenant-Colonel
Director Communications and Electronics Operations
for Chief of the Defence Staff

Enclosure



Y. RENE DE COTRET MWO/DCEO 2-2/2-7620/cg

MEMORANDUM

2910-CFP 300 (DLA)

21 Feb 78


DLP 4


①

FIRST DRAFT CFP 300 -
CONDUCT OF LAND OPERATIONS

Ref: A. 2910-CFP 300 (DLP) 9 Jan 78 (attached)

1. A review of Ref A did not reveal any areas of disagreement with accepted current doctrine. In light of the combat development studies being conducted, it is recommended that no further changes be incorporated into the draft CFP 300 until the results of those studies are presented to the Combat Development Committee.


G.C.E. Thériault
MGen
CADO

② Notes PA

2 Mar 78

Att.

MESSAGE FORM
FORMULE DE MESSAGE

Document disclosed under the Access to Information Act
Document divulgué en vertu de la Loi sur l'accès à l'information

FILE
DOSSIER

2910-CFP 300 (DLP)

PRE PRI	CLASS	CIC CT	OSRI IDSO	SSN NSS	DATE	TIME HEURE	CLASS.	RC CD	
							-		-

FOR COMM/CEN/SIGNALS USE - À L'USAGE DU CENTRE DES COMMUNICATIONS/TRANSMISSIONS

PA

PRECEDENCE - ACTION PRIORITÉ - ACTION	PRECEDENCE - INFO PRIORITÉ - INFO	DATE - TIME GROUP GROUPE DATE - HEURE	MESSAGE INSTRUCTIONS INSTRUCTIONS (MESSAGE)
ROUTINE		21/9/5 Z FEB 78	
SECURITY CLASSIFICATION COTE DE SÉCURITÉ	SPECIAL HANDLING INSTRUCTION SPÉCIALE	ORIGINATOR'S NUMBER NUMÉRO DE L'EXPÉDITEUR	
UNCLAS		DLP 45744	

FROM DE	NDHQ OTTAWA
TO-A	4 CMBG LAHR
INFO	<p>CFE</p> <p>FOR SSO OPS FROM DLP 4</p> <p>SUBJECT: COMMENTS CFP 300 - 4 CMBG STUDY GP</p> <p>1. AS DISCUSSED, NOW REQ 4 CMBG COMMENTS TO REACH NDHQ DLP NO LATER THAN 20 MAR 78 AS PRINTING MUST COMMENCE 1 APR</p> <p>2. WOULD APPRECIATE COPIES OF ALL PRESENTATIONS AT STUDY WEEK.</p> <p>WOULD APPRECIATE 1 R22ER PORTION ON EN TACTICS IN BUILT AREAS ASP TO ASSIST IN DOCTRINE DEV</p>

PAGE 1	OF DE 1	DRAFTER'S NAME NOM DU RÉDACTEUR W HUTCHINSON LCOL	OFFICE BUREAU	TEL. - TÉL.
FOR OPR'S USE À L'USAGE DE L'OPÉRATEUR	R T	DATE	TIME HEURE	SYSTEM SYSTÈME
		OPERATOR OPÉRATEUR	SECURITY CLASSIFICATION COTE DE SÉCURITÉ	

DND 903 (6-75)
7530-21-870-8922

COPY 4 - COPIE 4

DLP 4

2-8550

SIGNATURE OF RELEASING OFFICER
SIGNATURE DE L'OFFICIER APPROBATEUR

OK DANGERFIELD COL

001298

PA

MEMORANDUM

2910-CFP 300 (DLA)

21 Feb 78

DLP

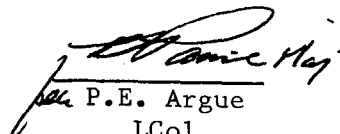
FIRST DRAFT CFP 300 -
CONDUCT OF LAND OPERATIONS

Ref: A. 2910-CFP 300 (DLP) 9 Jan 78 (attached)

1. A review of Ref A did not reveal any areas of disagreement with accepted current doctrine. In light of the combat development studies being conducted, it is recommended that no further changes be incorporated into the draft CFP 300 until the results of those studies are presented to the Combat Development Committee.

ORG SIGNED
BY
W. NIEMY
COL
for G.C.E. Thériault
MGen
CADO

Att.


for P.E. Argue
LCol
DLA

M. Erkins/Maj/2-4388/ic

2910-CFP300 (DCEO)

National Defence Headquarters
101 Colonel By Drive
Ottawa, Ontario
K1A 0K2

20 February, 1978

Distribution List

CFP 300 REVIEW

References: A. 2910-CFP300 (DLP) 9 Jan 78
B. 2910-CFP300 (DCEO) 20 Jan 78

1. Attached are:

- a. Annex A - proposed inserts/changes to CFP 300 in addition to those contained in Annex A to Reference B which remain valid less Appendix 1; and
- b. Annex B - a revised Chapter 4, Section 7.

2. Annex B incorporates comments from within DGCEO (less DEM) and 4 CMBG, CLFCSC, DLAEM and DLR.



G.L. Coady

Lieutenant-Colonel

Director Communications and Electronics Operations
for Chief of the Defence Staff

Attachments

Annex A
Annex B

DISTRIBUTION LIST

Action

Internal

DLP 4

Information

External

4 Canadian Mechanized Brigade
Group Headquarters
Canadian Forces Base Europe
CFPO 5000
Belleville, Ontario
K0K 3R0

Attention: Bde Sig Offr

.../2

001300

- 2 -

DISTRIBUTION LIST (cont'd)

Information

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Fort Frontenac
Kingston, Ontario
K7K 2X8

Attention: Signals DS

Commandant
Canadian Forces School of Communications
and Electronics Engineering
Canadian Forces Base Kingston
Kingston, Ontario
K7L 2Z2

Attention: OC A Sqn

Internal

D Freq
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DLAETM 5
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E.R. CAMPBELL MAJ/DCEO 2/5-1434/cg

ANNEX A
TO 2910—CFP 300 (DCEO)
DATED 20 FEB 78

PROPOSED INSERTS/CHANGES

- 403.2.d. The tank regiment has an extensive, flexible and reliable communications system based on combat net radios. Adequate communications are vital to the conduct of highly mobile armoured operations, they provide armoured commanders with the capability to quickly regroup or redirect their forces, thus enhancing the characteristics of firepower and mobility.
- (New sub-para)
- 404.3.g. Reconnaissance units require a reliable, flexible and secure tactical communications system based on a variety of radios which allows vital information to be passed quickly over long ranges.
- (New sub-para)
- 406.3.f. DELETE: "Artillery communications ... at all levels of command."
- 406.3.h. Artillery communications parallel the normal command communications of a unit or formation. Dedicated communications are provided from the highest to the lowest level of artillery command through a mix of radio and trunk systems. The layout of artillery communications provides great flexibility, reliability, and ensures that liaison is maintained between the artillery and the unit or formations being supported.

.../2

- 2 -

Through the use of the artillery communications system it is possible to co-ordinate all aspects of fire and air support.

(New sub-para)

408.4.e.

Add after: "... with the air defences." The control and reporting system is based upon a theatre wide communications system which links all elements of the Air Defence System. Air Defence communications do not necessarily adhere to the normal chain of command.

417.2.

Add after: "... a specific job and a definite time." Engineers require dedicated communications to exercise the required control. Engineers must be able to communicate effectively under conditions of radio or electronic silence.

815.1.f.

Change to either 815.2 or to 816 as per 828.

828.1

Insert: (line 5): "... primary means of communications at and below Brigade level."

917

Renumber as 918.

917

COMMUNICATIONS

1. The key to effective command and control of forces in the defence is a flexible, reliable and secure communications system capable of supporting operational requirements under the full impact of enemy jamming and under conditions of radio silence.

2. Signals must deploy a variety of networks to ensure survivability and the timely restoral of links

.../3

which come under attack. Communications Centres must be deployed before the battle and the layout of communications must cater for the rapid relocation and regrouping of units and formations.

3. The physical security of Communications Centres and land lines must receive high priority attention. It will often be impossible for Signal Units to redeploy for protective reasons, thus they may have to be dug in and provided with combat forces to supplement their local defences.

4. To the greatest extent possible commanders in the defence should use non-radio communications in order to deny the enemy vital information provided by his radio intercept and direction finding elements.

(New section)

937

Retitle as: LIAISON AND COMMUNICATIONS

937.2

Flexible and reliable communications are vital to the successful conduct of delaying and withdrawal operations. These operations will frequently take place after the communications system has sustained significant damage. It may be necessary, therefore, to establish vital links without regard to established command and control procedures. Deception is vital to delaying or withdrawal operations and it may be necessary to allocate scarce Signal resources to a comprehensive electronic deception plan, thus further limiting the capability of the communications system to support the commander's plan.

(New para)

- 1006.7 Retitle as: COMMAND CONTROL AND COMMUNICATIONS
- 1006.7.c.(4) (4) a flexible, reliable and secure communications system.
(New sub-para)
- 1007.6 Retitle as: COMMAND CONTROL AND COMMUNICATIONS
- 1014 Retitle as: COMMAND CONTROL AND COMMUNICATIONS
- 1014.1 Amend line 4 to read: "... using a helicopter as a radio
rebroadcast station if necessary."
- 1014.4 Communications. The airmobile force will have a special
airmobile Signal Unit which will provide the ATFC with
command and control communications. The inherent limit-
ations of airmobile operations will effect the scale of
communications support. The AMC will be supported by
organiz tactical aviation communications elements for the
control of air operations.
(New para)
- 1048 Retitle as: COMMAND CONTROL AND COMMUNICATIONS
- 1051 Retitle as: COMMAND CONTROL AND COMMUNICATIONS
- 1058 Retitle as: COMMAND CONTROL AND COMMUNICATIONS
- 1104 Renumber as 1105
- 1104 COMMUNICATIONS

Communications problems are exacerbated in mountains.
Communication Centres are difficult to deploy, and it is
often impossible to lay land lines. Radio and radio relay
terminals and repeaters may have to be air lifted to suit-
able sites, and frequency utilization is usually much more
difficult than in other areas.

(New section)

1113

Renumber as 1114

1114

COMMUNICATIONS

Operations in the jungle pose special communications problems. The effective ranges of some types of radios are drastically reduced; land line construction is hampered by the thick bush, but is critical to ensure that cables are not rendered useless by moisture.

(New section)

1126

Retitle: COMMAND CONTROL AND COMMUNICATIONS

1126.2

It is imperative that vital civil telecommunications facilities be seized in any operation in a built up area. Normal tactical communications methods and equipments will often be unsuitable in an urban area and will have to be augmented by civil systems. It is equally important that access to telecommunications and broadcast facilities is denied to the enemy.

ANNEX B
TO 2910-CFP300 (DCEO)
DATED 20 FEB 78

NEW CHAPTER 4

SECTION 7 - SIGNALS

418. GENERAL

1. Signals have two roles in land operations:

a. Command and Control Communications. Communications

provide the vital links through which all the elements of the Command and Control system operate. Signals are responsible for all aspects of land and tactical air force communications throughout the combat and communications zones. This responsibility embraces the design, development, deployment, operation and maintenance of C&E systems, and much of the equipment and facilities associated with the Command and Control system. The provision of communications also involves advising and assisting commanders, staffs and unit personnel, and training users and communicators. In addition Signals assist the staff in controlling the allocation and use of communications and electronics equipment, and are responsible for the management of the electromagnetic frequency spectrum and all aspects of Communications Security; and

b. Electronic Warfare Operations. Signals are responsible for the technical control and conduct of tactical Electronic Warfare operations. This subject is treated separately in Chapter 14.

2. The Command and Control system described in Chapter 3, Section 1, has three fundamental aspects: organization; material; and communications. The organizational aspect involves personnel and procedures, and is the responsibility of the staff. The material aspect involves headquarters equipment and facilities, and is a shared staff-Signals responsibility. The Command and Control system is the *raison d'être* for signals.

419. PRINCIPLES

1. The principles to be used as a guide in the development or deployment of any combat communications system are:

- a. Utility. A combat communication system must provide the correct information at the time it is required;
- b. Flexibility. A combat communication system must be capable of changing quickly in order to meet the needs of the commander;
- c. Reliability. A communications system must not fail at a critical moment;
- d. Durability. A system must be capable of having some of its parts destroyed and yet still function. The system must allow these destroyed parts to be readily replaced; and
- e. Exclusivity. A combat communications system must be capable of restricting the access of unauthorized persons to the information it provides and to restrict the delivery of unwanted information. The latter is especially important as commanders at all levels can quickly become victims of the information explosion.

2. As with war and the application of the principles of war, the commander who fails to provide for the administration (maintenance) of his communication system is likely to lose it at the most inopportune moment.

420. FACTORS

1. Communications is, simply, the act of imparting information or ideas. Communications, like Command and Control, involves personnel, procedures, equipment and facilities (or materiel). They can be ranked in that order of importance. Men communicate: they are able to do so because they understand the procedures and are able to use whatever means are placed at their disposal.

2. Combat communications are provided through adherence to basic factors which are categorized as follows.

- a. Human. While the act of imparting information or ideas is done by the user (or subscriber), it is the professional communicator who is responsible for the

provision of the means. The communicator shares all the hazards of the battlefield with the other arms and must be, perforce, a skilled soldier. In addition, however, the nature of his duties imposes additional burdens on him. To meet these additional responsibilities the communicator must possess five well-developed traits:

- (1) discipline;
- (2) integrity;
- (3) technical skill;
- (4) sense of urgency; and
- (5) stamina.

b. Procedural. Good combat communications rely on well-established and well-practised procedures. The procedures fall into three areas:

- (1) responsibility for provision of communications - between formations, units and headquarters communications are provided from -
 - (a) superior to subordinate,
 - (b) left to right, and
 - (c) supporting to supported;
- (2) responsibility for planning - the staff must involve signals in planning at the start to ensure that the respective duties are defined, one towards the other. Signals are aware of what is required of them and the staff is aware of what can or cannot be done in certain circumstances; and
- (3) operating procedures - it is imperative, however complex the communications system, that Signals provide clear, simple procedures to facilitate the effective use of the system by all users.

421. METHODS

1. There are four principle methods of communications in common use in land operations.

- a. Radio. Radio nets may pass voice, morse code, teletype facsimile, data or other types of traffic.

They are the primary means of communications within combat and combat support units, and for all units and formations engaged in highly mobile operations. Radio nets provide greater flexibility than other methods because all subscribers hear all transmissions. They are, however, very vulnerable to enemy electronic warfare, difficult to control and unable to pass large amounts of information.

- b. Trunk Networks. The trunk networks comprise single and multi-channel (or pair) land lines and radios, and the terminating, switching and routing facilities such as telephones, teleprinters, switchboards and teletype relay centres associated with the passage of telephone, teletype, facsimile and data traffic. The trunk networks are designed and deployed to handle large volumes of traffic with minimum enemy interference. Trunk networks provide the backbone of formation level communication down to brigade level.
- c. Hand Carriage. There is a large volume of information which, due to its form or security implications, is either not suitable for or does not require passage on telecommunications systems. Such information is best exchanged by hand.
- d. Visual. Visual signalling is used within units and sub-units when other methods are not available. There are few, if any, visual signalling resources in Signal units.

2. All four means of communications are integrated, by Signals, into a comprehensive Command and Control Communications system. When the means are organized, deployed and operated in accordance with the principles of communications, commanders will be able to impart information or ideas.

422. ORGANIZATION

- 1. Signal units are, generally, organized in one of three ways.
 - a. Functional. At high levels of command and within the communications zone, where many Signal units exist, it is common to organize them by function, ie, Line Construction, Communications Centre, Radio, etc.

- b. Geographic. At Corps level, and sometimes within Divisions, Signal units are organized to provide the full range of Command and Control Communications support to all subscribers within a certain geographic area.
- c. Formation Related. At and below Division level, Signals are an integral part of the formation headquarters and are tasked to provide communications and combat service support for that specific headquarters.

423. DEPLOYMENT

1. The communications system need not adhere, slavishly, to the chain of command, but it must be responsive to it. The communications system may be deployed in either of two ways - on a chain of command basis, or as an "area" system.
2. The chain of command system is based on command responsibility being decentralized to each formation or unit while technical direction is maintained by the highest level of command. This system provides each commander with the greatest degree of control over his own communications, but it forces him to adapt his organization and deployment to a master plan in order to make the best use of limited resources. Within a chain of command system the reserves of manpower and equipment are spread throughout the formation and may not be available to satisfy critical requirements in a timely manner.
3. Area communications systems involve centralized command and control over many of the communications links between headquarters. In general terms, each commander has a Signal unit capable of providing support for only the internal operation of his headquarters and access to the area system. Most Signal resources are commanded and deployed by the highest formation in order to support all elements of the formation. Area systems are more economical than chain of command systems and are, usually, more flexible.
4. As a general rule both chain of command and area systems are deployed in concert in order to achieve economy while maintaining the ability to organize a formation for special missions.

422. EMPLOYMENT

1. Each unit and formation commander has his own Signal officer who commands the unit or formation Signal elements, and/or provides the commander with advice on communications. In addition to their command relationships, however, Signal officers must be allowed to coordinate technical matters outside of the established chain of command.
2. Because Signal resources are limited, poor deployment of a Signal unit can have disastrous consequences. Commanders and staff officers must ensure that Signals are involved in all stages of battle procedure in order to guard against the possibility of failure of the Command and Control system.
3. The employment of Signal units is based on a consideration of two factors: tactical and technical. Very often there will be a conflict between the deployment that a commander would like for tactical reasons and that which is possible for technical reasons. A compromise is usually necessary. When tactical or technical problems are severe it may be necessary for the higher formation to deploy additional resources for an operation.
4. Signals are a unique arm; their activities extend throughout the combat and communications zones. Communications are critical to command and control: the importance of good communications is rarely evident except when they fail. When Signal units are organized and deployed according to the principles of communications the possibility of failure is minimized.

MEMORANDUM

SC 2900-1 TD 8021

17 Feb 78

SSO

CFP 300 CONDUCT OF LAND OPERATIONS

Reference: A. SC 2900-1 TD 8021 17 Jan 78

1. Chapters 5, 6, and 15 of CFP 300 have now been reviewed and detailed comments are attached as follows:

- a. Annex A - Chapter 5: The Support Services and Administration
- b. Annex B - Chapter 6: Constant Factors in Combat
- c. Annex C - Chapter 15: Movement of Troops

2. A few general comments you might consider:

- a. It is difficult to review chapters of the book in isolation from the publication as a whole, but it is clear that there is simply not enough time to go at the thing any other way than the method set out in Reference A.
- b. The three chapters I have reviewed vary considerably in writing style. They were obviously put together by different people, and there is evidence of the scissors and paste approach here and there. If CFP 300 is to be our "capstone manual", it should be written by one person, starting from scratch but using the ideas in the current manual, to give the finished product stylistic integrity.
- c. The draft as written suffers badly by comparison with FM 100-5 or the German equivalent, 100/100. If NDHQ does give the rewriting job to one single individual, hopefully he will be able to give the finished product the same sort of dramatic punch its US and German counterparts have, and present the ideas in a concise and graphically exciting format along the lines of FM 100-5.
- d. Do we really need this book? If we do, then it is worth taking the time to do it right.

3. In the comments attached, I have changed one of the principles of war from Cooperation to Coordination, and done the same to one of the principles of administration. Cooperation implies that we must all be pleasant chaps and really should get together if possible over a cup of tea to attempt to work together in a proper British Victorian old-school-tie fashion. Coordination implies that we bloody well must get together, and that it is the job of the Commander and his staff to see that we do; indeed, to ensure that nothing of a coordination nature is left unplanned for. Cooperation implies that working together is optional; coordination makes it mandatory. In this respect, it is much closer to its American and Chinese counterpart principle "Unity of Command". If you agree with the change, we should push it up to NDHQ for their concurrence as soon as possible, as it's of a nature guaranteed to rattle teacups all over the North Tower (or maybe it's not').

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4. All in all, the attached comments are only just adequate. A lack of time kept me from giving these three chapters of CFP 300 the thorough critique (rewriting?) they probably need and deserve.

J. I. Hanson

J.I. Hanson

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ANNEX A
TO SC 2900-1 TD 8021
DATED 17 FEB 78

COMMENTS ON CHAPTER 5 OF CFP 300

1. Chapter 5 meets the requirements of a general discussion on administration. However,

- a. Stylistically, it's not very exciting stuff. It should be rewritten completely to give it more punch. As it now stands it's almost word for word the same as its counterpart chapter in CFP 165.
- b. It could be improved by a few selective additions to set administration more neatly into its proper context, and to provide something more than general principles to act as a yardstick for judging the worth of an administrative system. These additions are set out below.

2. Para 501

- a. Add a new subpara 1 "As pointed out in Chapter 1, National Strategy is the art and science of developing and using the political, economic and psychological powers of a nation, together with its defence forces, during peace and war, to secure national objectives. Administration in its broadest sense serves the purposes of national strategy by providing the men, women, equipment and supplies the armed forces need to play their part in securing national objectives, and then sustaining these armed forces wherever they may be deployed and through the whole range of conflict in which they are employed."
- b. Add a new subpara 2 "Administration is defined as the management and execution of all military matters not included in tactics and strategy. It is customarily broken down into the fields of logistics and personnel management".
- c. Remove the existing subparas 1 to 4, deleting subpara 3.

3. Para 502

- a. Underline the key word in each of subparas 2 to 7, i.e.:
 - (1) "Foresight", the first word in subpara 2;
 - (2) "Flexibility", the fourth last word in the second line of subpara 3;
 - (3) "Economy", the first word in the third line of subpara 4;
 - (4) Change "Cooperation" to "Coordination" in subpara 5, first word in the third line and second last word in the fifth line, and underline its first use;
 - (5) "Simplicity", the first word in the second line of subpara 6; and
 - (6) "Communications", the second word in subpara 7.
- b. Add to subpara 5, "Coordination doesn't just happen. It is the result of clear direction by commanders and thoroughness by the staff; indeed, it is the hallmark of efficient staff work. Coordination is as vital to the success of administrative plans and operations as it is to tactical ones."

4. After para 502-8, add a new Section 2 (a draft version is attached as Appendix 1) and renumber subsequent sections and paras. (References below, however, are to the existing numbers in the draft).

5. Para 511

- a. Change the title to read Ammunition, POL and Rations (Combat Supplies)
- b. Para 2a:
 - (1) Reword the second sentence to read "Quantities of ammunition, POL and rations, referred to collectively as combat supplies, delivered routinely ..." etc.
 - (2) Add a new sentence to the end of the para "While deliveries of combat supplies will be on a routine basis whenever possible, the supply system must be designed to respond quickly to emergency demands for combat supplies at any time."
- c. Para 2b: in line 3, delete "RPs" insert "corps supply points", and in line 6, delete "RPs", insert "supply points".
- d. Reword the last sentence of para 2b to read "Ammunition includes mines, explosives, and components of missiles and their fuels."
- e. Change para 3 into subpara 2d, and change the word "supplies" to "rations" in the first line (two places). Renumber subparas 9b and c as (1), (2) and (3), and renumber the subsequent para from 4 to 3.
- f. Add to para 4b (1) "which may be designed to carry offensive armament, and including such conversions from basic A vehicles as armoured engineer vehicles, armoured bridgelayers and armoured recovery vehicles, but excluding APCs".
- g. A subpara should be added somewhere under subpara 4 on Canex supplies.

6. Para 512

- a. Add to para 2a, after "personnel" in line 2, "stores".
- b. Add to para 2c, after "transport units" in line 2, "held at corps or higher levels," and delete "their" in line 3.
- c. Change para 2d (6) from "General transport units (Tipper)" to "Dump truck units".
- d. Add to para 3, after "army" in line 3, "combat or".

7. Para 513. This para should be broken into two separate paras, one for BATH and one for DECONTAMINATION. The terms are not synonymous, and it is strictly a Canadian aberration that our bath facilities have been given a decontamination function. In addition, a portion of the para on BATH facilities should be expanded to include LAUNDRY facilities as well.

8. Para 514

- a. Para 2, first line, delete "categorized", insert "classified", and delete "three", insert "four".

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- b. Reword the title of para 2a to read "First Line or Unit Repairs".
 - c. Reword the title of para 2b to read "Second Line or Field Repairs".
 - d. Reword the title of para 2c to read "Third Line or Intermediate Repairs". The rest of the para should read "Those beyond the capacity or capability of brigade or division repair units. They include the overhaul and repair of assemblies such as engines, guns and electronic assemblies".
 - e. Reword the title of para 2d to read "Fourth Line or Depot Repairs". The rest of the para should read "Those beyond the capacity of intermediate units. They include the overhaul of major assemblies and complete equipments, including tanks, aircraft and ships. Repairs of this nature are often beyond the scope of maintenance organizations in the theatre of operations."
 - f. Change the last phrase in para 3 to read "and a replacement item may be demanded by the losing unit when the damaged equipment is backloaded to a repair agency behind the formation second line organization."
9. Para 515. Add to the first sentence of para 2 "like other combat supplies".
10. Para 519
- a. Para 1, last line, delete "logistics", add "administrative services provided by his unit".
 - b. Para 2, third line, before "supply" insert "which includes".
 - c. Para 3, lines 2 and 3, delete "and individual traing"; this is not a personnel staff responsibility except in NDHQ, and it is wrongly included there. In addition, change "provost" to "military police" in lines 4 and 6 (three places).
 - d. Para 4: insert "including" before "feeding" in line 3, and change "are the production" to "include the provision" in line 5.
11. Para 520.
- a. Para 1, add to the end of the first sentence "as well as attack by aircraft carrying conventional weapons, and by infiltrators, saboteurs and deep mechanized penetrations". Add after "depends" in line 6, "alternate command and control arrangements."
 - b. Para 2, line 5, delete "the bulk of", insert "adequate".
12. LCol Ronald should be requested to go over Chapter 5 and these comments before we go to NDHQ with them.

APPENDIX 1
TO ANNEX A
TO SC 2900-1 TD 8021
DATED 17 FEB 78

SECTION 2 - DESIREABLE CHARACTERISTICS OF AN ADMINISTRATIVE SYSTEM

502. INTRODUCTION

1. The principles of administration are useful general guidelines for providing service support to land formations, but they are too broad to be very helpful in actually designing an efficient administrative system.
2. The characteristics which follow are desirable in all administrative systems, from those functioning in units to those designed to support a national or multinational war effort.

503. CHARACTERISTICS GOVERNING THE WHOLE SYSTEM

1. The system must be economic in peacetime.
2. The system must be capable of a swift and efficient transition from a peacetime posture to a war footing with a minimum of modification.
3. The system must be simple and effective throughout the spectrum of military operations and be designed to cater to the worst case - high intensity conflict.
4. The system must strike a balance between control centralized at the highest level practical for efficiency and economy, and command decentralized to lower levels to ensure the system is mission sensitive, flexible, and geared to the needs of those who use it.
5. The system must be capable of integrating the total military and civilian resources of the nation to the needs of the war effort.
6. The system must recognize that administration is a command responsibility. Commanders at all levels will therefore have administrative resources and advisors available to them to the extent necessary to enable them to fulfill their missions.
7. The administrative system must include alternate command and control arrangements at all levels from the platoon upward to minimize the disruption caused by the loss of commanders and/or a headquarters.
8. All military administrative personnel are liable to be required to serve in a theatre of operations. They will therefore be trained as soldiers first and tradesmen second.
9. Administrative units and installations will be equipped, trained and motivated to fight in their own defense.

504. THE MAINTENANCE SYSTEM

1. Combat essential equipment will be repaired as far forward as possible, ideally where it breaks down or is damaged, to the maximum extent feasible, in order that it may be returned to battle quickly. If it cannot be repaired forward, it will be recovered expeditiously to a location where it can be fixed.
2. Soldiers will be trained to do operator maintenance on their equipment, and to recognize when faults are beyond their own repair capability.

3. Maintenance technical authority and control will be centralized at the highest possible level, but the execution of maintenance tasks will be decentralized. All units and formations will therefore have organic maintenance organizations under command.

505. THE SUPPLY SYSTEM

1. Combat-essential high usage items which have readily predictable expenditure rates (such as ammunition, petroleum, oil and lubricants (POL) and rations) will be pushed forward by the supply system to locations where they can be easily picked up by those that use them. Demand procedures for such items will be kept simple.
2. High cost or low use items which are less mission essential will be pulled forward by units demanding them through routine supply channels.
3. Operational staff controls will be imposed upon any mission-essential item which is or becomes scarce.
4. The supply system must be designed to give priority of response to the needs of the fighting troops, not to the needs of supply management.

506. THE TRANSPORTATION SYSTEM

1. Transport resources must be carefully designed to meet all the transportation needs of the force they must support.
2. The transportation system will be controlled at the highest practical level to ensure the most effective use is made of all means of transport in support of operational requirements. However the command of transport resources will be decentralized to ensure they are responsive to the needs of units and formations. In the case of a conflict between these requirements, transport efficiency will be secondary to the needs of the combat units.
3. Transportation and supply agencies will work together as a matter of routine to ensure items of supply are delivered promptly.

507. THE MEDICAL SYSTEM

1. Medical resources, including medical advice, must be available at all levels of command from the unit up.
2. The medical system will be capable of evacuating patients as quickly as possible to the level at which the appropriate treatment can be provided.
3. The casualty evacuation portion of the medical system will be capable of providing sustaining care to patients en route and at points in the evacuation chain should the system be disrupted.

508. THE REINFORCEMENT SYSTEM

1. The reinforcement system will be designed to provide the proper reinforcements to the place where they are needed, when they are needed there, and ready to do their jobs.
2. Although planning for the supply of reinforcements is done to some degree in bulk much as it is for any other combat-essential commodity, reinforcements will be treated as individuals from the time they enter the system until they leave it.
3. The reinforcement system will be manned by officers and NCOs with command experience, and are members of those branches in which the majority of those soldiers in the system are to serve.

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4. The crews of armoured fighting vehicles and certain technical vehicles will be married up with equipment in the reinforcement system, and go forward to join their new units as a fighting team.

ANNEX B

TO SC 2900-1 TD 8021

DATED 17 FEB 78

COMMENTS ON CHAPTER 6 OF CFP 300

1. Chapter 6 is, or could be, a fairly important part of the whole book. Parts of it are quite good, and just possibly meet the standard CFP 300 should have but generally lacks. However, parts of the chapter are wooly, and other parts are poorly organized. What follows is only one set of suggestions to improve the thing; suggestions constrained considerable by a shortage of time to give the chapter an in-depth review. Perhaps someone else should have a hard look at Chapter 6, and these comments, before we forward any final recommendations on its contents to NDHQ.
2. Para 601. This para is a good example of wooly thinking (or at least wooly writing). The second sentence and the third contradict each other, and the fourth one only adds to the confusion generated by this fact. The whole paragraph needs rethinking.
3. Para 602
 - a. Para 1 gives a definition of operations which does not agree with the definition in either CFP 121(4) NATO Glossary or Chapter 1 of CFP 165. The para should be rewritten to use NATO terminology.
 - b. Subparas a and b of para 1 should introduce such ideas as advancing, withdrawing, pursuing, counter-attacking and counter-penetrating.
 - c. Para 4: delete "and logistics" from the para; it is, by definition, included in administration.
4. Para 603
 - a. Para 1 should be included in the discussion of command in Section 3 of the chapter.
 - b. Para 2 is pretty important stuff, but is not well set out and is incorrectly placed in the chapter. For a start, it does not even define what an appreciation is. It also includes a number of points which are discussed at length further on in the chapter, notably in Section 3. This whole section should be reworked, and moved back in the chapter to provide a logical conclusion to either Section 3 or to the whole chapter (the appreciation is, in effect, the device by which a commander analyses how "the constant factors in combat", which is the subject of the chapter, apply to his particular tactical mission to develop his plan).
 - c. Para 3 belongs in Section 3 of the chapter. In addition, in subpara d, "ensuring his presence" should read "exerting his influence". He doesn't have to be there to do it.
5. Para 604
 - a. Para 1 is a reasonable introduction to the Appreciation of the Situation. Therefore, it should either be moved to that portion of the chapter dealing with appreciation or, preferably, have a sentence added to the effect that "a commander decides on his plan by making an appreciation of the situation" after the third sentence, and "Appreciations are discussed more fully elsewhere in this chapter" at the end of the para.

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- b. The references to the actions of a boxer in paras 2, 3, 4 and 5 add little to the impact of the introduction, and should be deleted.

6. Para 606

- a. The last sentence of para 3 is now a debatable point. A well planned defence no less than an offense leaves the commander loads of scope for initiative and freedom of action.
- b. Rewrite para 9 to read "Coordination. Only through effective coordination will a commander be able to apply all his resources to operations when and where they are needed and will do the most good. Coordination involves ensuring that the efforts of all units and all branches of the staff are directed in harmony toward the achievement of the commander's aim. Cooperation is one aspect of coordination, but unlike cooperation, coordination does not just happen; it is one aspect of a commander's conscious effort to have all elements of his command work together. Many aspects of a commander's responsibilities for coordination are handled for him by his staff: his chief of staff if he has one, his operations staff if he does not."

7. Para 607

- a. Delete the second sentence of para 1; it adds nothing to the discussion.
- b. Separate "command" and "control" into two separate sub-subparas in subpara 1a.
- c. Delete "logistics and" from sub-subpara 1a (4). Logistics is by definition a part of administration.

8. Para 608. As suggested in paras 4 and 7b above, this article should be broken into two parts, one on command and one on control, and the detail on command now in para 603.1 and 3 should be included here. Should the section on Control then not include at least some mention of the staff's role in this area?

9. Para 609. This para should include a brief discourse on what information is and what intelligence is, and how a commander and part of his control organization (ie his intelligence staff) transform the former into the latter and put it to use.

10. Para 64. Delete "logistics and" from the title and line 2 (see para 7c above), change "their" "its" (twice) in the second sentence, and delete the last two sentences; their contents are covered earlier (in chapter 5).

11. Para 612. This para could stand to be punched up a bit to give it more impact; it's pretty important stuff. Maybe the gunners should take a look at it.

12. Para 613. The second sentence of this para is wrong; it purports to talk about tactical movement, but is actually discussing manoeuvre. It should be deleted, and replaced by "Movement is made for a number of reasons: in preparation for tactical operations, for administration, to obtain protection or concealment from the enemy and so on. When movement is combined with fire it is referred to as manoeuvre."

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13. Para 616

- a. The term "spatial definition" in para 2 should be replaced by something more useful. If the subject of the para is control measures, then it should be reworked to emphasize this term.
- b. Para 3 should include definitions or discussions of the terms area of responsibility, area of control and area of interest.
- c. Insert "the use of" after "difficult for" in line 4 of Para 4.

14. Para 617

- a. Para 1. The first seven words of this sentence suffer from the same problem as do the second and third sentence of Para 601. The sentence needs rethinking and rewriting to make its meaning clear.
- b. Delete "reach" and insert "complicate" in the third line of Para 2.

15. Para 620

- a. Insert "in battle" after "leadership" in the second last line of Para 1.
- b. Add to Para 3 "On the other hand, prolonged exposure to the dangers and uncertainties of battle will drain the courage of even the most resolute of individuals. No one has an unlimited stock of courage, and combat stresses constantly drain the available resources. Leaders must be mindful of this, watch out for it in their soldiers, and transfer to less stressful training and staff jobs those whose courage has become exhausted". See the article on "Courage and Fear" in The British Army Review, No 57, pages 44-47.
- c. Something seems to be missing at the top of page 6-23; a part of Para 5 on decisions perhaps?
- d. Add "for no good reason" to the end of the fourth line on page 6-23.

16. Para 621. Insert "do it correctly" after "do something" on line 4 of Para 4.

17. Para 628. Add to this para "It also comes from confidence in oneself, one's comrades one's leaders, one's weapons and one's unit - confidence built by hard training and confirmed in battle."

18. Para 633. Some mention should be made in this article to the fact that air forces in a theatre of operations, particularly aviation units, are administered by an army line of communications (LC), hence cooperation between land and air forces extends to more than tactical operations. It also reinforces the need for all administrative troops to be trained as soldiers first and administrators second (a point made in Para 8 of Appendix 1 to Annex A, and not observed in the Canadian Forces).

19. Para 635. Some mention could be made here about the formation of a branch of the staff to deal with civil-military cooperation (CIMIC as it's called CENTAG): the G5 staff branch in the continental staff system.

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20. Finally, the concept of Battle Procedure is not discussed anywhere in this chapter. As it plays such a key role in the deployment of a commander's resources for combat, it would seem worthy of inclusion in here somewhere. It could appear under the discussion of control, or in conjunction with the points made on the appreciation.

21. In sum, there's a lot of room for improvement in Chapter 6, and someone else should go over it with a critical eye before our final comments go forward on it.

ANNEX C

TO SC 2900-1 TD 8021

DATED 17 FEB 78

COMMENTS ON CHAPTER 15 OF CFP 300

1. In general, this chapter meets the requirements of a general discussion on movement. However, like Chapter 5:
 - a. Stylistically it leaves a lot to be desired, and in some areas it's not as clear as parts of Chapter 9 of CFP 165 (in other areas it is taken word for word from this earlier version).
 - b. It could be improved by selective additions here and there.
2. The chapter should define the types of movement fairly early on; say in Para 1501 or just after Para 1502. The format and content could be exactly as set out in Para 5 of the 7801 version of MOV/1/P (a flawless example of the staff officer's art). Perhaps the types of movement should also be included (Paras 8, 9 and 10 of MOV/1/P).
3. I prefer Paras 901 and 902 of CFP 165 to Paras 1501 and 1503 of CFP 300 for clarity of ideas.
4. Para 1504 is not quite correct insofar as the improved rates of movement between day and night are concerned. For example, a day column moving at day speeds and densities can take up to 33% longer to pass a point than the same column at night speeds and densities on the same road. If the distance covered is short (say than 100 Km), and the column a large one (say 1000 vehicles), the day move can take longer to complete than the night one (7 hrs for the day move, 6 hrs 35 mins for the same column on the same road at night). In effect then, the third sentence of Para 1504.1 is an oversimplification; given greater night densities, the greater the number of troops, the smaller the advantage become for moving by day.
5. The figures in Para 1505.3 seem rather modest. If roads are reasonable, mechanized columns should be able to do better than 10 to 15 MPH (the worst case is for a night move on bad roads: 15 KPH; speeds of up to at least 40 KPH should be attainable with training on good roads by day). The easy answer is to delete all numbers from Paras 1505.1 and 2; CFP 303(9) can be used for exact data.
6. Para 1506.3 speaks of column, file or single file. For movement purposes are these not the same thing?
7. Para 1511.2 speaks of "other critical points", but does not define them. It should do so.
8. Para 1511.3 uses the term "provost" in line 5; it should be deleted and "military police or other traffic control personnel" should be used in its place.
9. Paras 1513.1. c and d should mention the provision of recovery and medical resources as necessary at critical points along the route. Recovery resources are particularly necessary at defiles.
10. All in all, I'd be happier with the parts of the chapter dealing with movement in the combat zone if it followed CFP 303(9) and MOV/1/P more closely.

3-3-2-3

MEMORANDUM

PA
2910-CFP 300 (DLES 2-2)

17 Feb 78

Distribution List

FIRST DRAFT CFP 300
CONDUCT OF LAND OPERATIONS

1. The first draft of CFP 300 has been reviewed with much interest since we are at present involved in formulating the Land Ordnance Engineering doctrine that supports the conduct of land operations.
2. Of particular interest to us is the organization of land forces in a theatre of operations. It is agreed that Brigade Groups, as established for peacetime operations and training, would not normally be used to form Canadian Divisions, however, this implies that the Service Battalion concept cannot be economically used either to form the Divisional Service Group. This, in turn, points to the need for an extra paragraph or two in chapter 5 to outline how the transition from peacetime organization to wartime organization can be effected. Attached as Annex B to this memo is an excerpt from CFP 314(1) Ordnance Engineering System, second draft, which describes the transformations that our system may have to undergo in wartime. The war established maintenance company is the basic building block used.
3. Specific constructive comments on the subject draft are provided at Annex A to this memo.

R.B. Scutcheon Col

for E.B. Creber
BGen
DGLEM
2-2886

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ANNEX A

TO: 2910-CFP 300 (DLES 2-2)

DATED: Feb 78

DETAIL COMMENTS ON DRAFT CFP 300

- p 3-28 (figure 3.2) - a brigade (not to be confused with a brigade group) does not have a Service Battalion as an integral unit. It gets its support from division.
- p 3-33 (331.2) 4th line - delete service battalion, insert maintenance company.
- 5th line - delete sentence starting with "Small equipment ...". It is redundant.
- 7th line - delete "... and so constitutes a second line repair task, ...". This is not true, the job becomes a second line task when it is beyond the unit's capabilities whether it is performed in situ or at maintenance company.
- 8th line - Reword as follows: "... it is set aside at an equipment collecting point (ECP) for subsequent backloading or evacuation".
- p 3-33 (331.3) last line - delete "beyond local repair capability" insert "beyond repair".
- p 3-33 (331.3) last line - delete "recovered" insert "backloaded"
- p 3-34 (331.3) third line - Poorly worded sentence. Replace by "Level four repairs can be done by third line workshops in certain cases, however most level four maintenance is done in the COMMZ by fourth line organizations".
- fifth line - delete "local".
- p 3-36 (figure 3-4) Repair By - delete "INTERMEDIATE LEVEL FORWARD MAINT" insert "MAINT COY OF DISGP MAINT BN".
- Note 1 - delete "forward"
- Note 2 - delete "behind intermediate level maint coy" insert "to corps adm area".
- p 5-14 (514.2) first line - delete "under three headings".
- second line - delete "spare", insert "repair"

- 2 -

- p 5-14 (514.2a) - delete "First Line", insert "Level One".
- p-5-14 (514.2b) - delete "Second Line", insert "Level Two".
- p 5-14 (514.2c) - delete "Third Line", insert "Level Three".
- p 5-14 (514.2d) - delete "Fourth Line", insert "Level Four".
- p 5-14 (514.2a) last line - delete "unit repair personnel"
insert "the operator or unit maintenance personnel"
- p 5-14 (514.2b) first line - delete "repair", insert "maintenance".
- third line - delete complete sentence
- fourth line - replace last sentence by "These repairs are carried out by divisional maintenance companies attached to brigades or allocated to divisional troops support".
- p 5-14 (514.2c) first line - delete "combat formation repair"
insert "divisional maintenance".
- second line - delete complete sentence and replace by "They include overhaul of major assemblies and calibration of test and diagnostic equipment. They are carried out by semi-static Corps Workshops.
- p 5-14 (514.2d) first line - delete complete sentence and replace by "Those repairs needed to restore an equipment to its original specifications, or to extend its useful life, or to improve its performance. They include overhaul of complete equipment, rebuild of major assemblies or retrofit. These are carried out by workshop depots either in the COMMZ or in Canada".
- p 5-14 (514.3) second line - Reword second and third sentence into one sentence "Mobile Repair Teams (MRTs) are used to achieve that, however, when the estimated time to do a repair is too long or the task too involved, the equipment is backloaded to the next line".
- p 5-15 (514.4) third line - delete "theatre" insert "combat zone".

TO: 2910-CFP 300 (DLES 2-2)

DATED: FEB 78

SECTION 7 - WAR ORGANIZATION

347. GENERAL

This section describes the transformations that the ordnance engineering system may have to undergo under war conditions.

2. As Canadian divisions and corps are formed, the maintenance organizations to support them will have to be devised. This will be done by reassignment of complete maintenance organizations as much as possible.

348. UNIT

1. Units that have integral maintenance support in peacetime operations will retain that supporting organization in wartime.

349. BRIGADE GROUPS

1. Self-supporting Brigade Groups, as established for peacetime operations, will continue to operate in wartime for a short period of time. They will be assigned to allied corps and therefore will be provided with maintenance support beyond their own capability by those formations for common equipment and by a Canadian Theatre Base maintenance organization for non-common equipment.

350. DIVISIONS

1. If it is decided to form Canadian Divisions by grouping two or three Brigade Groups together, then a Service Battalion, comprising a maintenance company, would be formed to provide second line support to divisional troops. The organization of that maintenance company would be similar to that described at sect 3 of this chapter. A small maintenance staff, in addition to that of each Bde Gp HQ, would be required at division headquarters to coordinate the maintenance efforts of the assigned Brigade Groups. Such a formation would be provided with level three maintenance by the Allied Corps to which it is assigned for common equipment and by a Canadian Theatre Base maintenance organization for non-common equipment.

2. The situation described at para 1 above, although possible, is unlikely. The formation of a Canadian Division comprising two or more Brigades, either infantry or armoured, is more likely. In that case, maintenance companies of disbanded service battalions, would be assigned to the maintenance battalion of the Divisional Service Group (DISCP). Rn HQs would then allocate a maintenance company to each Brigade, adjusting the composition of MRTs of the FRG in accordance with the type of Bde to be supported, and one maintenance company to the support of divisional troops. A typical Direct Support Maintenance Battalion organization is

.../2

- 2 -

shown at Annex B. Under this concept of operations, all major units of the division will have integral first line maintenance organizations and level three maintenance services will be provided by the Allied Corps to which the Canadian Division is assigned for common equipment and by a Canadian Theatre Base maintenance organization for non-common equipment. Brigade HQs would not require any maintenance staff and the staff would be re-assigned to division headquarters where it would form the basis for the division headquarters maintenance staff.

351. CORPS

1. Once Canada has fielded two divisions, it is possible that a Canadian Corps would be formed. A Corps Service Command (COSCOM) would then be implemented along the lines set out in NATO logistics doctrine for a theatre of operations. Ordnance Engineering System personnel will be employed at both line and staff functions throughout COSCOM in a similar way that they were in a division; the addition of General Support Maintenance Battalions as well as a sizeable maintenance staff at Command HQs being the main differences.

MEMORANDUM

SC 2900-1

16 Feb 78

SSO

CFP 300 - SECTIONS 3 AND 4 OF CHAPTER 10

Reference: A. Memo SC 2900-1 dated 17 Jan 78

1. General. Section 3 of Chapter 10 "Airmobile Operations" and Section 4 of Chapter 10 "Airborne Operations" are in fact Chapters 8 and 7 respectively of ATP-35 (INTERIM). My acceptance of this extraction coupled with the fact that I commented on early drafts of these ATP-35 chapters obviates further detailed comment at this time.

2. Section 3 - Airmobile Operations

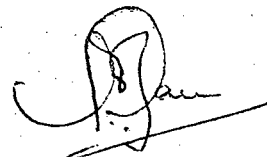
a. Suggest add new para 4 to Article 1009:

"Although specialized airborne and airmobile (air assault) units may be designated for airmobile operations, all infantry units, including mechanized, should be capable of conducting such operations. It is necessary, therefore, that all infantry units should develop and practice SOPs for conducting airmobile operations."

b. Suggest new para 2 be added to Article 1012 (extract from FM 100-5):

"If dismounted anti-tank guided missile teams can be moved into the battle by helicopter, they represent a valuable reinforcement, but one which must be employed carefully. Because the airmobile ATGM teams are vulnerable to massed artillery, they should not be employed in the forefront of the initial defence. They should be kept out of areas which will probably be subjected to preplanned massive artillery concentrations. They should normally be employed on the flanks of penetrations and be separated from attacking enemy armour by terrain obstacles such as rivers, woods, or steep embankments. Whenever possible, they should be sited to deliver surprise attacks - enfilade shots from reverse slopes or through saddles or from built-up areas so they will be protected to some extent from frontal suppressive fire. These ATGM teams must also be withdrawn, repositioned, and resupplied by helicopter. They must attempt to occupy positions which afford terrain cover to the helicopters which support them."

3. Section 4 - Airborne Operations. As this is a Canadian reference manual, and in consideration that our main airborne tasking is directed to Defence of Canada and ALCANUS operations, I suggest that a new article on airborne operations in a cold weather (or Northern) environment be inserted. The drafting author should refer to CFP 310(1) AIRBORNE Chapter 9, Section 2.



M.D. Barr
LCol
DS

MEMORANDUM

16 Feb 78

Dir A Div

CFP 300 - CONDUCT OF LAND
OPERATIONS & FIRST DRAFT - COMMENTS

Ref: A. 2900-1 Dir A Div 16 Jan 78

1. It's too big and too broad in scope. Like some other draft FMC pamphlets, it reads like a compendium of a number of documents and, as a result does not flow well or develop logically. Part of the problem arises from the double aim. In my opinion, this document should stick to the first aim i.e. to set out principles and precepts which govern the conduct of land operations in war. Other pamphlets and documents should then be developed from this capstone publication.
2. At times, the draft deals with matters at a higher level than it should. However, much more time is spent at too low a level. While obviously most important, lengthy paragraphs on pride of unit, low level leadership, tactics etc would be better placed in other more appropriate publications.
3. One chapter which must be updated is Chapt 13, NBCW. Section 2-Nuclear Weapons should be rewritten, to include the current concept of the corps nuclear package.
4. My general recommendations, therefore, are:
 - a. That the book be restructured, with a single aim, from which the subsequent material develops logically.
 - b. That the material contained in the draft be reviewed, with a view to eliminating much of it from this publication.
 - c. That Chapt 12 and other sections dealing with nuclear employment be reviewed & updated, where necessary.
5. Specific areas which can, in my opinion, be reduced in size or eliminated include:
 - a. Preface. Much of this section contains low level philosophy inappropriate to such a document. All good stuff and irrefutable, but not in CFP 300.

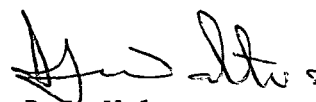
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- 2 -

- b. Chapt 1. Again all good stuff, but this time much of the material is above the scope of the manual.
- c. Chapts 4 and 5. These chapters should be reviewed to determine how they bear on the aim i.e. an examination of principles and precepts which govern the conduct of land operations.
- d. Chapt 6. Sections 4 and 5 should be reviewed, with a view to reducing the amount of material included.
- e. Chapt 7. Sections 1 could be eliminated.
- f. Chapt 15. This whole chapter should be eliminated.
- g. Chapt 16. Appears to get involved in low level tactics.

6. Unfortunately, the requirement to review this manual occurred at an inopportune time, i.e. the height of the land phase. As a result, a detailed examination has not been possible. Even during less demanding periods, I consider that the whole document is too big a bite for one reviewer. However, it is too important a document to allow it to pass without in-depth comment. I recommend therefore:

- a. That an extension to the 1 Mar 78 comment due date be requested. 1 May 78 is suggested.
- b. That a team be formed to examine the document in detail. One officer could be detailed to examine the general aim, scope & structure of the document, while others concentrate on specific chapters or areas of interest.


D.J. Walters
LCol
DS 5

PA

MEMORANDUM

2910-CFP 300 (DLR 4)

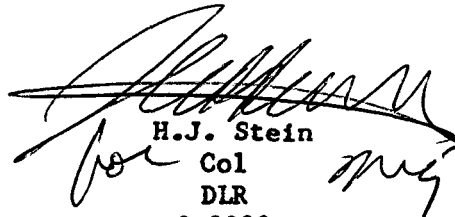
16 Feb 78

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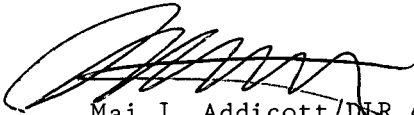
CFP 300 - CONDUCT OF LAND OPERATIONS -
COMMUNICATIONS

Ref: A. 2910-CFP 300 (DCEO), dated 20 Jan 78

1. The draft Sect 7 of Chap 4 received at Ref A has been reviewed by DLR 4.
2. In general the draft does not accurately describe the Command and Control system. More detail is required on what is a Comd and Con system; what are the sub-systems; what is an area system; nodes; what about MIDS; how is trunk system accessed. It is recommended that the various concept papers and LFCDC working papers be used as a guide in completing this sect on Comd and Con.
3. Detailed comments in point form and recommendations for changes are attached as Annex A.


H.J. Stein
Col
DLR
2-3239

Attachment:



Maj J. Addicott/DLR 4-3/2-8100/kj

ANNEX A
TO 2910-CFP 300 (DLR 4)
DATED FEB 78

DLR 4 COMMENTS ON DRAFT SECTION 7 - CHAPTER 4

Para	Comments
418.2	The second sentence is incomplete. Assume it should read ... "the responsibility of the staff." ... to be completed properly.
419.1	Delete the whole para 1. It doesn't contribute anything to the idea of "Principles and Methods"..
419.2	The whole of sub-para 2 ^a - is suspect. "Human" is not a category for principles, and the traits listed for communication could be applied to any trade. Recommend: delete para 2a.
419.2b	Recommend: "Good combat communication rely on well established and well practised procedures." in lieu of the first two sentences.
419.2b(2)	Recommend: "responsibility for planning ^B - the staff must involve the signals in planning from the very start".
419.4	three "principal" ...
419.4a	Recommend <u>Radio</u> as sub-para heading. The use of the word net is not strictly correct for <u>all</u> cases of radio comms (i.e. AN/GRC 122 is a one-to-one link).
419.4b	a & b Mention should be made of facsimile and data which may be passed over CNR or trunk system.
419.4b	Recommend that the penultimate sentence of this para be deleted. Surely one could not advocate such a system for the backbone of the formation level communications. A proper area system would not possess these undesirable characteristics.
420.2	Recommend a new heading and renumber: "421. <u>Deployment</u>
	1. The communications system ..."
420.4	Delete the last sentence. Such a statement is not justified.

.../2

ANNEX A
TO 2910-CFP 300 (DLR 4)
DATED FEB 78

- 2 -

Para	Comments
421.1	Second line Delete "of" ; "/or" ; last line amend as follows "... technical matters on the signals chain of command."
421.2	Recommend "Because signal resources are ...".
421.4	This para does not seem to fit under the heading "EMPLOYMENT". Recommend that it be deleted.

MEMORANDUM

2910-CFP300 7A
2910-1 (DLR 8)
16 Feb 78

DLP

COMMENTS - FIRST DRAFT CFP 300
CONDUCT OF LAND OPERATIONS

Ref: 2910-CFP 300 (DLP), Jan 78

1. The first draft of CFP 300 - The Conduct of Land Operations - forwarded under Ref has been reviewed by my staff.

2. In general, this draft is acceptable. Specific comments on Section 3 of Chapter 4, The Artillery, follow:

a. 406.2e - delete all detail, insert

"The basic artillery fire unit is the battery comprising one or more weapon systems; each battery may be divided into troops or sections for tactical employment. Two or more batteries may be combined to form a regiment having one broad tactical function."

b. 406.2f - delete "; independent battery or troop" insert "or battery".

c. 408.1 - comment: the threat should include direct attack by armed helicopter.

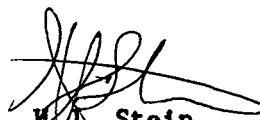
d. 408.3 - second line - delete "positive", insert "passive".

e. 408.4a - fifth line - delete "warfare", insert "support measures (ESM)".

f. 408.5a - delete all detail, insert

"Air defence artillery equipment includes surface-to-air missile systems at the high, medium, low, and very low altitude, rapid firing gun systems, associated surveillance, acquisition and tracking radars and fire distribution systems".

3. For your action.


H.A. Stein
Col
DLR/Darty
2-3239

Maj G.R. Smith/5-8776/kj

MEMORANDUM

SC 2900-1 TD 8021

16 Feb 78

SSO

CFP 300 CONDUCT OF LAND OPERATIONS
COMMENT - CHAPTER 8, OFFENCE

References: A. SC 2900-1 TD 8021 dated 17 Jan 78
B. CFP 300 (DRAFT)

GENERAL

1. In accordance with Reference A comments on Chapter 8 of Reference B are submitted.
2. It is assumed that Reference B is to be a manual which deals with the principles and generalities of land operations and that it will be supplemented by a series of specific manuals, beginning with formation tactics and leading to the combat and combat support arms manuals, which will flesh out all aspects of land operations.

COMMENTS - GENERAL

3. Reference B, Chapter 8 is a great improvement over CFP 165 Chapters 10 and 13 which it will replace. New material has been added and old material up-dated and the whole incorporated into one chapter dealing with the offence. This is an important improvement.
4. The writer found Chapter 8 to be far too long and far too specific to provide an effective framework for the more detailed consideration of the offence by other manuals. By being so long, the reader is lost in a maze of detail and the principles do not stand out clearly. As a means of comparison, the offence chapter of the new US Army Manual 100-5 is 12 pages long compared to 70 (double spaced) pages in Reference B.
5. Further, because much material has been taken directly from CFP 165 and ATP-35 the glaring faults of these manuals are incorporated into the new one: it is almost unreadable. Except for the new material added, the wording and construction of much of Chapter 8 is so difficult to read that it is considered unlikely that it will receive serious study by officers, let alone other ranks (for example, read para 801.3 or 805 which are typical examples of the extremely obtuse style of this chapter). Again, comparison with FM 100-5 leaves CFP 300 far behind in readability.
6. The organization of Chapter 8, which better than CFP 165, requires re-thinking. Sections 2 and 3 (Attack and Advance) should be interchanged so that they conform to the "cycle" of battle. Within Section 1 (General), Articles 802 (Types of Offensive Operations) should come after the more general Articles 803 (Fundamentals), 804 (Ground) and 806 (Execution). The organization of material on the advance is particularly confusing. Throughout Section 3 (Advance) pursuit and advance are confused. These should be clearly separated. Also, in Section 1 (General) too much specific material on the advance is incorporated. The whole subject of the advance in contact is not included but should be.
7. More emphasis on simplicity should be written into the whole chapter. The reader is left with the impression of the immense complexity of the offence when the really important principle is its simplicity.
8. FM 100-5 contains a very useful discussion about the division of responsibility of the various levels of command in operations. A clear understanding of the interests of commands at various levels should be considered for inclusion in CFP 300.

.../2

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9. The offensive aspects of electronic warfare are not included and should be.

COMMENTS - SPECIFIC

10. Para 801.2d. Add "and demoralize him".

11. Paras 801.5, 802.2, 802.4 and 820. Include considerations of the advance in contact.

12. Para 802.1d. Add ambush.

13. Para 802.7. Add that a quick attack is seldom made against organized, well prepared defences.

14. Para 802.8. Include counter-attack as a form of deliberate attack.

15. Para 802.9-13. The differentiation between exploitation and pursuit is not clear. Suggest the addition of exploitation being intended to take advantage of enemy confusion to capture important ground and that exploitation should be planned at all levels for every attack.

16. Para 803.1. Delete, unnecessary.

17. Para 804. Add that capture of ground may be one of the aims of the attack (as may be destruction of the enemy).

18. Para 805. Add sentence on AD.

19. Para 806.5, Line 6. Change non-armoured to dismounted.

20. Para 807. Delete.

21. Para 808.1. Aim of attack may be to capture ground.

22. Para 809.2-4. Add reference to figure 8-2.

23. Para 809.5. Add reference to figure 8-3.

24. Para 809.7. Insert after "figure", 8-4.

25. Para 809.11. Add reference to figure 8-5.

26. Para 809.12. This should be included in para on frontal attacks.

27. Para 809.14. Insert after "figure", 8-6.

28. Para 810.1. Should include Reconnaissance, Planning and Preparation Stage as one stage of the attack. Exploitation should be separated from reorganization.

29. Para 812. Mention terrain-studies or going-maps as a task for reconnaissance. Sources of high-level intelligence should be mentioned (intercept, civilians, satellite/photography, AWACs, etc). The importance of the integration of all-source intelligence and getting it down to fighting levels should be stressed.

30. Para 814. This should be shortened to one or two paras dealing with types of fire, stages of attack, pre-planned or on-call and air.

31. Para 815. Mention should be made of command arrangements stressing simplicity and need for tactical commanders to be well forward where they can see.

32. Paras 816.2 and 816.3. Tanks set the pace in mounted operations, infantry in dismounted operations. In each case all arms support the pre-dominant ones. Note the difference in wording between FM 100-5 and CFP 300. The former is very clear.

.../3

- 3 -

33. Para 816.8. This para considers only low level air defence and should be expanded to consider the whole air defence system, including air and electronic warfare.

34. Para 817. Emphasize the three types of operations:

- a. Nuclear weapons will not be used.
- b. Nuclear weapons may be used at anytime.
- c. Nuclear weapons are being used.

This para considers the last case only. The NATO nuclear pulse doctrine makes some of this para invalid.

35. Para 818. This para is very repetitive of previously presented material. Some of this properly belongs in tactical manuals. Suggest some of the material (which is good) could be placed under a new heading - "Leadership".

36. Para 820.1-6. Much of this general material could go in para 802.1-6.

37. Para 821.2. This para confuses pursuit and advance.

38. Para 824. More should be said about by passing - policy, mop-up, etc.

39. Para 825.9. First line for "occupying a defensive deployment", read, "has been deployed for defence".

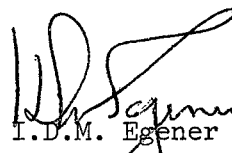
40. Para 832. Heading above this para should be "SECTION 4 - ADMINISTRATION".

41. Para 834.3 and 4. For ration, POL and ammunition, read "combat supplies".

42. Para 834.6. The point should be made that the advancing force is closing up to its own broken down and damaged equipment, weapons and vehicles, therefore recovery is not a problem. What about salvage of enemy weapons, combat supplies, etc?

CONCLUSION

43. It is recommended that this chapter be completely reviewed for organizational logic, which is lacking now. Further, it should be rewritten in simple, concise, hard-hitting language and made shorter and more readable.


I.D.M. Egner
LCol
DS
5802

MEMORANDUM

SC 2900-1

16 Feb 78

SSO

CFP 300 CHAPTER 11 - COMMENT

Reference: A. Memo SC 2900-1 dated 17 Jan 78

1. Section 1 - Introduction, 1101.2d, Line 4. Insert in parenthesis after word "support" the phrase: "(including attack helicopters)".

2. Section 2 - Mountain Warfare

a. 1102, General

(1) Number this paragraph "1".

(2) Insert after word "tactically" on line 5: "The essence of mountain warfare is to gain the heights and fight from the top down. Thus, light airmobile infantry will play the dominant role in mountain fighting. The helicopter is by far the principal vehicle for moving forces engaged in mountain operations."

(3) Delete the last two sentences and add new paragraph "2":

"2. Mountainous terrain greatly amplifies the advantages of the defender. Delaying actions are particularly effective as inferior but determined forces well placed on dominate terrain can hold an enemy many times its own strength."

b. 1103.1, Line 6. Insert after word "high"; "ground, along spurs and ridges rather than in the depressions between them. Movement through a valley, without security on the high ground, invites destruction. The high ground provides many opportunities for effective covering fire and mutual support. Digging may be difficult or impossible. Therefore troops must make full use of reverse slopes, rock walls or sangars."

c. 1103, After Para 1. Insert new para 2 as follows (and renumber remaining paras accordingly):

"2. Because of the increased advantages of the defender in mountains, the small unit commander must often emphasize the use of surprise in the attack. Frontal assaults in daylight are normally prohibitively costly. Helicopter assaults on heights which dominate the defender's positions are more advantageous. If helicopters are unavailable, the envelopment conducted by a stealthy night approach without preparatory fire may well provide the best chance of success."

d. 1103.2, Last Line. Add new sentence; "Attack helicopters are especially useful for compensating for the limitations imposed on the mobility of armour in this environment."

3. Section 3 - Desert Warfare

a. 1106, General. Add new sentence at end of para: "Large forces are seldom canalized by the terrain and, therefore, large scale use of mines and obstacles is required."

b. 1107.1

(1) Line 2. After "desert" insert "because of the need to

.../2

- 2 -

concentrate from dispersed locations or conduct wide envelopments and turning movements".

- (2) Line 4. After word "motorized" insert new sentence:
"Airborne forces may be valuable for the initial lodgement and airmobile forces can be employed to good advantage because the freedom of manoeuvre and vastness of these regions favour a fluid type of warfare."

(3) Start New Paragraph 2

"2. Other characteristics that may have important consequences are:

- a. special equipment, such as tracks, oversize tires, and wire netting, is required to improve the mobility of vehicles;
- b. the lack of cover, because -
 - (1) it creates a need for the dispersion of forces and camouflage,
 - (2) close air support and air interdiction is highly effective,
 - (3) movement at night or during sandstorms while maintaining strict communications security assumes enormous importance to conceal intentions,
 - (4) effective deception measures of all types (eg, feints, ruses, decoy equipment, etc) and security are indispensable conditions for successful concentration of forces, and
 - (5) there is an initial psychological shock to troops, who feel isolated and exposed to the enemy and this must be countered during the acclimatization period before battle;
- c. air defence is vital to preserve freedom of manoeuvre; and
- d. easy observation and long fields of fire make enemy ATGM and air defence weapons principle targets for indirect fire suppression."

c. 1108.1. Add new sub-paragraphs d, e, and f:

- "d. L of C traffic should be minimized, and carefully regulated, and, as far as possible restricted to night movement;
- "e. L of C must be covered by strong air defences; and
- "f. units should be organized and equipped to sustain themselves for 72 hours without normal resupply."

4. Section 4 - Jungle and Bush Warfare

- a. 1110, General and 1111, Effects of Topography. Delete and insert:

"1110. GENERAL

Operations are primarily affected by two environmental factors - climate and vegetation. These two factors combine

.../3

- 3 -

to restrict movement, observation, fields of fire, communications, battlefield surveillance and target acquisition. On the other hand these factors favour operations by providing excellent cover and concealment. However the environmental effects dictate that all equipment accompanying combat forces must be rugged, light weight and man-portable. The fighting load of the soldier should be kept under 40 pounds."

"1111. ENVIRONMENTAL EFFECTS

"1. The heat and humidity rapidly diminishes the vitality of troops and their resistance to disease. Acclimatization and special training is required to counter health hazards and maintain morale or more troops may become hospitalized because of disease than because of wounds. In addition, the constant dampness attacks equipment, especially radio sets, optical equipment, leather, metal and food.

"2. There are few roads, and tracks are usually only a few feet wide. Movement off tracks is often impossible, except when a path is out. Visibility and fields of fire are extremely restricted, and navigation is difficult. Vehicular movement is normally canalized, impeded, or impossible. Cross-country movement by foot is slow and exhausting. Therefore airmobility is critical to a successful jungle campaign. Infantry units should be committed by helicopter whenever possible and helicopters and tactical airlift must be carefully husbanded for the resupply effort. In some areas water transport can be used to enhance overall mobility.

"3. In dealing with these conditions good discipline and training, sound organization, accurate intelligence, and bold leadership are essential to success."

b. 1112, Characteristics. Delete and insert:

"1112. CHARACTERISTICS OF OPERATIONS

"1. Operations in jungle and bush are characterized by the employment of a high proportion of infantry, especially air-mobile infantry. Infantry short-range, flat trajectory weapons, including automatic small arms, light anti-tank weapons, flame and grenades assume great importance. Artillery gun positions are difficult to find (clearings assume great tactical importance) and effective fire is reduced by thick and high bush or trees. The high trajectory of mortars makes them very suitable for firing from small clearings. Leaders, at all levels, should be capable of directing and adjusting mortar fire as it may often be the only indirect fire available. Armoured and long range ground delivered ATGM support is limited. Therefore close air support (including attack helicopters) and air interdiction are essential.

"2. Reconnaissance and target acquisition are particularly difficult and the chances of surprise and ambush are high. Patrolling is essential and there are many opportunities for effective long-range and deep penetration operations, especially against enemy bases of supply. In no other type of military action is ambush more important, more effective, or more frequently employed than in jungle combat.

"3. Since manoeuvre is limited, operations are normally conducted by platoons and companies. Combat actions are likely to be short and violent. The usual technique is to employ infantry to find the enemy, pin him down, and cut off his escape; then, concentrate field artillery and air firepower on the enemy to destroy him."

.../4

5. Section 5 - Cold Weather Warfare

a. 1115, General

- (1) Line 7. Insert after word "training"; "dynamic leadership".
- (2) Add new sentence at end of para: "Finally, the cold weather environment significantly increases the time required to perform even simple tasks. Experience has shown that five times the norm may be required during extreme temperatures."

b. 1116, Characteristics

- (1) Insert new paras 1 and 2 and renumber remainder accordingly:

"1. One of the most important environmental effects is the impact upon mobility. Mobility varies considerably according to season. During winter months, light infantry units achieve mobility by foot, snowshoes, skis or by light oversnow vehicles. Tracked vehicles are useful except during spring thaws. Wheeled vehicles and trailers are not generally suitable for cold weather operations. Thus, airmobility provides the most effective method of movement for light infantry units and resupply year-round.

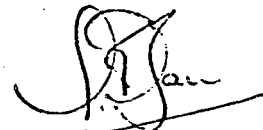
"2. Navigation is difficult. Ice fogs can form over defences, bivouac areas, gun positions, columns, etc. Turret elevating, and traversing mechanisms operate with difficulty, and maintenance is made more difficult at the very time that the need for it is increased."

- (2) Add new para after last para:

"5. Of particular importance is the opportunity to achieve surprise and the corresponding ever-present danger of being surprised. Because the severe weather conditions increase the natural tendency for troops to seek protection, the opportunities for achieving surprise by attacking during blizzards, white-outs, etc, are abundant. Conversely, the requirement for increased security in the defence during such periods demands intensive supervision."

6. Section 6 - Raids and Clandestine Operations. No comment.

7. Summary. The above insertions have mainly been extracted from FM 100-5 OPERATIONS, Chapter 14. I also feel that there is a need for doctrine on forest operations (ie, Bavaria) as well as jungle operations. I recommend that Chapter 12, ATP-35 (INTERIM) be adopted and inserted into the CFP 300 draft.



M.D. Barr
LCol
DS

5508

T.D.
D.I.
No.

2910-CFL 300

MAIN FILE NUMBER
DOSSIER PRINCIPAL

15 Feb-78

[illegible]

1. Temporary Dockets are to deal WITH ONE CASE ONLY.
Les dossiers temporaires sont créés à l'égard d'un SEUL CAS.
2. T.D.'s NOT to be placed on main file UNLESS Records Management Office informed by File Control Form DND 710.
Ne PAS placer un dossier temporaire dans le dossier principal SANS en informer le Bureau de la gestion des dossiers au moyen de la formule DND 710.
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Mentionner le numéro du dossier temporaire et le numéro de référence du dossier principal dans toute correspondance.
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Utiliser la méthode applicable aux dossiers principaux pour les demandes, acheminements, rappels, etc., des dossiers temporaires; employer la formule DND 710.



Canadian Armed Forces
Air Command

Forces armées canadiennes
Commandement Aérien



2910-CFP300 (IPR)

Air Command
Westwin, Man
R2R OT0
15 Feb 78

NDRMS/SGDDN 3-3-2

Referred to
Transmis à... *DLP*

National Defence Headquarters
Ottawa, Ont
K1A 0K2

FEB 24 1978
REV

Attention: DLP

File # *2910-CFP300*
Doc. *DGCEO*

Reference: A. 2910-CFP300 (DLP) 9 Jan 78

Chargé de Change à *15 FEB 78*

Attached as Annex A are our comments and recommendations
for revision to the draft of CFP300 received under cover of ref
A.

[Signature]
W.D. Stewart
Colonel
for Commander

Attachment: 1 ✓

Annex A
Dg

ANNEX A
TO 2910-CFP300 (IPR)
DATED 15 FEB 78

DETAILED COMMENTS ON DRAFT CFP300

1. Chapter 1, Section 5 and 7 - CFP283(1) has different classifications of "war" or "conflicts" to those presented in this manual. Although we do not consider this to be a major problem, the same terminology should be used where possible, in all CF publications.
2. Page 3-10, para 310.4 - delete para 310.4 and insert:
"AIR SUPPORT. Air Support includes close air support, air interdiction and tactical air reconnaissance operations which when conducted in support of land forces are collectively known as offensive air support. Counter-air operations, both offensive and defensive, will be essential to achieve air superiority and, as such, support land force operations. In addition, tactical air transport operations may also directly support land forces when requested and coordinated through the tactical air support system." This description is drawn from the working draft of the new ATP-33/3 and we consider it to be more accurate since it includes counter-air operations.
3. Page 4-1, para 401.2.b - delete "and Air" in line 3 and add the following to para 401.2: "Tactical Aviation (or Tactical Helicopter Units) although not an "arm" of the land forces do provide both direct and indirect support."
4. Page 4-16, para 408.1, line 2 - delete "strike aircraft" and insert "strike/attack aircraft" to indicate the threat from aircraft armed with either nuclear or conventional weapons.
5. Page 4-16, para 408.2 - insert "land force" between "current" and "defence" in last sentence. Shipborne anti-missile weapons already exist (Sea-Wolf, UK).
6. Page 4-16, para 408.3 - delete "positive" in line 2 and insert "passive".
7. Page 4-17, para 408.4.a. - In line 3, insert "defensive" between "for" and "counter-air" because fighter interceptor aircraft according to CFP121(4) are utilized for air-to-air operations. This requires that para 4.c. be deleted in its present form and rewritten as follows: "These are the longer range weapons of the air defence system. Their task is to intercept and destroy the enemy at maximum ranges."
8. Page 4-26, para 412.2 - delete "attack by close support aircraft" and insert "close air support" which is a NATO recognized term.

ANNEX A
TO 2910-CFP300 (IPR)
DATED 15 FEB 78

9. Page 4-34, para 422.1 - delete "the air environment of the Canadian Forces" and insert "AIR COMMAND".
10. Page 4-35, para 422.1.b - add "and direction" between "observation" and "of" in lines 1 and 2 to describe full capability.
11. Page 4-35, para 422.1.ê - we recommend subpara 1.e to be rewritten as follows:
"FIRE SUPPORT. Helicopters armed with air to surface missiles, rockets, guns or mines can produce direct fire support for air mobile operations and augment...".
12. Page 4-36, para 423.1, line 9 - delete "the air element" and insert "Air Command". In addition we suggest that, ideally, tactical helicopter units are also equipped with "attack Helicopters" and you may wish to incorporate them as was done in CFP311(5).
13. Page 8-35, para 816.9 - as previously stated "Tactical Aviation" or "Helicopter" units are not considered to be an arm of the land forces. Air support requires a mention but this should be pointed out not in a way which suggests that Air Command units are under land force command. In addition we prefer the term "Tactical Helicopter" to "Tactical Aviation" and consider "Aviation" alone unacceptable because it has a much wider application.
14. Page 8-60, para 829.1 - delete "if the aircraft are available". We do not consider that a request for air support is related to aircraft availability, though meeting the request is.
15. Page 8-60, para 829.3 - delete "demanding" in line 1 and insert "requesting".
16. Page 9-33, para 911.9, line 1 - delete "Tactical Air Support" and insert "Offensive Air Support" which is used in ATP27A and the working draft of ATP-33/3.
17. Page 9-33, para 911.9 - add to last sentence: "when the position or type of target is outside the effective range or capabilities of organic land force weapons".
18. Page 9-50, para 915.1.f - recommend "attack" or "anti-armour" be used instead of "anti-tank" in first line.
19. Page 9-51, paras 915.3.a and b - paras 3.a and b should be replaced with the following more comprehensive text:
 - "a. Counter-air operations, both offensive and defensive are conducted to attain and maintain a favourable air situation by the destruction or neutralization of enemy air resources. In this manner, defensive land force operations can be assisted whenever enemy air presents a significant threat to friendly forces. Ground forces can assist in these operations by suppressing enemy forward air defences.

ANNEX A

TO 2910-CFP300 (IPR)

DATED 15 FEB 78

- b. Air interdiction operations, conducted to destroy or neutralize the enemy's military potential before it can be brought to bear against friendly forces and to restrict the mobility of enemy forces by disrupting their lines of communications are considered to be more economical and effective than close air support missions in most circumstances. However, in an enemy breakthrough situation, all available fire power including close air support may have to be employed in the vicinity of the FEBA. Due regard must be given to the morale effect of CAS on our own troops."
20. Page 9-88, para 933.c - delete "anti-tank" and insert "attack".
21. Page 16-2, para 1602.1.a - insert "If possible" before "close air support" and alter "must" in line 1, to "should" in order to indicate that other priorities may result in reducing the number of missions committed to CAS.
22. Page 16-3, para 1603.1, line 4 - add "may" between "support" and "complement".
23. Page 16-3, para 1603.1, last sentence - we recommend the following: Close air support should be an integral part of the land force commanders planning for offensive and defensive operations.
24. Page 16-7, para 1603.5 - delete second sentence and insert: Counter air operations are conducted to maintain a desired degree of air superiority. The aim of offensive counter-air missions is to seek out and destroy enemy air power. Representative targets are surface-to-surface missile sites, aircraft, air bases, supporting facilities, command and control facilities and surface to air missile sites. Defensive counter-air missions involve the employment of a combination of passive and active measures designated to nullify or reduce the effectiveness of an enemy air attack and permit freedom of action to all friendly forces.

CHIEF
LAND
DOCTRINE AND
OPERATIONS

FEB 17 1978

MEMORANDUM

2910-CFP 300 (DSM 2-3)

15 Feb 78

DLP 4

FIRST DRAFT CFP 300 -
CONDUCT OF LAND OPERATIONS

Refs: A. 2910-CFP 300 (DLP) 9 Jan 78
B. FMC 2910-CFP 312(1)(DOC) 9 Jun 77

1. In the review of CFP 300 (First Draft), the following paragraph is felt to require revisions in the light of current supply policy and procedures and per Reference B:

a. Chapter 5, para 511, sub para 2b

- (1) The word "stores" in the context used is vague and should be replaced by the word "supply" in the theatre system context.
- (2) Later in the same sub-paragraph "the transport organization has complete responsibility" is an incorrect statement. The composite platoon and the ammunition platoon of the supply company although generally co-located with the transport organizations still have a very real role in receiving, accounting for, breaking bulk, loading and preparing for issue rations, POL and ammunition for the Bde Gp units and also to inspect and repair ammunition. The relevant paragraphs of Reference B are listed below:

Chapter 2, Section 5. Paras 247, 248,
Chapter 5, Section 3, Paras 523, 524,
Chapter 7, Section 1, Paras 702, 721.

2. In view of the comments above, it is felt that the paragraph should be revised and rewritten as follows:

- b. The provision, holding, maintenance, and supply of ammunition is a supply responsibility as far forward as the corps level at RPs. Supply is responsible for inspection and repair of

.../2

- 2 -

ammunition at all levels. Its movement, however, is the responsibility of the transport organization at all levels. From replenishment points (RPs) forward, the transport organization has custody on wheels, of these commodities with control of issue vested in the supply organization under direction of Bde HQ. Ammunition includes mines and components of missiles and their fuels and explosives.



W. P. Whelan
LCol
DSM 2



National
Defence

Défense
nationale

2900-1(SIGS)

4 Canadian Mechanized Brigade Group
Headquarters and Signal Squadron
CFPO 5000
Belleville, Ont
KOK 3R0
10 Feb 78

National Defence Headquarters
Department of National Defence
Ottawa, Ont
K1A 0K2

NDRMS/SGDDN 3-3-2

Referred to
Transmis à DGCEO

14 1978

Attention: DGCEO

File No
Dossier No. 2910-CFP300

Charged to/Chargé à

DRAFT CFP 300
COMMUNICATIONS - COMMENTS


Reference: A. 2910-CFP 300(DCEO) dated 20 Jan 78

1. The redraft of Chapter 4, Section 7, to CFP 300 has been reviewed as requested in reference A. The redraft is a considerable and necessary improvement over the initial very vague effort. There are however some areas of the draft which require comment. No effort has been made to address errors in syntax, spelling or typing.
2. The basic principles that are stated as being necessary for provision of combat communications, are somewhat difficult to apply and hence should not be defined as principles. They are in essence factors to be considered in the provision of communications.
3. The statement in para 419.2.a. that communicators must possess certain traits to an extraordinary degree is far too complimentary depending on individual interpretation of extraordinary. A simple statement that a good communicator possesses a degree of the traits is sufficient.
4. The fifth trait of robustness might better be described as versatility. With the exception of lineman, robustness is not a required trait and certainly not to an extraordinary degree.
5. After learning the three basic principles of which the system characteristics are included, the reader is introduced to three further characteristics which must be applied for successful communications; utility, results and exclusiveness. This leads to confusion as to what is really required for provision of combat communications.
6. The trunk system is the backbone of formation level communications down to but excluding brigade. Net radio is the primary means of communication at brigade and below.

.../2

- 2 -

7. Under para 420, organization, sub-para c., is better titled "Formation Related". At and below Divisional level Signals are an integral part of the formation headquarters and are tasked to provide communications and combat service support for that specific headquarters.
8. At sub-para four of para 421, substitute peculiar arm with unique arm. One word can destroy a lot of credibility.
9. Amend the final sentence to read "When Signal units are organized and deployed according to the principles of communications, the possibility of failure is minimized".
10. These comments are offered in a constructive attitude and it is hoped that they will be of some assistance.


P.A. Tappin
Major
Commanding Officer

MEMORANDUM

SC 2900-1


13 Feb 78

SO 2 Trg

CFP 300 - CONDUCT OF LAND OPERATIONS - DRAFT
CHAPTER 7 - COMMAND AND CONTROL - COMMENTS

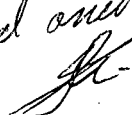
References: A. CFP 300 Draft
B. CFP 303(2) Interim 2

1. The contents of Chapter 7 are good however readability suffers from too much detail, repetition and superfluous statements.
2. Since the title and aim are the conduct of land operations and generalities respectively, reference to NATO and definitions should be avoided. NATO infers geographical location. Definitions are the opposite of generalities and properly belong in "subordinate" doctrinal manuals of amplification. Delete all of this content.
3. The frequent use of article headings is disruptive, productive of empty space, generally detracts from readability and increases repetativeness. Delete the majority if not all.
4. Any reference to other "corps manuals", etc, should be established in the forward or preface to the publication and deleted from the remainder of the work. Paragraph, Section and Chapter cross references should be also deleted.
5. Sections 2 and 5 and to a certain extent Section 4 of Chapter 7 are too elaborate and leave little room for expansion in CFP 313(2) Interim 2 and other publications. They must be more condensed and general.
6. Paragraph 718 of Reference A and paragraph 303.1 of Reference B describe or define essentially the same thing; the former as DEPLOYMENT PROCEDURE and the latter as BATTLE PROCEDURE. Should paragraph 718 be retained, which I do not recommend, Reference B requires amendment to conform. This would also be the case for many other doctrinal publications.
7. My belief is that this Chapter 7 attempts to achieve too much. Incorporating the above, I have attached a severely edited version which may be useful.


S.M. Newell
LCol
DS

Attachment

SSO

I realize that article headings are part of our CFP format. I have inked in some suggested ones.


CHAPTER 7

COMMAND AND CONTROL

SECTION 1 - INTRODUCTION

701 THE COMMANDER

1. The authority vested in an individual to direct, coordinate, and control military forces is termed "command". This authority, which derives from law and regulation, is accompanied by commensurate responsibility that cannot be delegated. In discharging his responsibility, the commander exerts authority to direct those actions and to establish those standards that ensure accomplishment of his mission.
2. The commander is the leader and instructor of his command. His prime responsibility is to accomplish his mission with the least loss of the men and materiel at his disposal. He will be dynamic, decisive and resolute in pursuit of his mission. His personality, attitude and capabilities will mold his command, inspire confidence in him, ensure obedience to his direction, ensure mutual understanding and common reaction ^{to} of his direction by his subordinate commanders; and permit them to exercise initiative. He will possess the fullest possible measure of understanding of the capabilities of his men and materiel, his subordinate commanders, his headquarters and the enemy.
3. Command will normally be exercised through immediate subordinate commanders. In an emergency it may be necessary to bypass one or more of them for short periods of time. This should be considered exceptional. Coordination of the commander's direction will normally be effected through his headquarters. Continuity of command must be ensured.

SECTION 2 - HEADQUARTERS ORGANIZATION AND OPERATION

702 HEADQUARTERS

1. A headquarters is the collective name for the personnel and equipment required to assist a commander in the exercise of command. The primary requirement is for communications and personnel assistance to the commander. The term 'staff' is normally applied to the personnel assistance provided at formation level and above. All the other elements of a headquarters whatever its size exist primarily to support the communications and staff provided for the commander.

- 2 -

703 STAFF

1. There are two main branches of the staff at formation, the operations branch and the administrative branch. These may be sub-divided into more functional cells - intelligence, personnel, logistics and so on. Assistance is provided in several ways. The staff foresees requirements; provides information and advice necessary for decision-making; is responsible for the detail in the orders and instructions issued for the commander and for the coordination required for the execution of plans; and supervises the execution of orders and plans.

2. The operations branch and the administrative branch are coordinating staffs. In addition, commanders are provided with ~~personal staff and with~~ ^{AND MAY BE PROVIDED WITH A PERSONAL STAFF} arms and service advisers. The staff must have a good working knowledge of the capabilities and limitation of both the arms and the services and must keep the arms and service advisers fully informed. All should be advised of forthcoming operations or plans as early as possible so that their advice can be timely.

704 OPERATION

1. The operation of an headquarters is governed by the requirements to provide for the commander, to maintain communications, and to permit the work of the staff. It will often be difficult to fully satisfy the demands of each requirement.

2. At formation level the headquarters may deploy in two parts; the operational headquarters and the remainder. The purpose of such deployment is to permit each part of the headquarters to be near its main centre of interest and to provide it with better communications. Further advantage accrues from simplicity of siting, movement, concealment, and protection.

3. If a commander is to see, and be seen, and be at the critical point in the battle, his movements must be carefully regulated. A tactical headquarters will allow the commander to move about the battlefield by air or ground vehicle without prejudice to the control exercised through ^{his} ~~main~~ headquarters. He must never be out of communication with his own headquarters and his immediate subordinates. Whenever possible, he must also maintain direct contact with his immediate superior.

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- 3 -

SECTION 3 - INFORMATION AND INTELLIGENCE

705 INTELLIGENCE

1. In order to accomplish his mission the commander will require knowledge of the enemy and the environment which is timely, reliable and as complete as possible. He will place his needs in priority to those best able to fulfill them.

2. The collection of information and the development of intelligence on the enemy should be a continuous process in space as well as time.

Included are:

a. Enemy

- (1) Capabilities in terms of organization, equipment, tactics, strength, morale, and location.
- (2) Vulnerabilities capable of being exploited.
- (3) Probable courses of action capable of being implemented.
- (4) The course of action most likely to be implemented.

b. Environment. The need for information on the environment include terrain, weather and population. (NOTE: Should be expanded.)

3. All available sources and agencies must be utilized for the collection of information, even though the source may not be under the direct control of the commander. (NOTE: Should be expanded.)

SECTION 4 - DEPLOYMENT PROCEDURE

The three basic steps in the process are:

- a. reconnaissance and planning;
- b. issues of orders; and
- c. deployment.

These steps are common to all levels of command and to all types of units.

.../4

- 4 -

The commander should reconnoitre the ground personally accompanied by arms or technical advisers as necessary, observing what he can of the enemy and of the disposition and condition of his own troops.

When a personal view of the area is not possible the commander must make full use of maps, air photographs, and any other sources of information available. If there is time he should order reconnaissance units and other troops to perform specific missions which will give him the answers to particular questions.

Once the plan is made, orders to implement it must be issued to all subordinate commanders. Orders must be clear and simple.

Deployment is the extension or widening of the front of a military unit extending from a close order to a battle formation. During and following the act of deployment there is some loss of control due to increased dispersion and wider frontage. Deployment should not be begun until the best course of action is clear. When little is known about the enemy only minimum deployment should be carried out so as not to be surprised by the unexpected presence of the enemy.

Some of the principal steps which can be taken to save time in deploying are:

- a. Standard Deployment Groupings. Reconnaissance Group and an Orders Group can be formed, each of which is of relatively stable composition. These groups are responsible for the planning, issue, and receipt of orders.
- b. Early Warning. This means early issue of warning orders which tell of the impending operation, its nature, the general area in which it will be conducted, the time and place for the Orders Group to meet and receive orders, and the tentative times for the movement of all or part of the main body.
- c. Simultaneous Action. As many of the basic steps as possible or desirable should be carried out at the same time.

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- 5 -

d. Movement. Speed and simplicity in the movement plan.

As a matter of principle there should be no long pauses in the process of deployment procedure.

SECTION 5 - PLANNING AND ORDERS

Planning is the analysis of a problem leading to a decision on the course of action to be taken. It is a progressive and continuing process. When one commander completes his plan and announces his decision, his subordinates begin their planning, and so on. It is continual in that, during the course of current operations, plans at the higher levels are developed for future operations and for foreseeable contingencies.

The commander must constantly look ahead in an attempt to foresee situations before they arise. His planning keeps pace with, but ahead of, operations in progress. Thus he avoids being taken by surprise and can give a quick decision without its being a hurried decision. His staff, too, must plan ahead. The speedy execution of a quick decision is often dependent upon advance preparation by the staff. Therefore, the commander must keep his staff informed of his intentions. Both may then plan concurrently and along the same lines.

There can be no plan without an aim or a mission. It must remain dominant in the mind of the commander. Neither the enemy nor circumstances must be allowed to divert him from his task. All aspects of the situation bearing on accomplishment of the mission must be examined. Through his headquarters, the commander will maintain as a minimum an up-to-date picture of: his own troops and material resources; the location, strength, and actions of the enemy; the ground, obstacles, and weather.

Since war is, after all, a battle of will between the opposing commanders, the commander should always give consideration to his personal knowledge of the enemy. His experience and military judgement should be applied to such things as enemy intentions and habits, over and above intelligence estimates submitted by the staff. After a thorough study of the situation, the commander will decide on his plan. He must then act on it.

.../6

- 6 -

Orders may be issued either orally or in writing. Oral orders may be given by the commander in person, by radio, by telephone or through a liaison officer. Each method has its place in battle. Time will often decide the means to be employed. If urgent action is necessary, then orders must be got out quickly. It may be that time demands brief instructions by radio, however desirable it may be to do or say more.

When time permits, detailed orders may best be given in writing. Written orders reduce the chance of error and provide a source of reference to the recipient. They are often used in conjunction with oral orders, and they need not contain all the information given verbally; nor need the verbal orders cover all the information issued in writing. The method adopted in any situation is usually a compromise between time and completeness.

OFFICE OF THE
JUDGE ADVOCATE GENERAL



CABINET DU
JUGE AVOCAT GÉNÉRAL

MEMORANDUM

NOTE

PA 2910-CFP 300 (D Law/I2)

9 Feb 78

D Law/A

FIRST DRAFT - CFP 300
CONDUCT OF LAND OPERATIONS

- Refs: A. First Draft CFP 300
B. 2910-CFP 300 (D Law/A) 19 Jan 78
C. Protocol Additional to the Geneva Conventions of 12 August 1949 relating to the Protection of Victims of International Armed Conflicts (Protocol I) (attached)
D. Protocol Additional to the Geneva Conventions of 12 August 1949 relating to the Protection of Victims of Non-International Armed Conflicts (Protocol II)

1. Ref. A is written at a relatively high level of generality and as a consequence none of its provisions, with the possible exception of Article 517, flatly contravene the law of armed conflict. On the other hand, in my opinion, certain legal principles should be integrated into Ref. A to ensure that the law is not unintentionally violated in the heat of conflict.

2. Canada signed Refs. C and D on 12 Dec 77. It is probable that we will ratify these Protocols in the near future. In my comments below I have assumed that the Protocols are binding on Canada.

3. Article 82 of Ref. C states:

"Article 82 - Legal advisers in armed forces

The High Contracting Parties at all times, and the Parties to the conflict in time of armed conflict, shall ensure that legal advisers are available, when necessary, to advise military commanders at the appropriate level on the application of the Conventions and this Protocol and on the appropriate instruction to be given to the armed forces on this subject."

The exact impact of this provision is uncertain. Presumably a legal officer is not allowed to act as a political commissar and veto plans put forward by operational staffs. On the other hand, it is my opinion that a legal officer must review all operational plans at the "appropriate level" (presumably brigade level or higher) and give a professional opinion on the legality of proposed courses of action. I do not know whether the legal officer is to be considered as a staff officer or as an adviser but in

either event he should not be under the supervision of the personnel administration staff. Article 517 of Ref. A is therefore undesirable in its present form.

4. Article 209 of Ref. A is not inaccurate but it is incomplete. I suggest the insertion of the following sentence at the end of the article:

"The basic principles of the law of war: military necessity, humanity, and proportionality can in most cases be equated with analogous principles of war such as the selection and maintenance of the aim, concentration of force, and economy of effort. For example, wilfully killing or injuring non-combatants is not only contrary to the laws of war, it is also a waste of military effort which should be directed at enemy combatants."

5. Articles 607 to 618 of Ref. A are concerned with the elements of tactics. It is suggested that some reference should be made to the presence of non-combatants as an inhibiting factor in the use of firepower in either Article 612, which is concerned with firepower, or in a separate article, or in Article 616 which is concerned with topography.

6. Article 630 2.c. of Ref. A is concerned with deception. Most forms of deception are legally acceptable. These forms are called ruses. Other forms of deception, called perfidious acts, are violations of the law of war. Article 37 of Ref. C distinguishes between ruses and perfidious acts. Some reference to Article 37 of Ref. C should be provided in Article 630 2.c. of Ref. A.

7. Section 5 of Chapter 7 of Ref. A is concerned with operational planning and orders in general. Article 813.3 is concerned with the choice of objectives in offensive planning and Article 814 is concerned with offensive fire plans. Article 908 is concerned with the factors affecting defensive plans and Article 911 is concerned with defensive fire plans. It is my opinion that lack of awareness of the law of war may result in serious unintentional violations in the planning phase. Article 51 and Article 57 of Ref. C ban certain types of attacks and require certain precautions to be taken in the planning phase. (It should be noted that Article 49 of Ref. C defines an attack as meaning any act of violence against an adversary whether in offence or in defence.) It is recommended that these articles be incorporated verbatim or with slight modification in Section 5 of Chapter 7 of Ref. A.

8. Article 916.3. of Ref. A is concerned with various control measures and firing boundaries for defence planning. It is suggested that a reference to lines surrounding heavily populated civilian areas might be included in the article.

.../3

9. Article 1206.6. is concerned in part with POW interrogation. The following sentences should be inserted at the end of this provision:

"A POW is not obligated to give any information other than his name, rank, date of birth, and service number. He shall not be mistreated under any circumstances."

10. Article 1707 of Ref. A is concerned with intelligence and security in internal security operations. It is recommended that the following sentence be added to para 3. of Article 1707:

"Under no circumstances will persons being interrogated be mistreated."

W. J. Fenrick
Capt
D Law/I2
2-2590

Attachments

Capt W.J. Fenrick, D Law/I2/2-2590

MEMORANDUM

SC 2900-1 TD 8021

6 Feb 78

SSO

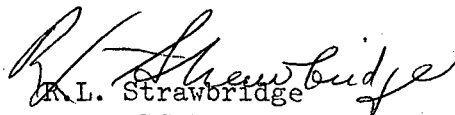
CFP 300 CONDUCT OF LAND OPERATIONS
COMMENTS - CHAPTER 13 (NBCW)

Reference: A. SC 2900-1 TD 8021 dated 17 Jan 78

1. In accordance with Reference A the NBCW chapter has been reviewed and the following comments are offered:

- a. Page 13-10, Para 7, Line 5. Delete "artillery staffs", insert "NBC Centres".
- b. Page 13-12, Para 2. Target analysis is a pure artillery function. Artillery do not assist other staff members in carrying it out.
- c. Page 13-14, Para 6. Add to end of para "and radiation measurement".
- d. Page 13-18 and 13-19. The point should be made that Biological operations are hazardous to friend and foe alike and are very difficult to control. Accordingly, their use in close combat situations is unlikely.

2. Perhaps the main comment on this chapter should be that an entirely new doctrine for nuclear use has been developed by the US (the nuc package fired as a short pulse) which should be mentioned and explained in this chapter.


R.L. Strawbridge
LCol
DS

MEMORANDUM

2900-1 (Engr)

6 Feb 78

Dir A Division

CFP 300
COMMENTS ON FIRST DRAFT

Reference: A. 2900-1 (Dir A Div) 16 Jan 78

1. General Comments

- SSO Land
yours.
B.
- a. The writing is too flowery. See the story of the boxing match at para 901.1, page 9-1. Many, many sentences do not flow or contain non-sequiturs.
 - b.1 The order of the chapters is wrong. Surely Tactical Intelligence (Chapter 12) should appear earlier. And The Land Air Battle (Chapter 16) should be of more importance than Movement of Troops (Chapter 15).
 - c. Much repetition. Obviously many writers were involved. One good second reader could reduce the volume by dozens of pages.
 - d. Chapters 1 and 2 should be 'inspected' by NSR staff.
 - e. ATP 35 and in particular, Active Defence, does not seem to be accounted for at all.
 - f. Much of Chapter 17 belongs in Chapter 1.


2. Comments in Detail (Examples only)

- a. Preface. Surely "excusable" is a poor word in line 6 of second paragraph. And "mortal men" (line 4, third paragraph) does not impress, which is the aim of the preface.
- b. Para 312. Does "multi-capable" mean "general purpose"? I prefer the latter.
- c. Para 401.1. Arty does not have as its major task "to advance into danger" nor does it "engage the enemy in close combat".
- d. Para 401.2. LGen Paradis says that engineers are combat arms!

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- 2 -

- e. Para 409.1. Does "create the battlefield framework" mean anything specific?
 - f. Para 409.2. An example of a poor sentence. The 'basic role' will not be altered by battlefield variables!
 - g. Para 607.1. The first four sentences are horrible.
 - h. Para 912.7. The first two sentences are a good example of multiple non-sequiturs.
 - j. Para 914.2g. Very confusing. The identity of the commander referred to and the relationship of that commander or commanders with the covering force or guard is unclear.
 - k. Para 914.2h. In combination with the previous para, a conflict in concepts appears with regard to covering forces on near sides of obstacles. Personally I do not think the obstacle is being "applied" properly.
 - m. Para 918.1. Is the first sentence really true? That is, does a delaying operation really have application to offensive operations on principle alone; I think not.
 - n. Para 1006.1. Sub-sub-para 'a' is a very poor start. Note there is no mention of bank group.
 - p. Para 1006.8/9. Sub-sub-paras 8a and 9c contradict each other. The latter is (normally) correct.
 - q. Para 1029. The detail on the myriad of Navy 'groups' is totally out of place in this publication.
 - r. Para 1122. Somewhere in this paragraph, note should be made of the necessity to include urban operations as normal operations, specially in Europe in any future war.
 - s. Chapter 17. Somewhere in this chapter the absence of "enemy" or the existence of "two enemy" which every you chose, must be discussed if this chapter is to remain in a publication.
3. Conclusion. A distinct improvement over CFP 165, but much work left to do.


J.D. Harries
LCol
SSO 2 Land
5608

MEMORANDUM

SC 2900-1 TD 8021

6 Feb 78

SSO

CFP 300 CONDUCT OF LAND OPERATIONS-
COMMENTS- CHAPTER 9 DEFENSIVE OPERATIONS

Reference: A. SC 2900-1 TD 8021 dated 17 Jan 78

1. In accord with Ref A the above has been reviewed and the fol
comments are offered:

- a. Page 9-1, Para 3. A statement that "def is the stronger form of war" could be added to the advantages of the def.
- b. Page 9-2, Para 5. Sub-para d - "disengagement" and e. "Retirement" should be deleted completely since these are part of delaying and withdrawal actions.
- c. Page 9-4, Para c(2). Battle posns vice fighting posns.
- d. Page 9-4, 9-5. The mutual sp para. "Indirect" fire should also be mentioned.
- e. Page 9-5, Para 5 (Offensive Action). This para could be strengthened by giving some examples, eg, action of covering tps at all levels incl bn and coy, spoiling attacks, aggressive ptling etc.
- f. Page 9-5, 9-6 (Reserves). The differences between "depth" and "reserve" should be stated. Further, the term situationally designated reserves should be introduced and explained.
- g. Page 9-11. ATP 35 uses the term "covering force actions" vice "delaying stage actions". Is there a need to conform? If not then perhaps diagram on page 9-16 should be changed to read "delaying area".
- h. Page 9-24. Last word should read "zone" vice "area".
- j. Page 9-25, Para 1. Line 5. Courses of action vice causes of action.
- k. Page 9-28, Para 911,(1), Line 3. Developed vice deployed.
- m. Page 9-29, Para 3c. Should read "especially attacks and counter-attacks."
- n. Page 9-31, Para 6 (Infantry). This entire para should be rewritten to better portray the role of infantry in def. The impression is that they are "protectors" of anti-tank wpns and the anti-armour plan may dictate the inf deployment. In fact the entire def is an anti-armour def with inf battle posns providing the frame work for all else.
- p. Page 9-32, Para 7 (Artillery). In view of soviet arty imbalance (7:1 at best of times), the importance of an active CB program should be stresses.
- q. Page 9-35, Para 4, Line 1. Breach vice break.

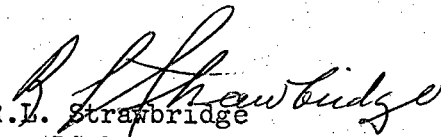
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- 2 -

- r. Page 9-36, Para 9. Add "induced or" before residual in Line 1.
- s. Page 9-40 to 9-42 (The Delaying Stage). A confusion in terminology exists, eg, "covering force and guards are referred to throughout. Perhaps an explanation of covering troops consisting of screen elms and guard elms would be in order.
- t. Page 9-45, Para(4), Line 2. Containing vice positional.
- u. Page 9-52, Line 2. Delete last "or" insert "rather".
- v. Page 9-50 and 9-52. The NBC and AD paras respectively are too broad and general to be of much value. They could perhaps be deleted.
- w. Page 9-68, Para 5.
 - (1) Line 4 - delete "tank".
 - (2) The para implies that the delaying force must keep a symmetrical line across the whole front. This reduces the opportunity for flank or spoiling attacks that an assymetry offers.
- x. Page 9-74 and throughout Section 4. Terminology needs to be sorted out. Rear gds, flank gds and adv gds are covering tps. A different impression is given in this section.
- y. Page 9-77 and throughout portion on "Conduct of Wdr"

For tps in close contact and under hy pressure the "clean break" may best be achieved by a C attack to break or prevent "interlocking". (A GE belief).

- 2. Throughout the chapter the use of the term covering troops VS covering force needs to be resolved.


R.L. Strawbridge
LCol DS

MEMORANDUM

SC 2900-1 TD 8021

2 Feb 78

SSO

CFP 300 - CHAPTER 17

1. Sections one and two of the subject chapter must undergo a complete rewrite. Currently they are rife with grammatical error, ie plural subjects used with singular verbs, incorrect punctuation, especially semi-colons, long rambling sentence structure, confused wording and superfluous wordings. In content, the author is repetitious and fails to adequately discriminate between the two scales of conflict within the Type A. (I question the need or advantage to doing so in a manual of this type.) Finally, there appears to be a tendency to go to excess detail, again for a general manual such as this is intended to be.
2. Section three is clearly the work of a different author. It is well written and I criticize it on the following counts only:
 - a. Causes of Tension (para 1715) could be stated more succinctly and simply while still providing a background to Peacekeeping of more use to the reader of a military manual.
 - b. There should be a discrimination made between the two major categories of Peacekeeping Operations, ie, Peacekeeping Forces and Peace Observer Missions (para 1721).
3. Specific corrections have been made directly on the att draft, but they do not obviate the need for a partial (2/3) rewrite.
4. As requested.

ORIGINAL SIGNED BY

W.A. Methven
LCol

MEMORANDUM

1 Feb 78

SSO

COMMENTS ON DRAFT CFP 300

Reference: A. SC 2900-1 TD 8021 17 Jan 78

1. In Reference A I was asked to provide comments on Chapter 10. This is a diverse chapter covering some eight different aspects. I have asked LCol Mike Barr to review Sections 3 and 4 which are on Airmobile Operations and Airborne Operations respectively. In turn I have accepted from him Section 7 of Chapter 11 - Operations In Built-up areas. I assume that LCol Barr will submit his comments directly to you.

General

2. My first impression of the portion I have been given is that it is very vague, verbose and non-enlightening. It deals neither with the basic philosophy of how land operations should be conducted nor with specific doctrine as to the conduct of land operations. That is, a student of tactics would be none the wiser having read this CFP as to how he should fight the land battle.

3. To comment adequately on this CFP it would probably be best to simply rewrite it. However I do not anticipate that I could achieve this in the time available. Therefore I will start off with detailed comments section by section.

Chapter 10

4. Section 2 - Crossing and breaching obstacles. This section appears to be a restatement of the conventional wisdoms. I do not think that this is adequate. We must rethink our concept for bridgehead operations. We cannot afford the luxury of consolidating and building up within a bridgehead. It might be far better to feed the assaulting element into the bridgehead and into the attack in one well-controlled and continuous move from the assembly area to the objective, with no pause within the bridgehead. The crowding within the bridgehead creates too great a risk.

5. Specific comments on this section are as follows:

- a. Para 1002.2 "Crossing and breaching operations are normally conducted within offensive operations, and must be conducted as such". This is a most cryptic sentence! Of course a crossing will be conducted offensively! Is there such a thing as a defensive crossing or breaching?
- b. Para 1003.2 "A hasty crossing is characterized by .. decentralization of control of specific crossing times for subordinate forces". Again, I fail to see the significance of this sentence. If specific crossing times are assigned to a subordinate force, you have in effect exercised centralized control over that force's movement.
- c. Para 1003.2 Mention is made of a "quick tactical reconnaissance". What is a tactical reconnaissance? Is it one that is not a strategic reconnaissance? I suggest that the word tactical be dropped.
- d. Para 1003.3 Rephrase as follows: This type of crossing requires extensive planning and detailed preparations and will be carried out if the tactical situation does not allow a hasty crossing.
- e. Para 1004.1.f What is the significance of 'good timing'? I can think of good preparation and detailed plans but fail to see what good timing is supposed to mean.
- f. Para 1004.5 This entire sub-section on the use of helicopters is bound to be misleading if it does not carry a caveat to the effect that before helicopters can be used in a crossing operation the enemy's air defence (and even small arms) must be effectively neutralized.

Continued.

- g. Para 1005.2 A lot of paper is used to say that there is little that can stop determined soldiers on foot. I suggest that this paragraph be deleted. If it is retained there is a typo error at line two - for determine read determined.
- h. Para 1005.3.b Delete the word 'friendly'. It is superfluous.
- j. Para 1006.1a Further jargon. "When a forward unit approaches a water obstacle it may be forced to pause, but should be deployed in depth to provide forces to maintain the impetus of the assault". Crap! This could be examined in great detail but is hardly worth it. Is it intended to mean that if the leading element is stopped by an obstacle, then a depth element should be launched to cross that obstacle? This is arguable. Planning and anticipation and the proper placement of resources can reduce the time on an obstacle, but not depth.
- k. Para 1006.1.b This superficial look at how an enemy might defend on a water obstacle is misleading. Why is it 'usual' that an enemy is forced to site his defensive positions well back from the obstacle? This won't be the case with the Soviets.
- m. Para 1006.2.b.2 The staff college teaching is that the initial stage of a crossing is the Preparatory Phase which is inclusive of reconnaissance.
- n. Para 1006.3 Line 3. Suggest that 'amphibians' be deleted. I cannot conceive of a scenario where a river recce would be done in an amphibian.
- p. Para 1006.4.a.4 This is a motherhood statement. Of course one must allow time for the execution of tasks. Is the intent that the reader should be warned that work done at night takes longer?
- q. Para 1006.4.c Delete 'support weapons' in line three. Insert 'anti-tank and air defence weapons'
- r. Para 1006.5.a Delete 'barges' insert 'ferries'.
- s. Para 1006.5.d A Classic Statement! Rephrase to the effect: Air defence both for the crossing sites and the bridgehead are absolutely essential, and the weapons must be brought into the bridgehead as a priority.
- t. Para 1006.6.a The first sentence must be broken up into about three sentences in order to make it readable.
- u. Para 1006.6.b Line 9. End sentence after Crossing and start new sentence with 'An'.
- v. Para 1006.7.a A control headquarters is discussed without it being clear as to what constitutes this headquarters. This is further confused in the next paragraph where it states that the control headquarters takes over from the engineer HQ the control of bridging equipment.
- w. Para 1006.7.d The introduction of more confusion. There should be no requirement to state who 'controls' bridging in the various phases of a crossing operation. The bridging is assigned to the appropriate level of engineers and they would normally hang on to it for the duration of the operation. I have never heard of the need to pass 'control' of bridging to anyone once an operation begins.
- x. Para 1006.9 We are introduced to a new term - The Crossing Control Group. From the tasks described this must be the bank group. I suggest that we ask that it be so named. At sub-para c it states that this group controls the movement forward of the assaulting infantry. This is not so. The traffic control organization controls movement up into the assembly areas, after which the tactical commanders control their own movement, guided by the bank group. I suggest that control be deleted and guided inserted.

.../3

Continued.

- y. Para 1006.10 Line 3 Change 'is required' to 'may be required'.
- z. Para 1007.1 Forward units do not have the capability to clear any sort of minefields. Is this supposed to be forward formations?
- aa. Para 1007.2.b A motherhood statement. Good communications will suffice.
- bb. Para 1007.2.d.4 The deployment of troops into a bridgehead is less a function of the number of lanes than it is of speed of movement and perhaps a good tactical plan supported by a proper fire support plan.
- cc. Para 107.3 Line 9. Recce patrols are almost always found from within infantry units and not all arms. The engineers will provide the technical expertise within a basically infantry patrol.
- dd. Para 107.4 I cannot accept the statement "...a breaching operation should not be improvised because, if it is, it may well fail". There are varying degrees of improvisation. And as we have no units or organizations dedicated solely to minefield breaching we must in effect improvise all breaching operations. Planning and rehearsals will surely overcome some of the difficulties connected with improvisation.
- ee. Para 1007.6.b This very lengthy paragraph is not needed. The situation portrayed is a very complex one and rarely found. I suggest that it be deleted.
- ff. Para 1008.1 Helicopters in the early stage of a breaching or crossing operation can be of assistance only if the air situation is favourable and the enemy's air defence weapons are neutralized.
- gg. Para 1008.1.b There are no such beasts as FTs. This should read 'Mobile Repair Teams' - MRTs.

6. Section 5 - Amphibious Operations. At the outset, this section states that this material is a summary of ATP 8. I can only hope that the navy has a proper translation of this ATP, for the summary is extremely confusing to this land officer. This section is ridden with jargon that makes no sense whatever. It is too long for inclusion in a publication on land operations. More pertinent to land operations would be descriptions of landing parties put ashore by destroyers and perhaps riverine operations. Here without comment are some of the classics:

- a. "An amphibious operation is launched from the sea by naval and landing forces embarked in ships or crafts involving a landing on a hostile shore"
- b. "It normally requires air participation.."
- c. "The salient requirement of the amphibious assault is the necessity of building up combat power ashore from an initial zero capability to full co-ordinated striking power.."
- d. "The Basic Tactical Organization. This is the conventional organization of the landing force units for combat, involving various combinations of ground and aviation combat, combat support, and combat service support units for accomplishment of missions ashore. This organizational form is employed as soon as possible during the battle for the beachhead following the landing of the various assault components of the landing force".
- e. "Assault. The assault comprises the period between the arrival of the major assault forces of the amphibious task force in the objective area and the accomplishment of the amphibious task force mission. Development of the area for its ultimate use may be initiated during this period".
- f. "At the conclusion of the amphibious operation the assigned airspace will be disestablished.."

7. All told there are twenty pages wasted on this subject when perhaps five should suffice. The long lists of the various forces involved and an explanation of what each does is unnecessary. The discussion on command relationships is confusing. I suggest that this chapter be completely rewritten.

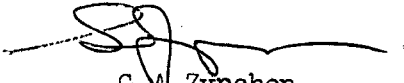
Section 7 - Defence of Coastal Areas. This section is fairly straightforward and I have no comments to make thereon.

9. Section 8 - Encircled Forces. I have little to say about this section except to question its need. This is a rather rare occurrence of war and not one that is commonly studied. The place where it does have some significance is in the discussion of a form of defence where units must be prepared to fight whilst isolated as perhaps in towns and villages. But even in this scenario the forces that are bypassed by enemy elements would not be considered as being encircled forces. I think that more thought ought to be given to this section. There is one jumbled sentence at paragraph 1050.3 lines 3 and 4. Delete - "Movement arrangement must provide logistic in the defensive contact".

10. Section 9 - Relief Of Combat Troops. Again, this is a section that repeats the conventional wisdoms, which in our case is not all that good. This section merits critical examination not just for phrasing and other nits but for basic doctrine. We have the German Army Service Regulation 100/100 as well as the 4 CMBG -4 Jagerdivision field SOP that have some doctrine for relief and passage of lines. I have given the Commandant photocopies of the relevant sections. I believe that he wants this area examined in greater detail. Therefore I am leaving off making detailed comments on this section. There is but one nit and that is found in paragraph 1060.1.c wherein they speak of traffic control as being a combat service support function. This is an operational responsibility.

11. Chapter 11 - Section 7 - Operations in Built-up Areas. As a brief introduction to fighting in built-up areas, this section is acceptable. However, it is very conventional and merely restates old views. I have my own ideas as to how to defend or attack a town, but they are just that - my own personal views which have yet to be exposed on the next course. Perhaps after Course 7801 we could provide more detailed comments for this section. Detailed comments are as follows:

- a. Para 122.8 Line 3. This sentence is scrambled. I suggest it be rephrased:
"An attacker will use his mobile forces in an enveloping role while follow-up troops will capture and clear the built-up area"
- b. Para 123.1. The statement that the infantry will normally fight dismounted supported by armour is too simple. There must be elaboration on the manner in which armour will operate in built-up areas. Armour would only be used on the approaches to the built-up area or after sectors of the built-up area are relatively secure. Armour must be well protected by infantry when it is introduced into a built-up area.
- c. Para 1123.2.d.2 It states that there may be a need to recapture objectives reoccupied by the enemy. Why not state that there is a need to secure all objectives against counter-attack and infiltration by the enemy?
- d. Para 1124.1 Two small errors. In line one insert 'a' between of and built-up. In line four delete support insert supported.
- e. Para 1124.2 "In small towns defence positions are normally employed". I do not understand what the term 'defence positions' is supposed to mean.
- f. Para 1124.2.f Line 7. For most read must.
- g. Para 1125 There is no mention in this section of evacuating civilians. In the interests of humanitarianism it is essential that all civilians be evacuated out of any town or city that is to be defended. The Soviets do not observe the niceties of the Geneva accord on civilians in battle areas.
- h. Para 1127.1 I cannot agree that there are no special problems of supporting a force attacking a built-up area. There are problems in the immediate resupply of the assaulting forces, of medical aid and evacuation of casualties and of supplying enough artillery ammunition.
- j. Para 1127.1.b It is all too easy to say that helicopters will be invaluable for casualty evacuation. It ignores the vulnerability of the helicopter. The assaulting infantry teams must have additional medical aidmen and litter bearers moving with them.


G. A. Zypchen
LCol

MEMORANDUM

SC 2900-1 TD 8021

26 Jan 78

SSO

CFP 300 Chapter 16 - Comment

Reference: A. Memo SC 2900-1 TD 8021 dated 17 Jan 78

1. The chapter on The Land-Air Battle is generally well presented. However, its over-view treatment of the subject serves only to introduce or familiarize the reader with fundamental concepts of land-air doctrine. Its use as a reference text is negligible beyond the basics. If its function is to only serve this purpose, my main criticisms would be a general lack of conciseness and some apparent misconceptions in doctrine or procedure, likely caused by choice of wording.
2. My specific observations/recommendations are as follows:
 - a. Art 1601, Para 1 and 2. Combine to read "Success on the modern battlefield necessitates air and land forces operating as a combined arms team. Both complement each others effectiveness necessitating interaction and teamwork whether in combat or support activities. Detailed procedures to effect this integration of effort are found in ATP-27, 'Offensive Air Support Operations, and in ATP-40, 'Doctrine and Procedures for Airspace Control in the Combat Zone'. This chapter reflects the concepts, organizations and principles of these documents".
 - b. Art 1602
 - (1) Para 1. Delete sub-para a to e.
 - (2) Para 2. Change sentence to read "A concentrated attack against armoured forces, for instance, may involve close air support near the FEBA, air interdiction against enemy armour in depth, and counter air over the complete battlefield."
 - (3) Para 3. Change the word "suppression" in second line to read "neutralization", (and in rest of chapter). This CFP should generally reflect NATO terminology. "Suppression" is not in the NATO Glossary.
 - c. Art 1603
 - (1) Para 1.
 - (a) Sixth Line "firepower" misspelled.
 - (b) Sub-para a, Observation. Neutralizing of air defences will be a necessity prior to attacking strong defensive positions. Unacceptable air losses may occur otherwise.
 - (c) Sub-para b, Observation. Close air support should be used against concentrations such as the centre of a bridgehead or a mass of enemy contained by counter-penetration forces. Tasking against leading elements nearest to ground forces, or against isolated or ill-defined targets leads to misuse of air with accompanying high losses and poor results.

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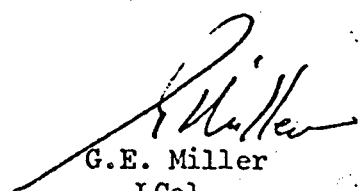
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(2) Para 4.

- (a) Change second sentence to read "These operations restrict the combat capability of enemy forces by disrupting their lines of communications, destroying supplies, and reducing effective strength and movement of reinforcement and follow-on echelons."
- (b) Sub-Para a. Suggest the classification of air interdiction sorties into immediate or preplanned need not be mentioned so as not to confuse procedures with that required for close air support. Air interdiction is the responsibility of air forces. The ground commander, planning to fire surface-to-surface weapons beyond the FSCL set by the Corps Commander in consultation with the Air Commander should ensure coordination with the overall air interdiction activity.
- (c) Sub-para c, First Sentence. Delete "and in surprise amphibious operations".

(3) Para 6 Line 11.

- (a) Suggest that "deeper ECM targets" would far likely be the target of air interdiction vice an "airborne suppression force."
 - (b) Line 15. "defence" repeated erroneously.
- d. Art 1604 Para 2, Line Seven. "ensure" misspelled.
 - e. Art 1605. Delete the first two sentences as they detract from paragraph effectiveness.
 - f. Art 1607
 - (1) Para 1, Observation. It should not even be suggested that our aircraft would orbit or loiter over the battle area. Rather, they would likely be limited to a single pass with no re-attack. Further, if a ground FAC or FOO (Not FO) is able to identify the target and direct the aircraft he would do so rather than through an airborne FAC situated behind the FEBA.
 - (2) Para 2, Observation. If able, the ground FAC would pass a target damage assessment to the mission attack leader who, with his personal observations, would give a MISREP to the TACP of the formation concerned while in the air, and in detail to the Int O at mission debrief. A MISREP following the format shown in ATP-27 would be forwarded to the original requesting unit as soon as possible.
 - (3) Para 3, Second Line. Change to read "laser target designators."
 - (4) Para 4, Observation. A target designation system (laser) is not used with an area Anti-tank weapon, ie, CBU, 2.75 rkts.
 - g. Art 1608, Para 2, Observations. Use of airspace over BG or Div areas of responsibility whether by fixed wing, helicopter, arty, mortar, or drones, must be coordinated through their respective Fire Support Coordination Centres.


G.E. Miller
LCol
DS

MEMORANDUM

2910-CFP 300 (DSM 2-4-3)

PA

24 Jan 78

DSM 2-4

LOGISTICS IMPLICATIONS OF CFP 300 -
CONDUCT OF LAND OPERATIONS

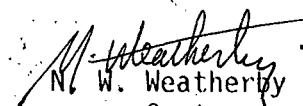
Refs: A. Conversation Maj Gautron/Capt Weatherby 19 Jan 78
B. First Draft - CFP 300 Conduct of Land Operations
C. 2910 - CFP 300 (DLP) dated 09 Jan 78.
D. CFP 180 and CFP 181

1. A perusal of Ref B with the aim of segregating those paragraphs that affect CFSS policy and support procedures has been concluded. CFP 300 is a general publication dealing, primarily, with land operations during hostilities. Comments, for your consideration, on possible changes to Ref B are attached as ANNEX A.

2. Although, Ref C indicated that one should ignore minor editorial errors one that was consistently obvious was the use of the word material. The word material refers to the raw product, whereas, the word materiel refers to the finished product. Troops in an emergency situation would, in the main, receive materiel and not material through the CFSS.

3. Ref D publications do not specifically refer to supply policy and supply procedures to be used during hostilities. No special information is given to any of the four levels of management on the method of control/issue of materiel in an operational emergency. Therefore, a paragraph or two in general terms should be made in one or both publications.

4. The Co-ordinator of the CFP 300 series should be informed that the national authority for the control/requisition of materiel is NDHQ Attention: DGSS. Further, that DGSS controls materiel through its subsection the National Inventory Control Point (NICP). This will enable future publications in this series to note the CF materiel authority as applicable.


N. W. Weatherby
Capt
DSM 2-4-3
3-9270

Att. 1

001376

ANNEX A

TO 2910-CFP 300 (DSM 2-4-3)

DATED 24 JANUARY 1978

RECOMMENDED
CHANGES TO CFP 300

<u>Serial</u>	<u>Article</u>	<u>Comments</u>
01	112	<p>NDHQ Attn: DGSS would have to know in what areas we are providing materiel support. This will enable control/requisition requirements to be input by the NICP. Stock items supplied by other allies should also be listed and forwarded to NDHQ Attn DGSS for consideration prior to requisitioning stock items. Therefore, I would recommend a general statement be added to article 112 as follows:</p> <p>NDHQ Attn: DGSS is to be kept informed of supply support provided or received so that they can govern national stocks accordingly.</p>
02	331	<p>The compilation of wastage statistics, which were due to stock being beyond economical repair, cannibalization, or destroyed, is necessary. Wastage statistics must be input into the CFSS. Therefore, add the following sentence to paragraph 5:</p> <p>"Wastage statistics are forwarded through the CFSS or, if necessary, direct to NDHQ, Attn: DGSS. This procedure will ensure timely purchases and/or transfers to re-stock operational replenishment points."</p>
03	939	<p>Add the following sentence to paragraph 3:</p> <p>"Ordnance stores are to ensure wastage statistical documentation is completed and input into the CFSS."; and,</p>
04	939	<p>Destruction of equipment and dumps is an unknown factor significant enough to disrupt materiel availability if unreported. Therefore, I recommend we add the following to paragraph 9:</p> <p>"Lists of destroyed equipment and dumps are required to be input into the CFSS. This will enable NDHQ Attn: DGSS to be made aware of field and CFSS shortages of materiel immediately they occur."</p>

001377

CHIEF
LAND
DOCTRINE AND
OPERATIONS
JAN 25 1978

MEMORANDUM

2000-43 (DGIS)

24 Jan 78

DLP 4

COMMENTS -
CFP 300 CONDUCT OF LAND OPERATIONS

Ref: A. 2910-CFP 300 (DLP) 9 Jan 78

1. The following comments are provided in response to Ref A:
 - a. Art 421. This Art along with Art 418 para 2 may mislead the reader in terms of what agencies are responsible for the various phases of EW. As this aspect is further clarified in Chap 14, it is suggested a cross reference be made. An addition to the last sentence in Art 421 "... electronic warfare which are detailed in Chap 14" is recommended.
 - b. Art 630 para 2a. The second sentence perverts the accepted definition of "cover" in that cover measures are those used by specialist security agencies rather than tactical forces. It is suggested the second sentence be dropped.
 - c. Art 630 para 2f. The use of smoke is a defensive tactical measure, not a CI measure. The phrase "and use of smoke" must be deleted from the last sentence.
 - d. Art 1201 para 1. While as the hostile EW effort is amplified in a later para, the subject should be introduced here as have the other enemy characteristics. It is suggested that "and electronic warfare" be inserted between "engineer" and "support".
 - e. Art 1202 para 3. The explanation here is unclear. Deducing the enemy's capability is dependent upon identifying his resources. In turn, probable course of action is determined from deployment patterns based on his doctrine. This para must be rewritten. A suggestion is as follows:


"Commanders at all levels must have a knowledge of the threat forces' doctrine, tactics and capabilities. Commanders can no longer be satisfied with deducing possible enemy courses of action based on his resource

.../2

- 2 -

capability, but must always try to assess his specific intentions. For example, it can be assumed that all armies conduct tactical operations in accordance with their doctrine and that their activity patterns and deployment variations will indicate what they are likely to do. If our information and intelligence acquisition reveals these patterns, it is possible to deduce the enemy's intentions in a certain sector. However, there is an important warning. The enemy will strive to deceive and commanders must always bear this in mind."

- f. Art 1206 para 6. It is suggested that adding "and CI field specialists" between "troops" and "may" will indicate that some comprehensive analysis can be done at the FEBA.
- g. Art 1417 para c. The term "operations security" is used here where "tactical security" has been used in all other cases. The former term is preferable.
- h. Art 1707 para 4. "Counter intelligence" should be inserted between "trained" and "specialists" to better indicate which agency performs the function.

for 
M. Wilson
LCol
DGIS Ops, Plans & Trg
6-3617

MEMORANDUM

PA

2910-CFP 300 (DPM)

24 Jan 78

DMPR

APPRECIATION OF DRAFT CFP 300

1. The Chapter 13, which you asked to be reviewed by this office, consists largely of a philosophical approach to the NBC defence, and there is little of medical constructive or destructive criticism to be offered.
2. The Nuclear Section engenders no observations.
3. The Chemical Section is also philosophically written. I would suggest that in para 11, the third sentence might read:

"Individual protective measures, including the taking of prophylactic medication, are most important..."

It is, I believe, important to mention our only form of "medical defence".

4. Lastly, in the Biological Section, I suggest that in paragraph 5, the statement that "Vaccination and other immunization measures carried out" not be left unchallenged in this form. It implies that immuno-prophylaxis is a satisfactory defensive measure. Of course, it is not for only few micro organisms can be processed as an immunizing agent, and a weapon employing organisms with molecular changes or in enormous quantities would be indefensible. Accordingly, a qualifying sentence should be added.

5. In conclusion, it is my opinion that the document (Chapter 13) has little medical relevance and only minor observations, such as I have outlined above are necessary.

A. J. Clayton

A.J. Clayton
Col
DPM
5-1704

2910-CFP 300 (DCEO)

National Defence Headquarters
101 Colonel By Drive
Ottawa, Ontario
K1A 0K2

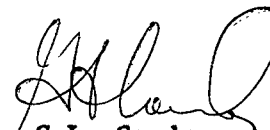
20 January, 1978

Distribution List

**CFP 300 - CONDUCT OF LAND OPERATIONS
COMMUNICATIONS**

Reference: A. 2910-CFP 300 (DLP) 9 Jan 78 (Notal)

1. Attached as Annex A is the draft of the DGCEO input to Chapters 1-7 of CFP 300. Chapter 14 was written by DEW and comments should be passed directly to DEW.
2. In order to meet the 1 Mar 78 target date specified in the Reference, and to ensure that DGCEO's input reflects current thinking, action addressess are requested to review the Annex and provide comments by 15 Feb 78.
3. It is appreciated that the redraft of Chapter 4, Section 7 is lengthy and has organized some establishment doctrine in a new form. It will be reviewed within DCEO prior to submission to DLP.



G.L. Coady
Lieutenant-Colonel

Director Communications and Electronics Operations
for Chief of the Defence Staff

Attachments

Annex A
Appendix 1 to Annex A - Section 7 - Signals

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E.R. CAMPBELL MAJ/DCEO 2/5-1434/cg

001382

ANNEX A
TO 2910-CFP 300 (DCEO)
DATED 10 JANUARY, 1978

REFERENCE			PROPOSED REVISION	REASON
CHAP	SEC	PARA		
2	2	203-2	Change line 5 to read: "... rail systems, port facilities, airfields and telecommunications networks;"	Force structure includes Signal units whose composition will depend upon the nature of existing facilities in the theatre.
3	1	301.5	Change the second sentence to read: "This is the command and control system which consists of the facilities, equipment, communications, procedures and personnel essential to a commander for planning, direction, coordinating and controlling his forces and operations."	This is consistent with ABCA 00 1007 TACTICAL COMMAND AND CONTROL and is the definition of the system accepted by the Land Forces.
3	2	310.1	Change line 5 to read: "... combat service support, national strategic communications, strategic air ..."	A more accurate definition. Long range communications might be tactical.
3	5	324.1	Insert new sub-para: "lines of communications signal units".	They are a vital part of the L of C.
3	5	331	Insert new para: "The repair of certain specialized signal equipments is effected wholly within signals channels."	This caters for COMSEC equipment.
4	7	418- 421	Insert new section: See attachment (Appendix 1).	A more current and accurate statement is required.
4	9	430.4	Add new sentence: "It may be necessary to assign special task Signal elements	That's what the special task dets are for.

PAGE 2
TO ANNEX A
TO 1910-CFP 300 (DCEO)
DATED JANUARY, 1978

REFERENCE			PROPOSED REVISION	REASON
CHAP	SEC	PARA		
7	2	712	<p>to a mixed force in order to facilitate effective command and control."</p> <p>Add new para 9: "The staff must work very closely with Signals to ensure that adequate communications are deployed to support a specific operation. Specific responsibilities of the staff towards Signals and Signals towards the staff are usually detailed in service doctrine publications."</p>	<p>This key element of staff work should be included.</p>
7	2	713.3	<p>Change line 10 to read: "... communications. In addition, many of the communications facilities may be sited at some distance from both the main and rear headquarters. Further advantage ..."</p>	<p>This is consistent with current Signals procedure.</p>

APPENDIX 1
TO ANNEX A
TO 2910-CFP 300 (DCEO)
DATED 20 JANUARY, 1978

SECTION 7 - SIGNALS

418. GENERAL

1. Signals have two roles in land operations:

- a. Command and Control Communications. Communications provide the vital links through which all the elements of the Command and Control system operate. Signals are responsible for all aspects of land and tactical air force communications through the combat and communications zones. This responsibility embraces the design, development, deployment, operation and maintenance of communications systems and of much of the equipment and facilities associated with the Command and Control system. The provision of communications also involves advising and assisting commanders, staffs and unit personnel and training users and communicators. In addition Signals assist the staff in controlling the allocation and use of communications and electronic equipment and are responsible for the management of the electromagnetic frequency spectrum and all aspects of Communications Security; and
- b. Electronic Warfare Operations. Signals are responsible for the technical control and conduct of tactical Electronic Warfare operations. This subject is treated separately in Chapter 14.

.../2

2. The Command and Control system described in Chapter 3, Section 1, has three fundamental aspects: organization; materiel; and communications. The organizational aspect involves personnel and procedures and is the responsibility. The materiel aspect involves headquarters equipment and facilities and is a shared staff-Signals responsibility. Communications is the heart of Signal's role.

419. PRINCIPLES AND METHODS

1. Communication is, simple, the act of imparting information or ideas. Communications, like Command and Control, involves personnel, procedures, and equipment and facilities (or materiel). They can be ranked in that order of importance. Men communicate; they are able to because they understand the procedures and are able to use whatever means are placed at their disposal.

2. Combat communications are provided through adherence to basic principles which are catagorized as follows.

a. Human. While, very often, the act of imparting information or ideas is done by the user (or subscriber) it is the professional communicator who is responsible for the provision of the means. The communicator shares all the hazards of the battlefield with the other arms and must be, perforce, a skilled soldier. In addition, however, the nature of his duties imposes additional burdens on him; to meet those additional responsibilities the communicator must possess five traits to an extraordinary degree:

(1) discipline;

.../3

- (2) integrity;
- (3) technical skill;
- (4) sense of urgency; and
- (5) robustness.

b. Procedural. The essence of good combat communications is order. This essential order results from the use of well established procedures. The procedures fall into three areas:

- (1) responsibility for provision of communications -
between formations, units and headquarters
communications are provided from -
 - (a) superior to subordinate,
 - (b) left to right, and
 - (c) supporting to supported;
- (2) responsibility for planning - the staff and
Signals must have well defined duties, one
towards the other, to ensure that Signals are
aware of what is required of them and that the
staff are aware of what can or cannot be done
in certain circumstances, these duties are
found in army staff procedures manuals; and
- (3) operating procedures - it is imperative, no
matter how complex the communications system,
that Signals provide clear, simple procedures
to facilitate the effective use of the system
by all users.

c. System Characteristics. The Command and Control Communications system must be designed, developed, deployed, operated and maintained so that certain essential characteristics are maintained. Primary amongst the characteristics are:

- (1) reliability;
- (2) flexibility;
- (3) security;
- (4) survivability; and
- (5) restorability.

3. These principles are applicable to communications at all levels of command and under all conditions. Adherence to them will ensure that information or ideas are imparted. Successful communications has three characteristics.

a. Utility. The information passed must be precise, that is, the original form and intent and impact is maintained despite the means of communications. The information must be passed in a timely manner, timely does not necessarily mean rapid.

b. Results. It is imperative that the information passed is completely understood and that the intended action, if any, is taken.

c. Exclusiveness. The communications process must exclude both the enemy and friendly recipients who do not need the information. The latter is especially important - commanders at all levels can easily become victims of an "information explosion" which will only increase

.../5

the fog of war unless it bears on their operations.

4. There are three principle methods of communications in common use in land operations.

- a. Radio Nets. Radio nets may pass voice, morse code, teletype or other types of traffic. They form the basis for communications within combat and combat support units and for all units and formations engaged in highly mobile operations. Radio nets provide greater flexibility than other systems because all subscribers hear all transmissions. They are, however, very vulnerable to enemy electronic warfare, difficult to control and unable to pass large amounts of information.
- b. Trunk Networks. The trunk networks comprise single and multi-channel (or pair) land lines and radios and the terminating, switching and routing facilities such as telephones, teleprinters, switchboards and teletype relay centres associated with the passage of telephone, teletype and data traffic. The trunk system is designed and deployed to handle large volumes of traffic with minimum enemy interference. It is, however, difficult to move; expensive to deploy and operate; and relatively inflexible. The trunk system is the backbone of formation level communications.
- c. Hand Carriage. There is a large volume of information which, due to its form or security implications, is

.../6

either not suitable for or does not require passage on telecommunications systems. Such information is best exchanged by hand carriage.

5. All three means of communications are integrated, by Signals, into a comprehensive Command and Control Communications system. When the means are organized, deployed and operated in accordance with the principles of communications commanders will be able to impart information or ideas.

420. ORGANIZATION

1. Signal units are, generally, organized in one of three ways.

a. Functional. At high levels of command and within the communications zone, where many Signal units exist, it is common to organize them by function, ie, Line Construction, Communications Centre, Radio, etc.

b. Geographic. At Corps level, and sometimes within Divisions, Signal units are organized to provide the full range of Command and Control Communications support to all subscribers within a certain geographic area.

c. Headquarters and Signals. At and below Division level, Signals may be tasked to provide both communications and all other aspects of headquarters support including command posts, staff clerks, and combat service support.

2. Signals organizations need not adhere, slavishly, to the chain of command, but they must be responsible to it. The communications system may be deployed in either of two ways - on a chain of command basis, or as an "area" system.

3. The chain of command system is based on command responsibility

.../7

being decentralized to each formation or unit while technical direction is maintained by the highest level of command. This system provides each commander with the greatest degree of control over his own communications, but it forces him to adapt his organization and deployment to a master plan in order to make the best use of limited resources. Within a chain of command system the reserves of manpower and equipment are spread throughout the formation and may not be available to satisfy critical requirements in a timely manner.

4. Area communications systems involve centralized command and control over many of the communications links between headquarters. In general terms, each commander has a Signal unit capable of providing support for only the internal operation of his headquarters and access to the area system. Most Signal resources are commanded and deployed by the highest formation in order to support all elements of the formation. Area systems are more economical than chain of command systems and are, usually more flexible. They require detailed planning by a large Signal staff and, while they reduce a subordinate commander's problems, impose a limitation of a commander's ability to organize his formation as he sees fit.

5. As a general rule both chain of command and area systems are deployed in concert in order to achieve economy while maintaining the ability to organize a formation for special missions.

421. EMPLOYMENT

1. Each unit and formation commander has his own Signal officer who commands the unit of formation Signal unit or sub-unit and/or provides the commander with advice on communications. In addition to their

.../8

- 8 -

command relationships, however, Signal officers must be allowed to co-ordinate technical matters outside of the established chain of command.

2. Signal resources are limited, poor deployment of a Signal unit can have disastrous consequences. Commanders and staff officers must ensure that Signals are involved in all stages of battle procedure in order to reduce the possibility of failure of the Command and Control system.

3. The employment of Signal units is based on a consideration of two factors: tactical and technical. Very often there will be a conflict between the deployment that a commander would like for tactical reasons and that which is possible for technical reasons. A compromise is usually necessary, when tactical or technical problems are severe it may be necessary for the higher formation to deploy additional resources for an operation.

4. Signals are a peculiar arm, their activities extend throughout the combat and communications zones. Signals are critical to command and control, the importance of good communications is rarely evident except when they fail. When Signal units are organized and deployed according to the principles of communications failure is rare.

CHIEF
LAND
DOCTRINE AND
OPERATIONS

JAN 23 1978

MEMORANDUM

2910-CFP 300 (DTRP 2-2)

20 Jan 78

DLP

FIRST DRAFT CFP 300 -
CONDUCT OF LAND OPERATIONS

Ref: A. 2910-CFP 300 (DLP) 9 Jan 78

1. The first draft of CFP 300 received under cover of Ref A has been reviewed by DTRP. Particular attention was paid to Chapters 5 and 15 and the Combat Service Support/Administration articles of other chapters.
2. There is a general lack of consistency in the use of the terms "combat service support" and "administration". Some chapters employ one term, some the other, and still others, both. Art 103, para 8 defines administration, but combat service support is not defined. One term should be adopted and used throughout. *good pts.*
3. Other suggested amendments and comments are provided at Annex A.

George J. Murray
George J. Murray
LCol
DTRP
6-0974

SUGGESTED AMENDMENTS

TO 2910-CFP 300 (DTRP 2-2)

DATED 20 JAN 78

DOCUMENT: CFP 300 (FIRST DRAFT)						FILE NO: 2910-CFP 300	DATE:
SER	PAGE	PARA SUB-PARA	LINE	FIG	TABLE	SUGGESTED AMENDMENTS	REMARKS
1	3-15	Art 313 para 3	5			Delete "field engineer squadron" insert "combat engineer regiment"	The engineer element of each Canadian Brigade Group is now designated a regiment.
2	3-24	Art 326 para 1	3				"Canadian Corps Support Command" has not previously been defined. Has the term been officially accepted into CF doctrine?
3	3-24	Art 326 para 2	2			Delete "Art 324" Insert "Art 325"	Nil
4	3-28			3-2		Delete "Support Point" below "Corps Support Command" Insert "Replenishment Point"	What is the definition of a "Support Point"?
5	5-2 5-3	Art 502				Entitle each para with the name of the principle of administration being described in that para.	There used to be five principles. It is difficult to determine from this format just what or how many there are now.
6	5-6	Art 506	4			Delete "formation headquarters" Insert "service battalions"	Chaplains are on the strength of the Administration Company of the Service Battalion.
7	5-7	Art 507	2				This sentence does not make sense.
8	5-12	2c	3			Delete "their"	Nil
9	5-13	2d (8)	1				The descriptive word before "transport units" is missing.
10	9-94	6	4			Insert a period after "defiles". Begin a new sentence with "It may..."	The wording implies that equipment collecting points should be established at defiles"...to prevent concentrations of equipment from developing". This is a contradictory statement.

SUGGESTED AMENDMENTS

TO
DATED

DOCUMENT:						FILE NO:	DATE:
SER	PAGE	PARA SUB-PARA	LINE	FIG	TABLE	SUGGESTED AMENDMENTS	REMARKS
11	10-20	1				Redesignate sub paras a and b as paras 2 and 3.	
12	10-20	1b	7			Delete "Forward repair teams (FTs)". Insert "Mobile repair teams (MRTs)".	This change should be confirmed by the maintenance staff.
13	15-12	1	1			Delete "Chief Transportation Officer". Insert "Director General Transportation".	
14	15-13	2	5			Delete "Chief Transportation Staff Officer". Insert "Director General Transportation".	



Canadian Armed Forces
Maritime Command

Forces armées canadiennes
Commandement maritime



MARC: 2910-1 TD 652 (DRO)

Maritime Command Headquarters
FMO Halifax, N.S.
B3K 2X0

19 Jan 78

NDRMS/SGDDN 3-3-2

Referred to

Transmis à

JAN 20 1978

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Dossier No

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①
National Defence Headquarters
Ottawa, Ontario
K1A 0K2

Attention: DLP

FIRST DRAFT CFP 300 -
CONDUCT OF LAND OPERATIONS

Reference: A. 2910-CFP 300 (DLP) dated 9 January, 1978
covering first draft CFP 300 - The Conduct
of Land Operations.

Maritime Command Headquarters has no comments on Ref-
erence A.

52-

H.F.H. Pullen

Major

for Commander Maritime Command

② Noted - PA

DLP4

23 Jan 78

MEMORANDUM

SC 2900-1 TD 8021

18 Jan 78

SSO

CFP 300 - CONDUCT OF LAND OPERATIONS

Ref: A. SC 2900-1 TD 8021 17 Jan 78

1. As requested, I have reviewed Chapters 1-3 inclusive of CFP 300 and have noted suggested amendments on the draft.

2. CFP 300 when compared with CFP 165 seems a more understandable book. Chapter 1 is very similar to Chapter 1 of CFP 165, but Chapters 2 and 3 have been re-worked with a resultant feel of practicality.

Detailed Comments

3. Preface

a. Is there a requirement for a CAVEAT in the preface? Restrictions suggested by the CAVEAT include -

(1) land operations cannot be amenable to absolute ruler,

(2) a limitation on discussion to mid-intensity war, and

(3) a dependence on the conditions at the time, and the level of command concerned in application of principles.

I suggest a CAVEAT which includes the above restrictions is not necessary as a marginal heading.

b. Suggest deletion of words "stated in the manual" be deleted from the last paragraph.

4. Record of Amendments. There is a requirement for a record of amendments page.

5. Chapter 1

a. Section 113(1) - suggest deletion of word "the" before Canadian Forces.

b. Section 114(3)a - third line - suggest change of "material" to read "weapons or equipment".

c. Section 116(5)d - second last line - suggest change of "active" to "regular".

.../2

001397

- 2 -

6. Chapter 2

- a. Section 203(2) - last line - suggest change of "the troops" to "to troops".
- b. Section 203(3) - last line - suggest change of "supporting them" to "their support".

7. Chapter 3

- a. Section 301(5)a - last three lines - difficult to read; suggest "and the provision of a capability for survey, mapping and imagery interpretation to headquarters and engineer units".
- b. Section 301(5)c - second line - spell out "automatic data processing (ADP)".
- c. Section 308(2) - first line - "combat zone" should read "CZ".
- d. Section 327(1) - first line - "combat zone" should read "CZ".
- e. Section 327(3) - fifth line, seventh line - "Replenishment Points" should read "Support Points". (This then ties in with COSCOM Concept as outlined in CFCSC Manual CSC 205.)
- f. Section 328(5) - fourth line - "Replenishment Points" should read "Support Points".
- g. Section 328(6) - first line, fourth line, fifth line - "Replenishment Points" should read "Support Points".
- h. Figure 3-2 (page 3-20) - "Replenishment Points" should read "Support Points".
- j. Section 331(4) - seventh line - "Replenishment Points" should read "Support Points".

ORIGINAL SIGNED BY

D.B. Crowe
LCol

MEMORANDUM

2910-CFP 300 (DEW 2)

18 Jan 78

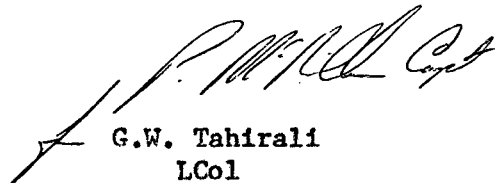
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CFP 300 CONDUCT OF LAND OPERATIONS
DGCEO REVIEW

Refs: A. 2910-CFP 300 (DCEO) 12 Jan 78
B. 2414-ATP 35 (DEW 2-2) 7 Jan 77
C. HEBREWS 13-8

1. Chapter 14 of CFP 300 forwarded under Ref A was originally sent to DLP at Ref B.
2. There are only two minor points that need correction in Ref A:
 - a. Section 2 - COMMAND AND CONTROL should read Section 3; and
 - b. Section 3 - Combat Service Support should read Section 4.

DGCEO Circ
DEW Circ
DEW File
Orig
File
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G.W. Tahirali
LCol
DEW
2-7274

MEMORANDUM

2910-CFP 300(DCEO)

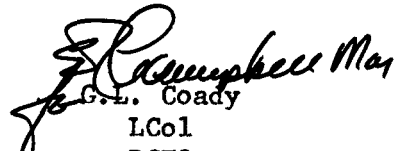
12 Jan 78

DEW

CFP 300 CONDUCT OF LAND OPERATIONS
DGCEO REVIEW

Ref: A. 2910-CFP 300 (DLP) 9 Jan 78 (enclosed)

1. Enclosed under cover of the Ref is Chapter 14 (EW) of CFP 300.
2. You are requested to review the chapter and submit comments to DCEO 2 by 19 Jan 78 so that a consolidated DGCEO review/revision can be passed to FMC SSO Comm and CO 4 CMBG HQ and Sig Sqn for comments prior to submission to DLP on 1 Mar.


E.R. Campbell Maj
LCol
DCEO
5-8538

Enclosure: 1

E.R. CAMPBELL MAJ/DCEO 2/5-1434/cg

PA

2910-CFP 300 (DLP)

National Defence Headquarters
Ottawa, Ontario
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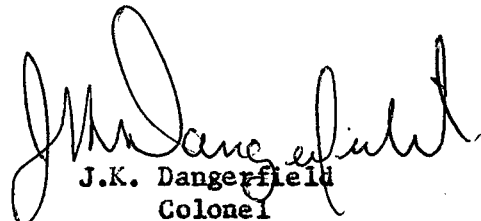
9 January, 1978

Distribution List

**FIRST DRAFT CFP 300 -
CONDUCT OF LAND OPERATIONS**

- References:** A. Land Forces Combat Development Committee decision
of 7 February 1977
B. 2910-CFP 300 (DLP 4-2) dated 30 March 1977

1. Attached is the first draft of CFP 300 - The Conduct of Land Operations prepared by Deputy Commandant of the Canadian Land Forces Command and Staff College and the staff officers of the Directorate of Land Plans.
2. This draft does not attempt to enunciate new tactical doctrine for the land forces but rather seeks to codify the existing doctrine that has evolved since the writing of CFP 165 in 1964, and to incorporate agreed NATO doctrine. Addressees are requested to review the draft in that light for content ignoring minor editorial errors. It would be appreciated if, where there is strong disagreement with the text, that proposed revisions be forwarded with your comments for consideration.
3. In order to produce an interim edition of this critical manual by 1 May 1978 you are asked to forward your comments and recommendations to reach the Directorate of Land Plans by 1 March 1978.



J.K. Dangerfield
Colonel
Director Land Plans
for Chief of the Defence Staff

Attachment: 1st draft
CFP 300

DISTRIBUTION LIST

- 2 -

DISTRIBUTION LIST

External

Commander Maritime Command
Commander Mobile Command (5)
Commander Air Command
Commander Canadian Forces Europe
Commander 4 CMBG
Commandant Canadian Forces College
Commandant Canadian Land Forces Command
and Staff College

Internal

CMDO
CADO
Surg Gen
DG Ammo
DGCEO
DGIS
DGLEM
DGMAP
DGMEQ
~~DG Pol-P~~
DGRET
DGT
JAG
D Armour
D Arty
D Inf
DLA
DLOR
DGSS

LCol WEJ Hutchinson, 2-8550/mr

bL0 (37)

VV

AVC080

UU

RR RCCWC

DE RCECG 78 2271703

ZNR UUUUU

R 151630Z AUG 77

FM CTC GAGETOWN

TO NDHQ OTTAWA

BT

UNCLAS INSTR/PERS 2131 FOR ~~DPL~~ ^{DPL} -4 FROM COL OPS AND INSTRUCTION

SUBJECT: CFP 300 - CONDUCT OF LAND OPERATIONS - FIRST DRAFT

FORWARDING TODAY UNDER SEPARATE COVER FIRST DRAFT OF SUBJECT CFP

OVER TO YOU HUTCH

BT

~~CWA FOR DPL 4~~

CHIEF
LAND
DOCTRINE AND
OPERATIONS

17 4377

AUG
AGU 18 1977

~~NOT DIT~~

2910-CFP 300

② Noted - PA

~~HA~~ DLP4
18 Aug 77
2-8550

4

DEPARTMENT OF NATIONAL DEFENCE
MINISTÈRE DE LA DÉFENSE NATIONALE

MINUTE SHEET - NOTE DE SERVICE

SECURITY CLASSIFICATION - COTE DE SÉCURITÉ

Unclass

FILE NO. - N° DE DOSSIER

2910-1 (Col Ops)

TD-D.T.

REFERENCE - RÉFÉRENCE

CFP 300 - FIRST DRAFT

DATED - DATÉE

15 Aug 77

REFERRED TO
TRANSMISE À

REMARKS - REMARQUES

(To be signed in full showing Appointment, Telephone Number and Date)
(Attaché de signature, fonction, numéro de téléphone et date)

CHDO
(through [signature])

1. The first draft of this manual has been received as prep by Col Nicholson.

2. A very cursory review indicates it will require considerable work before it can be sent out in first draft for comment. This incl an edit of each chap, a complete retyping and printing.

3. With coop from typing pool and Queen's Printer locally we should be able to meet the fol schedule:

a. First draft out for comment by 1 Oct 76

b. Comments in by 1 Jan 78

c. Interim out by 1 May 78 to be eff 1 Jul 78 for all purposes.

4. Maj constraint is staff time avail in DNP4 to review

001404

DEPARTMENT OF NATIONAL DEFENCE
MINISTÈRE DE LA DÉFENSE NATIONALE

MINUTE SHEET - NOTE DE SERVICE

SECURITY CLASSIFICATION - COTE DE SÉCURITÉ

FILE NO. - N° DE DOSSIER

TD-D.T.

REFERENCE - RÉFÉRENCE

- 2 -

DATED - DATÉE

REFERRED TO
TRANSMISE À

REMARKS - REMARQUES

(To be signed in full showing Appointment, Telephone Number and Date)
(Attaché de signature, fonction, numéro de téléphone et date)

chaps as well as the stress on author's time in Jan/Feb 78 when revision in accordance with comments must be done.

5. It is regrettable that Col Nicholson did not have more time to work on manual - however at least we have a workable draft.

④ DWP 4

I believe your typing is being looked after satisfactorily.

SOICLDO
R R HOODSPITH
MAJ

SEP 7 1977

[Signature]
DWP 4
2-8350



National Defence
Défense nationale

18 1977

2910-1 (Col Ops)

Combat Training Centre
Canadian Forces Base Gagetown
Oromocto, New Brunswick
EOG 2P0

15 Aug 77

National Defence Headquarters
Ottawa, Ontario
K1A 0K2

Attention: DLP-4

CFP 300 - CONDUCT OF LAND OPERATIONS
FIRST DRAFT

NORMS/SCDR 3-2	
Referred to	
Transmis à	DLP4
File No	AUG 17 1977
Dossier No.	2910-CFP300
Charged to/Chargé à	DLP4

2-5-77

References: A. LFCDC Decision of 7 Feb 77
B. 2910-CFP 300 (DLP 4-2) 30 Mar 77

1. Herewith the only existing copy of the first draft of CFP 300. It is assumed that the mechanics of typing, reproduction, distribution, etc, can best be handled at your headquarters. The only thing missing is Annex A to Chapter 3, a chart illustrating current NATO command structure, which is not available in Gagetown.

2. It will be obvious that the draft has been, in the main, pirated directly from CFP 165. There are three main reasons for this:

- a. The author of CFP 165 was patently an experienced and erudite soldier. I found myself unable, therefore, to improve upon his highly literate presentation of the material involved.
- b. Careful reading of CFP 165 reveals little, if any, material which is not as fundamentally true and applicable today as it was when the manual was first written. We will not re-vitalize our written doctrine by messing about with the basic truths as expressed in CFP 165. It is in the more specific tactical manuals dealing with division and brigade operations that we must sort out and emphasize how we intend to fight future battles.

②
PA

Copies made

18 Aug 77

2-8330

...72

- 2 -

- c. The six-month "free of other duties" period referred to in Reference A has, as expected, failed to materialize. My primary duties have continued to receive priority and have occupied an inordinate amount of my time, precluding a more extensive rewrite.
3. For your appropriate action.



D.A. Nicholson
Colonel Operations and Instruction
Combat Training Centre

DEPARTMENT OF NATIONAL DEFENCE
MINISTÈRE DE LA DÉFENSE NATIONALE

MINUTE SHEET - NOTE DE SERVICE

SECURITY CLASSIFICATION - COTE DE SÉCURITÉ

FILE NO. - N° DE DOSSIER

TD-D.T.

REFERENCE - RÉFÉRENCE

DATED - DATÉE

REFERRED TO
TRANSMISE À

REMARKS - REMARQUES

(To be signed in full showing Appointment, Telephone Number and Date)
(Attaché de signature, fonction, numéro de téléphone et date)

DLP4

I Finally spoke to Col NICHOLSON 10 May 77. He is generally happy with the writing plan suggested by us especially as it drew so little fire. His comments on those of CFSC deserve our acceptance ruling. As there are no comments from other sources I recommend that the next step be by msg, distributed like the specification. It will OK his writing on the basis of the suggested plan subject to our explicit rulings on the various comments (incl in msg). Col NICHOLSON will be satisfied & we won't consume more time staffing something that seems to have been accepted (or ignored.) Col N sees great value in cutting & pasting the old CFP 300. Thinks he cannot improve it much. He is reserved about

DEPARTMENT OF NATIONAL DEFENCE
MINISTÈRE DE LA DÉFENSE NATIONALE

MINUTE SHEET - NOTE DE SERVICE

SECURITY CLASSIFICATION - COTE DE SÉCURITÉ

FILE NO. - N° DE DOSSIER

TD-D.T.

REFERENCE - RÉFÉRENCE

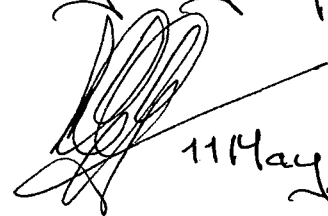
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REFERRED TO
TRANSMISE À

REMARKS - REMARQUES

(To be signed in full showing Appointment, Telephone Number and Date)
(Attaché de signature, fonction, numéro de téléphone et date)

FM 100-5. I was impressed
If you would OK my next step
as outlined in para 1, I will speak COL N by
telephone so he can start directly & then will
cfr by all-station msg so all are informed.
I would have prepared the msg but regard
the ATP35 Int Chap as my high pri.


11 May 77



National Defence
Défense nationale

2910-1 (Comdt)

Combat Arms School
Canadian Forces Base Gagetown
Oromocto, New Brunswick
E2V 2G6

26 Apr 77

National Defence Headquarters
Ottawa, Ontario
K1A 0K2

Attention: DLP 4

CFP 300 - CONDUCT OF LAND OPERATIONS
WRITING PLAN

NORMS/SCDDN 3-2	
Referred to	DLP 4
Transmis à	
File No	2 1977
Dossier No	2910-CFP 300
Charged to/Chargé à	

- References:
- A. 2910-CFP 300 (DLP 4-2) 30 Mar 77
 - B. CFC Toronto Wire CFC 164 971215Z Apr 77
 - C. LFCDC Decision of 7 Feb 77

1. The suggested writing plan at Annex A to Reference A appears satisfactory. It is proposed to incorporate the suggestions in Reference B with the following exceptions (paragraph references are to paragraphs in Reference B):

- a. Para 1 D. The general heading "The Arms" is satisfactory. Separation of the arms into categories of Combat Arms and Combat Support Arms does not alter the fact that they are all "arms". It is not agreed that "Intelligence" is a Combat Support Arm. It is an all-pervasive operational function, not an "Arm".
- b. Para 2 E. Cross-referencing sections to Stanags is not considered to be either necessary or desirable. STANAGs will change more frequently than the basic principles and techniques of the conduct of land operations.

2. The author awaits the issue of the approved writing plan mentioned in paragraph 6. c. of Reference A. It should be noted that the 6-months free time for this project, mentioned in the Minutes of the meeting which produced Reference C, appears unlikely to materialize.

② DLP 4-2


I couldn't reach Col Nick
to day. He seems to be waiting
for us while we are waiting for
him - pls call him and clarify -
we want his writing plan to staff


D.A. Nicholson

Colonel

Commandant Combat Arms School

173-357-8401

 DLP 4
4 May 77

001410

CHIEF
LAND
DOCTRINE AND
OPERATIONS

102 17 23 '77

APR 12 1977

DLP

NNNNVV CLB183FA202CWA069

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ZNR UUUUU

R 121430Z APR 77

FM HQ 4 CMBG LAHR

TO RCECG/CAS GAGETOWN

INFO RCCWC/NDHQ OTTAWA

BT

UNCLAS OPS 1281

CAS FOR COMDT NDHQ FOR DLP-4

SUBJ: CFP 300 - CONDUCT OF LAND OPERATIONS

REF: A. NDHQ 2910 - CFP 300 (DLP 4-2) OF 30 MAR 77

1. THIS HQ DOES NOT HAVE ANY COMMENTS AT THE PRESENT TIME ON
THE SUGGESTED WRITING PLAN FOR SUBJ. CFP

2. COMD 4 CMBG WILL HOWEVER DESIRE TO REVIEW FIRST DRAFT OF
PROPOSED CFP AND HOPES THAT IT WILL BE MADE AVAILABLE FOR
COMMENTS

BT

2910-CFP300
CHIEF
LAND
DOCTRINE AND
OPERATIONS

APR 12 1977

DLP

NNNN AVA437 UU

RR RCCWC

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ZNR UUUUU

R 071215Z APR 77

FM CFC TORONTO

TO RCECG/CTC GAGETOWN

INFO RCCWC/NDHQ OTTAWA

BT

UNCLAS CFC 164

SUBJECT: SPECIFICATION FOR CFP 300

REF: NDHQ 2910 CFP 300 (DLP 4-2) 30 MAR 77

1. CFCSC COMMENTS ON REF ARE AS FOLLOWS:

A. PARA 3B(1) - CHANGE REF AAP(6) TO CFP 121(4) *Agree*
B. ANNEX A SERIAL 3 SECT 2 - SUGGEST THIS INCL ROLE IN WAR
OF HQ CFE AND COMD RELATIONSHIPS OF ALL CDN FORCES ELEMENTS
IN EUROPE

*Check with DIPC
+ DOE.*

C. SERIAL 3 SECT 3. SUGGEST CHANGE TO HEADING OF MAINT SYSTEM
ALTHOUGH CONSISTENT WITH SECOND DEFINITION OF MAINT IN CFP
121(4) COMMON USAGE OF TERM MAINT IN CF APPLIES
TO FIRST DEFINITION. HEADING FOR THIS SECT OF ADM SYSTEM WOULD
BE MORE APPROPRIATE *Agree*

D. SERIAL 4 - CHAPTER HEADING QUOTE THE ARMS UNQUOTE IS
NO LONGER A VALID TERM IN CF. EITHER TERM ARMS

~~C HA TO FIRST~~

001412

PAGE 2 RCCBY 17 0 UNCLAS

SHOULD BE OFFICIALLY REINTRODUCED OR THIS SHOULD CHANGE TO CBT *agree*
ARMS AND CBT SP ARMS. A SECT SHOULD BE INCL IN THIS CHAPT ON INT *agree*
AS A CBT SP ARM EVEN THOUGH IT IS DISCUSSED IN LATER CHAPT

E. SERIAL 5 CHAPTER HEADING SHOULD NOT REFER TO SERVICES UNLESS
TERM DEFINED AND REINTRODUCED. CBT SVC SP IS NOW PROPER TERM *agree.*

F. SERIAL 7 SECT 6 SHOULD INCLUDE DAMAGE CON *agree.*

2. FOL GEN PTS ARE SUGGESTED:

A. INTRO SHOULD INCL DEFINITION OF INTENSITIES OF CONFLICT *yes. will be incl*

B. THEATRE ORG SHOULD INCL CON OF AIRSPACE, AD, TAC AIR FORCES *yes.*
AND THEATRE COMMS AREA SYSTEM

C. THEATRE ORG SHOULD INCL BRIEF DISCUSSION OF JOINT AND COMBINED *yes.*
OPS AND STAFF PLANNING

D. EARLY CHAPTER SHOULD INCL BRIEF DISCUSSION ON CONCEPT OF ORG *yes.*
OF LARGE BALANCED LAND FMNS IE DIV AND ABOVE

E. SUGGEST SECTS BE CROSS REFERENCED TO STANAG WHERE APPLICABLE *yes.*

F. SUGGEST FM 100-5 BE USED AS A REF *yes.*

BT

② DLP4-2

Mag to Col Nick
with comments on
CFSC comments.

[Signature]
DLP4 20 Apr 77

2910-CFP 300 (DLP 4-2)

Department of National Defence
101 Colonel By Drive
Ottawa, Ontario
K1A 0K2

30 March 1977

Distribution List

SPECIFICATION FOR CFP 300
CONDUCT OF LAND OPERATIONS

References: A. DCDS Instruction 11/76 of 30 December 1976
B. LFCDC Decision of 7 February 1977
C. Memo 2910-CFP 300 (DLP 4) of 9 February 1977 (NOTAL)

1. Reference A identified CLDO as the Responsible Agency for CFP 300 - Conduct of Land Operations, the manual that will succeed CFP 165 as the "keystone" manual of Canadian Land Force doctrine. Reference B named Colonel D.A. Nicholson, CAS, as the author. Reference C outlined a plan for the manual's preparation. The aim of this letter is to provide specifications and guidance to the author.

SPECIFICATION

2. CFP 300 - Conduct of Land Operations will replace CFP 165 as the doctrinal source document that ties together all other elements of Canadian Land Force doctrine whether they address matters of policy, strategy, procedures, or methods. It will incorporate the NATO doctrine of ATP 35, a publication which will not itself be widely distributed in the Canadian Forces.

- U
- a. The aim of the manual is essentially unchanged from that of its predecessor. It is: "to set out the principles which govern the conduct of land operations in war; at the same time providing guidance for Canadian officers on the planning and execution of battles based on these principles".
 - b. The scope of the manual will be like that of CFP 165, but will incorporate the NATO doctrine of ATP 35. The NATO doctrine will be complemented by the provision of a Canadian context. As well, it may be supplemented with elaboration and emphasis appropriate for Canadian readers. Supplementary material must not be inconsistent with the basic substance of ATP 35.

REFERENCES

3. The following references will be used in the preparation of CFP 300:

- 2 -

a. General:

- (1) CFP 165, as a background source, with the qualification that its content may be dated.
- (2) Staff College Precis, CSC Pubs 201, 202, 203, 204 and 205. The substance of these precis may be less dated than that of CFP 165.
- (3) Defence Policy Statements, for example The Defence White Paper.
- (4) ATP 35, for the framework of operational doctrine.

b. Terminology, references in precedence order:

- (1) AAP 6 (N), NATO Glossary of Terms and Definitions for Military Use.
- (2) The Concise Oxford Dictionary, 6th ed, 1976.
- (3) The Shorter Oxford Dictionary, 1973.

c. Other references. Official doctrinal publications of other NATO allies, particularly those of UK, GE and US may be useful and may be drawn upon by the author.

4. Primary and Secondary Sources are identified in Annex B to Reference B. Contacts for assistance from the Primary Sources are:

- a. FMC - SSO Doc, Lieutenant-Colonel E. Exley (Ed)
Telephone FMC local 271
- b. DGMAP - DMPPP 3, Lieutenant-Colonel R.R. Marrs (Ron)
Telephone NDHQ 6-5156
- c. CFCSC - Lieutenant-Colonel G.D. Simpson (Gord)
Telephone Toronto 484-5605

5. Additional guidance, including authoritative rulings on conflicts of substance or terminology, will be provided on request by Directorate of Land Plans on behalf of Chief Land Doctrine and Operations. The contact is Lieutenant-Colonel W.E.J. Hutchinson (Bill), DLP 4 telephone NDHQ 2-8550.

TIMINGS

6. The following critical timings will be used in the manual's development:

- a. DLP issues specifications to author 1 April 1977
- b. Author submits writing plan to DLP 1 May 1977
for staffing; adjustment(?) and approval

.../3

001415

- 3 -

- c. DLP issues authorized plan to author 1 June 1977
- d. Author submits first draft to DLP for staffing 1 September 1977
- e. DLP issues comments on first draft, and direction, to author 1 November 1977
- f. Author submits revised draft to DLP 4 1 January 1978
- g. DLP approves revised draft 1 February 1978


GUIDANCE

7. The organization of the content of CFP 300 is left to the author's discretion with only the suggestion that he consider making its parts that are developed from ATP 35 parallel that manual. A suggested writing plan is attached as Annex A to this letter.

CONCLUSION

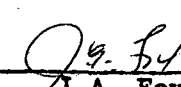
8. Information addressees who may wish to comment on the suggested writing plan should do so promptly. Comment should be sent directly to the author, with an information copy to DLP. Addressees are:


- a. Commandant
Combat Arms School
Canadian Forces Base Gagetown
Oromocto NB
EOG 2PO
- b. NDHQ (Attn: DLP 4)
101 Colonel By Drive
Ottawa, Ontario
K1A 0K2


J.P.R. LaRose
Major-General
Chief Land Doctrine and Operations
for Chief of the Defence Staff

R.G. Graham Maj/2-8550/sh
Attachment: Annex A

DISTRIBUTION LIST (see page 4)


J.A. Fox
Col
DLP
29 Mar 77


W.E.J. Hutchinson
LCol
DLP 4
29 Mar 77

.../4

- 4 -

DISTRIBUTION LIST

Action

External

Comdt CAS

Information

External

FMC-5 for: Comd
D Comd
SA Comd
COS Ops
COS Adm

Comd 1 Cbt Gp
Comd 2 Cbt Gp
G Com 5e G de C
Comd CTC
Comd 4 CMBG
Comdt CFCSC
Comdt CLFCSC

Internal

ADM (Pol)
ADM (Per)
ADM (Mat)
CRAD
DGLEM
DGMEQ
DGCEO
D Armd
D Arty
D Inf
DLOR
DLA

SUGGESTED WRITING PLAN
FOR CFP 300

ANNEX A to
2910-CFP 300 (DLP4-2)
DATED

<u>SERIAL</u>	<u>CHAPTER</u>	<u>CONTENT</u>	<u>REFERENCES</u>
1	1 - INTRODUCTION	Normal introduction including: a. Aim b. Scope c. Relationship to other doctrine: (1) Canadian - extends from this (2) NATO - incorporated d. Terminology/definitions e. Introduction to presentation	
2	2 - CANADA'S LAND FORCES	<u>Aim</u> - to relate the land forces and their resources and objectives to those of Canada and the nation's part in collective organizations and the wider, global, community of nations. <u>Sections</u> 1. Sovereign State's National, Foreign and Defence Policies Generally. 2. Canadian National, Foreign and Defence Policies and Implications for Canadian Forces.	CFP 165, Ch 1, Secs 1-5 CSC Pub 201 Chs 1&2 CSC Pub 202 Defence White Paper, other policy documents CFP 165 articles 102, 108, 110, 111, 114, 115, CSC 201 Chs 1&2 CFP 165 articles 116, 117, 118 CSC 201 Chs 1&2
3	3 - THEATRE ORGANIZATION	<u>Aim</u> - to explain the organization of an operational theatre. <u>Sections</u> 1. Basis of Organization 2. Theatres of War or Operations 3. The Maintenance System	CFP 165 Chs 2&3 CSC Pub 201 Ch4 CSC Pub 202 NATO Facts & Figures, NATO Information Service, Brussels CFP 165 articles 201&202, extended to include Corps & Armies CFP 165 articles 205, 206, 207, 208&209 Include also NATO Comd terminology - Major NATO Comds, Principal Subordinate, Major Subordinate Area Commanders CFP 165 articles 324, 325, 326 CFP 165 articles 327, 328, 329, 330 & 235 (air-space control).

.../2

- 2 -

SERIAL CHAPTER

CONTENT

REFERENCES

4 4 - THE ARMS

Aim - to explain the roles, functions and organization of the fighting components of an army in the field.

CFP 165 Ch 2
CSC Pub 201 Ch 4
CSC Pub 202
CSC Pub 203

- Sections
1. General
 2. Infantry
 3. Armour
 4. Artillery
 5. Engineers
 6. Signals
 7. Tactical Helicopters/Aviation
 8. Co-operation

CFP 165 Ch 2

Sec 4

Sec 3

Secs 5 & 8

Sec 9

Sec 11

Sec 10

Sec 12

5 5 - THE SERVICES &
ADMINISTRATION

Aim - to explain the roles, functions and organization of the supporting components of an army in the field.

CFP 165 Ch 3
CSC Pub 201 Ch 4
CSC Pub 202
CSC Pub 203 & 205

- Sections
1. General
 2. Medical
 3. Dental
 4. Chaplain
 5. Pay
 6. Military Police
 7. Reinforcements

Sec 1 & article 303

Article 304

Article 305

Article 306

Article 307

Article 308

Article 309

.../3

- 3 -

SERIAL CHAPTER

CONTENT

REFERENCES

	8. Records & Documentation	Article 310
	9. Materiel Supply	Article 311
	10. Transport	Article 312
	11. Bath and Decontamination	Article 313
	12. Repair and Recovery	Article 314
	13. Water Supply	Article 315
	14. Postal	Article 316
	15. Legal	Article 317
	16. Welfare	Article 318
	17. Public Information	Article 319
	18. Graves Registration	Article 320
	19. Civil Affairs and Military Government	Article 321
6	6 - PRINCIPLES OF WAR & ELEMENTS OF TACTICS	CFP 165, CSC Pubs 201, 202, 203, 204
	<u>Aim</u> - to provide a background to the study of land operations in war.	
	<u>Sections</u> 1. The Principles of War	Ch 5 Sec 2
	2. The Environment of Battle	Ch 5 Sec 1
	3. Elements of Tactics	Ch 5 Sec 3
	4. Leadership	Ch 4 Sec 1
	5. Morale	Ch 4 Sec 2
	6. Headquarters Organization and Operation	Ch 4 Sec 3

.../4

- 4 -

SERIAL CHAPTER

CONTENT

REFERENCES

7 7 - CONSTANT FACTORS IN
COMBAT

Aim - to discuss together those aspects that are common to all military operations, even though they may be elaborated (individually) in other chapters.

Sections 1. Command

2. Information and Intelligence

3. Planning

4. Communication and Liaison

5. Deployment Procedure

6. Tactical Protection and Security

7. Co-operation with Naval and Air Forces and Civil Authorities

8. Electronic Warfare

9. Psychological Warfare

10. Logistics

8 8 - OFFENSIVE OPERATIONS

Aim - to discuss offensive operations (which are characterized by friendly initiative) including advance, attack & pursuit operations.

Sections 1. Offensive Operations General

ATP 35 Ch 1
CSC Pubs 201, 202, 203, 204
CFP 165, articles 237, 422-424, 623-625 Ch 8

ATP 35 articles 106&107 (including hierarchy of command relationships with definitions and explanations).

ATP 35 articles 113-115
CFP 165 Ch 7

ATP 35 article 108
CFP 165 articles 422-424

ATP 35 articles 109&110

CFP 165 Ch 4 Sec 4

ATP 35 articles 116&117
CFP 165 Ch 8

ATP 35 articles 120, 121, 122, 123
CFP 165 article 114

ATP 35 articles 124&125
CFP 165 Ch 6, Sec 3

CFP 165 Ch 6, Sec 5

ATP 35
CFP 165
CSC Pubs 201, 202, 203, 204

ATP 35 Ch 4
CFP 165 Chs 10&13

.../5

- 5 -

<u>SERIAL</u>	<u>CHAPTER</u>	<u>CONTENT</u>	<u>REFERENCE</u>
		2. Advance	ATP 35 Ch 4 CFP 165 Ch 10
		3. Attack	ATP 35 Ch 4 CFP 165 Ch 13
		4. Pursuit	ATP 35 Ch 4 CFP 165 Ch 13
9	9--DEFENSIVE OPERATIONS	<u>Aim</u> - to discuss defensive operations (enemy's initiative) including defence, delay, disengagement and withdrawal.	ATP 35 CFP 165 CSC Pubs 201, 202, 203, 204
		<u>Sections</u> 1. Defensive Operations General	ATP 35 Chs 2 & 3 CFP 165 Chs 12 & 11
		2. Delay	ATP 35 Ch 3 CFP 165 Ch 11
		3. Defence	ATP 35 Ch 2 CFP 165 Ch 12
		4. Disengagement and Withdrawal	ATP 35 Ch 3 CFP 165 Ch 11
10	10 - ENVIRONMENTAL CONSIDERATIONS	<u>Aim</u> - to discuss operations in special environments	ATP 35 CFP 165 CSC Pubs 201, 202, 203, 204
		<u>Sections</u> 1. General	
		2. Operations in Urban Areas	ATP 35 Ch 14 CFP 165 article 1333
		3. Forest Operations	ATP 35 Ch 16 CFP 165 Ch 14, Sec 4

.../6

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- 7 -

<u>SERIAL</u>	<u>CHAPTER</u>	<u>CONTENT</u>	<u>REFERENCE</u>
		2. Information Requirements	
		3. Sources	
		4. Intelligence and Its Co-ordination	
13	13 - NUCLEAR, BIOLOGICAL & CHEMICAL WARFARE	<u>Aim</u> - to discuss the impact on operations of NBC weapons.	ATP 35 CFP 165 CSC Pubs 202, 203, 204
		<u>Sections</u> 1. General	
		2. Nuclear	ATP 35 Ch 5 CFP 165 Ch 8, Sec 3
		3. Biological and Chemical	ATP 35 Ch 6 CFP 165 Ch 8, Sec 3
14	14 - ELECTRONIC WARFARE	<u>Aim</u> - to discuss EW (more exhaustively than the brief mention in Ch 7).	ATP 35 CFP 165 CSC Pubs 202, 203, 204
		<u>Sections</u> 1. General	ATP 35 Ch 8 CFP 165 Ch 6, Sec 3
		2. Electronic Countermeasures	ATP 35 Ch 8 CFP 165 Ch 6, Sec 3
		3. EW Support Measures	ATP 35 Ch 8 CFP 165 Ch 6, Sec 3
		4. Electronic Counter-Countermeasures	ATP 35 Ch 8 CFP 165 Ch 6, Sec 3
15	15 - LAND/AIR BATTLE	<u>Aim</u> - to discuss the inter-action of land and air forces (more comprehensively than in Ch 7).	ATP 35 Ch 9 CFP 165 CSC Pubs 202, 203, 204, 205
		<u>Sections</u> 1. General	ATP 35 Ch 9

.../8

- 8 -

<u>SERIAL</u>	<u>CHAPTER</u>	<u>CONTENT</u>	<u>REFERENCE</u>
		2. Offensive Air Support	
		3. Transport Support	
16	16 - MOVEMENT	<u>Aim</u> - to discuss movement in the theatre of operations.	CFP 165 Ch 9 CSC Pubs 202, 203, 204, 205
		<u>Sections</u> 1. General	CFP 165 Ch 9, CFP 303 (9)
		2. Manoeuvre	CFP 165 Ch 9, CFP 303 (9)
		3. Tactical Movement	CFP 165 Ch 9, CFP 303 (9)
		4. Administrative Movement	CFP 165 Ch 9, CFP 303 (9)
17	17 - SITUATIONS SHORT OF WAR	<u>Aim</u> - to discuss military operations in low and mid-intensity conflict situations, whether in the role of participant or peacekeeper.	CFP 165 (AL 1) ATP 35 Ch 21
		<u>Sections</u> 1. General	
		2. Mid-intensity	
		3. Low Intensity Type A	
		4. Low Intensity Type B	

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National Defence Headquarters
Ottawa, Ontario
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16 August 1976

Distribution List

**ADVANCED NOTICE - AMENDMENT 1 TO CFP165
CONDUCT OF LAND OPERATIONS**

References: A. CFP165 Conduct of Land Operations dated 30 October 1973
B. NDHQ 3205-1 over 2575-7 over 2910-CFP165(DLP) dated
3 June 1976
C. NDHQ 2910-CFP165(DLP) dated 7 June 1976 (NOTAL)

1. Attached, as an advanced notice, are two copies of Amendment List 1 to Reference A for your information and any action you consider necessary.
2. This amendment incorporates three significant changes:
 - a. the replacement of the discussion on General War, Limited War and Cold War in Chapter 1 Section 3 with a discussion of the terms agreed to in Reference C - High Intensity, Mid Intensity and Low Intensity conflicts;
 - b. the addition of the principle of war - Administration - to those listed in Chapter 5 Article 512 as agreed in Reference C; and
 - c. a revision of Chapter 17 required by the agreed change in sub-para a. above.
3. This amendment has been submitted for printing and translation and will be officially notified in due course.


J.A. Fox
Colonel

Director Land Plans
for Chief of the Defence Staff

Attachments: 2

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August 1976

Amendment List 1
To CFP 165

AMENDMENTS TO CFP 165 - CONDUCT OF LAND OPERATIONS

FOREWORD

1. The following amendments are approved and shall be inserted on receipt.
2. This amendment list is effective on receipt.
3. THIS AMENDMENT LIST CONTAINS CLASSIFIED INFORMATION AFFECTING THE NATIONAL DEFENCE OF CANADA AND SHALL BE SAFEGUARDED, HANDLED, TRANSPORTED, AND STORED IN ACCORDANCE WITH THE REGULATIONS AND ORDERS FOR THE SECURITY CLASSIFICATION APPEARING HEREON. RELEASE OF THIS AMENDMENT LIST, OR INFORMATION CONTAINED HEREIN, TO ANY PERSON NOT AUTHORIZED TO RECEIVE IT IS PROHIBITED BY "QUEEN'S REGULATIONS AND ORDERS FOR THE CANADIAN FORCES" AND THE "OFFICIAL SECRETS ACT".
4. Any loss or suspected compromise of this amendment list, or suspected compromise of this amendment, or portions thereof, shall be reported in accordance with CFP 128(1) Chap 60.

AMENDMENT INSTRUCTIONS

NEW AND REPLACEMENT PAGES

Remove and destroy the following pages

iii, ix, xxviii, xxix, xxx, 1-4,
1-5, 17-1 to 17-18

Insert the following new or replacement pages

iii, ix, xxviii, xxix, xxx, 1-4,
1-5, 5-8A, 17-1 to 17-18

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CFP 165

FOREWORD

1. CFP 165, Conduct of Land Operations, is issued on the authority of the Chief of Defence Staff.
2. CFP 165, is effective on receipt and supersedes CFP 165 dated 1 January 1972.
3. THIS PUBLICATION CONTAINS CLASSIFIED INFORMATION AFFECTING THE NATIONAL DEFENCE OF CANADA AND SHALL BE SAFEGUARDED, HANDLED, TRANSPORTED, AND STORED IN ACCORDANCE WITH THE REGULATIONS AND ORDERS FOR THE SECURITY CLASSIFICATION APPEARING HEREON. RELEASE OF THIS PUBLICATION LIST, OR INFORMATION CONTAINED HEREIN, TO ANY PERSON NOT AUTHORIZED TO RECEIVE IT IS PROHIBITED BY "QUEEN'S REGULATIONS AND ORDERS FOR THE CANADIAN FORCES" AND THE "OFFICIAL SECRETS ACT".
4. Any loss or suspected compromise of this publication, or portions, thereof, shall be reported in accordance with CFP 128(1), Chap 60.
5. Suggestions for amendments should be forwarded through the usual channels to National Defence Headquarters, Attention Directorate of Land Plans.

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AMENDMENT 1 TO CFP 165

CHAPTER 1

110. Intensity of Conflict

1. General. The intensity of military operations will vary in proportion to the conflict of interest of the opposing nations or factors. The intensity, scope and duration of wars also depends upon the extent to which the belligerents will make sacrifices to achieve their objectives.
2. High Intensity Conflict. When little or no restraint is exercised by the belligerents, a conflict is usually considered to be of high intensity. Both sides are prepared to employ the full range of weapons and resources available to them. In such a conflict nuclear weapons could be used from the outset, or the conflict would be initiated by conventional weapons.
3. Mid Intensity Conflict. If the vital interests of opponents are not immediately threatened a mid intensity conflict may occur. This is armed conflict fought with limited objectives under definitive policy limitations as to the extent of destructive power that can be employed and the extent of geographical area that might be involved. Tactical nuclear weapons may be used but mid intensity conflict differs from high intensity in as much as the possibility of escalation beyond the use of tactical nuclear weapons is not present. Mid intensity automatically escalates into high intensity when one of the belligerents is prepared to employ the full range of weapons.
3. Low Intensity Conflict (Type A). When a country acting independently, or mutually with friendly nations, conducts operations to prevent

the internal seizure of power or changes to established order by illegal, forceful means the conflict is considered to be low intensity (Type A). The country, or countries, seek to establish, regain or maintain control of land areas or populations threatened by guerilla action, insurgency, rebellion, dissidence, communal violence, civil disturbance or other tactics.

4. Low Intensity Conflict (Type B). When a country, or countries, conduct operations in an area of political or armed conflict for the purpose of maintaining or restoring the peace other than by the application of offensive armed force, the conflict is considered to be low intensity (Type B). Offensive armed force is not used except under extreme circumstances when only the minimum force necessary is applied.

111. Operational Environment

1. The tempo of conflict is not limited by its defined intensity. Further variation can result from the effects of geography and climate as they differ between one theatre of operations and another. For example, a high intensity conflict which originated in Europe would assume a different character as it spread to the Middle East or Asia. Even more so low intensity conflicts offer a variety of ground and climate. It is a mistake to link an intensity of conflict to a particular theatre of operations.

2. The nature of the enemy also adds variety to the commitments which can face military forces. One enemy may possess all the modern weapons of war available to fully industrialized nations. Another may consist of semi-civilized tribesmen, loosely organized and crudely equipped. The nature of the conflict will vary with each circumstance, regardless of the intensity of the war or the ground over which it is fought.

112. Effect On National Strategy

1. The range of potential conflict in which a nation may be required to participate extends from high intensity conflict, through mid intensity with or without the restrained use of nuclear weapons, to low intensity conflicts of either type. No finite definitions of these intensities of conflict can be established; the dividing line between the various intensities of conflict is neither distinct nor absolute, and the possibility of escalation from one to another will most likely be present.

2. The defence forces of a nation need an ability to execute a variety of tasks with appropriate forces over a wide range of operational conditions of terrain, climate, type of enemy, in any intensity of conflict. It should therefore be the aim of national military strategy to build the maximum practical flexibility, versatility, and strategic mobility into the military establishment, and at the same time to be adaptable to the requirements of changing circumstances.

AMENDMENT 1 TO CFP 165

CHAPTER 5

ART 512

10. Administration

Disregard of the principal of administration has led to failure in the past, and is much more likely to do so in the future because of the increased complexity of modern weapons and equipment. No operational plan is likely to succeed unless great care is devoted to the administrative arrangements for giving it effect. Administrative arrangements must be designed to give the commander maximum freedom of action in executing the operational plan and so the administrative organization must be as simple as possible. The commander must have a clear understanding of the administrative factors that may affect his activities and, within his sphere of authority, implement administrative procedures that will enhance his ability to conduct effective operations.

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CHAPTER 17

LOW INTENSITY CONFLICTS

SECTION 1 - INTRODUCTION

1701. Scope of the Chapter

1. This chapter is intended to cover low intensity conflicts of either type. As stated in Chap 1, Sec 3, there is no finite definitions dividing low intensity conflicts from those of greater intensity and some of the operations described in low intensity (Type A) conflict might occur in mid or high intensity operations, particularly in the rear areas. However, generally speaking the military operations discussed in this chapter are characteristics of situations in which there has not been a declaration of war.

2. This chapter will discuss low intensity conflict in three sections. The first two sections will examine the two scales of low intensity (Type A) conflict - the lower scale of internal security operations and the upper scale of counter-guerrilla operations. The third section will examine low intensity (Type B) conflict; traditionally referred to as peacekeeping.

1702. Characteristics of Low Intensity Conflicts

1. In low intensity conflicts, the responsibility to solve the problem will probably not rest with the military. Therefore, whatever the role assigned to the armed forces it is certain to be closely linked with and will be only part of concurrent political, economic, sociological and psychological measures. The effect of this is, first, that the armed forces may be called upon to participate in non-military activities; for example, soldiers may be required to restore or operate public utilities, second, the tactical handling of the armed forces may greatly be influenced by the demands of other agencies; for example the use of force, or of certain weapons or areas, may be circumscribed for political economic or psychological reasons.

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2. The nature of the problem facing the military commander may be unusual. There will not necessarily be a readily identifiable enemy or a specific piece of territory controlled by the enemy. The hostility or friendship of warring factions may alternate from time to time. There is no ready military solution to such situations other than flexibility of mind and a clear idea of the ultimate aim to be achieved.

3. The tactics employed in any one type of operation may vary widely according to the conditions prevalent in the area. The special characteristics of desert, mountain, and jungle operations discussed in Chap 14 may also be present to further complicate the situation.

4. There is a basic difference between the two types of low intensity conflict. Low intensity (Type A) conflicts are largely national matters, that is a threat to law and order within a particular country. There may be outside influences and zones of action, but more often the origin as well as the resulting unrest are national in their scope. Low intensity (Type B) conflict, which may or may not result from armed conflict, is an international business in which internationally sponsored forces intervene between other contending parties. Even if the initial conflict is between factions of one nation, it will be of sufficient international concern to be a threat to peace; hence an international force is charged with maintaining the peace.

SECTION 2 - LOW INTENSITY CONFLICT (TYPE A)

LOWER SCALE - INTERNAL SECURITY

1703. Introduction

Internal security operations are designed to subdue insurgents and irregular forces that are determined to overthrow established authority in the form of the government, the national armed forces, and the

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police. They are characterized by clandestine operations, subversion, sabotage, assassination, intrigue, and other unconventional or paramilitary activities.

1704. Pattern of Development

1. Whatever the cause, internal security situations in the past have revealed a pattern in their development which seems likely to apply in the future. This is not to say that they will be identical or that they will all develop to the full extent. But it is well to understand what is likely to occur if internal disorder is left unchecked.

2. An internal security situation may be preceded by months or even years of growing unrest, characterized by meetings, marches, strikes and other overt forms of protest. During this period the cause of the unrest will become known. Specific grievances rather than the general aim of the movement are most likely to be the object of any single disturbance. As the degree of public support increases, the campaign will turn from one of protest to one of defiance. Non-violent civil disobedience will give way to sporadic and isolated acts of violence.

3. Events described above are not necessarily a prelude to overthrowing the government. For example, they might stem from a labour dispute. But if the cause is more fundamental and the aim is the complete overthrow of the government, then the movement may be labelled insurrection. Either event is an internal security situation, though the latter is far more serious.

4. Insurrection, if not checked, will soon become organized revolution. "Hard core" members will be recruited, a command structure created,

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contacts with the populace established, and the lower ranks of the organization filled. As this is completed, a campaign of terrorism will be launched. It will: secure the support of the populace or aim to prevent loyal people from giving information to the authorities; discredit the forces of law and order; gain material resources; and tie down security forces to static tasks. Finally, the revolutionaries may gain control of limited areas in which to conduct training, set up supply bases, and locate HQ.

5. If allowed to develop even further, the insurrection may lead to the control of large areas and the formation of armed groups of battalion or even larger size. This will depend upon outside support and the existence of favourable terrain. Such a movement, normally called guerilla warfare, will lead to large scale operations very similar to those conducted by partisans in rear areas during a more conventional war. Such operations are dealt with in Sec 3. This section will deal with operations against a movement not developed beyond the stage given in para 4. Whenever possible, however, such movements should be dealt with early before they can develop to such a stage.

1705. Dissident Organization

1. The dissident organization for the conduct of wide-spread disturbances or insurrection is likely to be headed by a military-political committee. Its membership will represent each of the major areas of activity, such as political direction, military measures, finance, intelligence, liaison, and justice. Generally, each arm below this level will be organized independently of the others. Individual activities may be even further divided. For example, the military arm might

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have a murder group or a sabotage group which reports directly to the central committee.

2. The organization of each arm is likely to be based on the cell structure in which small groups function independently within geographical boundaries. The essence of this organization is security. Any member will know only one or two others in the organization. The cells are small, perhaps two to five people, and are grouped in an elongated chain of command which places perhaps five or six levels of command between the member of a cell and the central committee. Furthermore, at some levels of command there will be no direct contact; orders will be passed down by courier or through "letter boxes"; some members will not know their superiors. Thus, the clandestine organization is very difficult to break, even if a captured member can be persuaded to talk.

1706. Dissident Tactics

1. A dissident may be highly trained in sabotage, ambushes, and hit and run tactics. He will be cunning and will have an intimate knowledge of local geography. Lightly armed and very mobile, he will attack soft targets such as individuals and small defenceless parties. He will not attack organized forces except in circumstances of his own choosing and in conditions giving every chance of surprise and safe withdrawal.

2. Terrorism is a tactic of insurrectionary forces used to promote local support. To this end the terrorist will not hesitate to kill innocent civilians, including women and children. In particular, targets will be selected from amongst local officials, or their families, who are suspected of assisting the forces of law and order. The terrorist is a tough and absolutely ruthless foe entirely unhampered by any "rules" of warfare.

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1707. Intelligence and Security

1. Intelligence is the most important single factor in the conduct of internal security operations. The key to defeating this elusive foe is finding him. It is essential that information be obtained about his habits and methods, without which security forces cannot operate successfully.

2. Security forces must be well informed on all aspects of the clandestine organization and its methods. Their mission must be to destroy the organization as a whole. Therefore, information on its methods of collecting money or food is as important to them as the activity of bomb throwers or murderers.

3. The intelligence network must centralize and control all sources of information and all users of intelligence. One man should head it. When possible, this may best be accomplished by basing it on existing police facilities and integrating with them the military and other government agencies such as propaganda, finance, and agriculture. Military intelligence staffs will work closely with the police, and should be either with them or represented by intelligence LOs. Police officers may also be attached to military HQ for intelligence duties; they will be of particular value in the identification and interrogation of prisoners.

4. In addition to the usual sources of intelligence, much valuable information will come from informers, double-agents, and other covert sources. Whenever possible such methods must be left to the police. If the police cannot provide the information, then highly trained specialists will be required to set up a covert intelligence network; it is a difficult and lengthy process beyond the capability of normal intelligence staffs.

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5. The dissident relies upon the civil populace to supply him with money, food, medical, and other supplies. Usually, he assures their loyalty by his well known acts of terror against informers. Thus, the local inhabitants are a prime source of information, but for it to be forthcoming they must be protected. Not only will operational plans rely upon good intelligence, but they must take into account the protection of sources of information.

6. It is just as important to deny information to the rebels. A very high standard of security must be maintained over our own intentions. Because agents are liable to be anywhere, even within our own forces, extraordinary precautions must be taken. Access to HQ must be restricted and all information dispensed on a strict need-to-know basis.

1708. Command and Control

1. The form of high command for the conduct of internal security operations will depend upon the constitution of the national government, the seriousness of the situation, and the size and proportion of the military and police forces and others engaged. Overall responsibility rests with the civil government, with the police and military forces as its agents. The mission of the armed forces will be to support the civil authority. However, at the highest level there must be one person responsible for the operational control of all security forces, both civil and military. This person may well be the military commander, but the broad direction of the campaign, the setting of policy, will remain a responsibility of the civil authority of the country.

2. At lower levels of command, it is unlikely that any individual will be given operational control of both civil and military forces.

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Experience has shown that the best results are achieved by regional and local committees that bring together the heads of each branch of the security forces. Broad direction is agreed in committee, while operational control is vested in the commanders of the individual arms or agencies.

3. At all levels of command there must be an integration of the overall effort. The action of one group will inevitably have an influence on and be influenced by action in other fields. For example, a military commander must weigh the economic, social, and psychological effects of his plans. Therefore, at all levels, policy committees should include representatives of all agencies, and commanders must be prepared to compromise in their own plans to allow for the action being taken in other fields.

1709. Tasks of the Armed Forces

There is wide variety in the tasks likely to be assigned to the armed forces in internal security operations. Much will depend upon the strength of the dissidents and the geography in which the uprising takes place. Though discussion here is confined to land force tasks, naval and air forces may play a significant role. Alternately, naval and air force personnel may be assigned to typical land force tasks.

1710. Maintenance of Law and Order

1. Whenever possible, an internal security situation should be dealt with promptly, before it can develop into a well organized revolution. To this end, the initial requirement for troops will be to assist the police in maintaining law and order. It may necessitate a dispersed deployment within towns and villages over a wide area. Such dispersal

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is justified when it will result in the early quelling of disturbances. The sudden and widespread appearance of troops, and the subsequent increase in law enforcement, will very often succeed in stamping out the trouble before it can spread.

2. Troops may take over some police functions or they may work closely with the police. Tasks assigned the land force might include guarding vulnerable points, escort duties, enforcement of a curfew, crowd control, and the setting up of cordons and road blocks. The prime requirement is always for well trained, highly disciplined, and mobile troops. This aspect of internal security will be regulated by the civil law of the country, from which troops are not excused. Even though emergency legislation may be enacted by the government, security forces must comply with such well established principles as the use of minimum force and exercise discretion in their rights of arrest and search.

1711. Offensive Operations

1. In a more serious situation, the land force is primarily responsible for the elimination of the armed and militant wing of the movement. It may be necessary to continue assistance to the police, but the aim must be to constitute an offensive land force element, as quickly as possible. These troops, freed of static tasks, must seize the initiative from the rebels by mounting offensive operations.

2. Speed of reaction is vital. If rebels are located, they must be attacked swiftly and aggressively. The insurgents, too, have an intelligence service and mobility, and it is unlikely that they will be caught by a slow and ponderous operation, no matter how cunningly it may be planned. If there is an unavoidable delay, it must be compensated for by elaborate security precautions to mask future operations and, when appropriate, a deception plan.

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3. With speed, there must be originality. Stereotyped methods will soon become known and cease to be effective. Every effort must be made to surprise the dissidents and to keep them off balance by continuous but novel offensives.

4. More often than not, the exact location and strength of the rebels will not be known. They must then be systematically rooted out, and for this there is no quick and easy solution. Determination, inquisitiveness, and vigilance will be required of all troops taking part in such operations. It is only by constant patrolling, ambushes and other relatively small operations that the rebels will be found and destroyed, and this only after much effort.

SECTION 3 - LOW INTENSITY CONFLICT (TYPE A)

UPPER SCALE - COUNTER-GUERILLA

1712. Introduction

1. This section of the manual will cover operations against strong guerilla forces. The situations envisaged might occur as: the result of "partisan" activity in rear areas during a major war; a development of an internal security situation; or the result of an outside attempt to overthrow a friendly government. There are major political differences between such situations, but the military steps required for each are similar and can be dealt with together.

2. When considering the military role in counter-guerilla warfare it must be clearly understood that military action alone cannot be successful. Military measures must be co-ordinated with political, social, economic, and psychological programmes. Experience in many parts of the

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world has shown that guerillas cannot be defeated unless the people of the country are won over and are desirous of victory. Winning them will be as much a part of the struggle as the actual fighting between contending forces.

3. This section concentrates on the strategy of a counter-guerilla campaign. Tactics are not covered because they will evolve from what is said in other chapters and because the tactics peculiar to guerilla warfare are more likely to be those discussed in Chap 14. This section must be studied in conjunction with Sec 2, much of it has equal application to guerilla warfare and has not been repeated.

1713. The Guerilla Force

1. A guerilla force will usually have a covert element organized on the cell principle, as described in Sec 2. Its purpose is: to recruit members; to organize the population in support of the guerillas; to gather intelligence, arms, and supplies; and to carry out sabotage, murder and other such missions as required. Members of this covert group will continue to carry out their normal civilian work but may also form small village defence units.

2. Full-time guerillas are usually first recruited at a regional level. Regional forces are formed by drawing groups of section or platoon strength from villages and towns. These may then operate as companies or battalions within enlarged geographic areas as the situation demands. However, the area in which they conduct operations is limited. They may wear a distinctive uniform and are usually fairly well equipped with small arms.

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3. Strong guerilla forces will also have regular units formed by a steady progression of personnel and units from local to regional level, and finally to regular status. Some regular units or recruits for them may be infiltrated into the country from outside; others may be formed from soldiers or units cut off during the course of a major campaign of conventional armies. Regular units are better equipped and trained than regional forces and may be deployed anywhere within the operational zone. They are capable of conducting well co-ordinated operations and may even have supporting artillery and engineers.

4. A guerilla movement that has developed to this stage will require a base from which to operate. A guerilla base is an area in which official government administration has been replaced by that of the guerillas. It is usually in inhospitable terrain. The area is prepared for defence and movement into and out of it is closely observed. The population is thoroughly indoctrinated to assist the guerillas, and supply and maintenance depots, training establishments and HQ are set up. Regular, and in some cases regional, units make use of base areas for logistic support and for rest and training.

1714. Basic Concept of Operations

The basic concept of counter-guerilla operations is to re-establish control throughout the country in successive stages. Starting from a secure base or bases, a number of controlled areas will be established by a concentration of counter-guerilla effort. Finally, offensives will be launched against the remaining guerillas and the guerilla bases.

1715. Establishment of a Base Area

1. Counter-guerilla operations must be launched from loyal territory. If the situation has deteriorated to the extent that much of

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the country is dominated by the guerillas, the establishment of a secure base may involve a major operation. The base area should include the centre of civil administration, to make co-ordination of all anti-guerilla activities easier. It should contain airfields and, depending on the circumstances, road, rail, or port facilities. It will also require installations for the logistic support and training of the armed forces.

2. It is important that the base area be reasonably secure from guerilla activity. The consolidation of this area may be a large commitment and must also include strict security and counter-intelligence measures. The base must be secure before anything else is attempted.

1716. Controlled Areas

1. With a firm base to work from the next stage is to establish controlled areas. One of these would normally adjoin the base area. Within controlled areas the aim is to provide an efficient and progressive civil administration and protection from guerilla attack; this will restore the confidence of the people and win their support. It follows, therefore, that the size and number of the controlled areas will be limited by the civil and military resources available.

2. Protection within controlled areas is based on defence of the towns and villages, backed up by mobile reserves. Initially, the towns and villages must be put into a full state of defence, and some of them may have to be relocated. Militia or home guards must be organized and trained quickly to take over local defences from the government troops. There may be many administrative problems, and the military and civil authorities must work closely together. This defensive scheme is also

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important because it brings the population under control, permits control of food, medical, and other supplies, and encourages the population to provide information. When it is necessary to impose restrictions on the populace, these must be explained and made to be a source of grievance against the guerillas rather than the government.

3. The network of defended towns and villages must be backed up by strong mobile forces, and the local defence forces must know that this is so. There should be good communications between the defended settlements and the mobile forces. These reserves: provide immediate assistance to towns and villages under attack; patrol constantly throughout the controlled area; and destroy any major infiltration into the area. The force may be composed of a number of elements to fulfil these tasks.

4. As soon as one area has been pacified or when further resources are available, the controlled areas must be expanded until eventually the bulk of the population is under control. The basic framework of defended settlements and mobile reserves must remain in being to ensure that guerillas do not return to pacified areas. Thus, the guerillas will be systematically isolated from the population and hence their major source of recruits, supplies, and information. Their local and regional forces will be destroyed, and their regular units will be driven back into their base areas.

1717. Offensive Operations

1. In the later stages of the campaign, well trained forces must be freed from the controlled areas to conduct offensive operations against guerilla bases or lines of communication. Forces operating in the depth

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of the guerilla zones will normally be lightly armed and may be widely dispersed in battle groups of company or battalion strength. There is no question of taking up conventional defensive positions to hold ground or to lure the enemy to attack; if the guerillas find government forces in a static position for any length of time they may concentrate and attack in overwhelming strength. Nor is it likely that the guerillas will be found in a static defensive position. Operations are more likely to evolve about violent encounter battles in which contact between units of relatively small size is made and re-made as both sides manoeuvre for advantages. Intelligence will play a vital part in such operations.

2. Movement of government forces into and out of areas of operations will often be a problem. If the guerillas became aware of such plans they will either set ambushes or disperse to avoid battle. Guerillas reaction may be strongest after an assault, and withdrawing forces may have difficulty in extricating themselves. Steps taken to overcome this problem may include: the use of indirect routes and covered approaches; night movement; movement by aircraft, especially helicopters. In some circumstances temporary operational bases may be established outside the controlled areas. These must be used for a short time only; the temptation to remain in a particular area can be dangerous. Temporary bases must be so situated that they can be re-supplied, reinforced, or withdrawn at short notice.

1718. Co-operation

1. Full co-operation with the civil authority and indigenous troops, especially in the base and controlled areas, is of prime importance in counter-guerilla operations. A proper working relationship must be established at all levels between the civil authority, the police, the

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indigenous armed forces, and the assisting armed forces. This will ensure that at each level political, administrative, economic, and military aspects are taken into account in the formulation of joint plans. The assisting armed forces must work in unison with existing security forces and other government organizations, however inadequate these may seem. Every effort must be made to improve indigenous troops by giving them advice, training assistance, and equipment.

2. Naval, land, and air forces must work closely together. Perhaps even more so than in other operations they will depend upon each other to register any real success. They will often depend upon each other for protection, which cannot be assured without the closest harmony.

SECTION 4 - LOW INTENSITY CONFLICT (TYPE B)

PEACE-KEEPING

1719. Causes of Tension

1. The geopolitical factors that contribute to power in any geographic area or nation are innumerable, but they may be broadly classified as geographic, human or ethnic, economic, and political. Geographic factors are those physical aspects of a country, such as its location, size, and shape, that might lead to a border dispute or an attempt either to improve or to withstand inroads into its position relative to other states. Human or ethnic factors include such matters as religion, race, customs, and language. Differences over such matters might centre about a minority group within a country or an attempt to expand a nation to satisfy the ethnic demands of nationalism. Economic factors encompass natural resources, commerce, and industry and may lead to disputes over the improvement of the economic position of one country at the expense

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of another. Political factors are acts of government. They include: threats to the sovereignty of a country; or political action to dishonour or discredit officials, national symbols, or customs; or in any other act of government which can be construed to be provocative.

2. These factors of national power are the essence of international tension. Irrespective of the apparent nature of any international problem, careful examination will help to disclose if it has its roots in geographic, human, economic, and political factors. Although one set of factors may predominate, the source of international tension is usually a compound of all these factors. Most instances of tension involve all four groups, in degrees of importance that vary with the circumstances.

1720. Analysing Tension

1. The first step in maintaining the peace is to analyse the problem in the light of the geopolitical factors. Before anything practical can be done to remove international tension, it is first necessary to isolate its root cause and to establish, through analysis, the degree and order of importance in which each group of geopolitical factors is influencing the parties involved. Once the motives of contending parties have been isolated, it is necessary to assess their strengths and weaknesses. Here, too, the geopolitical factors are used to evaluate the national power of each side. This analysis of strength will permit an assessment of each party's probable course of action and may well indicate the type and scale of control measures that must be applied to establish stability and control.

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2. Where such an analysis concludes that armed conflict is likely to occur, it is the job of some form of international peace-keeping organization to prevent it. And the steps to be taken will follow logically out of the estimate of what is causing the tension and what each side is likely to do. The military purpose is to intervene in a dispute that may lead to war but not to solve the problem. It is the task of politicians to solve the problem within the peaceful atmosphere imposed by the military peace-keepers.

1721. Nature of Peace-keeping Tasks

1. The role of peace-keeping forces, then, is to prevent war by maintaining stability in an area of potential conflict until such time as a peaceful solution to the problem can be reached. A peace-keeping force, by itself, is not designed to bring about a permanent settlement.

2. Peace-keeping is an international business. A peace-keeping force does not choose sides and will generally operate within a demilitarized zone, if not physically, then certainly in a diplomatic sense. That is, it functions as a neutral third party to the quarrel at hand.

3. A peace-keeping force, though essentially a military organization, must be designed to suit the nature of its environment. The force provided must result from a geopolitical analysis of the problem by the political agency dispatching the force. In particular it must be related to the military power and likely courses of action of the antagonists. It may be judged sufficient if the peace-keeping body merely maintains observation and possibly investigates and reports on incidents that occur. This minimum amount of intervention is likely to be done by teams of officers made up of representatives of different nations. When

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observation is not deemed sufficient, a force may be required to separate two opposing armies, whether they be of different countries or of warring factions within a country. Depending upon the assessment of the intentions and capabilities of the opposing sides, one situation might require only token strength, while for another a force at least as powerful as those it is separating may be needed.

1722. Basis of an International "Presence"

1. International public opinion is a major factor in the effectiveness of peace-keeping forces. The force may be able to establish an effective "presence" in a disputed area with a minimum of troops provides that its actions have widespread international support. The popularity of its action will of itself act as a deterrent to any violation of its force by the warring parties.

2. Impartiality also figures strongly in peace-keeping operations. The decisions or actions of the force must result from totally impartial judgement on the part of all those responsible. Firstly, such impartiality will ensure the continued support of international opinion. Secondly, it will gain the acceptance of the force by the antagonists in the dispute. It must be remembered that it is not the responsibility of the peace-keeping force itself to resolve the difficulties between the parties involved, but rather to maintain a peaceful status quo until a solution has been found through diplomatic channels. Neither side, then, must be permitted to gain an advantage over the other while the force is charged with keeping the peace.

3. Behind this "presence", however, there must be force, the use of which can be a complicated and difficult business, especially for the

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- 20 -

commander on the spot. But the basic principle is clear: a peace-keeping force does not mount offensive actions or take the initiative in the use of armed force. This means the use of arms is permissible only in self-defence and when all peaceful means of persuasion have failed. It is important to appreciate, however, what is involved in "the right of self-defence". When forcible attempts are made to compel military personnel to withdraw from positions which they occupy, or to disarm them, or to prevent them carrying out their responsibilities, peace-keeping troops should be and have been authorized to use force. In addition, it is always open to the political authority to enlarge the mandate of a force and to authorize the use of the necessary amount of force to achieve specified objectives. For example, this might be done to prevent civil war from breaking out or to apprehend miscreants or mercenaries. It is the mandate, then, that determines the extent to which arms may be employed beyond the basic need for self-defence.

1723. Deployment of Troops

1. The allotment of tasks to peace-keeping troops may differ from that normally expected of a military force. Often, an international force will be placed between opposing forces, either of which may be superior to it. Such a task is dependent upon an appreciation that neither of the opposing sides is likely to mount a full-scale offensive without prior provocation. The task of the peace-keeping troops, then, is not to defeat an offensive by either side, but by its presence to prevent incidents which could lead to a major clash. Thus, too, a force may be obliged to occupy ground which in other circumstances would be regarded as tactically unacceptable, such as in the midst of an urban area occupied by civilians. Finally, peace-keeping troops may be required to work in close conjunction with indigenous troops and police of questionable reliability and over whom they have little or no control. These are but examples of what may occur.

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2. When faced with unusual tasks it is wrong to insist on the "normal" way of doing things. However, there is a limit to the extent to which military teaching may be overlooked. It is equally wrong to demand too much of junior leaders by isolating them or to place the lives of troops in jeopardy. It is a fine point of judgement for commanders in such situations to decide when the limit has been reached. But it is for the commander on the spot to decide.

1724. Command and Control

1. A peace-keeping force will have a command structure much like that of any other international force. It will normally have one commander and a multi-national force HQ. Below this there may be one or more intermediate levels of command, which may be national or multi-national in character, and finally the formations or units of the contingents making up the force. There must be a direct military chain of command from the force commander downwards, except that some aspects of administration and supply may be dealt with through individual command arrangement established by national contingents. There may also be civilian agencies, such as relief and rehabilitation, integrated with the force, especially during the early stages. However, it is more likely that a parallel international civilian organization will be established.

2. The terms of reference for the force will be established by the mandate that created it. Other than this, direction will emanate from the international agency that dispatched the force, for which purpose it is likely to have a political representative in the area of conflict. It is necessary that all nations contributing to the force agree with its terms of reference and to their subsequent interpretation or enlargement. For this reason they, too, may maintain political representatives in the area.

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1725. Liaison

A peace-keeping force requires close contact with the indigenous political authority, local administrators, and police in its area of operations. Where possible, HQ should be near established seats of local authority. Otherwise, use must be made of LOs to maintain contact.

1726. Communications

Communications are important in peace-keeping operations. This is especially so where distances are great and troops are thinly spread, as they will often be. Difficulties in communications may be caused by variation in national equipment, language, and voice procedure. These may best be overcome by the establishment of common items and procedures at each level of command. This will not be easy when stations on one radio net are of different nationalities; it may be necessary to allot spare radios to other contingents, possibly even bilingual operators. LOs with radios may also be used on standard radio nets to improve communications.

1727. Intelligence

Intelligence is required even though there may not be an enemy as such. It is especially important to be informed on the actions of the opposing armed forces. In some situations, the movement of the civilian populace will be of great interest. A major source of information will be local administrative officers and police, and close liaison should be established with them. It may be possible, and is highly desirable, to establish liaison direct with the opposing sides. Normal sources of information will also contribute, including both aerial and ground

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- 23 -

reconnaissance. Information should be shared between all the agencies involved, but care must be taken not to compromise the position of either of the opposing sides.

1728. Dealing with Incidents

1. In dealing with incidents between the opposing sides it is vital that action be taken promptly to prevent an enlargement of the conflict. This may often mean that junior commanders on the spot will have to take action with little or no reference to their superiors. Therefore, they must be provided with terms of reference within which they must be provided with terms of reference within which they can operate. If troops are not immediately available, or are not sufficient in strength, re-deployment must be rapid. Full use should be made of aircraft or helicopters if they are available.

2. Impartiality must guide commanders in the action they take. But if there is a clear violation by either side, it may be necessary to restore the situation. A show of force may suffice, but care must be taken not to threaten anything beyond what is possible for such bluffing will soon back-fire.

(1729 to 1799 inclusive: not allocated)

MEMORANDUM

2922-B-CL-300-000/FP-000

PA 2910-CFP 765

~~3205-1~~ (DMPR 2)

11 Jun 76

Distribution List

CFP 165 - CONDUCT OF LAND OPERATIONS
LEVELS OF CONFLICT - AMENDMENT

- Refs: A. 3205-1 (DLP) over 2575-7 and 2910-CFP 165 dated 3 Jun 76 (attached)
B. CFP 165, article 110 (attached)

1. Ref A proposes to do away with the "Scales of Conflict" (see ref B) and, in their place, introduce "Levels of Intensity" as described.

2. The initial reactions of the undersigned are that:

- a. the original article provided a more meaningful description of the types of conflict in which our land forces may become involved;
- b. better terms could be found for the last two levels of conflict (Type A and B) - possibly - "Low Level - Internal" and "Low Level-External" or "Internal Security" and "Peacekeeping"; and
- c. in the last listed level, a limited degree of force may be necessary in order to keep the peace.

3. Para 3 of ref A suggests that we may be faced with a "fait accompli". Nevertheless, this Branch has been asked to comment. This memo is intended to provide you with an opportunity to express an opinion on what is an important part of basic doctrine for the conduct of land operations.



M.E. Pillar

LCol

for DMPR

2-2696

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DEPARTMENT OF NATIONAL DEFENCE



MINISTÈRE DE LA DÉFENSE NATIONALE

3205-1 (DLP)
2575-7
2910-CFP165

National Defence Headquarters
Ottawa, Ontario
K1A 0K2
3 June 1976

Distribution List

AMENDMENT - CFP 165 - LEVELS OF CONFLICT

References: A. CFP 165 Conduct of Land Operations dated 30 October 1973
B. ABCA Armies Operational Concept 1986-95 dated 1 September 1975

1. It is proposed to amend Reference A Section 3 Article 110 "Scales of Conflict" by deleting the discussion on General War, Limited War and Cold War and inserting a discussion of the agreed ABCA terms, stated in Reference B, which define conflicts by intensity.

2. The levels of intensity set out in Reference B are:

- a. High Intensity. Conflict in which both sides are prepared to employ the full range of weapons and resources available to them. In such a conflict nuclear weapons could be used from the outset, or initially only conventional weapons could be used.
- b. Mid Intensity. Conflict fought with limited objectives under definitive policy limitations either as to the extent of destructive power that can be employed, or the extent of geographical area, or both.
- c. Low Intensity (Type A). Conflict aimed at the internal seizure of power, or changes to established order by illegal, forceful means. This includes guerilla actions, insurgency, rebellion, dissidence, communal violence, civil disturbance or other tactics.
- d. Low Intensity (Type B). Maintaining peace in an area of political or armed conflict other than by the use of the application of force.

3. It is considered that the classification of conflict by intensity rather than scale provides a more accurate delineation of types of conflict in which the Canadian Forces may become engaged. These terms are also thought to be more easily comprehended both inside and outside the military profession. In addition, they have been agreed to by three of

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our major allies and their use will facilitate standardization. The use of these terms within the Canadian Forces should not present a problem in the NATO forum as the NATO interest is generally focussed on high intensity operations.

4. Before initiating an amendment to CFP 165 your concurrence and/or comments are solicited as it is considered that these use of these ABCA terms has wide implications throughout the Canadian Forces.

5. It would be appreciated if your comments could be forwarded to this Directorate by 25 June 1976.



J.A. Fox
Colonel

Director Land Plans
for Chief of the Defence Staff

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108. COLLECTIVE DEFENCE

1. Participation in collective defence is a policy which adds a great deal to the security of a nation. It will also contribute to national prestige and influence in the community of nations.
2. Smaller nations can allocate defence resources for only a limited number of collective defence commitments. This means a co-ordination of military effort with allies which extends into many fields, including such matters as training and equipment, and even to a common strategic and tactical doctrine. At the same time the preservation of a sufficient measure of national control and identity must be an objective so that the nation's forces are sufficiently balanced and self-contained to be an expression of the national will and purpose.

Section 3 - Scope of Military Activity

109. GENERAL

Strategy covers the whole range of military activity from total war to situations short of war. In any given situation, it provides for participation which may range from direct combatant action to truce supervision within the area of conflict. It must also take into account differences in the ground and climate and the nature of the enemy to be found throughout the world.

110. SCALES OF CONFLICT

1. General. The conflicts of interest which lead to war may vary from mere disagreements to irreconcilable differences in national objectives. The scale of military operations will vary in proportion to the conflict of interest. The scope, intensity, and duration of wars also depends upon the extent to which a country will make sacrifices to achieve its national objectives.
2. General War. When little or no restraint is exercised by the belligerents, a conflict is usually referred to as a general war. It presupposes a direct threat to the vital interests of, and participation by, major nuclear powers. It includes the exchange of mass destruction weapons and the employment of naval, land, and air forces against the war-making potential of the opponents. It means that the war is total, involving the uninhibited use of weapons and the entire national resources of the opposing nations.
3. Limited War. If the vital interests of opponents are not immediately threatened it may be possible to wage war with conscious restraint on the part of the belligerents. This is normally called a limited war. Restraint may be exercised to limit the geographic area of conflict, the nationality of the forces engaged, the political and military objectives, or the use of certain weapons. The scope, intensity, and duration of the war will depend upon the type and degree of restraint applied. It is impossible to say when further relaxation of restraints will change a limited war to a general war. Furthermore, what is "limited" to one country may be a life or death struggle to another.

Art 110

RESTRICTED

CFP 165

4. Cold War. Near the lower end of the scale of conflict, limited war passes into the area sometimes referred to as cold war. Other terms in common use for this are: situations short of war; peace-keeping; and internal security. The dividing line between limited and cold war is neither distinct nor absolute. The basic characteristic of cold war is the absence of overt armed conflict, but military forces may be required and should be prepared to conduct cold war operations which are to all intents and purposes combat actions. In some cold war situations political, economic, and psychological measures may play a role equal to or more important than military strength.

111. OPERATIONAL ENVIRONMENT

1. The range of conflict is not limited to a scale of size or intensity. Further variation will result from the effects of geography and climate as they differ between one theatre of operations and another. For example, a general war which originated in Europe would assume a different character as it spread to the Middle East or Asia. Even more so does the scale of minor conflicts offer a variety of ground and climate. It is a mistake to link a scale of conflict to a particular theatre of operations.

2. The nature of the enemy also adds variety to the commitments which can face military forces. One enemy may possess all the modern weapons of war available to fully industrialized nations. Another may consist of semi-civilized tribesmen, loosely organized and crudely equipped. The nature of the conflict will vary with each circumstance, regardless of the scale of the war or the ground over which it is fought.

112. EFFECT ON NATIONAL STRATEGY

1. The range of potential conflict in which a nation may be required to participate extends from general nuclear war, through limited war with or without the restrained use of nuclear weapons, to cold war. No clear-cut definitions of these various degrees of aggression have been established; the dividing line between the various types of war is neither distinct nor absolute, and the possibility of escalation from one to another will most likely be present. As well as actual conflict, it is to be expected that there may be continuing calls for nations to participate in peace-keeping operations in various unstable parts of the world.

2. The defence forces of a nation need an ability to execute a variety of tasks with appropriate forces over a wide range of operational conditions of terrain, climate, type of enemy, etc. It should therefore be the aim of national military strategy to build the maximum practical flexibility, versatility, and strategic mobility into the military establishment, and at the same time to be adaptable to the requirements of changing circumstances.

Section 4 - Nature of Military Power

113. GENERAL

1. Military power is only one element of national strength. It is designed to apply or threaten the use of force when the government decides that there is no other way in which national objectives may be attained. It also exerts a stabilizing influence in the maintenance of law and order and in the deterrence of aggression. The measure of its effectiveness is the degree to which it can support national strategy.

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MEMORANDUM

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2922-B AL-300-000 / FP-000

~~2910-CFP-165~~

2528-44 (DMPPP)

11 Jun 76

DLP

AMENDMENT - CFP 165 - LEVELS OF CONFLICT

Refs: A. 3205-1 (DLP) 3 Jun 76
B. ABCA Armies Operational Concept 1986-95 1 Sep 76

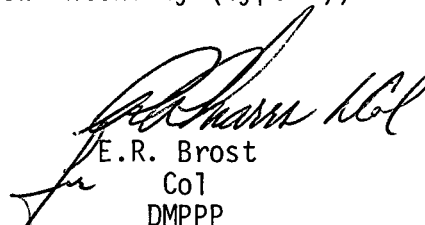
ADM(Mat) subscribes to the revision of CFP 165 to incorporate the ABCA descriptions of levels of conflict (ie High Intensity, Mid Intensity, Low Intensity (Type A) and Low Intensity (Type B)).

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DLP 4

Referred

Submitted
DLP 5
15 Jun 76

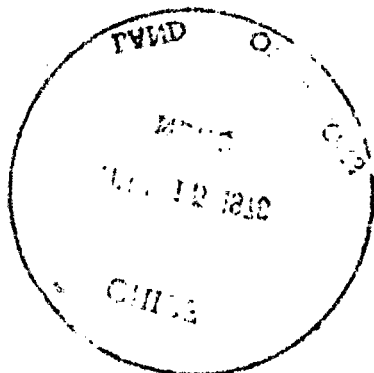

E.R. Brost
Col
DMPPP
65156

③ PA

HH DLP 4

2 Jul 76

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MEMORANDUM

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~~2910-CFP-165~~

3205-1 (DAP 3)

9 Jun 76

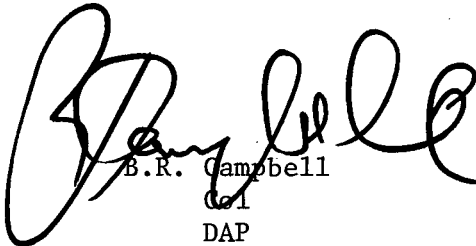
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DLP

AMENDMENT - CFP 165 - LEVELS OF CONFLICT

Ref: A. 3205-1 (DLP) 3 Jun 76

1. The proposed CFP 165 amendment to classify conflict by intensity rather than scale is supported by the CAO Branch.

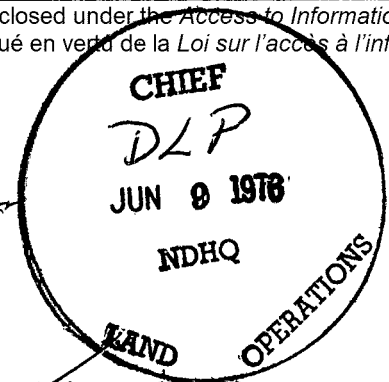

B.R. Campbell
Col
DAP

② PA

H/DLP
2 Jul 76



MEMORANDUM



2575-7 (DTRP 2-2-2)

2910-CFP 165

3205-1

2922-CL-300-000/FP-000

09 Jun 76

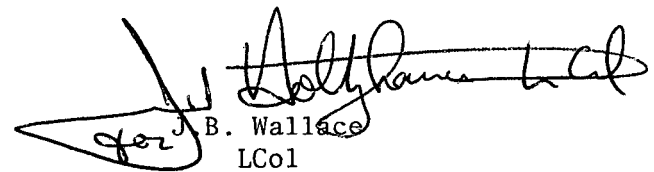
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AMENDMENT - CFP 165
LEVELS OF CONFLICT

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Refs: A. CFP 165, Conduct of Land Operations, 30 Oct 73
B. 3205-1 (DLP) over 2575-7 over 2910-CFP 165, 3 Jun 76

The Levels of Intensity noted in Ref B are considered to be more descriptive than the Scales of Conflict noted in Ref A, and it is recommended that CFP 165 be amended accordingly.


B. Wallace
LCol
DTRP

②

DLP4

Yours.

Subm 2575-7 9 Jun 76

③ PA

DLP4

2 Jul 76

~~2910-CFP 165 D4P~~

MEMORANDUM

CHIEF

JUN 9 1976

NDHQ

LAND

OPERATION

2922-B GK-300-000/FR-000

2910-CFP165

2575-7

3205-1(DMOPR)

8 Jun 76

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DLP

AMENDMENT - CFP 165
LEVELS OF CONFLICT

Reference: A. 3205-1(DLP), 2575-7, 2910-CFP165,
3 Jun 76.

1. The ABCA terms which define conflicts by intensity have the concurrence of this Branch.
2. It is suggested that as subparagraphs 2c and 2d have regional implications the distribution of Reference A should have been extended to the Commander, Maritime Forces Pacific.

②

DLP4

Yours
John L. Hay
DLP5
9 Jun 76

J.M. Cutts
J.M. Cutts
CMDRE
CMO
2-7455

③ PA

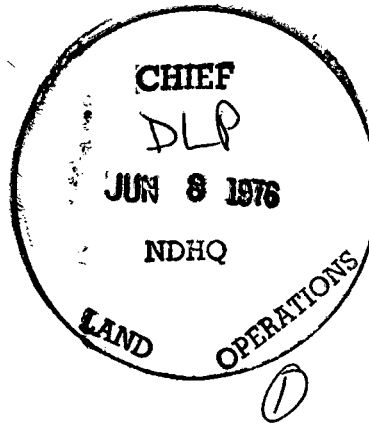
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2 Jul 76

MEMORANDUM

2922-B-GK-300-000/FP000
~~2910-CFP 165~~

3205-1 (DGME0)

8 June, 1976



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AMENDMENT - CFP 165
LEVELS OF CONFLICT

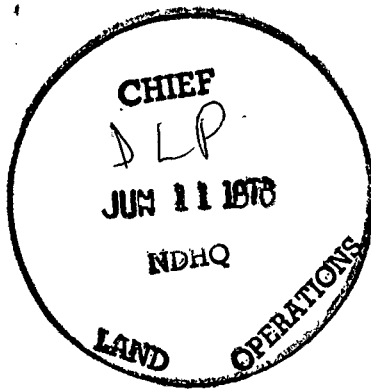
Reference: A. Your 3205-1 (DLP) over 2575-7 over 2910-CFP 165
dated 3 June, 1976

Other than considering the amendment proposed at Reference A
a logical move to clarify the classification of conflict, I have no
comments to offer.

D.G. McClellan
Colonel
DGME0

② PA

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DLP4
2 Jul 76



MEMORANDUM

2922-Buk-300-000/FP-000

2910-CFP 165 (DCEO)

8 Jun 76

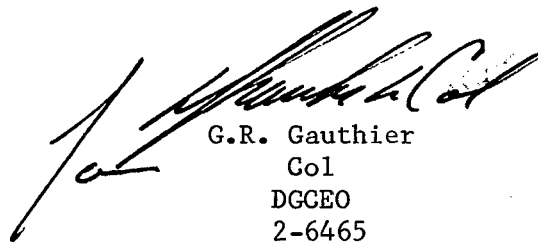
DLP

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CFP 165 AMENDMENT

Ref: A. 3205-1 (DLP) over 2575-7 over 2910-CFP 165 3 Jun 76

Your proposal at Ref A is concurred in.


G.R. Gauthier
Col
DGCEO
2-6465

② PA
HH
DLP4
2 Jul 76

MEMORANDUM

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2922-BEL-300-000/FP-000
~~2910-CFP165~~
~~2910-CFP283(1)~~
~~5570-20~~

3 Jun 76

Distribution List

CF AGREEMENT - PRINCIPLES OF WAR

Refs: A. 5570-20(DPED) dated 20 Apr 76
B. CFP165 - Conduct of Land Operations
C. CFP283(1) - Conduct of Aerospace Operations

1. Attached as Ref A is a memorandum from CPD pointing out an anomaly that exists in CF doctrine. It notes the discrepancy between the land and air environments in such a fundamental thing as the agreed principles of war. The air environment lists ten principles while the land environment has deleted "Administration" and so lists only nine.

2. After discussions with FMC and the staff colleges, the CLO is prepared to reinstate "Administration" as a principle of war and amend land force doctrine publications to reflect this.

3. As it is desirable that all CF publications which discuss the principles of war contain the same information, it would be most helpful if you could review your publications and advise if they reflect the ten principles of war:


- a. Selection and maintenance of the aim;
- b. maintenance of morale;
- c. offensive action;
- d. security;
- e. surprise;
- f. concentration of force;
- g. economy of effort;
- h. flexibility;
- j. cooperation; and
- k. administration.

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- 2 -

4. Attached, for your information, is the discussion on the principle of "Administration" which will be the amendment to CFP 165 and other land force publications.

5. Your concurrence and/or comments on this matter would be appreciated at your earliest convenience.


J.A. Fox
Col
DLP
2-5435

Attachments

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<u>Action</u>	<u>Information</u>
DMOPR	DPED
DAP	

W.E.J. Hutchison LCol/DLP 4/2-7907/mp

ANNEX A
TO 2910-CFP165
2910-CFP283(1)
5570-20
DATED 3 Jun 76

ADMINISTRATION

1. Disregard of administrative detail has led to failure in the past, and is much more likely to do so in the future because of the increased complexity of modern weapons and equipment. No operational plan is likely to succeed unless great care is devoted to the administrative arrangements for giving it effect.

2. Administrative arrangements must be designed to give the commander maximum freedom of action in executing the operational plan. Also, every administrative organization must be as simple as possible. The commander must have a clear understanding of the administrative factors that may affect his activities and, within his sphere of authority, implement administrative procedures that will enhance his ability to conduct effective operations. In the Western Desert campaign, for example, there was often a risk of operational progress outstripping administrative resources, and in the European theatre, the Allied forces had to pause before crossing the Rhine to ensure that subsequent support would be effective.

3. In general war, because the whole of a nation's administration is open to devastating attack, it is essential to provide for resilience and improvisation in the administrative structure. Also, it is vitally important that arrangements be made in peacetime to ensure the administrative support of at least the nuclear strike force in the event of general war. In other words, it is vital that the support services remain at the same high level of operational readiness as the front line operational units.

RESTRICTED

MEMORANDUM

2922-B-GK-300-000/FP000

~~2910-CFP165~~

~~2910-CFP283(1)~~

~~5570-20(DMOPR)~~

7 June 1976

DLP

CF AGREEMENT - PRINCIPLES OF WAR

Reference: A. 2910-CFP165, 2910-CFP283(1), 5570-20(DLP),
3 Jun 76.

1. The Clauswitzian principles outlined in paragraph 3 of Reference A are considered to be relevant for maritime forces although not necessarily in the order presented in paragraph 3. SACEUR, SACLANT and CINCHAN's recent studies have revealed the constraints of flexibility brought about by national policy, so presumably flexibility may be near the top of the list at the present time.

2. Nevertheless, it is considered that administration has a place within the principles of war if the word "administration" is used in its broadest sense and encompasses the concept of logistic support.

Original Signed by
H. R. TILLEY CAPT (N)

H.R. Tilley
Captain (N)
DMOPR
2-4353

W.G. Gray/LCDR/DMOPR3-2/2-0689/mla
ORIG, CHRON/DMOPR, CMO/OR

RESTRICTED

2922-BCL-300-000/FP-000

MINISTÈRE DE LA DÉFENSE NATIONALE

DEPARTMENT OF NATIONAL DEFENCE



3205-T (DLP)
2575-T
2910-CFP165

National Defence Headquarters
Ottawa, Ontario
K1A 0K2
3 June 1976

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11 JUN 1976

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15 JUN 76
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Distribution List

AMENDMENT - CFP 165 - LEVELS OF CONFLICT

- References: A. CFP 165 Conduct of Land Operations dated 30 October 1973
B. ABGA Armies Operational Concept 1986-95 dated 1 September 1975

1. It is proposed to amend Reference A Section 3 Article 110 "Scales of Conflict" by deleting the discussion on General War, Limited War and Cold War and inserting a discussion of the agreed ABGA terms, stated in Reference B, which define conflicts by intensity.

2. The levels of intensity set out in Reference B are:

- High Intensity. Conflict in which both sides are prepared to employ the full range of weapons and resources available to them. In such a conflict nuclear weapons could be used from the outset, or initially only conventional weapons could be used.
- Mid Intensity. Conflict fought with limited objectives under definitive policy limitations either as to the extent of destructive power that can be employed, or the extent of geographical area, or both.
- Low Intensity (Type A). Conflict aimed at the internal seizure of power, or changes to established order by illegal, forceful means. This includes guerilla actions, insurgency, rebellion, dissidence, communal violence, civil disturbance or other tactics.
- Low Intensity (Type B). Maintaining peace in an area of political or armed conflict other than by the use of the application of force.

3. It is considered that the classification of conflict by intensity rather than scale provides a more accurate delineation of types of conflict in which the Canadian Forces may become engaged. These terms are also thought to be more easily comprehended both inside and outside the military profession. In addition, they have been agreed to by three of

④ DIPC 2
As discussed. Suggest DLO should give... 12
for comment to DIACPOL and CORAF whose staffs
may be more familiar with the complexities of terminology
destined for application in theoretical studies

001476

- 2 -

ABCA
our major allies and their use will facilitate standardization. The use of these terms within the Canadian Forces should not present a problem in the NATO forum as the NATO interest is generally focussed on high intensity operations.

4. Before initiating an amendment to CFP 165 your concurrence and/or comments are solicited as it is considered that these use of these ABCA terms has wide implications throughout the Canadian Forces.

5. It would be appreciated if your comments could be forwarded to this Directorate by 25 June 1976.

J.A. Fox
J.A. Fox
Colonel
Director Land Plans
for Chief of the Defence Staff

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DGMPD

DEPARTMENT OF NATIONAL DEFENCE

MINUTE SHEET

SECURITY CLASSIFICATION

FILE NUMBER

TD

DATED

REFERENCE

REFERRED TO

REMARKS

(To be signed in full showing Appointment, Telephone Number and Date)

DIPC

1. A quick check of NATO terminology has not revealed any conflictions. Therefore, except for personal views, DIPC 2 has no basis for rejecting the proposed terms. Personal views are as follows:

a. comprehension of the terms is not as certain as suggested. The operative word "intensity" leads to subjective interpretations - it's unlikely a military commander would view his current activities in Lebanon as 'Low intensity (Type A)' nor are politicians likely to perceive battle casualty lists as an expected product of low intensity conflicts; and

b. the use of any terminology that is defined in narrow national - or even bilaterally acceptable - language almost always looks confusion in NATO where interest is maintained on the whole spectrum of operations, contrary to the opinion expressed in para 3.

Don
DIPC 2-5
8/6

DEPARTMENT OF NATIONAL DEFENCE
MINISTÈRE DE LA DÉFENSE NATIONALE

MINUTE SHEET - NOTE DE SERVICE

SECURITY CLASSIFICATION - COTE DE SÉCURITÉ

FILE NO. - N° DE DOSSIER

TD - D.T.

REFERENCE - RÉFÉRENCE

DATED - DATÉE

REFERRED TO
TRANSMISE À

REMARKS - REMARQUES

(To be signed in full showing Appointment, Telephone Number and Date)
(Attaché de signature, fonction, numéro de téléphone et date)

DIPC

1. To classify war only by its intensity is misleading. There are too many factors which influence our understanding of a conflict: ex, area, weapons, objectives etc. Far better to think in terms of traditional categories such as General or Global war, Limited War, Guerrilla War and so on.
2. If we must scale conflict, then I suggest
 - a. General or Global War
 - b. Limited War
 - c. Insurgent War
3. Other forms of violence and related activities ~~are not~~ such as hi-jacking, kidnapping,

DEPARTMENT OF NATIONAL DEFENCE
MINISTÈRE DE LA DÉFENSE NATIONALE

MINUTE SHEET - NOTE DE SERVICE

SECURITY CLASSIFICATION - COTE DE SÉCURITÉ

FILE NO. - N° DE DOSSIER

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REFERENCE - RÉFÉRENCE

DATED - DATÉE

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TRANSMISE À

REMARKS - REMARQUES

(To be signed in full showing Appointment, Telephone Number and Date)
(Attaché de signature, fonction, numéro de téléphone et date)

*peacekeeping etc do not fall within
the sociologist's definition of war.*


D.E. FITZ-GERALD
LCOL
DIPC 3

JUN 09 1976

DEPARTMENT OF NATIONAL DEFENCE

MINUTE SHEET

SECURITY CLASSIFICATION

UNCLAS

FILE NUMBER

3201-1 (DLP)

TD

DATED

3 Jun 76

REFERENCE

LEVELS OF CONFLICT

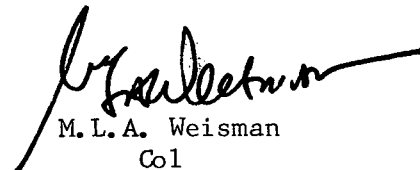
REFERRED TO

REMARKS

(To be signed in full showing Appointment, Telephone Number and Date)

DGMPO

There may be some reservations about labelling Levels of Conflict by intensity (High, Mid, Low) rather than by scale (General war, limited, peacekeeping etc). However, the purpose of ABCA is standardization and since they have already standardized these terms I see no alternative but to agree, especially in the absence of any NATO definition.



M.L.A. Weisman

Col

DCPC

2-1857

14 Jun 76

MEMORANDUM

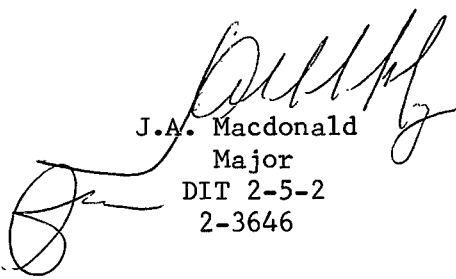
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~~2900-1~~ (DIT)

92 Mar 76

DLP 4-3

STAFF MANUALS VOLUME 1
CFP 300(1) (INTERIM) WAR ESTABLISHMENTS AND STAFF DATA

1. The subject Manual has been reviewed and is considered a worthwhile document for study purposes.
2. Confusion may arise when attempting to decipher some of the abbreviations and acronyms in our allied organizations.
3. The eqpt data listing is detailed but the information it provides may be of limited value.


J.A. Macdonald
Major
DIT 2-5-2
2-3646

DEPARTMENT OF NATIONAL DEFENCE



MINISTÈRE DE LA DÉFENSE NATIONALE

10032-1 (SSO Maint)

Headquarters, Materiel Command
Ottawa 7, Ontario

19 Jun 68

Chief of the Defence Staff
Canadian Forces Headquarters
Department of National Defence
Ottawa 4, Ontario

Attention: DEM

(1)

CFP 165 - MAINTENANCE TERMINOLOGY

Reference: A. L 2910-CFP 165 TD 8148 (DEM) of 3 Jun 68
B. 10032-1 (SSO Maint) of 28 Dec 67

1. Few of the comments attached with Reference A are significant. It is apparent that Mobile Command would prefer "unit, field and depot repairs" to "first, second and third line repairs". The Canadian Army Staff College would prefer to retain the term "field". DGMF is split with DGMFS supporting the proposed amendment to what is essentially a land/air publication, and DGMF A dissenting on the grounds that "first, second and third line" should continue to be used in the maritime air environment.
2. It is clear that the term "base repair" as it is now used should be replaced by another term because base repair can be taken to mean a complete overhaul, or a repair within the capability of a CF Base. The "where" a repair is done is confused with the "depth of maintenance".
3. In the same manner unit, field, ships staff, and dockyard are terms which indicate where or by whom a maintenance function is performed. In part they also indicate a depth of maintenance by custom peculiar to each environment.
4. If depth of maintenance is arbitrarily defined as having three levels with the higher levels including all that is done in the lower levels, then a workable system of terminology results as follows:

First line - defined as per Annex A to Reference B

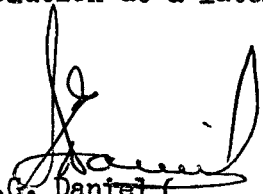
Second line - defined as per Annex A to Reference B but including first line

Third line - defined as per Annex A to Reference B but including first and second line.
5. This could be applied to all environments including the Maritime Surface environment where those maintenance functions performed on board by the ship's staff would be called second line, and those performed by

-2-

dockyard personnel would be called third line (which of course includes first and second lines)

6. It is recommended the terminology shown at paragraph 4 form the basis of an amendment to CFP 165 and that this terminology be adopted as standard in the Canadian Forces. If DGM is not prepared to recommend such a step at this time then it is suggested that this TD be passed to the DEVIL Maintenance Working Group for resolution at a later date.


C.G. Daniel
Captain (N)

for Commander Materiel Command

②

DMP

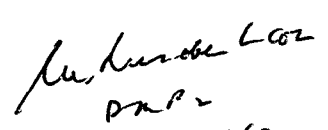
Your comments on para 6 above are requested.
It would be desirable to establish
the common terminology now for general
use in the CF.


E. Jones LCol
DEM(L)

25 Jun 68.

③ DEM(L)

1. The personnel to man the DEVIL Maintenance System Working Group will be made available early Sep 68. One of the first projects to be undertaken is the development of a glossary of maintenance terminology.
2. This should be completed according to our planning by approx mid Nov 68. Therefore, it is recommended that the resolution of the problem be deferred until that time.


M. Lusk LCol
DMP
23 Jul 68

DEPARTMENT OF NATIONAL DEFENCE



MINISTÈRE DE LA DÉFENSE NATIONALE

FMC 2910-2 MAINT

Headquarters Mobile Command
St Hubert, Que
26 Mar 68

Chief of the Defence Staff
Canadian Forces Headquarters
Department of National Defence
Ottawa 4, Ont

Attention: DGLF3

CFP 165 - MAINTENANCE TERMINOLOGY
PROPOSED AMENDMENT

Referred to	DGLF3
File No	V2910-CFP/68
Chg'd. to	DGLF3

24/3

Reference: A. CFHQ V2910-CFP 165 (DGLF3) 14 Feb 68

1. This HQ agrees that the terminology in Art 314 of CFP 165 should be amended however it is felt that only the term "Base Repairs" as defined therein requires changing and that the terms, unit and field repair are preferable to the proposals of Materiel Command.

2. It is therefore suggested that Article 314 para 2c be changed only as follows:

Depot Repairs vice Base Repairs.

3. CFP 144 defines levels of repair in aircraft maintenance as,
- Servicing level,
 - Field level, and
 - Depot level.

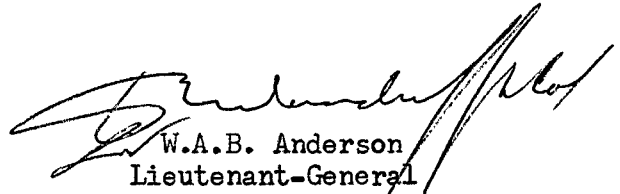
These terms would become consistent with those in CFP 165 by merely changing Servicing level to Unit level, as defined in CFP 144 Art 232.

4. The terms 1st, 2nd and 3rd line are usable however they have been and are been used in so many other areas of Mobile Command activity, such as transport and supply, with various meanings that a different set of terms for maintenance would eliminate confusion in communicating on maintenance matters.

.../2

- 2 -

5. This HQ firmly supports the need for consistent and understandable terms in the maintenance field and recommends one set of terminology be adopted for application to all environments.



W.A.B. Anderson
Lieutenant-General
Commander Mobile Command

1 February, 1968

RESTRICTED

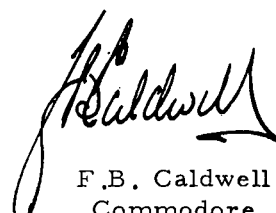
AMENDMENT LIST 1
To CFP 165

AMENDMENT TO CFP 165 - CONDUCT OF LAND OPERATIONS

FOREWORD

1. The following amendments are approved and shall be inserted on receipt.
2. This amendment list is effective upon receipt.
3. THIS PUBLICATION CONTAINS CLASSIFIED INFORMATION AFFECTING THE NATIONAL DEFENCE OF CANADA AND SHALL BE SAFEGUARDED, HANDLED, TRANSPORTED AND STORED IN ACCORDANCE WITH THE REGULATIONS AND ORDERS FOR THE SECURITY CLASSIFICATION APPEARING HEREON. RELEASE OF THIS PUBLICATION, OR INFORMATION CONTAINED HEREIN, TO ANY PERSON NOT AUTHORIZED TO RECEIVE IT IS PROHIBITED BY "THE QUEEN'S REGULATIONS AND ORDERS FOR THE CANADIAN FORCES" AND "THE OFFICIAL SECRETS ACT."

Amend copy pls - office
I held other me note + amend myself



F.B. Caldwell
Commodore
for Chief of the Defence Staff

AMENDMENT INSTRUCTIONS

NEW AND REPLACEMENT PAGES

Remove and destroy the page
containing the following articles:

<u>From</u>	<u>To</u>
701	703

Insert replacement page
containing the following articles:

<u>From</u>	<u>To</u>
701	703

RESTRICTED

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CHAPTER 7

COMBAT INTELLIGENCE AND RECONNAISSANCE

Section 1 - Combat Intelligence

701. INTRODUCTION

1. Information is the foundation of a commander's plan, and the more accurate and up to date his information is the better the plan is likely to be. Without information the commander is a man in the dark where "uncertainty is the mother of falsehood". Because of the influences of danger, fear, exhaustion, and enemy attempts to mislead and confuse him, much of the information he receives will be inaccurate, confusing, and exaggerated. The tactical situation is rarely as good or as bad as it appears to be from a distance.
2. The aim of a combat intelligence system is to obtain information from all available sources and to process it rapidly into accurate intelligence for timely use by the commander.
3. The commander's intelligence problem can be subdivided into four main categories. The information he needs must first be collected; then collated to eliminate confusion and exaggeration; the information must then be interpreted to produce combat intelligence; finally the intelligence must be disseminated to those who are directly affected by it.
4. The capacity to acquire information is largely dependent upon the resources available. These resources are many in number and varied in type. Not all of them will be available at every level of command and their most effective use will be realized only by a carefully co-ordinated plan. The plan must make the most economical use of the characteristics of each so that they supplement each other. The requirement is a continual one by day and by night, and the plan must take into account the limitations of men and equipment and provide some rest for each.
5. The value of the information received will depend in part upon the clarity of the orders given to information-gathering agencies. The commander should aim to ask questions which require specific answers, and it will often be wise for him to assign priorities for the gathering of the information and to specify a time by which it is required. Often, he should talk to the persons concerned either in person or by radio. This is more likely to ensure the timeliness and relevance of the information.
6. The collation and interpretation process involves piecing together many isolated scraps of information, often apparently irrelevant, to form a coherent picture for the commander. This problem is compounded by the variety of sources available and by the fact that, when forces are moved rapidly, the time during which information is relevant will diminish.
7. One of the most critical problems is to ensure that particular information reaches the appropriate commanders. This can be achieved only by a suitable allocation of reconnaissance resources, by speed and discrimination in collation and evaluation, and by good communications. In some operations it may be necessary to deploy special communications to do this.

8. Specially appointed intelligence staffs are provided at formation HQ and in combat units. It is their duty to collect, collate, and interpret the information received and to ensure that the resultant intelligence is disseminated to the commander, his staff, subordinate formations and units, higher headquarters, and flanking formations in time for them to act upon it.

9. Much of the large volume of information available can be promulgated in regular briefings and intelligence summaries. However, when information of urgent importance is received, the intelligence staff must use their right of direct access to the commander to inform him at once. At the same time they must pass the report, by the quickest possible means, to any other commander who may be directly affected by it.

10. The volume of information available has increased with the multiplication of sources. It is the intelligence staff's duty to assess the relative value of these sources and to determine the validity of the information by a comparison with many reports. There is a real danger that the communications and the intelligence staffs will become overburdened by this mass of detail. While the introduction of automatic data processing systems may alleviate this pressure, much can be done by the clarity and simplicity with which orders for reconnaissance are given and the reports rendered.

Section 2 - Information Requirements

702. GENERAL

A commander needs information, even negative information, about four main matters: the enemy, his own troops, the ground, and the weather.

703. ENEMY

1. Information about the enemy is the hardest to get; it is rarely accurate and often is not up to date. Under some conditions it is not difficult to establish the presence of enemy in a general area. However, it is more difficult to determine precise locations and strengths with sufficient accuracy to make plans to bring fire to bear. Knowledge of enemy intentions is likely to be, at the best uncertain; and normally, negligible. Yet, a commander must be prepared to act on imperfect knowledge; he cannot postpone action indefinitely on plea of this imperfection.

2. The effects of NBC weapons are such that they require, to some extent, special consideration. Whether they will be used is uncertain, and the information of their initial use by an enemy will be of vital significance to a commander. The decision to use them in retaliation cannot be lightly taken, and a commander will require as much confirmatory detail as possible.

3. First reports are likely to be vague and exaggerated and all units must be prepared to carry out their own reconnaissance procedures. Much effort must be devoted to maintaining surveillance over enemy nuclear stockpiles and delivery systems so that the likelihood of nuclear attack can be under constant assessment. Once the decision to use these weapons has been taken, post-strike reconnaissance drills must be implemented each time they are used by the enemy or by our own troops.

DEPARTMENT OF NATIONAL DEFENCE



CANADA

MINISTÈRE DE LA DÉFENSE NATIONALE

CANADIAN LAND FORCES COMMAND AND STAFF COLLEGE

SC 10032-1 (G)

Fort Frontenac
Kingston, Ontario

29 Feb 68

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Chief of the Defence Staff
Canadian Forces Headquarters
Department of National Defence
Ottawa 4, Ontario

CFP 165 - MAINTENANCE TERMINOLOGY

Referred to

DGLF3

MAR 4 1968

File No.

12910 CFP 165

Chg'd. to

DGLF3

Reference: A. V 2910-CFP 165 (DGLF3) 14 Feb 68

29/2

1. The following comments are submitted on the attachment to
Reference A:

- a. The term "line" is used to describe the organization of Workshops in the field and is sometimes also coupled with the terms "field", "medium", "intermediate" and "base" as applied to type workshops within the organization. It is also used to describe the recovery system, aircraft servicing, transport, scales, etc. Therefore, it is possible that using "line" to classify types of repair may add to the ambiguity involved particularly since types of repair do not necessarily coincide with "lines" in the workshop organization. E.g., a corps tps workshop may be equipped to carry out "third line" repair to certain equipments and also "first" and "second" line repairs for units in corps troops. This may not be a simple matter when one considers permissive repairs over a wide range of field equipments.
- b. The amendment makes no mention of our present "field workshops". Is the term field to be retained here?
- c. Since the Maintenance Platoon of a brigade group HQ is a "mobile brigade repair unit" but does not do "second-line" repairs, it is suggested that the last line of para 2b of Annex A to 10032-1 (SSO Maint) 28 Dec 67 be amended to read: " - - - are carried out by mobile brigade group (field) workshops and corps medium workshops".

W.A. Milroy
Brigadier-General
Commandant

001491

DEPARTMENT OF NATIONAL DEFENCE



2422-B CL-300 000/FP-000
MINISTÈRE DE LA DÉFENSE NATIONALE

2910-1(LOG)

Training Command Headquarters
Westwin, Man
23 Feb 68

Chief of Defence Staff
Canadian Forces Headquarters
Department of National Defence
Ottawa 4, Ont

CFP 165 - MAINTENANCE TERMINOLOGY
PROPOSED AMENDMENT

Referred to	D6 L F 3
File No.	FEB 29 1968 2910-CFP 165
Chg'd. to	

Reference: A. CFHQ V2910-CFP 165(DGLF3) 14 Feb 68

1. TCHQ concurs with the proposed amendment except for the following suggested changes:

- Para 2b last sentence should read "These repairs are carried out by mobile divisional or brigade repair units or base maintenance sections."
- Para 2c first sentence should read "Those beyond the capability of mobile combat formation repair units or base maintenance sections."

2. The proposed changes will permit the definitions to cater to both Mobile Command and fixed base operations.

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J. Walker
J. Walker
Captain

for Commander Training Command

Seen
4/2/68

MEMORANDUM

2922-BCL-300-000/FP-000

L 2910-CFP 165 (DEM)

22 January, 1968

DGLF

CONDUCT OF LAND OPERATIONS
CFP 165

References: A. CFP 165

B. MATCOM letter 10032-1 (SSOMAINT)
of 28 Dec 67 (Copy attached).

1. Reference "B" contains MATCOM comments concerning the maintenance terminology contained in Article 314 of CFP 165. Annex "A" to reference "B" is a suggested amendment to this article.
2. DGM supports the comment of reference "B" and concurs in the suggested amendment to Article 314 of CFP 165.
3. Current maintenance instructions and planning for the future Canadian Armed Forces Maintenance System describes the level of maintenance as "first", "second" or "third line".
4. Please note that paragraph 2 b of Annex A to Reference B has been change to reflect the current force structure of Mobile Command.

② DGLF 3
yours

17

DG MACLEOD
MAJOR
SEC DGLF

JAN 24 1968

F. Harley
F. Harley
Captain (N)
DGM
2-0970

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2922-B-GL-300-000/FP-000

DEPARTMENT OF NATIONAL DEFENCE



MINISTÈRE DE LA DÉFENSE NATIONALE

10032-1 (SSO Maint)

Headquarters Materiel Command
Ottawa 7, Ontario

28 Dec. 67

Chief of the Defence Staff
Canadian Forces Headquarters
Department of National Defence
Ottawa 4, Ontario

①
Attention: DGM

CFP 165 - MAINTENANCE TERMINOLOGY

Reference: A. Annex A - Amendment of Article 314 CFP 165,
Conduct of Land Operations (attached)

1. To avoid ambiguity and misunderstanding it is recommended that the terms "unit repair," "field repair," and "Base Repair" in CFP 165, article 314 be replaced by "first," "second," and "third-line repair" as proposed in Annex A.
2. With the adoption of the designations Canadian Forces Base and Base Maintenance Section, the term "Base Repair" has become ambiguous and consequently is often replaced by either "Depot Repair" or "third-line repair."
3. For years the CA(R) has used unit, field, and base to describe the level of maintenance; and first, second, and third-line to indicate the geographical location of the activity. There has been added confusion by the use of the word "echelon" to describe a geographical or chronological location of a maintenance activity.
4. It will be noted that this proposal establishes a degree of commonalty in the terms used in the Air and Land environments. Its application to the Maritime environment has been considered, and discarded, as at present no useful purpose can be seen in reclassifying the present two levels of ship maintenance, e.g., "Ship's Staff" and "Dockyard."

Annex A

②
C.G. Daniel
Captain, RCN

for Commander Materiel Command

DRAFT

ANNEX A
to 10032-1 (SSO Maint)
of 28 Dec 67

PROPOSED AMENDMENT OF ARTICLE 314 CFP 165

CONDUCT OF LAND OPERATIONS

314 REPAIR AND RECOVERY

1. The primary responsibility for proper maintenance of the full range of mechanical and electronic equipment carried by a force rests with each operator of such equipment. When faults or breakdowns of equipment occur, they must be repaired as soon as possible.

2. Repairs are categorized under three headings, based on the time, tools, spare parts, and tradesmen required to effect the repair:

- a. First-Line Repairs. Minor repairs involving adjustments or the replacement of parts and components by unit repair personnel.
- b. Second-Line Repairs. Those repairs beyond the capability of unit repair personnel and equipment, such as the replacement of defective assemblies. In addition, certain repairs to assemblies and other items are classed as second-line repairs. These are carried out by mobile ~~corps~~ ^{divisional} or brigade repair units. *all Perry*
- c. Third-Line Repairs. Those beyond the capability of mobile combat formation repair units. They include the entire overhaul of complete items of equipment and major assemblies.

3. Repair should be done as far forward as possible to reduce the time equipment is out of action. Both first and second-line repairs may be done in situ by mobile repair teams. When the estimated time to accomplish a repair is too great or the task too involved, the equipment may be set aside or back-loaded. If an equipment is back-loaded beyond brigade, a replacement item may be issued.

4. Recovery in the broadest sense means the process of extricating an equipment casualty, back-loading it through various formations, and its ultimate evacuation from a theatre. In conventional use, the term covers the extrication of a casualty and its removal to a repair facility. Recovery vehicles are organic to mobile units. They are also usually deployed on a formation basis as part of the TC system, and at defiles and other points where a casualty might hold up movement.

MEMORANDUM

2922-BCL-300-000/FP-000

V 2910-CFP 165 (DGLF3)

Canadian Forces Headquarters
Ottawa 4, Ontario

18 December, 1967

CFHQ/PUBS

CFP 165 AMENDMENT

1. The attached proposed amendment to CFP 165 suggested by the Commander Mobile Command, has been approved by DINTS.
2. Please prepare the required amendment in sufficient copies for issue to current holders.


W.K. Lye
Brigadier
DGLF
2-7455

c.c. CO 3 SD

Maj H Marston/2-8550/ss

DEPARTMENT OF NATIONAL DEFENCE



MINISTÈRE DE LA DÉFENSE NATIONALE

FMC 2910-1 DANAL

Headquarters Mobile Command
St Hubert, Que

23 Nov 67

Chief of the Defence Staff
Canadian Forces Headquarters
Department of National Defence
Ottawa 4, Ont

Attention: DGLF 3 Chg'd. to

Referred to DGLF 3
NOV 27 1967
File No. 2910 CFP 165

PROPOSED AMENDMENT TO CFP 165 - CONDUCT OF LAND OPERATIONS

References: A. CFP 165 Conduct of Land Operations
B. CFP 156 Combat Intelligence Land
C. CFP 130 Specifications for Canadian Forces Publications

1. In Chapter 7 of Reference A the words "evaluated", "evaluation" and "evaluate" are used with reference to one of the steps of the intelligence process. It can be inferred that the "interpretation" stage of the intelligence process was meant in each case.

2. Article 109 of Reference B describes the intelligence process. Evaluation is included correctly as one of the procedures of the collation stage.

3. The words as used in CFP 165 are incorrect and misleading to a trained intelligence officer. Attached is a draft amendment, prepared in accordance with Reference C, which is recommended for publication. This will bring Reference A into line with Reference B, the land force's current intelligence publication.

(3)
DGLF-3
absolutely!
W.A.B. Anderson
DINTS-4
Enclosure
13 Dec 67

DLFORT4 (CD)
957
NOV 28 1967
ORT4
4-2
4-3
4-4
4-5

W.A.B. Anderson
Lieutenant General
Commander

(2)
DINTS

Do you agree?
AMarston
DGL 001497

RESTRICTED

November, 1966

AMENDMENT LIST 1

To CFP 165

AMENDMENT TO CFP 165 - CONDUCT OF LAND OPERATIONS

FOREWARD

1. The following amendments are approved and shall be inserted on receipt.
2. This amendment list is effective upon receipt.
3. THIS PUBLICATION CONTAINS CLASSIFIED INFORMATION AFFECTING THE NATIONAL DEFENCE OF CANADA AND SHALL BE SAFEGUARDED, HANDLED, TRANSPORTED AND STORED IN ACCORDANCE WITH THE REGULATIONS AND ORDERS FOR THE SECURITY CLASSIFICATION APPEARING HEREON. RELEASE OF THIS PUBLICATION, OR INFORMATION CONTAINED HEREIN, TO ANY PERSON NOT AUTHORIZED TO RECEIVE IT IS PROHIBITED BY "THE QUEEN'S REGULATIONS AND ORDERS FOR THE CANADIAN FORCES" AND "THE OFFICIAL SECRETS ACT."

AMENDMENT INSTRUCTIONS

NEW AND REPLACEMENT PAGES

Remove and destroy the page
containing the following articles:

<u>From</u>	<u>To</u>
701	703.3

Insert replacement pages
containing the following articles:

<u>From</u>	<u>To</u>
701	703.3

AMENDMENT LIST 1

To CFP 165

CONDUCT OF LAND OPERATIONS

1. Article 701

a. Para 3, Insert new para 3 as follows:

"3. The commander's intelligence problem can be subdivided into four main categories. The information he needs must first be collected; it must then be collated to eliminate the confusion and exaggeration; next the information must be interpreted to produce combat intelligence; finally the intelligence must be disseminated to those who are directly affected by it."

b. Para 6, line 1. Delete: "evaluation"

Insert: "interpretation".

c. ~~Para~~ 8. Delete: "It is their duty to collate and evaluate the information received and to ensure that it reaches the commander, his staff and subordinate formations and units." as last sentence.

Insert: "It is their duty to collect, collate and interpret the information received and to ensure that the resultant intelligence is disseminated to the commander, his staff, subordinate formations and units, and higher headquarters and flanking formations in time for them to act upon it." as last sentence.

MEMORANDUM

2922-B-GK-300-000/FP-000

S2910-CFP 165 (CFHQ PUBS)

13 June, 1967

DLFORT

CFP 165(ENGLISH) - CONDUCT OF LAND OPERATIONS

1. MATCOM has forwarded the following information concerning the stock activity for CFP 165.

Quantity received	9,945
Quantity issued	6,628
Returned from Bases	519
Present holdings	3,856

2. Because of space limitations, the Depot is endeavouring to reduce stock levels to reasonable amounts by destroying surplus.

3. Before a decision is made, your comments are requested. Factors to consider are future plans for the manual and how the cancellation of promotion exams will affect the demand. If possible, a forecast use rate per year might also be supplied.

W.H. Nicholas
CFHQ PUBS
2-6481

3 PD 1000

RECORDS MANAGEMENT DIVISION VCDS BRANCH REGISTRY
Referred to <u>DLFORT</u>
JUN 15 1967
File No <u>U2910-CFP 165</u>
Chgt. to

2422-B-GK-300-000/FP-000

S 2910-CFP 165 (CFHQ PUBS)

Canadian Forces Headquarters
Ottawa 4, Ontario
28 December 1966

Commanding Officer
3 Supply Depot RCAF
Canadian Forces Base Rockcliffe
Ottawa 7, Ontario

CFP 165 CONDUCT OF LAND OPERATIONS

1. Attached is a distribution list for CFP 165 which will be printed in English and in French. The English version should be available by mid January, the French version by end March. It is not yet known whether the sponsor will permit distribution when the English version is available or simultaneous distribution of French and English is required.

Whitman

[Signature]
W.E. Nichols
CFHQ PUBS

WH Nichols/lw
2-6481

ANNEX A to 3 2510-077145
Dated 28 Dec 66

DISTRIBUTION CPT 165

		E	E
CFB Bagotville (0136)		1	
	Total	1	
CFB Borden (0113)		243	30
2 Airborne Med Sec		5	1
CFMS Training Centre		44	10
Cdn Provost Corps School		30	5
Joint NBCDW School		1	
RCAC School		1	
RCDS School		2	
School of Military Intelligence		28	2
RCASC(S)		188	34
RCS of I		1	
APIC		4	
	Total	217	47
CFB Calgary (0109)		43	7
AMQ Cdn Inf Bde Gp		17	
FGH Armoured Regt		55	
2 QOR of C		50	
CFPSU		3	
1 Provost Platoon		2	
1 Sig Sqn		7	
Ld SH Band		1	
3 Fd Amb		10	
1 AB Med Sec		6	
1 Ord Fd Pk		6	
1 Fd Workshop		8	
	Total	205	7
Chatham (0137)		2	
Naval Ammunition Depot Renous		1	
	Total	3	
Chilliwack (0122)		177	6
3 Fd Sqn RCE		10	
Canmildist Vancouver		90	
	Total	277	6

	2	<u>E</u>	<u>F</u>
Clinton (0112)		21	
	Total	<u>21</u>	
Cobourg (0128)		23	
	Total	<u>23</u>	
Cold Lake (0134)		2	
	Total	<u>2</u>	
Concord (0133)		3	
	Total	<u>3</u>	
Corvallis (0110)		3	
	Total	<u>3</u>	
Edmonton (0127)		171	
2 Bn PFCLI (Griesbach)		50	
1 Trans Hel Platoon Det		12	
10 Service Det Barracks (Griesbach)		2	
PFCLI Depot (Griesbach)		9	
Camildist Edmonton		24	5
7 BD		1	
10 TSU		1	
17 ROD		11	
	Total	<u>351</u>	<u>5</u>
Esquimalt (0103)		15	
HRC Dockyard		6	
1st Bn GORC		48	2
	Total	<u>69</u>	<u>2</u>
Georgetown (0105)		38	12
HQ 3 Cdn Inf Bde Gp		12	
The Royal Canadian Dragoons, RCAC		55	
1 RCHA (Fd Regt)		64	
2 Field Sqn RCE		10	
1st Battalion The Black Watch		50	
2nd Battalion the Black Watch		50	
Experimental Brigade Service Battalion		47	
3 Signal Squadron		7	
4 Engineers Stores Depot		1	
RCE Band		1	
8 Service Detention Barracks		2	
Camildist Fredericton		85	
32 CAD		1	
	Total	<u>100</u>	<u>17</u>

0121 (0120)

1 Flying Training School

Total

$\frac{2}{2}$

Geese Bay (0123)

Total

$\frac{1}{1}$

Halifax (0100)

RMC Dockyard

8

Canmildist Halifax

Total

$\frac{90}{90}$

Kingston (0114)

Canmildist Kingston

140

RHR Depot

8

COTC Kingston

3

4 ACD

45

2

RCEME(S)

30

10

RCS of S

120

15

1 Cdn Sigs Regt

27

3

1 Cdn Gds

50

1 Sig Unit

20

1 Line Troop

Total

$\frac{6}{107}$

$\frac{2}{30}$

London (0131)

78

RCH Depot

11

Canmildist London

185

1 RCH

Total

$\frac{48}{322}$

$\frac{2}{2}$

Moncton (0129)

Total

$\frac{1}{1}$

Montreal (0130)

102

65

RCCO(S)

60

15

COTC Montreal

1

12

Canmildist Montreal

Total

$\frac{176}{339}$

$\frac{2}{92}$

Moose Jaw (0121)

37

Canmildist Regina

107

36 CAD

Total

$\frac{5}{119}$

	E	F
Worth Bay (0135)	2	
ADCHQ	10	1
Total	12	1
Poncho2d (0116)		
43 Radar Sqn	2	
Total	2	
Petersons (0107)	43	7
HQ 2 Cdn Inf Bde Gp	17	
8 Cdn Hussars (less 1 Sqn)	30	
4 Fd Regt RCHA	50	
W Bty 2 RCHA	10	
2 Hq Cdn Cde	50	
1 Fd Sqn RCE	13	
3 Engr Stores Depot	1	
2 Sig Sqn	7	
2 Ord Fd Pk	6	
2 Fd Whse RCHNE	8	
2 Provost Platoon	2	
Cdn Cde Band	1	
Cdn Cde Depot	10	
2 Transp Coy	12	
4 Fd Amb	10	
Total	270	7
Rivers (0108)	90	15
428 T&AR Sqn	20	5
Total	110	20
Beckwith (0132)		
INTCOM	144	
CWD	55	
CFRMS	12	
JALS	4	
ARKB	7	1
CPCS	50	
Total	272	1

5

	<u>E</u>	<u>F</u>
<u>CFHQ</u>		
CAU	31	5
VCDS	10	
DCPLANS	22	
DC OPS	67	
DCRES	39	
CG (Rm 3304A)	65	10
CP (Rm 3125B)	160	
SECLS (CFHQ RJBS)	4	
Total	<u>398</u>	<u>15</u>
St Hubert (0136)	35	15
Mobile Command HQ	172	35
Air Defence Command HQ Rear Party	13	1
1 Trans Hel Platoon Det	18	
Total	<u>238</u>	<u>51</u>
St Jean (0111)	7	
Total	<u>7</u>	
Shilo (0138)	260	
2 SSM Bty	7	3
28 Central Ordnance Depot	4	
AOP Tp 3 BCHA	5	
Total	<u>276</u>	<u>3</u>
Toronto (0124)	20	
Canadian Forces Personnel Selection Unit	12	
Cannildist Oakville	494	
1 SD	1	
15 ROD	9	
12 TSU	1	
Total	<u>537</u>	
Trenton (0125)	18	
Air Transport Command HQs	15	2
6 Repair Depot	1	
129 Test and Ferry Flight	1	
Trg Standards Estab (less Dets Clinton & Borden)	2	
Total	<u>37</u>	<u>2</u>

6

	<u>E</u>	<u>F</u>
Uplands (0126)	<u>16</u>	
Total	<u>16</u>	
Valcartier (0106)	14	36
1 Bn R 22e R		50
3 Bn R 22e R		40
6 Sig Sqn		7
2 Field Ambulance		10
3 Airborne Medical Section		6
R 22e R Band		1
Commdist Quebec	50	155
R 22e R Depot		
Total	<u>5</u> 69	<u>5</u> 310
Winnipeg (0117)	67	4
4 Tpt Coy	12	
Commdist Winnipeg	65	
CFPSU	4	
3 Fd Reg RCA	56	3
1 Locating Battery	20	
16 RCD		
Total	<u>8</u> 232	<u>7</u>
CEUE		
HQ - CEUE	55	
1 Cdn Base Med Unit	50	
1 Cdn Base Ordnance Unit	5	
1 Fd Det Barracks	5	
HQ & CISO	35	5
1 St Armoured Regt	55	
6 Sqn 8 Hussars	15	
2 RCA	60	
1 SHI	18	
4 Fd Sqn	10	
4 Sig Sqn	7	
2nd Bn RCA	50	
1 Bn PFCLI	50	
1 Transp Coy	12	
1 Fd Arty	24	

001507

7

	E	F
2 Btn R 22e R		50
3 Coy 3 R 22e R		10
4 Dent Coy	10	
4 Ord Fd Pub	6	
4 Fd Workshop	12	
4 Post Det	3	
4 Prevost Platoon	2	
Total	<u>43</u>	<u>60</u>

Radar Sqns - each one - English

Alsask	Holberg
Armstrong	Kamloops
Baldy Hughes	Lac St Denis
Barrington	Larther
Beausjour	Moisie
Beaverlodge	Mont Apica
Chibougamau	Moosonee
Dana	Ramore
Falconbridge	Senneterre
Foymount	Sieux Lookout
Stn Gander	Sydney
Gypsumville	Val d'Or
	Yorkton

Stn La Macana - two

1 Air Div SU - 35 English

CDLS(L) - 25

CDLS(W) - 120

CANCON - 1

A. B. Scale - Regular Army

RCAC

RCA

RCE

RCCS

RCIC

RCASC

RCAMC

RCDC

RCOC

RCEME

RCAPC

CPC

C Pro C

C Int C

HQ & Misc

(Inf. Puro Scale 4 each only ^{Total} 56)

20 School

5 School

(1 Pay Trg Wing)

(1 School)

1 each (25 School)
Other Than HQ
2 each (50 School)
Other Than HQ

A	B	C	D	E	F
33	66	78	321	786	1296
32	64	80	431	925	1586
53	106	134	208	345	549
58	105	105	245	516	971
45	90	155	806	1828	3359
44	88	88	210	398	606
47	88	88	230	304	467
13	25	25	60	95	104
49	98	98	160	236	324
53	95	95	173	402	585
4	8	11	11	13	13
5	10	10	10		
11	21	21	55	68	82
2	2	2	2	2	2
352	575	583	1050	967	1342
801	1441	1573	3972	6985	11286

7924

APD Dist Control (45058)

S. R. Gibson

DLFORT

Attn: Major Howard

Item I submitted in accordance
with our telcom this date.

Billieann
S20 - APD.
23 Sep 66.

39/1
MESSAGE FORM

2922-B-CL-300 000 /FP-000
300
File V ~~2910 CFP 165~~ (DLFORT)
~~V 2900-4~~

ROUTINE 061530 Z OCT 66

FROM CANFORCEHED

UNCLAS

TO CANCOMGEN

DLFORT 679

1/ CFP 165 CONDUCT OF LAND OPERATIONS IS NOW BEING PREPARED FOR
PRINTING. TO ENSURE ADEQUATE DISTRIBUTION ADDRESSEES ARE
REQUESTED TO INFORM BY 14 OCTOBER 66 QUANTITIES FOR INITIAL ISSUE
IN ENGLISH AND FRENCH BASED ON THE FOLLOWING SCALES.

2/ MOBILE COMMAND AND 4 CIBG WILL BE PROVIDED WITH ONE COPY TO
EACH LIEUTENANT COLONELS COMMAND PLUS ONE COPY TO EACH SQUADRON,
BATTERY, COMPANY OR EQUIVALENT PLUS ONE COPY FOR EACH OFFICER ON
ESTABLISHMENT. AN ADDITIONAL 20 PERCENT OF THE COMMAND ENTITLE-
MENT MAY BE HELD WITHIN MOBILE COMMAND AND 4 CIBG AS A POOL FOR
SCHOOLS AND STUDY PURPOSES.

3/ MARITIME, AIR DEFENCE, AIR TRANSPORT, TRAINING, MATERIEL
COMMANDS, CFCs, 1 AIR DIVISION AND CDLS WASHINGTON AND LONDON

PAGE 1 OF 3 PAGES

-2-

WILL BE PROVIDED WITH ONE COPY TO EACH LIEUTENANT COLONELS
COMMAND PLUS ONE COPY TO EACH SQUADRON, BATTERY, COMPANY OR
EQUIVALENT PLUS ONE COPY TO EACH LAND FORCE OFFICER ON THE
ESTABLISHMENT. AN ADDITIONAL 20 PERCENT OF THE COMMAND,
FORMATION OR STAFF ENTITLEMENT MAY BE HELD WITHIN THE COMMAND,
FORMATION OR STAFF AS A POOL FOR SCHOOLS AND STUDY PURPOSES.

4 SCHOOLS AND TRAINING ESTABLISHMENTS WILL BE PROVIDED WITH
SUFFICIENT COPIES TO MEET PEAK COURSE LOADS.

5 DISTRICTS WILL BE PROVIDED WITH ONE COPY PER OFFICER PLUS
A DISTRICT POOL TO MEET PEAK COURSE LOADS FOR RESERVES,
SCHOOLS AND STUDY PURPOSES.

6 CANADIAN FORCES RESERVES UNITS WILL BE PROVIDED WITH ONE
COPY TO EACH LIEUTENANT COLONELS COMMAND PLUS ONE COPY TO
EACH SQUADRON, BATTERY, COMPANY OR EQUIVALENT.

7 REPLY DIRECT TO CFHQ ATTN DLFORT 3-2.

PAGE 2 OF 3 PAGES

-3-

8 COMMANDS ARE REQUESTED TO CONSOLIDATE RETURNS FOR ALL THEIR
UNITS BUT ALSO TO INCLUDE INFORMATION WHICH WILL PERMIT
DISTRIBUTION THROUGH CFBS.

9 CONSOLIDATED RETURNS FROM DISTRICTS WILL INCL CFHQ DC PES
AS AN INFO ADDRESSEE.

DISTRIBUTION: SEC DS, SEC VCDS, SEC CP, SEC CTS,
SEC CG (BY MAIL)

PAGE 3 OF 3 PAGES

Howard
MAJ TF HOWARD DLPORT

2-6070/ms

FR Heuchan
FR Heuchan, Colonel
for CDS

See ~~HEADS~~ UEDS

MEMORANDUM

PA
2922-B-CL-300 000 /FP-000

~~3-2910 CFP 165 (CFHQ PUBS)~~

13 September, 1966

DLFORT

CFP 165, CONDUCT OF LAND OPERATIONS

References: A. V 2910-CFP 165 (DLFORT3)

B. HQ 4521-0-20 (DMT) 18 Mar 65

RECORDS MANAGEMENT DIVISION VCDS BRANCH REGISTRY
Referred to <u>DLFORT</u>
SEP 23 1966
File No. <u>V2910-CFP 165</u>
Chg'd. to

1. The drafts of CFP 165, received 31 Aug 65 are being given a final editorial review and reproducible copy preparation will start as soon as possible. In this respect, since we are now working on a backlog of two months' work, some idea of the priority required would be appreciated.

2. As requested in previous discussions, a distribution list is required. When producing this list, it must be kept in mind that 25,000 copies will cost, in printing alone, between 75 - 100,000 dollars, not to mention packaging, distributing and warehousing.

3. *practice*
The policy followed since integration does not permit personal issue, as this is extremely wasteful. The least to be expected is that an individual will want a manual sufficiently to take the trouble to go to a supply section or library to request it. Even then, many probably would be quite content just to borrow the book from the library rather than be carrying it with them on their moves.

4. On this basis then, it is requested that certain criteria be established for CFP 165, i.e.:

- a. only Army officers, generally, on distribution;
- b. loan only if individual so desires; and
- c. apart from use at schools, application must be made to supply section or library to acquire a copy.

Schools should retain their stock after each course. Following this it should be possible to state requirements for an initial printing in relation to a number of officers established at a base, and so many copies to a base when no Army officers are established.

5. At Annex A a sample of how this can be computed has been laid out. The sample covers several CFBs in Ontario, and is based on one copy for each five Army officers on establishment and 2 copies to Bases without Army personnel. Course loadings at appropriate schools will have to be determined and included under the appropriate base.

*no policy has
been established
yet
DE-3-2*

-2-

6. A draft CFSO concerning CFP 165 should be prepared along the lines of CFSO 290/66 for publication at the same time the manual is distributed.



R.E. Hogarth
Colonel
DSECDS
2-4119

ANNEX A
TO S 2910-CFP 165 (CFHQ PUBS)
13 September, 1966

DISTRIBUTION LIST CFP 165

Note 1

Distribution based on unit army officer establishment (approximately) on a ratio of one manual to every five officers.

Note 2

Officers of all services may be given one copy on request.

Note 3

Further stock may be demanded from APD.

Note 4

Schools entitlements are for individual issue for duration of course then returned to school library.

CFB Toronto	12
CFB London	22
CFB Cobourg	4
CFB Clinton	2
CFB Centralia	2
CFB North Bay	2
CFB Borden	60
CFB Trenton	4
CFB Kingston	450
Base	70
CASC	100*
RMC	200*
NDC	80*
CFB Petawawa	52
CFB Uplands	2
CFB Rockcliffe	52
CFHQ	120

* These figures are samples only.
The true figure would represent
the maximum number of students on
any one course load.

MEMORANDUM

2922-B-61-3000-000

V 2900-4 (DLFORT)

1/P-000

28 April 1966

Sec VCDS

NEW DRAFT PUBLICATION
REQUIREMENT FOR FRENCH TRANSLATION

1. At flyleaf is a "Notice of Intention to Draft New Publication", covering the publication "Conduct of Land Operations" which has been approved by VCDS.
2. Final draft of this publication has been forwarded to Commander Mobile Command for ~~approval~~ *final comments*, and action has been taken to prepare a French translation. However, the notice of intention is required by SecDS Editorial Section for planning of editing and publication programmes.
3. It is recommended that the Notice of Intention be signed approving the French translation, and that this TD be returned to DLFORT for further action required.

R.P. Welland
R.P. Welland
Rear Admiral
Deputy Chief Operations

NOTICE OF INTENTION TO DRAFT NEW PUBLICATION

MEMORANDUM

A 2922-BAL-300 000/FR 000
~~File: V 2900-4~~

Date: 27 Apr 66

SecDS/Editorial Section

INTENTION TO DRAFT NEW PUBLICATION

1. It is proposed to produce a new publication called "CONDUCT OF LAND OPERATIONS".
2. This new publication is necessary because there is no manual which enunciates this doctrine.
3. The requirement for this publication has been approved at the VCDS - Commander Mobile Command level.
4. It is requested that the covers be as agreed in attached letter.
5. There is a requirement to translate this publication into French. A French translation has been prepared.
6. It is estimated that this publication will contain 250 pages, it will be ready for re-editing approximately 16 May, 1966.
7. The project officer has been instructed to contact SecDS/Editorial Section to obtain guidance on form and the quantity required as reserve stock.

S.E. Samson

(Branch Chief's Signature)
(For French Translation Only)

R.W. Moncel

R.W. Moncel
Lieutenant General
Vice Chief of the Defence Staff

E.R. Heuchan Col.

(Sponsor's Signature)

E.R. Heuchan
Colonel
DLFORT

2922-B-GK-300000/FP000
HQ 4521-C-20 (DM7)

MEMORANDUM

18 Mar 65

COFR (Through D/COFR)

DRAFT FIELD SERVICE REGULATIONS
PRODUCTION

1. Production of the draft FSR received from ATOB on 11 Mar 65 cannot proceed until direction has been given on the points raised in the following paragraphs.

EXAMINATIONS

2. Our original manual plan called for the issue of the FSR, The Divisional Manual and revised associated corps manuals by 1 Sep 65 so they could be used as a basis for the 1966 promotion examinations. On 4 Dec 64 you issued direction revising that plan because of the hold-up in the Divisional Manual and stated that examinations would be based on the FSR and existing corps manuals. It is now considered that this policy cannot be followed for the following reasons:

- a. The Army Examination Board has stated that the FSR is not compatible with the tactical doctrine set forth in the unrevised corps manuals and for this reason they would have difficulty in setting tactical examinations. The FSR by itself, is not in enough detail to form the basis for tactical examinations.
- b. We were originally informed that we could have the manual printed on a priority basis in four months. We are now informed that it is likely to take closer to eight months which means that it would not be possible to have the manual in the hands of officers for study purposes by the target date of 1 Sep 65.
- c. If we carry out the various clearances which we consider are required as outlined below it is doubtful if we could have the final draft ready before 1 Jun 65.

3. In view of the above and as we must inform the CP by 1 May of the manuals on which the 1966 examinations will be based, it is recommended that:

- a. The 1966 examinations be based on CAMT 1-3 and existing corps manuals as was the case in 1965.
- b. The target date for the issue of the FSR be 1 Jan 66.

4. Distribution

5. We understand that you would like to see the manual given a wide distribution, including sales to the public. This would require it to be issued as a unclassified document. The manual in its present form contains classified material and we have been informed that to downgrade it to unclassified would require clearances from the author and the UK and US because of material taken from their documents. Sections such as Section 30 on NBCW Policy would undoubtedly have to be extracted thereby reducing the value of the manual. In view of this, it is recommended that:

- a. The manual remain classified as "RESTRICTED".
- b. After it is issued, consideration be given to producing a unclassified edition for distribution outside the Services.

..../2

- 2 -

Clearances

5. *ok*
- a. You have directed that the Minister's Office be requested to clear Chapter 1 and Section 30 of the manual. A memo to effect this will be forwarded for your signature as soon as we have your direction on the other points raised in this memo which may have a bearing on the form of this submission.
 - b. As the manual was submitted by General Rowley directly to you we consider that no one but you should comment to ATOB on it. However, before you do discuss it with ATOB we consider that we should carry out the following:
 - (1) Review the manual for any minor inconsistencies in doctrine or concept.
 - (2) Review the manual for any possible errors in grammar, inconsistencies, etc.

agree

Any comments or observations would be forwarded to you for discussion with General Rowley together with your own observations. The thoroughness with which we can do this will depend on your decision as to the date on which we must issue this manual.

6. Format

With reference to your suggestion that the manual be produced as a single manual incorporating both French and English with the English text on one page and the French text on a facing page. We have studied this proposal before in DMT and the following points are made:

- ok*
- a. During the Second World War the Army Translation Bureau decided that this form was suitable only for manuals of from 1 to 50 pages. Manuals from 51 to 100 pages had English and French front to back, tumbled, and manuals from 100 pages were issued separately.
 - b. The size of the manual would be at least 570 pages which would make it a formidable document.
 - c. The cost of printing the manual would be almost doubled.

agree

For these reasons it is recommended that the manual be issued simultaneously in separate English and French editions in accordance with our terms of reference.

7. Title

- a. The present title was selected over the alternate suggested by ATOB "Field Service Manual". It is understood from ATOB that the VCDS made the final selection on the basis that the title, while not precise, was understood. *has not been in use for 20 years*
- b. Similar publications to the FSR are:
 - US FM 100-5 - Field Service Regulations - Operations
 - US FM 100-10 - Field Service Regulations - Administration
 - WD 9637 - The Land Battle
- c. The following alternatives are suggested for your direction:-
 - (1) Conduct of War on Land - General Rowley prefers this.
 - (2) The Conduct of Land Operations.
 - (3) The Principles of Land Operations - While this incorporates the stated aim of the manual, General Rowley did not like it as the definition of "principles" makes this title imprecise.

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- 3 -

8. Geneva Agreement

With reference to your direction that we consider including the Geneva Agreement as an Annex. This Agreement which runs to 150 printed pages has never been ratified by Parliament although Canada is a signatory. Further, Part 3 of the UK manual on military law requires some 440 pages to cover the agreement and to explain its application. In view of this it is recommended that:

- a. The Agreement not be included in the FSR.
- b. Consideration be given to issuing a Canadian edition of Part 3 of the UK manual on military law "The Law of War". Mention of the UK manual would of course be deleted from the FSR.

9. Preface

As discussed with you the manual will include a Preface, an outline of which you will provide.

10. Staff Duties in the Field

You questioned the reference to Staff Duties in the Field. As far as we can determine the rewrite of Staff Duties in the Field will not affect any reference to that manual in the FSR. It is therefore recommended that those references be left in.

11. Binding

Our present policy is to issue manuals in a looseleaf form which allows for easy amendment. It has been our view that the FSR should not require amendment and therefore it could be issued in a bound edition. It has also been suggested that the manual should have a better cover than we normally use. Choices are:

- a. Bound with a good cover. Each cover costs \$1.65 for a total cost of \$5,000 for covers of 50,000.
- b. Looseleaf in a three-ring binder with imitation leather cover. Each cover costs \$3.24 for a total cost of \$90,000.
- c. Looseleaf with a better grade than current cover. Each cover costs 70¢ for a total cost of \$21,000.
- d. Looseleaf with normal window-type cover for a total cost of \$2,900.

It would appear that the better grade pressboard cover (c above) is a reasonable compromise. May we have your views.

(W.A. Milroy)
Colonel

Director General of Operational Training