

*Col. H. Smith*

**TACTICAL NOTES  
AND  
REFERENCE DATA**



Published:—  
For instructional purposes only.

**MARINE CORPS SCHOOLS  
QUANTICO, VIRGINIA**







**MARINE CORPS SCHOOLS**  
**MARINE BARRACKS, QUANTICO, VIRGINIA**

**TACTICAL NOTES AND REFERENCE DATA**

CONTENTS:

	Page
Section I. Principles of War .....	1—2
II. Deployment for Attack .....Part 1.....	3—13
III. Deployment for Attack .....Part 2.....	14—17
IV. Location of Attack or Defense .....	18—22
V. Forms of Attack .....	23
VI. Counterattack .....	24—26
VII. Troop Leading .....	27—36
VIII. Siting of Defensive Position .....	37
IX. Flank Guards .....	38
X. Daylight Withdrawal (Diagram) .....	39
XI. Night Withdrawal (Diagram) .....	40
XII. Outpost (Diagram) .....	41
XIII. Defense (Diagram) .....	42
XIV. F-3 Data .....	43—47
XV. Logistical Data .....	48—55
XVI. Staff Functions .....	56—57
XVII. Type Decisions .....	58—59
XVIII. Effective Ranges .....	60
XIX. Sunrise and Sunset Table .....	61
XX. Conventional Signs .....	62—65
XXI. Abbreviations .....	66—73
XXII. Abbreviated Titles .....	74—75
XXIII. Nomenclature for Naval Vessels .....	76—78
XXIV. March Tables and Graphs .....	79—84
XXV. Glossary .....	85—96



## SECTION I

### A BRIEF EXPLANATION OF THE PRINCIPLES OF WAR

1. Principles of War.—a. The War Department of the United States announced some years ago the nine fundamental principles of War. These principles have been deduced from the study of military history, the records of which show that the great commanders have ever been guided by them and that success or failure in military operations has depended upon the extent and manner of their application.

b. The principles of war are:

- (1) The Principle of the Objective.
- (2) The Principle of the Offensive.
- (3) The Principle of Mass.
- (4) The Principle of the Economy of Force.
- (5) The Principle of Movement.
- (6) The Principles of Surprise.
- (7) The Principle of Security.
- (8) The Principle of Simplicity.
- (9) The Principle of Coördination.

c. The principles are basic and immutable. They are not subject to exception. Their application varies with the situation, the factors of which are the task, time, space, terrain, weather, and relative strength. The physical and moral factors such as numbers, equipment, supply, racial characteristics, training, discipline, and morale, also must be taken into consideration. The proper application of these principles constitute the true measure of military art.

2. Discussion.—a. The principle of the OBJECTIVE.—The purpose of a military operation is the attainment of the objective assigned a designated force. If none has been assigned select that which should be forthwith destroyed, secured, or denied to the enemy in order to accomplish your task; and upon which you must therefore exert military force. This objective constitutes the guide for the interpretation of orders, for the formation of decisions, and for the employment of the means available. The nation, its military forces, and each element of the latter have their objective.

b. The principle of the OFFENSIVE.—Offensive action is the only means by which a decision is gained. When successful, the offensive brings victory, while the defensive can only avoid defeat. The only effective way to wage war is to act on the offensive for the purpose of delivering a main blow in a decisive direction. The offensive increases the effectiveness of a force adopting it, and it raises morale, permits concentration of efforts, and allows freedom of action. The defensive should be assumed only to assist offensive action elsewhere, to gain time, or to utilize advantages of terrain, so as to compensate for weakness. Although the offensive confers great advantages, these advantages can be utilized only when the means available are sufficient to provide reasonable

chances for success. Be aggressive in attitude, in spirit, and in action. Even in defense be aggressive and dangerous, thereby denying the advantages of the offensive to the enemy.

**The principle of MASS.**—The term mass as used here means combat power. Numbers, weapons, tactical skill, fighting ability, mobility, resolution, discipline, morale, and leadership all contribute to this power. Success in war is attained by the concentration of mass in a main effort giving a balance of power in your favor at the proper time and place for the accomplishment of a definite purpose.

**d. The principle of ECONOMY OF FORCE.**—The application of the principle of economy of force is the means by which the mass to be employed in a main effort is obtained. The time and place of the main effort having been determined, men and means are conserved by reducing their employment in other directions to the minimum consistent with safety.

**e. The principle of MOVEMENT.**—The term movement as here employed means the maneuver of combat elements.

In the offensive this principle is used to bring mass to close grips with the enemy in order to secure decisive results or to place it where it can attack with advantage.

In the defensive the principle is used to avoid or parry a hostile blow, or place mass where it can counter-attack with advantage.

**f. The principle of SURPRISE.**—Surprise in some form is essential in order to obtain the maximum effect with the minimum loss. It may take the form of time, place, direction, force, tactics, or weapons, secrecy, rapidity, and preparation are the main factors.

**g. The principle of SECURITY.**—Security embraces all measures taken to guard against observation and surprise, to insure against effective hostile interference with operations, and to gain and maintain the power of free action.

**h. The principle of SIMPLICITY.**—Simplicity is a relative term. As used here it means that military plans should be as simple as the situation permits and should not provide for complicated movements, that orders should be direct and free from contingencies, that frequent changes of plan are to be avoided, and that unity of command is to be observed.

**i. The principle of COOPERATION.**—By coöperation is meant the working together towards the accomplishment of a common mission, of all military persons, i.e., TEAMWORK. Before it can be obtained, thorough coördination must be secured. This principle applies to everything that is done in the military service.

**3. Application.**—**a.** These nine principles comprise the whole art of war. Their application to the preparation for war and the direction of war is called strategy. Their application in specific battles and operations is called tactics.

**b.** These principles are few and may be learned in a short time, but a whole lifetime can be spent in the study of their application in war without exhausting the possibilities of the art.

## SECTION II

(Reprint from The Infantry School, Fort Benning, Ga.)

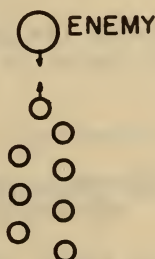
### TACTICS

#### DEPLOYING FOR ATTACK

##### I

#### WHY A COMMAND DEPLOYS TO FIGHT

1. a. **Situation.**—A rifle squad is marching in single file toward the enemy, as indicated below. Suddenly fire opens on the squad from the front.

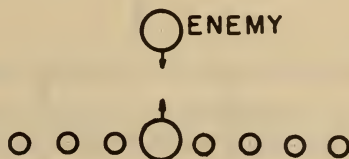


R. D. 1441-1

b. **Requirement.**—Is the squad in a suitable formation for fighting to the front? Why?

(Solutions to this and following requirements and questions are contained in Section III.)

2. a. **Situation.**—

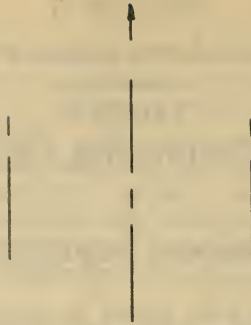


R. D. 1441-1

A squad in line of skirmishers is advancing toward the enemy as indicated above. Fire is received from the front.

b. **Requirement.**—Is the squad in a suitable formation for fighting in this situation?

3. a. **Situation.**—You command a force of all arms marching in one column with a fraction of the command in front and small security detachments on the flank, as follows:



R. D. 1451

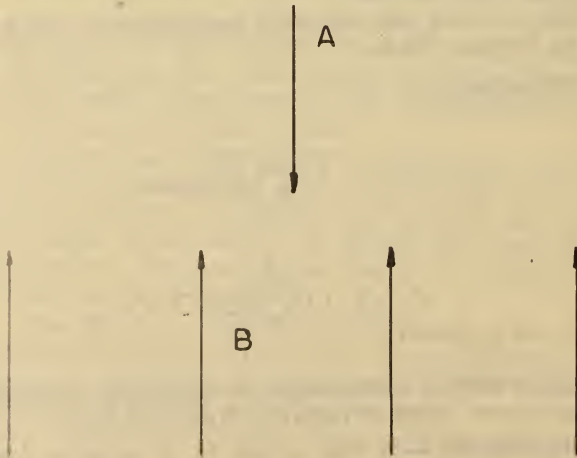
b. Requirement.—Is this force suitably disposed for combat to the front? Why?

4. Question.—Considering the command as a whole, what do you consider the primary reason for deploying it prior to launching an attack?

## II

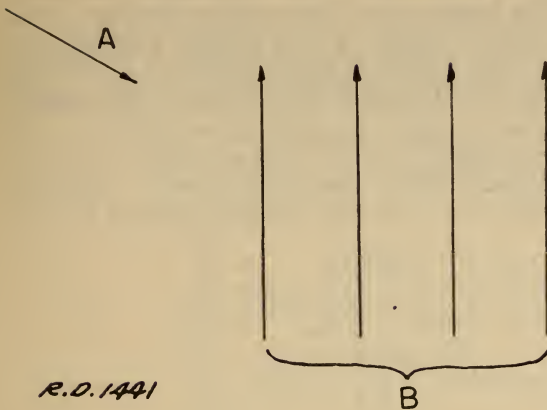
### WHEN TO START DEPLOYMENT AND WHERE TO DEPLOY

5. a. Situation.—Two hostile forces of approximately equal strength and mobility are moving toward each other as indicated below. Contact is imminent:



b. Requirement.—Which force has the advantage? Why?

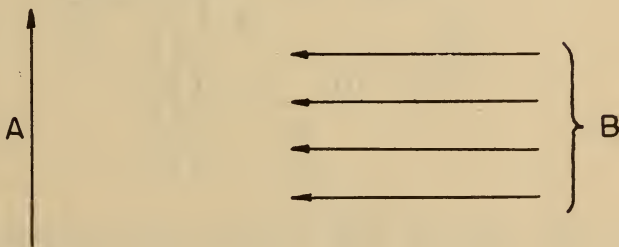
6. a. Situation.—The forces are moving as indicated below:



R.D. 1441

b. Requirement.—Which force has the advantage? Why?

7. a. Situation.—The forces are moving as indicated below but B is only three-fourths as strong as A:



R.D. 1441

b. Requirement.—Which force has the advantage? Why?

8. Question.—Under what circumstances is the commander justified in deploying for attack before contact is gained?

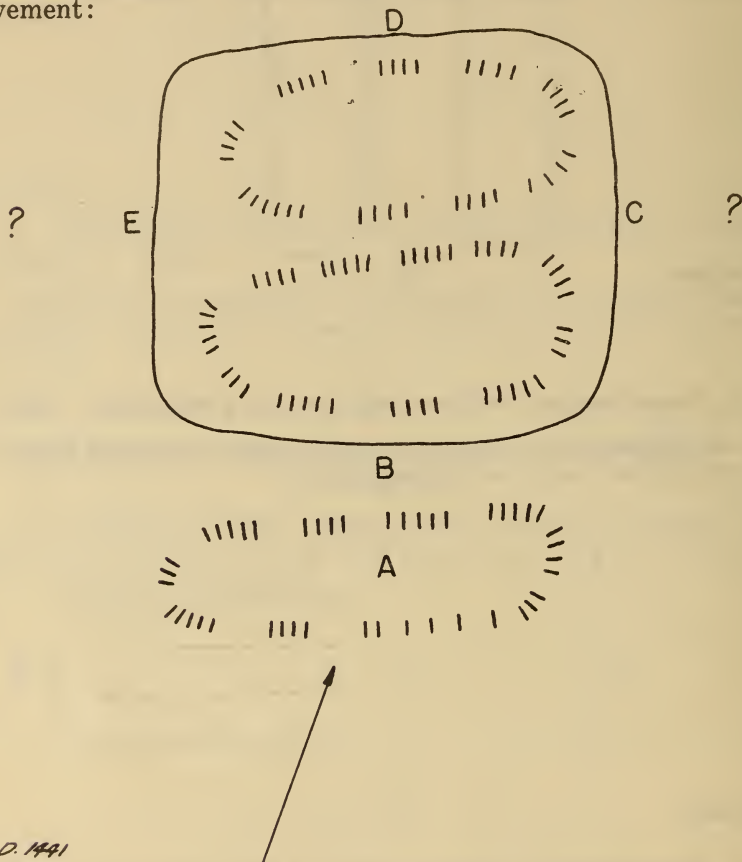
9. Question.—What determines the extent to which forces may advisably be deployed prior to contact?

10. Question.—What are the advantages of moving troops on roads rather than cross-country?

11. Question.—What are the advantages of moving in one column?

12. Question.—What principal disadvantages has a one-column?

13. a. **Situation.**—You command a force of all arms marching in one column as indicated below on an aggressive mission. You determine the probable area of contact with a similar hostile force to be the area B-C-D-E-. The situation to the right of C and the left of E is obscure. There are no serious obstacles to cross-country movement:

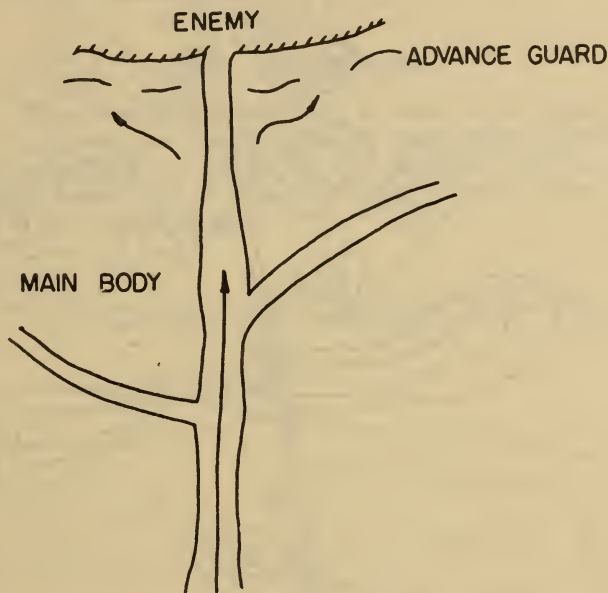


b. **Requirement.**—Will you continue forward in one column until contact is gained, partially deploy, or completely deploy before reaching this area?

14. a. Usually when a force of all arms marches on a road, not in contact with the enemy, the artillery, conforms to the infantry rate of march. When it is desired to move the artillery forward quickly, it is given road priority. It then moves at its own rate and the infantry marches so as to clear the road for it.

b. **Question.**—Having deployed before contact is gained, will the artillery go forward in column on the roads or will it echelon forward from one firing position to another, using where practicable roads on which it has priority? Why?

15. a. **Situation.**—You command a force of all arms which was marching in one column as indicated below on an aggressive mission. You were at the head of the main body. Marching hostile infantry was unexpectedly encountered by your leading elements. You promptly went forward to the advance guard. After 20 minutes, you estimate that you are opposed by a force of considerable strength. Your main body is still moving forward on the road. Hostile artillery, if any, has not yet come into action:



R.D. 1441

b. **Requirement.**—When will you start to deploy your main body? Why?

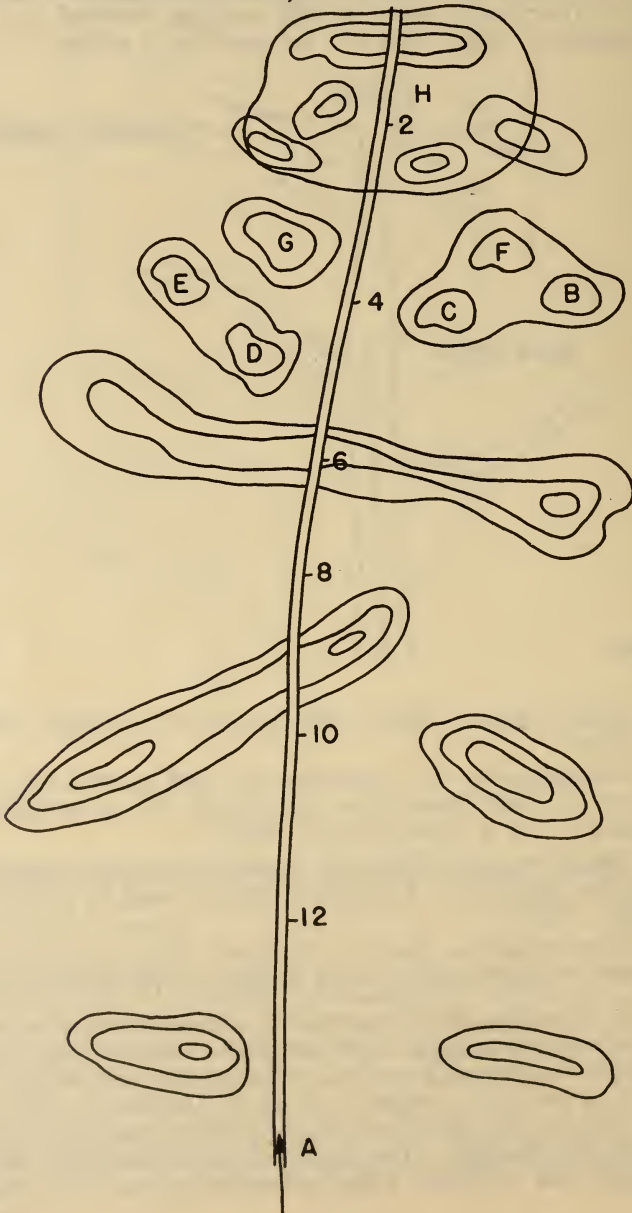
c. **Requirement.**—In this situation and at this time will you deploy for any particular form of attack, as an envelopment of either flank or for a penetration? Why?

d. **Requirement.**—Will you deploy your main body to the right, to the left, or on both sides of the road in which you are marching? Why?

e. **Requirement.**—How far forward will you make the initial deployment of your infantry with respect to the advance guard?

16. a. **Situation.**—You command a force of all arms marching in one column on an aggressive mission. When your leading infantry element reached A you had reliable information that a hostile force was entrenching areas B, C, D, F, G, and H. The weather is clear and for the past two hours hostile observation has been busy over your column. You have not yet come under hostile fire. The enemy has machine guns, effective range 4500 yards, and

medium artillery, effective range 11,000 yards. Your reconnaissance agencies report no other hostile forces within a day's march. You decide to attack today the hostile force in your front. Terrain open, no serious obstacles to a deployed advance; road is a main highway, paved. It is two hours after daylight. (The figures on the right of the road are miles.)



b. Requirement.—Where will you make the initial deployment of your main body? Why?

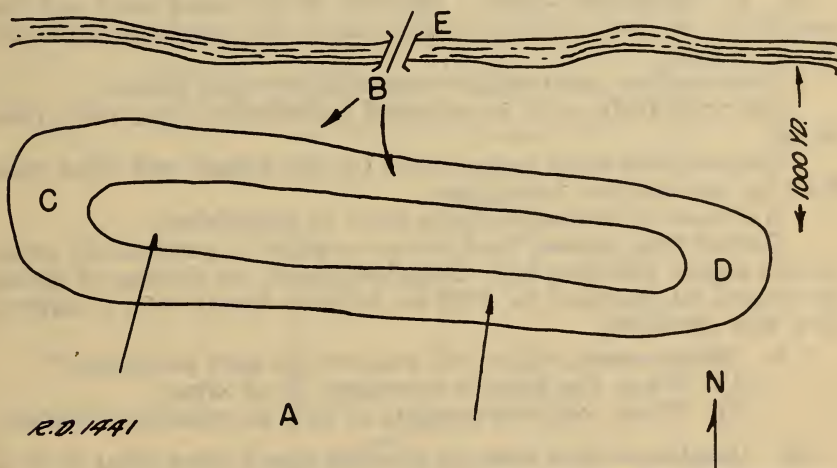
17. a. Situation.—Same, except you have air superiority, you have large, well-trained, motorized AA unit, and the ceiling is low. Two hostile observation planes have been brought down since daylight. Your ground reconnaissance agencies have superiority over those of the enemy.

b. Requirement.—Where will you make the initial deployment of your main body? Why?

### III.

#### HOW TO DEPLOY

18. a. Situation.—You command a force of all arms which is marching north in two columns on an aggressive mission. The ridge C-D commands the bridge E. At daylight you unexpectedly meet a superior force of all arms marching south in one column as indicated. The terrain in open:



b. Requirement.—When and how will you deploy your main body? Why?

19. Question.—You command a force of all arms. You contact a hostile force and decide to make a coordinated attack. You estimate that it will take three and one-half hours from the time you start to issue your orders until the last assault battalion can cross the line of departure; and that it will take two hours from the time you start to issue your orders for all commanders to get their orders issued. When can the attack be launched?

20. Question.—Your command marching in several columns makes contact and you decide to make a coordinated attack. You estimate it will take one and one-half hours from the time you start

to issue your orders until the last assault battalion can cross the line of departure; and that it will take two hours from the time you start to issue your orders for all commanders to get their orders issued. When can the attack be launched?

21. a. **Situation.**—You command a force of all arms, marching in one column. Rifle units are equipped as follows:

Advance guard: Haversacks (pack rolls being transported)  
160 rounds per rifleman, 600 rounds per auto-rifleman.  
(30 magazines carried in each squad.)

Main body: full packs, each rifleman has 40 rounds, each auto-rifleman 60 rounds.

The weather is hot.

You meet a hostile force and decide to make a coördinated attack.

b. **Requirement.**—What will you do about the pack rolls of the main body. Why? What will you do about getting additional ammunition to the rifle units of the main body? Why? When and how will you have these two operations performed?

22. a. **Situation.**—Same. Between initial deployment and the completion of the launching of the attack, the command must get ready to fight.

Commanders must make reconnaissance and plans.

The main body must be extended laterally and rear units closed up.

Commanders must issue orders for the attack and units must take up appropriate formations.

A system of communications must be established.

During this process the force as a whole is particularly sensitive to hostile reactions and, unless protected, its chances of defeat or serious interference by even an inferior enemy who is aggressive, are excellent.

b. **Requirement.**—How will you provide such protection?

(1) When the force is composed of all arms;

(2) When the force consists of only an infantry battalion?

23. **Question.**—How does the advance guard know what to do in any particular situation?

24. **Question.**—Who will designate the artillery positions and assign the artillery missions? Why?

25. **Question.**—Will you designate assembly positions for your artillery? Why?

26. **Question.**—During the advance after the initial deployment out of contact with the enemy, how will you control the forward movement of your columns?

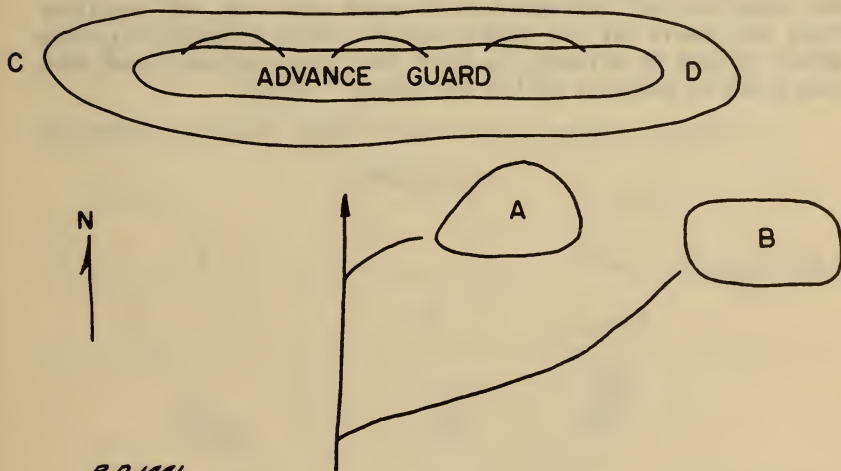
27. **Question.**—During the advance, how can you prevent one column or more than one column from becoming committed to action prematurely?

28. **Question.**—Assume that you are going to issue complete oral orders, as distinguished from fragmentary oral orders, for a coordinated attack. In general, when, where, and to whom will you issue them?

29. **Question.**—While your command is deploying after contact, what, in general, will be your chief sources of information of the enemy?

30. **Question.**—Will you wait until you have obtained complete information of the enemy before formulating your plan of attack? Why?

31. a. **Situation.**—The advance guard of a command marching north as indicated below met a marching hostile force on the northern slopes of ridge C-D. The force commander ordered the advance guard to hold ridge C-D and cover the deployment of the main body. One infantry battalion was ordered to assemble at A, another at B. The terrain is broken and partly wooded:



b. **Requirement.**—What security measures aside from adopting suitable formations to reduce casualties will the battalion take in moving to assembly area A.? Why?

c. **Requirement.**—\_\_\_\_\_ to assembly area B? Why?

d. **Requirement.**—Should the commander or his staff select assembly areas for the infantry units? Why?

e. **Requirement.**—What determines the exact route and formation of a battalion while moving to assembly area? While moving from assembly area to line of departure?

32. a. **Situation.**—Same. The battalion ordered to "A" arrived there without incident. The battalion commander has not yet been directed to report to the regimental commander for orders.

b. **Requirement.**—What should the battalion commander do now?

33. a. **Situation.**—Same. Before arriving at the assembly area, the battalion commander was ordered to report for orders.

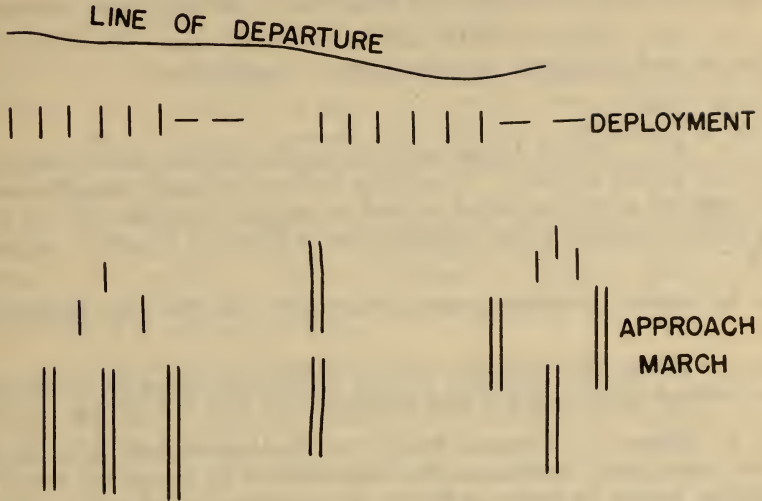
b. **Requirement.**—Who will perform the duties which constitute an answer to the preceding requirements?

c. **Requirement.**—What motor transportation is available for the use of the battalion commander?

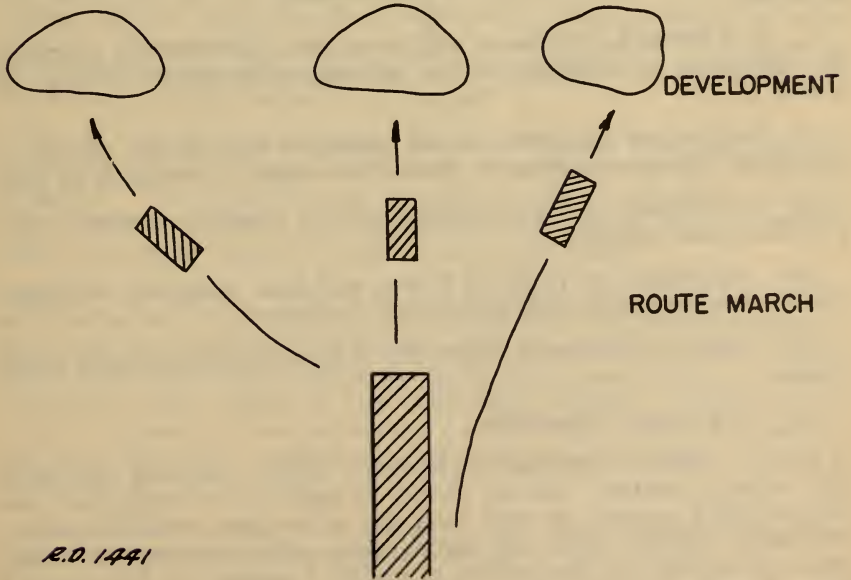
d. **Requirement.**—Who will the battalion commander take with him when he leaves the battalion to report for orders? Why?

e. **Requirement.**—Assuming that the battalion commander has not taken his unit commanders forward with him, will he, after receiving his orders for the attack, return to the battalion to issue his attack orders or arrange to have unit commanders meet him at some point in advance of the battalion? Why?

33. Entry into Combat.—



ASSEMBLY AREAS—DROP PACK ROLLS, ISSUE EXTRA AMMUNITION



R.O. 1441

## SECTION III

### SOLUTIONS

(Numbers refer to paragraph numbers in preceding sections.)

1. b. No. Because only one or two men can fire from this formation and the squad is vulnerable to hostile fire.

2. b. Yes.

3. b. No. It can bring only a small fraction of its fire and maneuver power to bear. To employ the entire force simultaneously the column must be closed up and extended laterally. To do this for a squad requires a few seconds; for a force of all arms; several hours.

4. In order to employ more effectively its fire and maneuver power.

5. b. Force B. Because it can bring its fire and maneuver power to bear more quickly and because it is less vulnerable, to fire.

6. b. Force A. Because force B will, other things being equal, require more time to change its dispositions to bring its fire and maneuver power to bear on Force A than this force will to bring its full power to bear on Force B. Furthermore, if Force A acts aggressively, there is a strong probability that it will overwhelm Force B and prevent the latter from maneuvering or at least punish it severely.

7. b. Force B. Force A will have great difficulty in changing formation so as to bring its fire and maneuver power to bear on Force B.

8. Only when he knows or can estimate with a fair degree of certainty, the general area in which the enemy forces will be met.

9. The extent of his knowledge of the enemy's strength, dispositions, and intentions.

10. Movement on roads is faster and less fatiguing, direction is more easily maintained and control is better.

11. Control is better and changes of direction can be more easily made.

12. It is more vulnerable.

13. b. Effect a partial deployment before reaching the probable area of contact. If the enemy is partially or completely deployed and I am not, he will have the advantage initially and can seriously interfere with my deployment. Not knowing the exact point of contact nor the enemy strength, I cannot yet formulate a plan of attack and therefore cannot deploy completely. In addition, complete deployment would result in a comparatively rigid forma-

tion and during a long advance there are great chances that some units will lose direction; also the difficulties of control will be greatly increased.

14. b. The artillery will echelon forward from one firing position to another, using, where practicable, roads on which it has priority. In this way the artillery will constantly be well forward and ready to go into action promptly.

15. b. Immediately. To adopt less vulnerable formation of artillery fire; to be able to meet the hostile force without delay.

c. No. I do not know as yet whether I will attack or defend. I know nothing of the composition, strength and dispositions of the hostile main forces.

d. Generally in depth on both sides. Because the situation is obscure. Being deployed on both sides of the road, I can shift the mass to the right or left as required, or make a penetration, if necessary, astride the road; or can assume march formation on the road with a minimum of delay.

e. The distance depends largely on the terrain and the size of the force. Effective range of hostile artillery will be a factor. The larger the force and the flatter the terrain, the farther back it should deploy initially. Every endeavor should be made to deploy into an area not under ground observation from points held or likely to be held by the enemy, and the area selected should afford concealment from aerial observation.

16. b. Under cover of the high ground in the vicinity of 10. The rear limit of the danger zone for hostile machine gun fire in the hostile outpost area, B—C—D—E—F—G, lies generally between 8 and 6. The rear limit of the danger zone for hostile medium artillery fires lies generally between the same figures. Hence deployment should begin before 8 is reached.

17. b. Same, in this case. Do not conclude, however, that deployment should always be beyond the effective range of hostile weapons. The necessity for attacking with a minimum of delay may make it desirable to take losses from hostile fire in order to gain the greater speed of movement along roads.

18. b. At once. Get all of my artillery into action as quickly as possible and feed infantry battalions into the line as rapidly as they can be gotten up. If I can seize ridge C-D, I will probably force the enemy back across the bridge and compel him to deploy his main forces north of the unfordable stream. Being in two columns, I can put two battalions into the line while he is putting one in. This is a case where piecemeal commitment to action is justified.

19. In three and one-half hours. The time required for movement is greater and therefore governs.

20. In two hours. The time required to issue orders is greater and governs in this case.

21. b. Have the rolls dropped before the attack since they are not essential to the soldier while fighting and the weight reduces his mobility. Have the extra ammunition carried in the combat vehicles issued to infantry units since the ammunition carried by the men is insufficient. Usually these operations will be carried out while the battalion is in assembly area although in special cases they might be done while the units are on the road.

22. b. (1) By employing the advance guard reinforced by artillery and perhaps some infantry to cover the front and by employing other security detachments to protect flanks and rear.

(2) By employing the advance guard reinforced, perhaps, by machine guns and the howitzer platoon to cover the front and security detachments to protect the flanks and rear.

23. Through an understanding of the functions of an advance guard; from any special instructions it may have received; and especially from specific instructions given by the force commander at the time of contact. The latter instructions are usually required in order that the advance guard is not committed to a line of action not in accordance with the plans for the main body.

24. The force commander designates the general areas and the missions for the artillery in order that it will be most suitably disposed to support the general plan of action.

25. No. It is more important that it get into action immediately to support the advance guard and cover the deployment of the main body even though minor changes in position must later be made.

26. When large forces are involved, by designating phase lines and zones of action. When only two columns, constant liaison and supervision will suffice to insure uniformity of advance. In small units a base unit may be designated and the rest directed to guide on it.

27. In large commands, by prescribing the maximum forces the column commanders may commit to action without further orders.

28. To subordinate commanders or their representatives and to certain members of my staff from a point from which at least part of the terrain to the front can be seen. Those concerned will be assembled so that orders can be issued as soon as the plan of attack is formulated.

29. Security detachments supplemented by purely reconnaissance agencies as motor patrols, dismounted patrols and observation aviation.

30. No. It is seldom possible to obtain such information and delay in waiting for it gives the initiative to the enemy.

31. b. Put out a small advance guard and patrols to the flanks. In a meeting engagement, all units should protect themselves when moving to assembly areas, while in them, and while moving to the line of departure. That the advance guard has been ordered to cover the deployment is no reason for failure to provide local protection.

c. Same.

d. When time permits, the force commander, since the location of assembly areas should conform to the general plan of action.

e. The possibility of enemy observation and fire. In general, the greater the chances of being observed, and fired on, the more extended the formation should be.

32. b. Report the arrival of his battalion to his immediate commander. Provide local protection. Designate assembly areas for the companies. Make arrangements for taking care of pack rolls and issuing extra ammunition. Begin reconnaissance for routes forward.

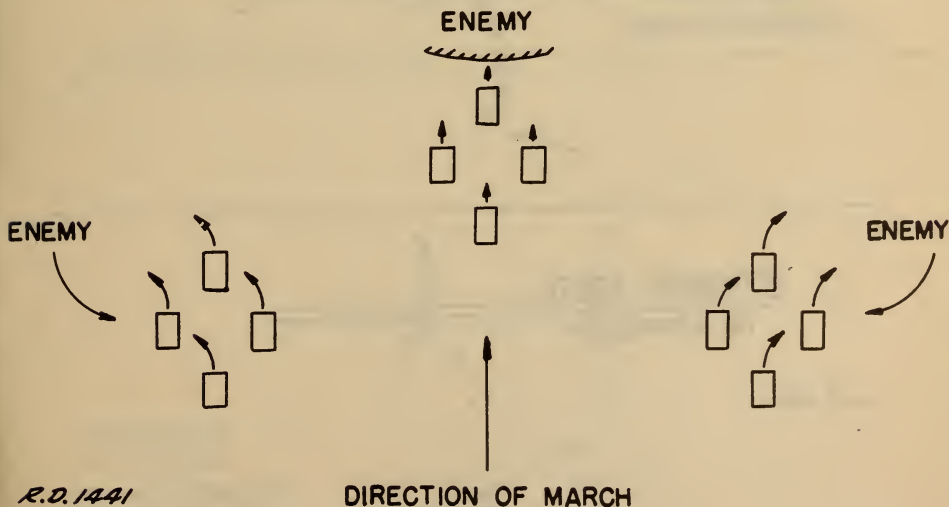
33. b. The battalion executive.

c. One cross-country car. (Organization Table 8W.)

d. No definite rule, but usually Bn-2 or Bn-3, Machine Gun Company Commander, sergeant major, runners.

e. He will have them meet him at a designated point in front of the battalion. This gives him time to reconnoiter and make plans while they are enroute, allows him to issue his orders on the ground without delay, gives the subordinate commanders time to reconnoiter and make plans while their subordinates are coming forward.

NAPOLEON'S "lozenge" formation for moving large forces, ready for employment in any direction.



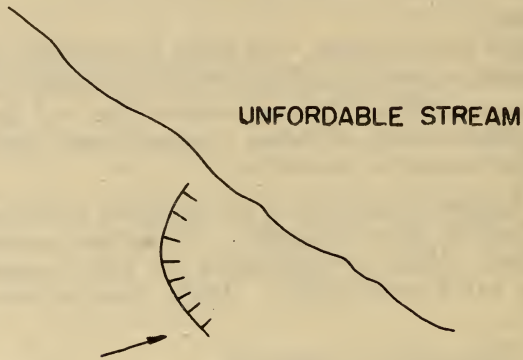
SECTION IV

TACTICS

ATTACK—Which Flank to Envelop.

DEFENSE—Which Flank is most vulnerable.

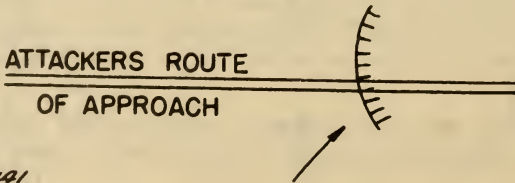
1.



2.

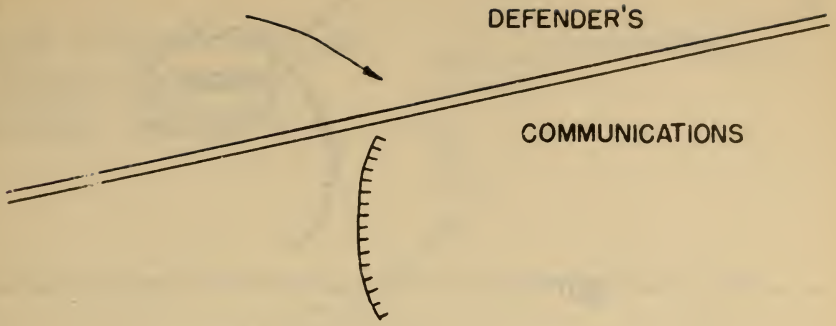


3.



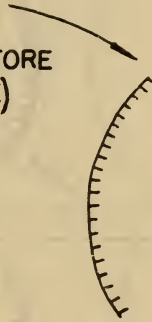
R.D. 1491

4.



5.

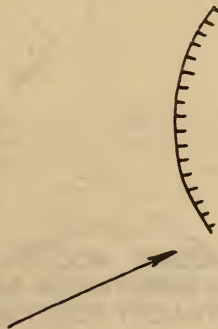
(MAY ENVELOP OTHER  
FLANK IF POSSIBLE BEFORE  
REINFORCEMENTS ARRIVE)



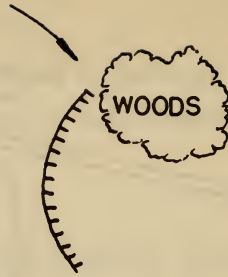
DEFENDER'S  
REINFORCEMENTS

6.

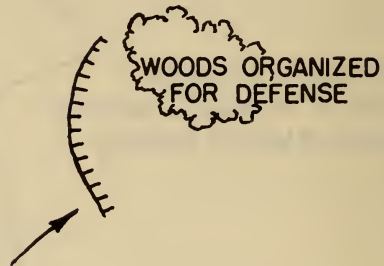
ATTACKER'S  
REINFORCEMENTS



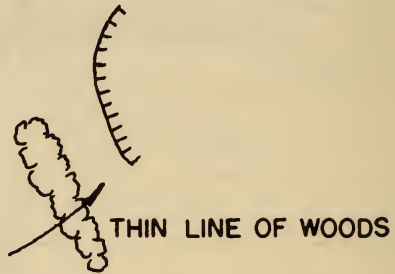
7.



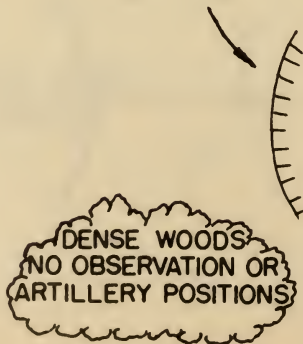
- BUT -



8.

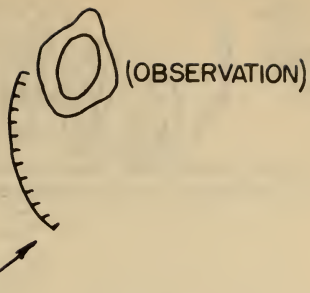


- BUT -

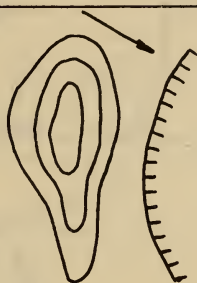


R.D. 1441

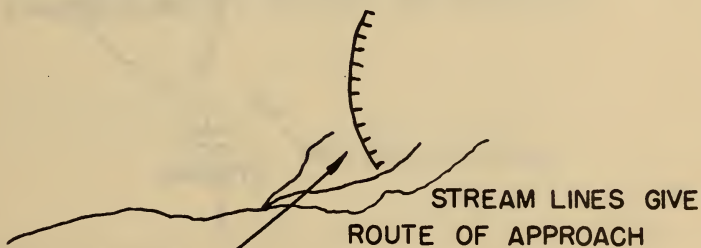
9.  
UNLESS ATTACKER'S ARTILLERY  
IS STRONG ENOUGH TO  
NEUTRALIZE OBSERVATION



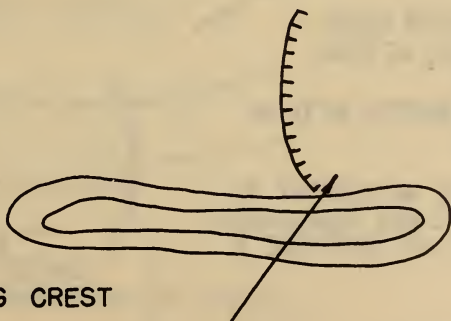
10.



11.



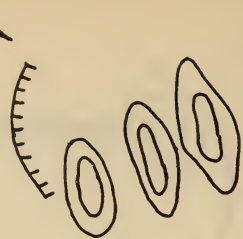
12.



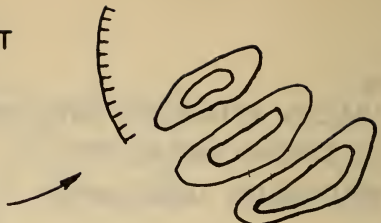
DOMINATING CREST

*R.D. 1441*

13.  
GOOD FOR  
DELAYING  
ACTION



BUT



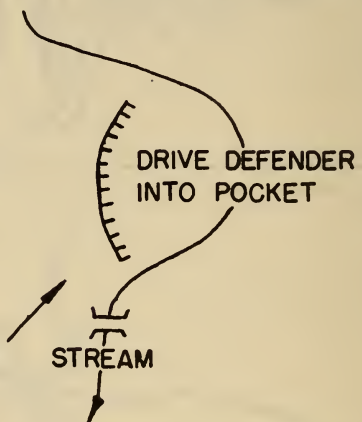
14.



ATTACKER'S  
OBJECTIVE



15.



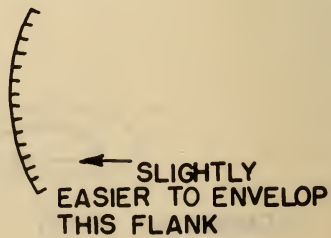
DRIVE DEFENDER  
INTO POCKET

STREAM

ATTACKER ARRIVING  
FROM THIS DIRECTION

TIME IS THE FACTOR HERE  
IF TIME IS LIMITED, ATTACK  
NORTH FLANK;  
IF TIME IS NOT LIMITED, ATTACK  
SOUTH FLANK.

SURPRISE: WOULD MOVEMENT TO  
ENVELOP SOUTH FLANK ADVERSELY  
AFFECT ELEMENT OF SURPRISE ?

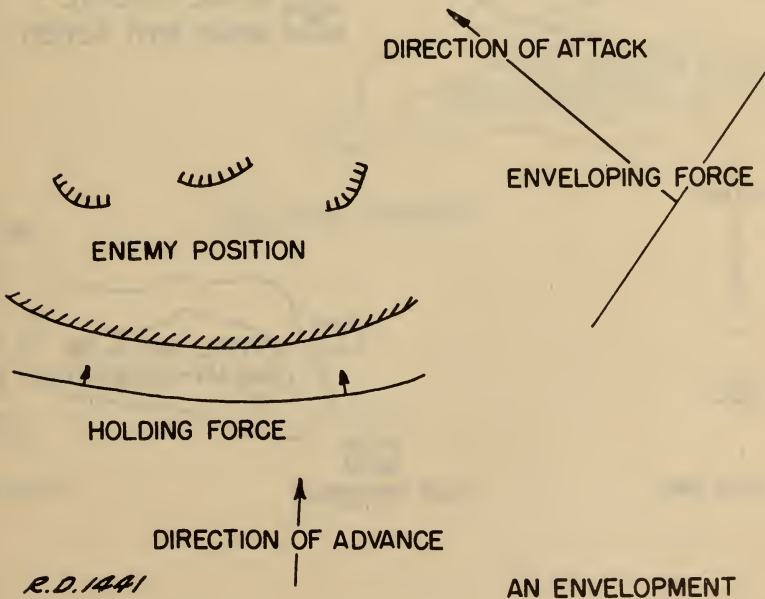
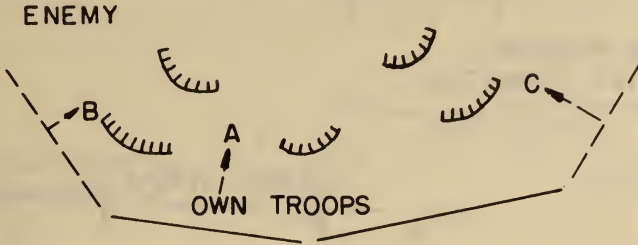


SLIGHTLY  
EASIER TO ENVELOP  
THIS FLANK

R.D. 1441

SECTION V  
TACTICS  
FORMS OF ATTACK

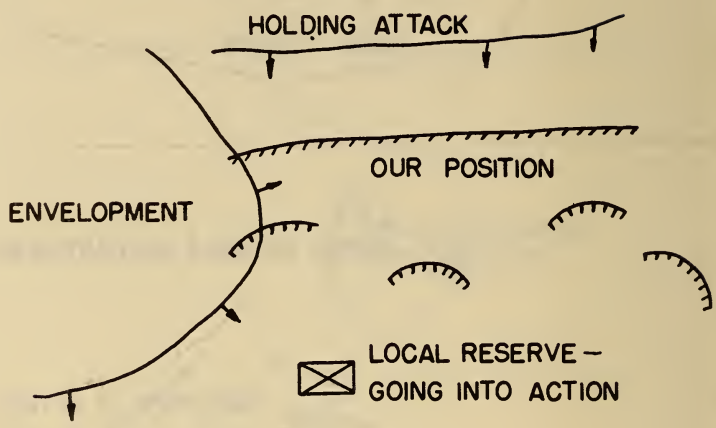
A—Penetration. B—Envelopment of enemy's right flank.  
C—Envelopment of enemy's left flank. Occasionally both flanks may be enveloped simultaneously—a double envelopment.



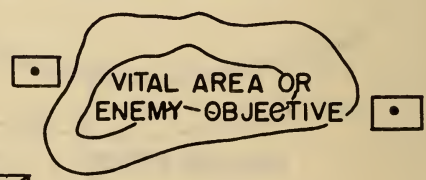
R.D. 1441

SECTION VI  
TACTICS  
COUNTERATTACK  
WHEN TO COUNTERATTACK

ENEMY RESERVE -  
NOT YET COMMITTED



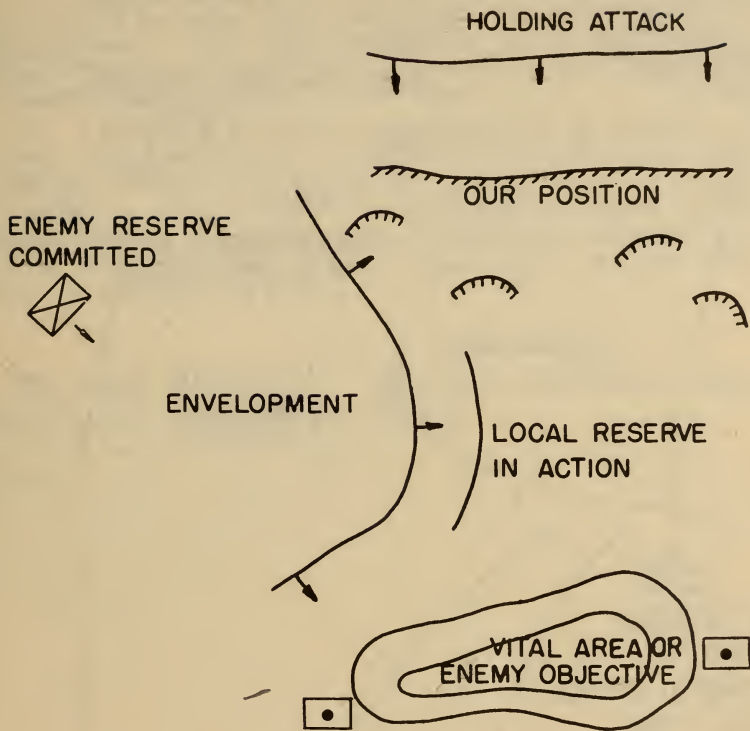
NOW  
?  
?  
?  
—  
NO




OUR RESERVE

*R.D. 1441*

# WHEN TO COUNTERATTACK



 OUR RESERVE

NOW

?  
?  
?  
-

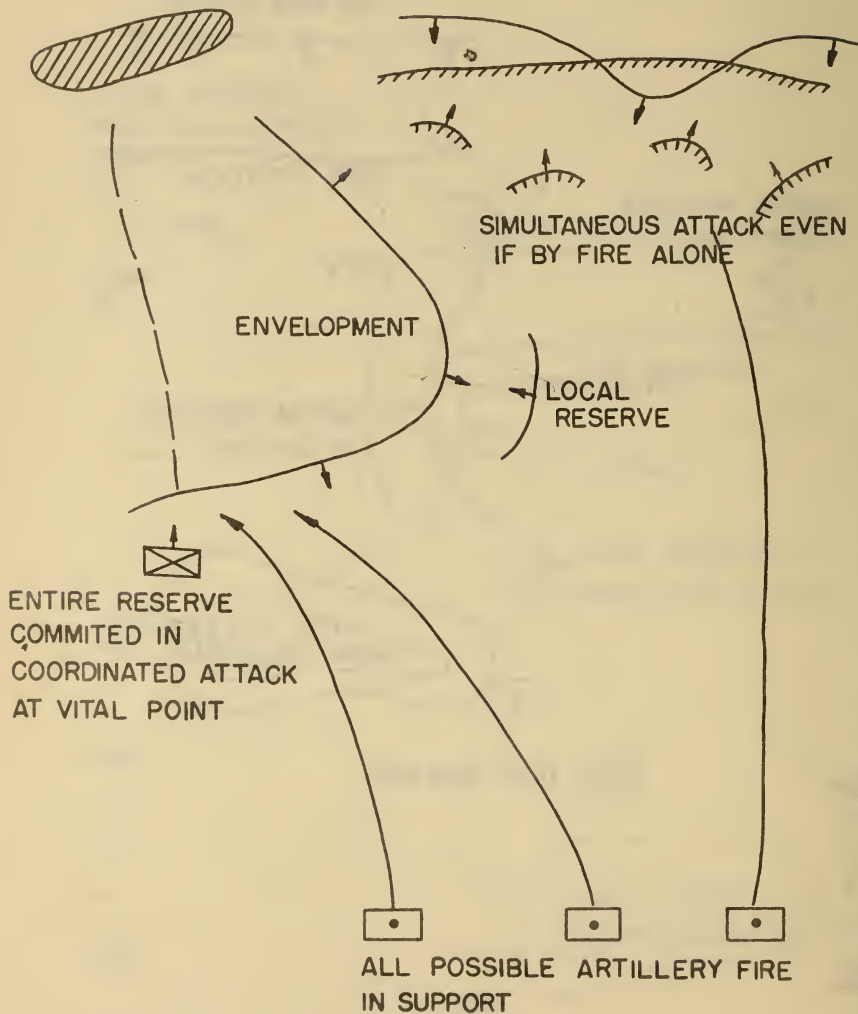
YES

R.D. 1441

# HOW TO COUNTERATTACK

LIMITED OBJECTIVE

HOLDING ATTACK




R.O. 1441

SECTION VII  
TACTICS  
TROOP LEADING

1. a. The IDEAL for troop leading: Continuity of action.

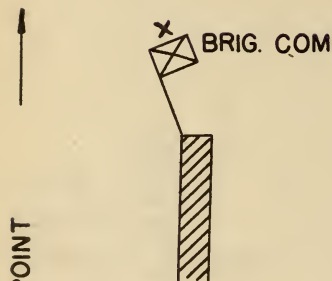
b. Usually troop movements require most time. Reconnaissance should be made, plans formulated, and orders issued during this movement. This is accomplished by forethought and by taking advantage of commanders' superior mobility through motor or animal transportation.

c. A simplified example is diagrammed in the following pages. It deals with a brigade in a meeting engagement followed by an attack, but the principles remain the same for any unit in any type of operation. Only infantry movements are shown, supporting units (as artillery or tanks) and administrative arrangements are omitted for simplicity. The situations shown are definitive and should be used only as guides.

(IN THESE DIAGRAMS  INDICATES POSITION OF COMMANDER; NOT THE COMMAND POST)

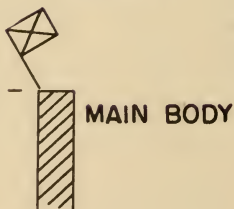
*R.D. 1441*

0900



7000 YDS TO POINT

BRIG EX



R.D. 1441

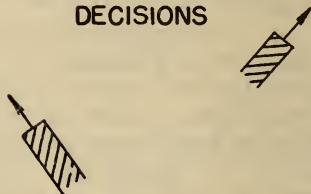
0915

ADVANCE GUARD

X

[Hatched rectangle with 'X' inside]

BRIG COM  
ARRIVES: ISSUES  
ORDER TO ADV GD  
COM; BEGINS RECONN-  
AISSANCE AND  
DECISIONS



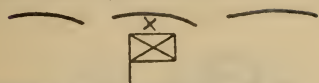
MTCL MSGR TO  
BRIG EX: "HAVE  
REGT COMS RE-  
PORT AT 0940  
AT (PLACE) FOR  
ORDERS. REGTS  
MOVE TO \_\_\_\_."

MAIN BODY

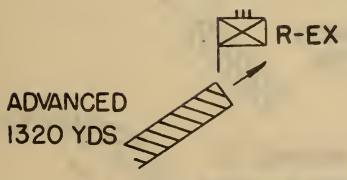
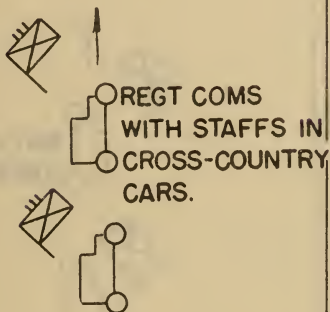
HAS ADVANCED  
1320 YDS ON  
ROAD.



ADVANCE GUARD



BRIG COM CONTINUES RECON., FORMULATES PLAN.



BRIGADE DEVELOPMENT



R.D. 1441

ADVANCE GUARD



BRIG COM BEGINS ISSUING ATTACK ORDER TO REGT COMS; WILL FINISH A 1000.



DEVELOPMENT CONTINUES



1000

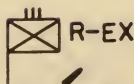
LINE OF DEPARTURE



REG COM BEGINS RECON.  
AND DECISIONS; WITH  
STAFF; R-2, R-3, MG & HOW OFF,  
SGT MAJ, MSGRS, ARTY LN O.



MTCL MSGR TO R-EX:  
"HAVE BN COMS REPORT  
AT 1025 AT \_\_\_\_\_ FOR  
ORDERS. BNS TO  
ASSEMBLY AREAS  
\_\_\_\_\_ AND \_\_\_\_\_."



ADVANCED 1320 YARDS

R. D. 1441

1015

L D



REGT COM CONTINUES  
RECON., FORMULATES  
PLAN.



BN COMS WITH  
STAFFS.



BN-EX

ADVANCED  
795 YDS.



BN-EX.

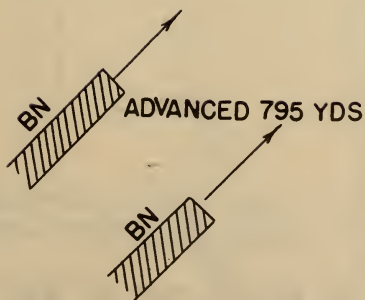
BNS MOVING TO  
ASSEMBLY AREAS  
(CROSS COUNTRY)

1030

L D



REGT COM BEGINS ISSUING  
ATTACK ORDER TO BN COMS;  
WILL FINISH AT 1045.

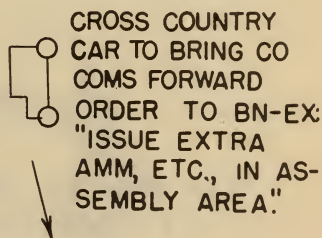


1045

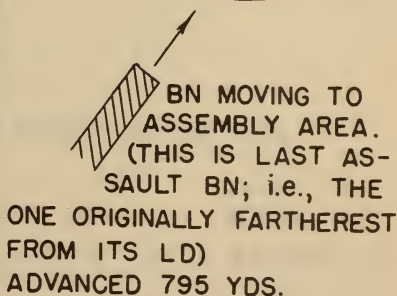
L D



BN COM BEGINS RECON AND  
DECISIONS WITH STAFF; BN-2  
BN-3, MG CO COM, SGT MAJ,  
MSGRS, ARTY LN O.



CROSS COUNTRY  
CAR TO BRING CO  
COMS FORWARD  
ORDER TO BN-EX:  
"ISSUE EXTRA  
AMM, ETC., IN AS-  
SEMBLY AREA."



1115

L D



BN COM BEGINS ISSUING AT-TACK ORDER; WILL FINISH AT 1130.



MTCL MSGR TO BN-EX: "MOVE BN AT 1130 TO CO AREAS AT \_\_\_\_ AND \_\_\_\_."



ADVANCED 795 YDS.

RD 1441

1130

L D

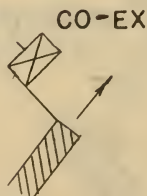


CO COM BEGINS RECON. AND DECISIONS.

RUNNER: TO GUIDE PLAT COMS TO CO COM.



1ST SGT: TO GUIDE CO TO POSITION IN REAR OF LD.



CO MOVING OUT OF ASSEMBLY AREA

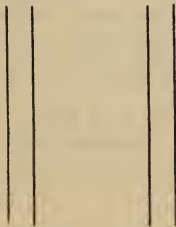
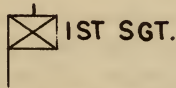
1150

1155

L D



CO COM ISSUES ORDER TO  
PLAT COMS; WILL FINISH  
AT 1155.



ADVANCED 1060 YDS  
FROM ASSEMBLY AREA

RD 1441

L D



PLAT COM BEGINS RECON.  
AND DECISIONS.

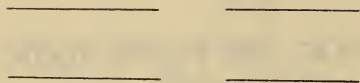


RUNNER: TO GUIDE PLAT  
TO POSITIONS ON LD



ADVANCED 265 YDS.

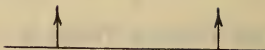
1210



PLAT ARRIVES ON LD. PLAT  
COM ISSUES ORDER.

ADVANCED 795 YDS

1215



ATTACK BEGINS - 3 HOURS  
AFTER BRIG COM BEGAN HIS  
RECONNAISSANCE. THERE  
HAS BEEN NO DELAY IN  
MOVEMENT OF LAST AS-  
SAULT UNIT TO LD.

Concurrently, in each unit, artillery, machine gun, and administrative agencies have been functioning according to orders of unit commanders.

2. You are directed to give your actions and orders at a certain time. This requires a statement in chronological order of the actions of and orders actually issued by the commander or staff officer you represent and includes the following where applicable:

Movements—where you go, means, route, and who accompanies;

Reconnaissance—how and where made, and object;

Visits of inspection—name places and units inspected and action taken;

Conferences held—with whom and action taken;

Actual orders issued giving exact words and stating how, when, where, and to whom issued.

### 3. A Check List.—

At the time you are required to state your actions and orders, consider:

What do you want to do—your general plan or what formation or action you are working toward.

What steps are necessary to accomplish this—immediate, subsequent.

Information—What should be transmitted to higher commanders, to lower commanders.

What do you require—direction of reconnaissance agencies, personal reconnaissance.

Coöperation with other commanders.

Movement of your subordinate commanders—where are they now, where do you want them at what time, and why (as, to issue orders).

Troop movements—where are troops now, where do you want them, and when. Are any changes required in present orders.

Time required for movement of subordinate commanders and troops, and for transmitting your orders to them.

Administrative arrangements immediately and subsequently necessary.

Means at your disposal—staff officers, messengers, transportation, communication; how to use them most economically.

Then DECIDE: The actions you must perform and the orders you must issue to accomplish the necessary results.

NOTE: Apply only such parts of the above check list as are applicable to the situation.

#### 4. Don'ts.—

a. DON'T forget **time** and **space**. "Under battle conditions a large factor of safety must be included in all time and space calculations. Incorrect estimates of the amount of time required for the distribution of orders, for the movement of units to new locations, and for the necessary reconnaissances of subordinates, frequently lead to tactical failure"; Infantry in Battle.

b. DON'T issue orders beyond immediate requirements. You should plan ahead but don't issue orders which, if in similar form on the drill field, would result in a command like; "1. Squads right; when you get to the corner column left, and after fifty paces eyes right. 2. MARCH". **Think** for the future; **Do** for the present. This does not mean of course that you are not to set in motion a chain of events which, followed by subsequent orders, will result in a condition which you foresee will be necessary; or that you cannot give a staff officer tentative orders or a troop commander warning orders for future action.

c. DON'T issue orders which will require later change or contradiction. Make up your mind as rapidly as possible but don't anticipate a decision you may make. On the other hand, remember you must keep things moving even though your knowledge of the situation is incomplete and counterorders may be required as the situation develops and you receive more information. Distinguish between counterorders which are the result of vacillation and inefficiency and those necessary ones which result from the obscurity of war.

d. DON'T lose control.

e. DON'T lose staff officers and messengers. When you send them to do something, tell them when and where to report back.

#### 5. Remember.—

Definite, decisive action, consistently applied, efficiently directed, and forcefully executed will succeed even though the plan of action may be faulty; hedging, straddling, fumbling toward a perfect plan will result in failure.

"No matter how complete, how accurate, and how correctly drawn up an order may be, it fails of its purpose if it does not arrive in time."

"In most cases a poor decision will be better than no decision at all."

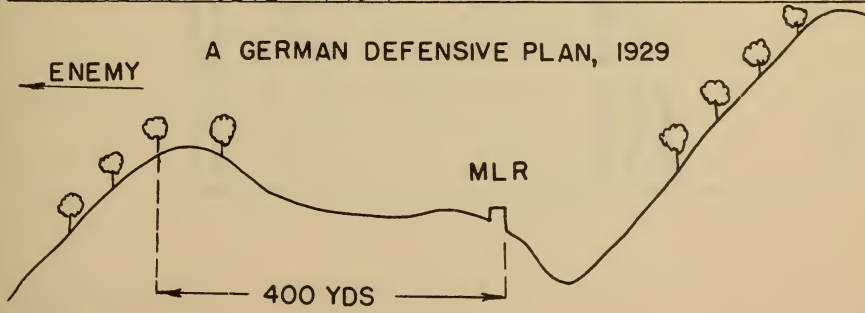
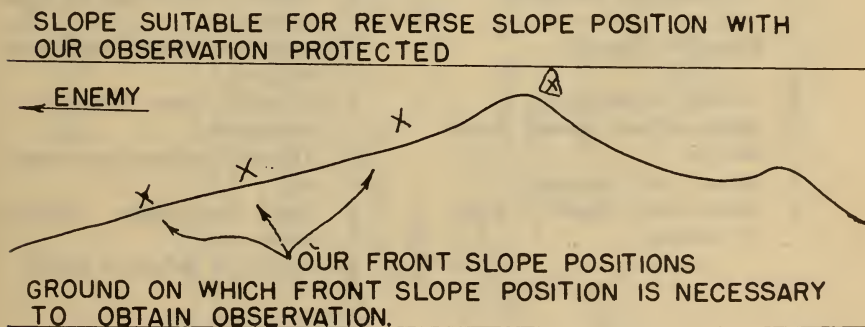
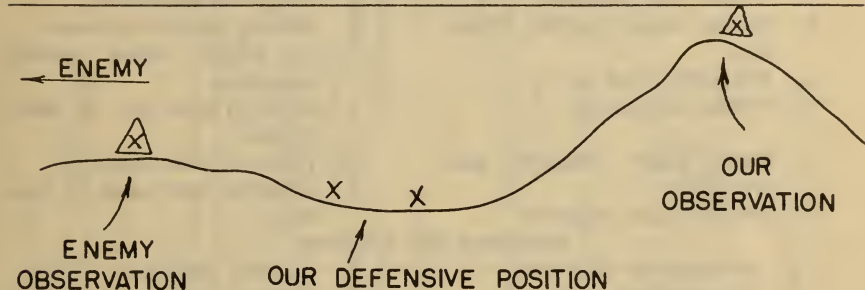
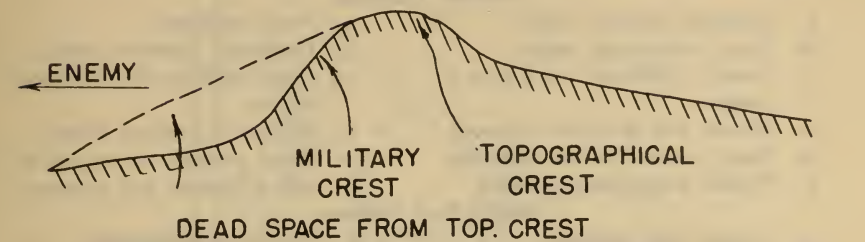
"Negligence and hesitation are more serious faults than errors in choice of means."

—Infantry in Battle.

# SECTION VIII

## TACTICS

### SLOPE OF GROUND AFFECTING SITING OF DEFENSIVE POSITION



SECTION IX  
FLANK GUARDS  
TYPES FOR VARIOUS CONDITIONS

**Favorable Conditions**

- a. Existent parallel road.
- b. Good connecting roads.
- c. Correct distance between roads.
- d. Threat not definitely located.
- e. Easy communication possible.
- f. Within supporting distance.

**Parallel Columns**

- a. Threat well located.
- b. Strong single position available.
- c. Adaptable road net.
- d. Threat centralized.
- e. Flank guard prepared and organized.
- f. Smaller force required.

**Single Key Position**

- a. Satisfactory road net.
- b. Commanding positions.
- c. Favorable terrain.
- d. Partial organization.
- e. Comparatively small force needed.
- f. Attack not imminent.
- g. When flank guard is highly mobile.

**Unfavorable Conditions**

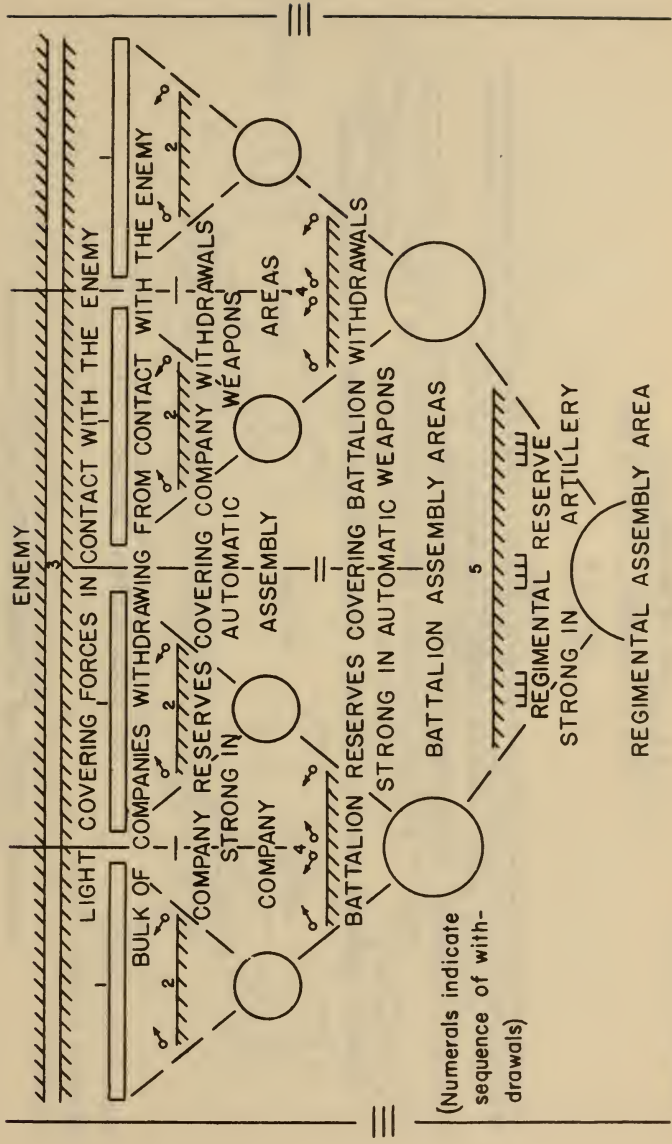
- a. Poor road net.
- b. Obstacles between roads.
- c. Poor facilities for communication.
- d. Definitely located threat.
- e. Flank guard is in motion and not organized for defense.

- a. Threat undetermined.
- b. Several possible threats.
- c. No single strong position available.
- d. Position that can be easily turned.
- e. Further from support.
- f. Restricts movement of flank guard.

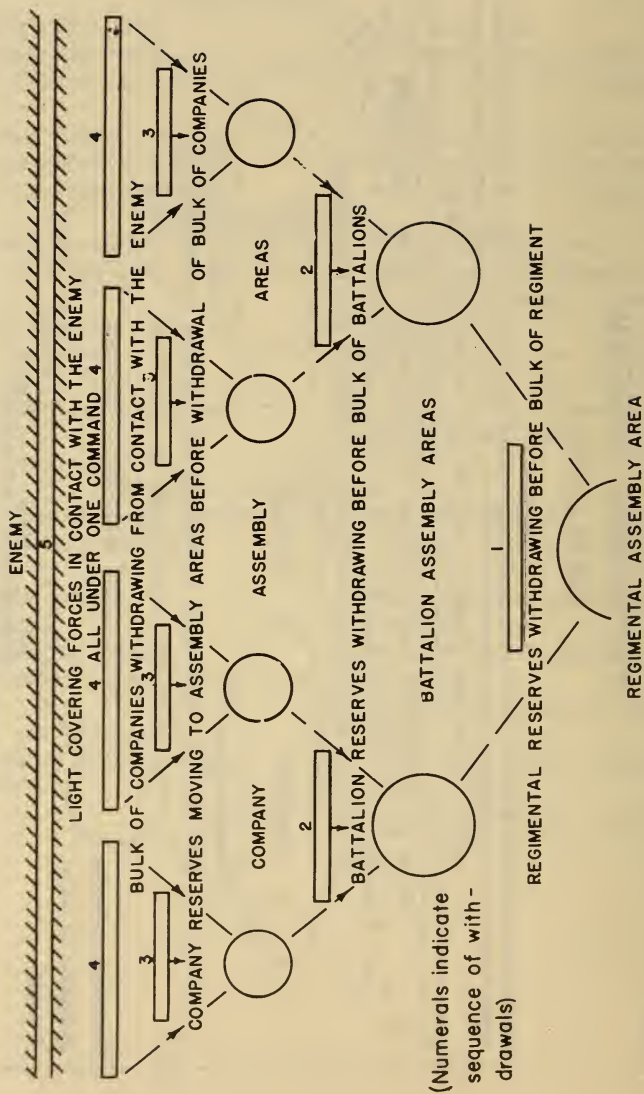
**Successive Key Positions.**

- a. Limited road net.
- b. Restricts movement of flank guard.
- c. More complicated movements involved.
- d. Requires more detailed coordination.
- e. Accurate information required.
- f. May necessitate dividing force.
- g. Danger of defeat in detail.

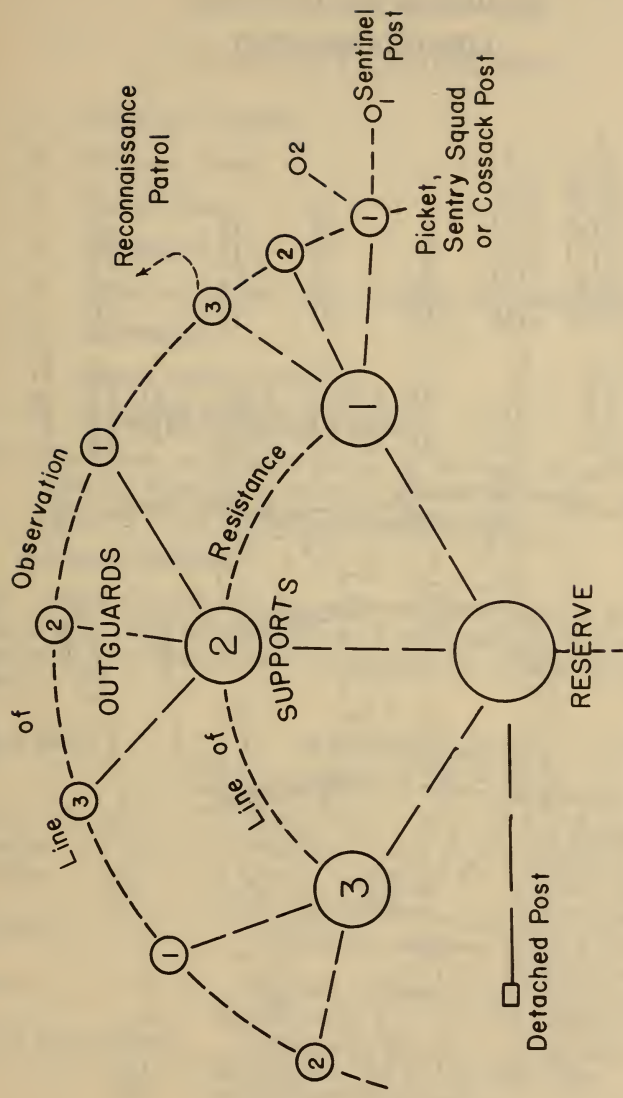
SECTION IX  
 WITHDRAWAL DIAGRAM  
 DAYLIGHT



# SECTION XI WITHDRAWAL DIAGRAM NIGHT



SECTION XIII



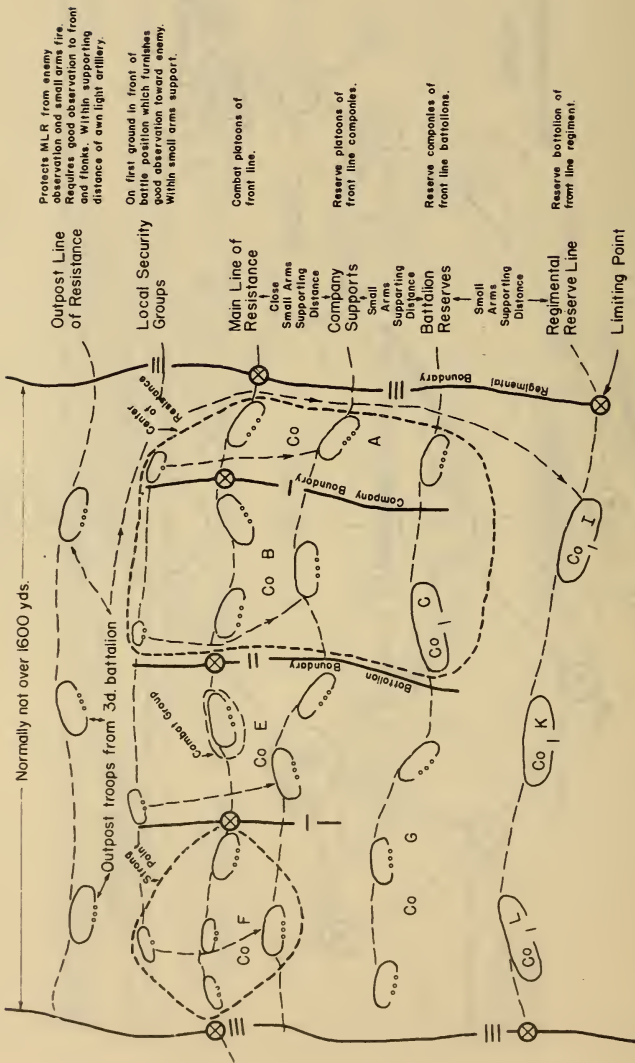
OUTPOST DIAGRAM

R.D. 1200-B

# SECTION XIII REGIMENT IN DEFENSE (DIAGRAMMATIC)

## SECTION XIII

ENEMY  
↑



## SECTION XIV

### TACTICS

#### F-3 MISCELLANEOUS DATA

1. Advance Guards.
2. Bivouac Areas.
3. Boundaries.
4. Frontages.
5. Location of units in deployed or position defense.
6. Movement.
7. Signal communication.
8. Computing time of attack.

**NOTE:** The figures given below are to be used only as guides for the preliminary study of a situation. Their application depends on the situation and particularly on the **TERRAIN**.

#### 1. Advance Guards.—

a. **Size.**—In general, the size and composition of the advance guard is governed by the size and composition of the main body, the mission, the terrain, and the situation, within the following extremes:

Main Body	Advance Guard	
	Maximum	Minimum
Platoon .....	Squad	1/2 Squad
Company .....	Platoon	Section
Battalion .....	Rifle Company with MG Platoon	Rifle Platoon with MG Section
Regiment .....	Battalion	Rifle Company with MG Section
Brigade .....	Regiment (less 1 Battalion)	Rifle Company with MG Section
Brigade Reinforced ...	Regiment (less 1 Battalion) with Battalion light artillery	Battalion with light artillery

b. **Distances.**—The distance between the rear of the advance guard and the head of the main body varies according to the terrain, mission, size and composition of the force. The following distances are general:

Main Body	Distance	Advance Guard
Platoon	150 - 250 yards.	Squad
Company	300 - 400 yards.	Platoon
Battalion	400 - 600 yards.	Company
Regiment	800 - 1200 yards.	Battalion
Reinforced Brig.	1/2 - 1 mile.	As in "a" above

2. **Bivouac Areas:** Regiment ----- 150 x 250 yards.  
 Battalion ----- 100 x 100 yards.

3. **Boundaries.**—

a. It is usually desirable to plan both the attack and the defense so as to take advantage of the terrain. Critical areas require a unity of command and are delineated by boundaries.

In the attack, the critical areas are usually the avenues of approach, with boundaries generally falling along the crests of the ridges.

In the defense, the critical areas are usually the tactical localities which must be held, with boundaries generally falling in the low ground adjacent, and including the approaches that are most threatening.

b. **Attack.**—From in rear of the rearmost unit (or far enough to the rear to give each unit the road net to reach its position without interruption) to enemy artillery position at least, and as much farther as the commander can foresee. When a limited objective is given, extend the boundaries, sufficiently to the front so that units may coordinate defense.

c. **Defense.**—Between Regiments: From 1000 yards in rear of RRL to 2000 yards in front of MLR.

Between Battalions: From just forward of RRL to 2000 yards in front of MLR.

4. **Frontages.**—Frontage, both for the attack and the defense, is measured by the number of battalions employed in the assault or on the main line of resistance.

4. Frontages.—Frontage, both for the attack and defense, is measured by the number of battalions employed in the assault or on the main line of resistance. Frontages will vary between wide limits depending on the type of terrain, the amount of artillery and other support, and the enemy dispositions. In general, the following frontages will apply to the Marine Infantry Battalion:

	Battalion 1936 WS Tables	Battalion 1938 Tables
<b>Attack:</b>		
Strong, sustained attack	300-600 yds	275-550 yds
Holding or secondary attack (normal)	600-1000 yds	550-850 yds
Holding or secondary attack (fire action only)	to 1800 yds	to 1500 yds
<b>Defense:</b>		
Determined or decisive defense	600-800 yds	600-800 yds
Defense for a limited period of time such as a delaying action	800-1600 yds	800-1600 yds
A screen with no depth	to 2400 yds	to 2400 yds
Advance guard in "contact imminent" formation	to 1800 yds	to 1500 yds
<b>Outpost:</b>		
Observation & Security	3000-5000 yds	3000-5000 yds
Resistance	Same as battalion in defense with like mission	Same as battalion in defense with like mission

NOTE:—Frontages in the defense do not take into account the employment of extra machine guns. When extra machine guns are employed, frontages should be correspondingly increased.

Page

port  
rate  
depe  
supp

b. Distances.—The distance between the rear of the advanced guard and the head of it

fe  
qu  
pr  
ri

in the defense, the critical areas are usually the tactical locali-

## For Marine Corps Battalion:

Decisive Attack .....	300 - 600 yds.
Holding Attack .....	to 1000 yds.
Outpost .....	to 3000 - 5000 yds.
Defense, determined, as part of larger force .....	600 - 800 yds.

**NOTE:** The Marine Corps battalion is only two-thirds as strong as the Army Battalion, consequently care should be employed in adopting Army figures to Marine Corps use and frontages reduced accordingly.

### 5. Location of Units in Deployed or Position Defense.—

Outpost: Line of Resistance 1500 - 1800 yards in front of MLR.

Outpost Reserve to Line of supports  $\frac{1}{2}$  -  $1\frac{1}{2}$  miles.

Line of supports to line of outguards 200 - 1200 yards.

Regimental Reserve Line: 800 - 1800 yards in rear of MLR.

Light Artillery: 1500-3000 yards in rear of MLR, echeloned in depth.

Brigade Reserve: 1500 - 3000 yards in rear of MLR.

Command Posts: (See Signal Communications.)

### 6. Movement.—

e 45, Section XIV, par. 6 a: Change to read as follows:

a. Rate of advance in the attack.—In planning artillery and other support it is necessary to estimate the expected rate of infantry advance. This will vary between 100 yards in 3 minutes and 100 yards in 8 minutes depending upon the element of surprise, the amount of artillery and other support, the degree of enemy resistance, and the type of terrain.

Through woods ..... 100 yards in 8 minutes.

#### b. Rate of March.—

For periods of more than one hour (includes ten minutes halt each hour):

Roads, day .....	$2\frac{1}{2}$ mph
Roads, night .....	2 mph
Cross-country, day .....	$1\frac{1}{2}$ mph
Cross-country, night .....	1 mph

For periods less than 50 minutes or when the hourly halt is omitted:

Roads, day .....	88 yards per minute.
Roads, night .....	70 yards per minute.
Cross-country, day .....	53 yards per minute.
Cross-country, night .....	35 yards per minute.

c. Mobility of a division is best accomplished:

0—15 miles by marching.

16—75 miles by motor transportation.

75 and over by rail.

The above figures are computed on the basis of allowing 3 hours for preparation of movement orders, 3 hours for entrucking and 3 hours for detrucking. In smaller units and when movement orders are previously prepared, transportation assembled, and troops disposed for entrucking, motor and rail transportation will prove efficient for less distances than those given above.

## 7. Signal Communications.—

a. **Command Post.**—The place where the staff does its work and where contact may be made with the commander.

b. **Location of Command Posts.**—In position or deployed defense: Battalion 500 - 1500 yards in rear of MLR (in rear part of battalion area)

Regiment: 500 - 1000 yards in rear of RRL.

Brigade: 1500 - 3000 yards in rear of MLR.

For attack, the distances behind the front line are less than those given above.

c. **Axes of signal communication.**—Points on the axis of signal communication are the probable successive locations of command posts. The distances between the locations are for the Battalion—about 1500 yards.

Regiment—about 2500 yards.

Brigade—about 3500 yards.

When possible, the axis of the higher unit should follow the axis of the one of the lower units in order to take advantage of wire lines already laid.

**NOTE:** A commander is free to leave the command post and move about at will in the accomplishment of his duties but he must leave an authorized and responsible representative at his command post to communicate with him or act in his absence.

Command Post Sites are usually selected in order to:

1. Facilitate the employment of the various means of communication;
2. Insure concealment;
3. To afford the greatest protection possible from harassment by enemy agents;

**Command Posts** are usually sited in defiladed positions possessing natural cover from observation, and convenient to established routes of communication. In distinction ~~observed~~

Page 47, par. 8 a: Change to read as follows:

a. The time required by the commander and his subordinate commanders (to include platoon leaders), in turn, to make their reconnaissances and issue their orders for the attack will vary greatly in different situations. The following are reasonable time assumptions for determining the earliest hour of attack:

—for a reinforced brigade .....	3 hours 15 minutes
—for a regiment .....	2 hours 15 minutes
—for a battalion .....	1 hour 15 minutes

... received the orders to the line of departure. This time for movement will indicate the earliest hour at which an attack can be launched provided it equals or exceeds the time required for the issue and distribution of attack orders.

c. Time elements within the Battalion:

Battalion Commander's reconnaissance and preparation of oral order ( after arrival in vicinity of line of departure) .....	20 min
Issuance of oral orders .....	15 min
Company commander's reconnaissance .....	10 min
Company commander's orders, platoon reconnaissance, platoon orders .....	15 min
Deployment of Companies .....	15 min
Total .....	75 min

For periods less than 50 minutes or when the hourly halt is omitted:

Roads, day .....	88 yards per minute.
Roads, night .....	70 yards per minute.
Cross-country, day .....	53 yards per minute.
Cross-country, night .....	35 yards per minute.

c. Mobility of a division is best accomplished:

0—15 miles by marching.

16—75 miles by motor transportation.

75 and over by rail.

The above figures are computed on the basis of allowing 3 hours for preparation of movement orders, 3 hours for entrucking and 3 hours for detrucking. In smaller units and when movement orders are previously prepared, transportation assembled, and troops disposed for entrucking, motor and rail transportation will prove efficient for less distances than those given above.

## 7. Signal Communications.—

a. **Command Post.**—The place where the staff does its work and where contact may be made with the commander.

b. **Location of Command Posts.**—In position or deployed defense: Battalion 500 - 1500 yards in rear of MLR (in rear part of battalion area)

Regiment: 500 - 1000 yards in rear of RRL.

Brigade: 1500 - 3000 yards in rear of MLR.

For attack, the distances behind the front line are less than those given above.

c. **Axes of signal communication.**—Points on the axis of signal communication are the probable successive locations of command posts. The distances between the locations are for the Battalion—about 1500 yards.

Regiment—about 2500 yards.

Brigade—about 3500 yards.

When possible, the axis of the higher unit should follow the axis of the one of the lower units in order to take advantage of wire lines already laid.

Page 47, par. 8 a: Change to read as follows:

a. The time required by the commander and his subordinate commanders (to include platoon leaders), in turn, to make their reconnaissances and issue their orders for the attack will vary greatly in different situations. The following are reasonable time assumptions for determining the earliest hour of attack:

- for a reinforced brigade ..... 3 hours 15 minutes
- for a regiment ..... 2 hours 15 minutes
- for a battalion ..... 1 hour 15 minutes

## SECTION XV

1. The attached tables are authorized for use in problems until more complete tables are issued by the school.

2. Contents:

- Table 1. Factors Used in Computing road Spaces.
2. Road Spaces, Marine Infantry Brigade.
  3. Road Spaces, Marine Artillery Brigade.
  4. Road Spaces, Marine Force Train.
  5. Rates and Lengths of Marches.
  6. Data for Troop Movement by Motor Truck.

### FACTORS USED IN COMPUTING ROAD SPACES.

TABLE 1.

	YARDS
Infantry in column of squads, per man .....	.5
One squad .....	4.0
Cart, hand drawn, by 4 men, per 4 men and cart .....	5.0
Bicycle .....	4.0
Motorcycle, with or without sidecar .....	20.0
Tractor with 1 trailer .....	21.0
Tractor, with 2 trailers .....	30.0
Other motor vehicles .....	25.0

NOTE: Distance of 5 yards between companies, platoons, and smaller detached units; 30 yards between battalions and regiments.

TABLE 2.

**TABLE OF ROAD SPACES  
MARINE INFANTRY BRIGADE (WAR STRENGTH).  
TABLES OF ORGANIZATION  
4 November, 1927**

UNITS	WAR STRENGTH YARDS
Rifle Company .....	67
Machine gun and howitzer company .....	171
Battalion headquarters and headquarters company .....	60
Battalion .....	452
Service Company, less transportation platoon .....	46
Regimental headquarters & headquarters company .....	81
Regiment, less trains .....	1553
Battalion section transportation platoon .....	195
Headquarters section transportation platoon .....	145
Platoon headquarters section, transportation platoon .....	150
Transportation platoon (regimental trains) .....	880
Regiment (total) .....	2433
Brigade headquarters and headquarters company less transportation .....	72
Transportation brigade headquarters and headquarters company .....	252
Brigade headquarters and brigade headquarters com- pany .....	324
Brigade, less transportation .....	3223
Brigade, (total) .....	5255

TABLE 3.

**TABLE OF ROAD SPACES  
MARINE ARTILLERY BRIGADE—75-mm PACK HOWITZER  
(MOTORIZED)**

UNITS	YARDS
Battery, 75-m/m pack howitzers .....	308
Battalion headquarters and service battery .....	193
Battalion .....	1117
Regimental headquarters and service battery .....	291
Regiment .....	2560
Brigade headquarters battery .....	170
Brigade .....	5290

TABLE 4.

**TABLE OF ROAD SPACES  
MARINE FORCE TRAIN**

UNITS	YARDS
Motor transport company .....	824
Motor repair section .....	180
Cross country car platoon .....	370
Train headquarters .....	50
Train .....	2250

**NOTE:** Distance of 5 yards between companies, platoons, and smaller de-  
tached units; 30 yards between battalions and regiments.

TABLE 5.

**RATES OF MARCH**  
(Miles per hour)

	On roads			Across country		Average length of march
	Day	Night		Day	Night	
		Lights	No lights			
Infantry 1 .....	2½	..	2	1½	1	12 to 15 mi
Artillery (75-m/m tractor drawn) .....	3½	..	3	3	2	25 to 35 mi
Cavalry .....	5	..	4	4	3	15 to 25 mi
Light tanks (on trucks) .....	8	5	3	..	..	50 to 60 mi
Light tanks (under own power) .....	3½	3	..	2	1	
Fast tanks .....	25	15	10	15	5	
Automobiles and motorcycles .....	20	15	10	..	..	
Trailers, tractor drawn .....	3½	..	3	3	2	25 to 35 mi
Trucks, light and medium .....	20	15	10	..	..	200 mi
Motor transport (convoys) .....	15	12	8	..	..	80 to 100 mi

1. In solving problems involving periods of march of less than one hour, infantry is assumed to move as follows:

	Yards per minute
On roads in daylight .....	88
On roads at night .....	70
Across country in daylight .....	53
Across country at night .....	35

**NOTES**—a. These figures are furnished to secure uniformity in the solution of problems.

b. Rates given will generally be lowered by dust, heat, snow, sleet, mud, or other adverse conditions. Small elements of any of the above-mentioned units can move at a more rapid rate for short distances.

c. The rate of march of a column composed of elements with different rates of march is regulated by that of the slowest element.

d. The following rates in addition to those given in the table above are prescribed:

	Miles per hour
Individuals or small dismounted groups (such as a company commander and reconnaissance party) .....	3
Individuals or small mounted groups (such as a battalion commander and his reconnaissance party) .....	8

These rates will apply on or off roads by day or night. They apply especially to reconnaissance made by a commander and his party.

TABLE 6.

DATA FOR TROOP MOVEMENT BY MOTOR TRUCK

(Brigades or smaller units.)

Entrucking time	Infantry only, 15 minutes; plus Lt. Art. 30 min.
Detrucking time	Infantry only, 10 minutes; plus Lt. Art. 30 min.
Truck capacities:	
	Troops with packs and individual equipment only;
	15 men per 1½ ton truck, and 30 men per 3 ton truck.
	Machine gun and howitzer companies, equipped; 10
	men per 1½ ton truck, and 15 men per 3 ton truck.
Length of truck column in yds	closed up multiply number of trucks by 11
	on road multiply number of trucks by 30
Economical distance for truck movement	up to 75 miles
Economical speed for truck column	15 mph (day)
	12 mph (night w/lights)
	8 mph (night w/o lights)

**ROAD SPACES  
TABLES OF ORGANIZATION  
WAR STRENGTH**

1 July, 1936

**THE MARINE INFANTRY BRIGADE  
BRIGADE HEADQUARTERS AND SPECIAL TROOPS**

TABLE 7.

Unit	Strength	Road Spaces in Yards			Total
		Foot Troops	Foot Troops Carts, Cars Guns, Tanks	Trains	
Headquarters and Special Troops	942		1427	2704	4041
Forward Echelon	34				
Rear Echelon	54				
Headquarters Company	87		256	75	328
Service Company	147		94	100	192
Signal Company	88		139	75	214
Tank Company	104		500	361	861
Platoon	23		150	50	200
Military Police Company	75		81	50	130
Chemical Company	160		224	75	298
Motor Transport Company	78		57	875	900
Motor Repair Section	37		19	218	218

Note: Two Motor Transport Cos' per Brigade.

## THE MARINE INFANTRY REGIMENT

TABLE 8.

Unit	Strength	Road	Spaces	in	Yards
		Foot Troops	Foot Troops Carts, Cars Guns, Tanks	Trains	Total
Rifle Company	145	83	83	—	83
Platoon	41	20	20	—	20
Machine Gun Company	172	105	177	—	177
Platoon	49	25	49	—	49
Battalion Headquarters					
Company	151	85	124	—	124
Howitzer Platoon	62	32	59	—	59
Communication Platoon	35	18	30	—	30
Battalion	758	459	570	195	765
Headquarters Company	117	77	184	150*	324
Communication Platoon	43	22	60	25	85
Pioneer Platoon	21	11	11	—	11
Medical Section	12	6	15	25	40
Intelligence Platoon	17	8	8	—	8
Company Headquarters	10	5	5	—	5
Regimental Headquarters	14	10	70	100	175
Service Company	136	69	64	100	150
Company Headquarters	8	4	4	—	4
Headquarters Platoon	40	20	20	—	20
Transportation Platoon	67	34	29	100	115
Supply Platoon	21	11	11	—	11
Regiment	2527	1618	2053	835	2864

## THE 75 mm. PACK HOWITZER REGIMENT

TABLE 9.

Unit	Strength	Road	Spaces	in	Yards
		Foot Troops	Foot Troops Carts, Cars Guns, Tanks	Trains	Total
Artillery Regiment					
75 mm. Pack Howitzers	1231		2235	900	3165
Battery	148		250	135	400
Battalion Headquarters					
& Service Battery	96		140	—	140
Battalion	540		980	435	1445
Regimental Headquarters					
& Service Battery	151		215	—	215

## THE ENGINEER BATTALION

TABLE 10.

Unit	Strength	Road Spaces in Yards			Total
		Foot Troops	Foot Troops Carts, Cars Guns, Tanks	Trains	
Engineer Battalion	511	320	435	368	772
Company	139	86	106	—	106
Platoon	41	21	21	—	21
Headquarters and Service Company	94	47	102	368	454

TABLE 11.

## THE MEDICAL BATTALION

Unit	Strength	Road Spaces in Yards			Total
		Foot Troops	Foot Troops Carts, Cars Guns, Tanks Ambulances	Trains	
Medical Battalion	398		664	170	841
Headquarters Company	18				
Collecting Company	79				
Ambulance Company	41				
Hospital Company	69				
Service Company	122		518	170	695

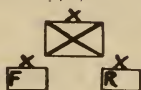
**Note:** Two Hospital Companies per Medical Battalion.

TABLE 12.

## BRIGADE TOTALS

Unit	Strength	Road	Spaces	in	Yards
		Foot Troops	Foot Troops Carts, Cars Guns, Tanks Ambulances	Trains	Total
Brigade Headquarters and Special Troops	942		1427	2704	4041
Two Regiments of Infantry	5054	3236	4106	1670	5728
Artillery Regiment	1231		2235	900	3165
Engineer Battalion	511	320	435	368	772
Medical Battalion	398		664	170	841
Brigade	8136	3556	8867	5812	14547

\*Note: Compiled for trucks. If tractors and trailers are substituted for trucks, add 5 yards for every tractor-trailer unit (1 tractor and 2 trailers).



Page 55, Section XV: Insert the following table:

TABLES OF ORGANIZATION, U. S. MARINE CORPS,  
Approved 1938

TABLE 13: The Marine Infantry Regiment:

	Strength	Road Spaces in Yards			Total
		Foot Troops	Foot Troops & Unit Transportation	Trains	
Rifle Company	120	75	75	—	75
Platoon	35	18	18	—	18
Machine Gun Company	158	94	178	—	178
Platoon	46	23	50	—	50
Battalion Headquarters Company	147	84	141	—	141
81 mm Mortar Plat.	72	36	75	—	75
Communication Plat.	25	13	22	—	22
Battalion	665	423	564	150(1)	714
Headquarters Company	169	100	148	75(1)	223
Anti-Tank Plat.	67	34	55	—	55
Communication Plat.	39	20	38	—	38
Service Company	89	45	42	55	85
Transport Plat.	58	29	26	55	69
Regiment	2253	1509	1977	580(1)	2545

NOTE:—(1) Motorcycles and passenger cars are not considered as occupying road space.

1 July 1936

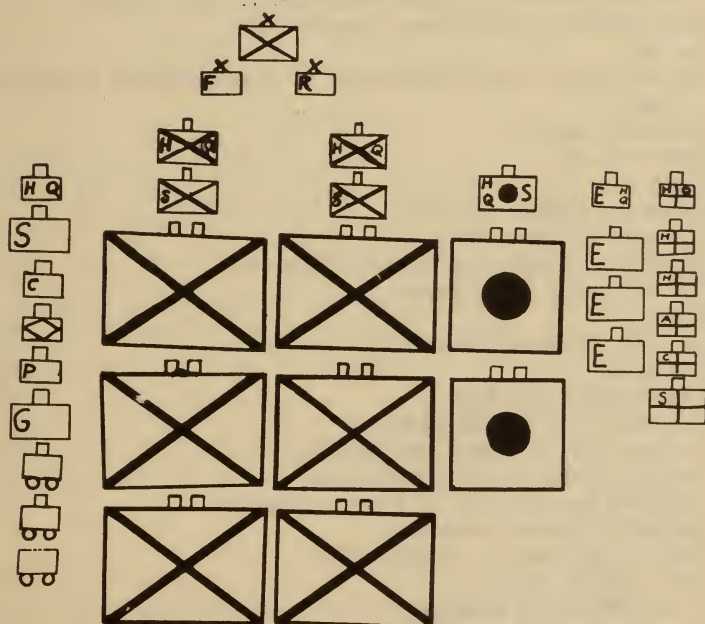


TABLE 12.

## BRIGADE TOTALS

Unit	Strength	Road Spaces in Yards			
		Foot Troops	Foot Troops Carts, Cars Guns, Tanks Ambulances	Trains	Total
Brigade Headquarters and Special Troops	942		1427	2704	4041
Two Regiments of Infantry	5054	3236	4106	1670	5728
Artillery Regiment	1231		2235	900	3165
Engineer Battalion	511	320	435	368	772
Medical Battalion	398		664	170	841
Brigade	8136	3556	8867	5812	14547

\*Note: Compiled for trucks. If tractors and trailers are substituted for trucks, add 5 yards for every tractor-trailer unit (1 tractor and 2 trailers).



THE MARINE BRIGADE  
WAR STRENGTH  
1 July 1936

SECTION XVI  
STAFF FUNCTIONS

(For brigades and smaller units)

Staff control group	under	Executive Officer
Personnel (First Section)	"	The Adjutant
Intelligence (Second Section)	"	Intelligence Officer
Operations and Training (Third Section)	"	Plans and Training Officer
Supply Section (Fourth Section)	"	Supply Officer

General Duties:

Executive: The principle assistant and adviser of the commander.

Formulates and announces policies for the general operation of the staff.

Directs and coördinates the work of the four staff sections.

Assumes command in the absence of the commander.

The Adjutant (S - 1): Is charged with the duties which relate to the personnel of the command as individuals.

Assignment, promotions, transfer, etc.

Leave.

Establishment and movement of headquarters and Command Posts.

Strength reports.

Quartering.

Files.

Intelligence Officer (S - 2):

Collects information.

Converts information into intelligence.

Disseminates intelligence.

Maps.

Plans and Training Officer (S - 3):

Training.

Assignment of units.

Movement of Combat troops.

Preparation of plans and orders.

Training and operation reports.

Controls the activity of liaison officers.

Battlefield reconnaissance.

Tactical adviser to commander.

Supply Officer (S - 4):

Procurement of supplies.

Distribution of supplies.

Accountability and responsibility.

Maintenance of roads and bridges.  
Collection and evacuation of sick and wounded.  
Circulation and traffic control.  
Burials.  
Salvage.  
Transportation.

Reference: "Staff Officers' Field Manual:  
Part one, Staff Data."  
"Command, Staff and Logistics."  
"The Infantry Staff."  
(Marine Corps Schools)

SECTION XVII  
TACTICS  
TYPE DECISIONS

(A reprint from The Infantry School, Fort Benning, Ga.)

A decision must contain the WHAT, WHEN, WHERE, HOW, WHY.

**1. ATTACK**

a. COORDINATED

- (1) Penetration: "To attack at \* \* \* \* o'clock (or on \* \* \* \* signal), penetrating the enemy position between hill 608 and hill 609, in order to drive him to the north."
- (2) Envelopment: "To attack at \* \* \* \* o'clock (or on \* \* \* \* signal), enveloping the enemy's east (left) flank, in order to drive him to the southwest."
- (3) Double envelopment: "To attack at \* \* \* \* o'clock (or on \* \* \* \* signal), enveloping both flanks, in order to destroy the enemy."

b. PIECEMEAL

"To attack piecemeal at once in order to drive the enemy west of Monocacy River."

**2. DEFENSE**

a. PASSIVE

"To defend without delay along the forward slope of the ridge about one mile southeast of Seven Stars, in order to cover the debouchment of the remainder of the division from the pass west of Cashtown."

b. ACTIVE

"To defend without delay along the forward slope of the ridge about one mile southeast of Seven Stars, with the view of later assuming the offensive and defeating the enemy."

c. COUNTERATTACK

"To counterattack at once from the vicinity of H. Hoover in the direction of A. Smith in order to restore the battle position."

**3. MARCHES**

a. IN TWO COLUMNS

"To march without delay in two columns, on Bartonsville in order to cover the detrainment of the division at Mt. Airy."

b. IN ONE COLUMN

"To march at daylight (or hour) today, in one column, on McKaig, via RJ 718—New London—McKaig, in order to delay the advance of the Red force."

#### 4. HALT FOR THE NIGHT

"To halt for the night and bivouac in the vicinity of Bonneauville, with the outpost line of resistance along the general line: hill 627-a—hill 607-a—hill 606-a—Guiter, with the view of continuing the march tomorrow morning."

#### 5. PURSUIT

"To pursue, at once, by direct pressure and an encircling maneuver around the enemy's east (right) flank, in order to destroy him."

#### 6. WITHDRAWAL

##### a. DAYLIGHT

"To withdraw, at once, to a defensive position with forward limits along the eastern slopes of hill 609—hill 596—hill 615, in order to protect the left flank of the corps."

##### b. NIGHT

"To withdraw from action under cover of darkness tonight, and retire in the direction of Westminister, in order to protect the left flank of the corps."

#### 7. DELAY

##### a. ON ONE POSITION

"To delay the enemy, by occupying at once the position \* \* \* \*, in order to hold him east of \* \* \* \* until \* \* \* \* o'clock tomorrow."

##### b. ON SUCCESSIVE POSITIONS

(1) "To delay the enemy on successive positions, first delaying position \* \* \* \* to be occupied at once in order to hold him east of \* \* \* \* until \* \* \* \* o'clock tomorrow."

(2) "To delay the enemy on successive positions, first delaying position \* \* \* \*, second delaying position \* \* \* \*, both positions to be occupied initially, in order to hold him east of \* \* \* \* until \* \* \* \* o'clock tomorrow."

## SECTION XVIII

1. Effective ranges for the different types of artillery and small arms as employed in the preparation and solution of map problems in these schools.

Caliber and Type	Range in Yards
75-m/m Pack Howitzer .....	8,000
75-m/m Gun .....	11,250
3" AA Gun (Against aircraft) .....	6,000
(Against horizontal targets) .....	13,500
155-m/m Gun .....	16,000
6" Gun .....	25,000
6" Gun (Star shell for illumination of target) .....	18,000
Rifle and Auto Rifle, .30 cal. (Average) .....	600
(Expert) .....	1,000
Machine gun, .30 cal. (Direct fire) .....	2,200
(Indirect fire) .....	5,000
37-m/m Gun (OLD TYPE) .....	1,800
81-m/m Mortar (Stokes-Brandt) .....	<del>2,000</del>
Rifle Grenade .....	285
Hand Grenade .....	50

*Heavy shell (maximum) - - - 1280*  
*Light shell " - - - 3280*

## SECTION XIX

## TABLES OF SUNRISE AND SUNSET

For use in problems, the following is taken as the hours of sunrise and sunset at Gettysburg, Pa. Daylight is assumed to begin one hour before sunrise and to end one hour after sunset.

Month	Sun- rise a.m.	Sun- set p.m.	Month	Sun- rise a.m.	Sun- set p.m.
<b>January:</b>			<b>July:</b>		
1 to 10.....	7:30	4:55	1 to 10.....	4:45	7:45
11 to 20.....	7:30	5:05	11 to 20.....	4:50	7:40
21 to 31.....	7:25	5:20	21 to 31.....	5:00	7:30
<b>February:</b>			<b>August:</b>		
1 to 10.....	7:15	5:30	1 to 10.....	5:10	7:20
11 to 20.....	7:05	5:45	11 to 20.....	5:20	7:10
21 to 28.....	6:50	5:55	21 to 31.....	5:30	6:55
<b>March:</b>			<b>September:</b>		
1 to 10.....	6:40	6:05	1 to 10.....	5:40	6:35
11 to 20.....	6:20	6:15	11 to 20.....	5:50	6:20
21 to 31.....	6:05	6:30	21 to 30.....	6:00	6:00
<b>April:</b>			<b>October:</b>		
1 to 10.....	5:45	6:40	1 to 10.....	6:10	5:45
11 to 20.....	5:30	6:50	11 to 20.....	6:20	5:30
21 to 30.....	5:15	7:00	21 to 31.....	6:30	5:15
<b>May:</b>			<b>November:</b>		
1 to 10.....	5:05	7:10	1 to 10.....	6:40	5:00
11 to 20.....	4:55	7:20	11 to 20.....	6:55	4:50
21 to 31.....	4:45	7:30	21 to 30.....	7:10	4:45
<b>June:</b>			<b>December:</b>		
1 to 10.....	4:40	7:35	1 to 10.....	7:15	4:40
11 to 20.....	4:35	7:40	11 to 20.....	7:25	4:40
21 to 31.....	4:40	7:45	21 to 31.....	7:30	4:45

Note: This table also applies to Quantico and vicinity.

# SECTION XX CONVENTIONAL SIGNS

ARMS AND SERVICES:	BASIC	TROOPS	CP	OP
INFANTRY.				
CAVALRY (MOUNTED DETACHMENTS)				
ARTILLERY	•			
ENGINEERS.	E			
TANKS.				
MEDICAL.				
SIGNAL CORPS.	S			
AIR CORPS.				
CHEMICAL WARFARE.	G			

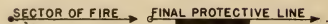
ORGANIZATIONS:	UNITS	BOUNDARIES	INFANTRY UNITS
SQUAD.	•	— • —	
SECTION.	• •	— • • —	
PLATOON.	• • •	— • • • —	
COMPANY (TROOP OR BATTERY).		—   —	
BATTALION OR SQUADRON.		—    —	
REGIMENT.		—     —	
BRIGADE.	X	— X —	
DIVISION.	X X	— X X —	

## WEAPONS:

AUTOMATIC RIFLE.



MACHINE GUN.



GUN.



BATTERY.



MORTAR OR HOWITZER.  
RD 1087-A



# APPLICATION OF SPECIAL MILITARY SYMBOLS

## INFANTRY:

ONE SECTION COMPANY A, 4TH MARINES.



1ST PLATOON, COMPANY B, 2D MARINES.



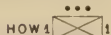
COMPANY D, 20TH MARINES.



3D BATTALION, 8TH MARINES.



HOWITZER PLATOON, 1ST BATTALION, 1ST MARINES.



5TH MARINES.



4TH BRIGADE



FIELD TRAINS 2D MARINES.



3-INCH TRENCH MORTAR.



37-MM. GUN.



COMMAND POST, 3D BATTALION, 7TH MARINES.



OBSERVATION POST, 6TH MARINES.

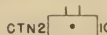


## ARTILLERY:

BATTERY F, 10TH MARINES (ARTILLERY).



COMBAT TRAIN, 2D BATTALION, 10TH MARINES (ARTILLERY)



1ST BATTALION, 10TH MARINES (ARTILLERY).



1ST AMMUNITION TRAIN.



COMMAND POST, 10TH MARINES (ARTILLERY)



## ENGINEERS:

COMPANY A, ENGINEERS.



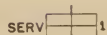
## AIR CORPS:

7TH OBSERVATION SQUADRON (AIR SQUADRON SAME SIGN AS COMPANY).



## MEDICAL DEPARTMENT:

SERVICE COMPANY 1ST MEDICAL REGIMENT.

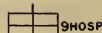


4TH AMBULANCE COMPANY.  
R.D. 1087-B.

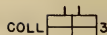


MEDICAL DEPARTMENT—CONT'D:

9TH HOSPITAL COMPANY.



COLLECTING BATTALION, 3D MEDICAL REGIMENT.



1ST MEDICAL REGIMENT.



MEDICAL ESTABLISHMENT OTHER THAN VETERINARY.



BATTALION AID STATION.



REGIMENTAL AID STATION.



DIVISION COLLECTING STATION.



DIVISION HOSPITAL STATION.



VETERINARY ESTABLISHMENT.



REGIMENTAL VETERINARY AID STATION.



VETERINARY COLLECTING STATION.



MISCELLANEOUS:

2D TANK COMPANY.



RATION DISTRIBUTING POINT.



ARTILLERY AMMUNITION DISTRIBUTING POINT.



BRIGADE INFANTRY AMMUNITION DISTRIBUTING POINT.



AREA TO BE COVERED BY FIRE.



MISCELLANEOUS:

AREA TO BE GASSED.



GASSED AREA TO BE AVOIDED.



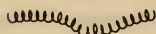
TRENCHES.



TACTICAL WIRE ENTANGLEMENTS.



PROTECTIVE WIRE ENTANGLEMENTS.



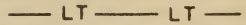
UNDER WATER ENTANGLEMENTS

XXXXXXXXXXXX

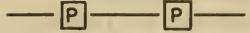
BOOMS, ANTIBOAT



FORWARD LIMIT OF LIGHTS



STRAGGLER LINE



R.D. 1087 - D

## SECTION XXI

### Abbreviations for Use in Plans and Orders (Tentative for School Use Only)

#### General list of abbreviations:

#### A

Acting Assistant Quartermaster .....	AAQM
Adjutant (Section) .....	Adj (Sec)
Adjutant and Inspector .....	A&I
Adjutant and Inspector's Department .....	A&ID
Admiral .....	Adm
Administrative Order .....	Adm O
Aide-de-Camp .....	ADC
Aircraft .....	Air
Aircraft Squadron (s) .....	Airon(s)
Air Intelligence Officer .....	A Int O
Ambulance (Company) (Section) .....	Amb (Co) (Sec)
Ammunition (Company) (Train) (Distributing Point) .....	Am (Co) (Tn) (DP)
Animal or Animal Drawn .....	Anl
Antiaircraft Artillery .....	AAA
Antiaircraft .....	AA
Approved .....	App
April .....	Apr
Artillery .....	Arty
Artillery (Brigade) (Liaison Officer) .....	Arty (Brig) (Ln O)
Assistant Adjutant and Inspector .....	AA&I
Assistant Paymaster .....	APM
Assistant Quartermaster .....	AQM
August .....	Aug
Authority .....	Auth
Assistant Chief of Staff .....	AC of S
Axis or Axes of Signal Communication .....	Ax Sig Com

#### B

Base Commander .....	Bascom
Base Defense Force (s) .....	Basdef(s)
Battalion .....	Bn
Battalion (Combat Train) (Commander) .....	Bn (C Tn) (Com)
Battalion Executive Officer .....	Bn-Ex
Adjutant .....	Bn-1
Intelligence Officer .....	Bn-2
Plans and Training Officer .....	Bn-3
Supply Officer .....	Bn-4
Battery .....	Btry
Battery (Commander) .....	Btry (Com)
Battle or battleship .....	Bat
Beach Party .....	B Pty
Bench Mark .....	BM
Boat (Group) .....	Bt (Gp)

(Standard Types)

50' motor launch	A
40' motor launch	B
36' motor launch	C
33' motor launch	D
30' motor launch	E
24' motor launch	F
31' racing cutter	G
28' cutter	H
30' whale boat	I
28' whale boat	K
24' whale boat	L
20' dingy	M
16' dingy	N
14' wherry	O
12' wherry	P
50' motor boat	Q
40' motor boat	R
35' motor boat	S
26' motor boat	T
26' motor whale boat	U
21' motor dory	V

(Special Types)

45' artillery lighter	W
Special type "squad" boat	X
Special type "section" boat	Y
50' troop barge	Z

Bombardment (Group) (Day) (Night)	Bomb (Gp) (Day) (Nt)
Brigade	Brig
Brigade Executive Officer	B-Ex
Adjutant	B-1
Intelligence Officer	B-2
Plans and Training Officer	B-3
Supply Officer	B-4
Brigade Commander	BrigCom
Brigade Headquarters	BHQ
Brigadier General	Brig Gen
Bureau	Bu
Bureau of Aeronautics	Bu aer
Bureau of Construction and Repair	Bu con
Bureau of Yards and Docks	Bu docks
Bureau of Engineering	Bu eng
Bureau of Medicine and Surgery	Bu med
Bureau of Navigation	Bu nav
Bureau of Ordnance	Bu ord
Bureau of Supplies and Accounts	Bu sanda

C

Caliber	cal
Camouflage	cam
Captain	Capt
Carrier	Car

Chaplain .....	Ch
Chemical (Company) (Officer) (Section) .....	Cml (Co) (O) (Sec)
Chief Marine Gunner .....	ChMGun
Chief of Naval Operations .....	Opnav
Chief of Staff .....	C of S
Chief Pay Clerk .....	ChPClk
Chief Quartermaster Clerk .....	ChQMClk
Civil Engineer Corps .....	CEC
Class .....	CI
Collecting (Company) (Point) (Station) .....	Coll (Co) (Pt) (Sta)
Colonel .....	Col
Combat Train .....	CTn
Commander or Commandant .....	Com
Commander Base Defense Forces .....	Combasdef
Commander Defense Forces Afloat .....	Comaf
Commander Defense Forces Ashore .....	Comdefash
Commander Fleet Marine Force .....	Comarfor
Commander Tactical Group .....	Comtacgp
Commander Transport Group .....	Comxaps
Commander Transport Division .....	Comtransdiv
Commanding Officer of Troops .....	Comtrs
Communication Instructions .....	Cominst
Communication (Officer) (Platoon) (Section) .....	Com (O) (Plat) (Sec)
Company (Commander) (Headquarters) .....	Co (Com) (Hq)
Construction Corps .....	CC
Corporal .....	Corp
Crossroads .....	CR
Cruiser .....	Cru

## D

December .....	Dec
Defense Forces Afloat .....	DFA
Defense Forces Ashore .....	DFas
Dental Corps .....	DC
Depot .....	Dep
Depot Quartermaster .....	DQM
Destroyer .....	Des
Detachment .....	Det
Distributing Point .....	DP
Division .....	Div
Division (Adjutant) .....	Div (Adj)
(Commander) (Engineer) .....	(Com) (Engr)
(Commanding Officer Special Troops and Provost Marshal) .....	(CO SpTrs & PM)
(Judge Advocate) .....	(JA)
(Munitions Officer) .....	(Mun O)
(Quartermaster) .....	(QM)
(Surgeon) .....	(Surg)
Division Headquarters .....	DHQ
Division Machine-Gun and Howitzer Officer .....	DMGHO

## E

East Coast Expeditionary Force .....	ECECF
Echelon .....	Ech
Embarkation .....	Emb
Engineer (Battalion) (Company) (Officer) (Train).....	Engr (Bn) (Co) (O) (Tn)
Engineers .....	Engrs
Ensign .....	Ens
Exclusive .....	Excl
Expeditionary .....	Ex

## F

February .....	Feb
Field Artillery (Brigade) .....	FA (Brig)
First Lieutenant .....	1st Lt
First Sergeant .....	1st Sgt
Fleet .....	Flt
Fleet Marine Force .....	FMF
Flight (Commander) (Surgeon) .....	Fli (Com) (Surg)
Foot (Feet) .....	Ft
Force Headquarters .....	FHQ
Force .....	For
Force, Personnel Section .....	F-1
Force, Intelligence Section .....	F-2
Force, Operations and Training .....	F-3
Force, Supply Section .....	F-4
Force Depot .....	ForDep
Forward Communication Center .....	FCC
Forward Echelon .....	Fwd Ech

## G

Geological Survey .....	Geol (Surv)
Group .....	Gp
Groupment .....	Gpmt
Guard .....	Gd
Gunnery Sergeant .....	Gy Sgt

## H

Headquarters .....	Hq
Headquarters (Battery) (Company) .....	Hq (Btry) (Co)
Headquarters and Headquarters (Battery) (Company) .....	Hq & Hq (Btry) (Co)
Headquarters Commandant .....	Hq Comdt
Headquarters United States Marine Corps .....	Marcorps
Hospital (Company) (Train) .....	Hosp (Co) (Tn)
Hospital Corpsman .....	hosp cpmn
Howitzer Platoon .....	How Plat
Hydrographic Office .....	Hydro

## I

Immediate Superior in Command .....	IsIC
Inch .....	in
Including or inclusive .....	incl
Infantry .....	Inf
Information Officer .....	Info O
Inspector (Section) .....	Inspr (Sec)
Intelligence (Officer) (Platoon) (Section) .....	Int (O) (Plat) (Sec)

J

January .....	Jan
Judge Advocate General .....	JAG
Judge Advocate (Section) .....	JA (Sec)
July .....	Jul
June .....	Jun

L

Landing Operations .....	LO
Liaison Officer .....	Ln O
Lieutenant (Colonel) .....	Lt (Col)
Lieutenant (Commander) (Junior Grade) .....	Lt (Comdr) (jg)
Line of Departure .....	LD

M

Machine Gun (Platoon) .....	MG (Plat)
Machine-Gun and Howitzer Company .....	MG & How Co
Main Line of Resistance .....	MLR
Maintenance Section .....	Maint Sec
Major .....	Maj
Major General .....	Maj Gen
Major General Commandant .....	MGC
March .....	Mar
Marine Barracks .....	Marbks or MB
Marine Barracks, Naval Station .....	MBNS
Marine Barracks, Navy Yard .....	MBNY
Marine Corps .....	USMC
Marine Corps Base .....	M <sup>r</sup> B
Marine Corps Expeditionary Force .....	MCEF
Marine Corps Order .....	MCO
Marine Gunner .....	M Gun
Marine Corps Reserves .....	MCR
Marine Detachment .....	Mardet
Master Technical Sergeant .....	MT Sgt
Medical Corps .....	MC
Medical Officer .....	MO
Medical (Depot) (Laboratory) (Laboratory Section) (Regiment) (Supply Company) (Supply Depot) (Supply Section) ..... Med (Dep) (Lab) (LabSec) (Regt) (Sup Co) (Sup Dep) (Sup Sec)	
Message Center .....	Msg Cen
Messenger Section .....	Msgr Sec
Meteorological Company .....	Met Co
Military Police (Battalion) (Company) .....	MP (Bn) (Co)
Minecraft or Mine .....	Min
Motor .....	M
Motorcycle Company .....	Mtel Co
Motor Repair (Section) .....	M Rep (Sec)
Motor Transport (Company) (Officer) .....	MT (Co) (O)
Motor Truck Company .....	M Trk Co
Mounted .....	Mtd
Movement Report Office .....	MRO
Munitions Distributing Point .....	Mun DP
Munitions Officer .....	Mun O

N

Naval (in titles only) .....	N
Naval Air Station .....	NAS
Naval Ammunition Depot .....	NAD
Naval Attack Force .....	NAF
Naval Attack Force Commander .....	NAFCom
Naval District .....	Com (Number of District)
Naval Hospital .....	NHosp
Naval Medical Supply Depot .....	NMSD
Naval Mine Depot .....	NMD
Naval Operating Base .....	NOB
Naval Ordnance .....	N Ord
Naval Ordnance Plant .....	N Ord P
Naval Radio Station .....	NRS
Naval Station .....	NS
Naval Supply Depot .....	NSD
Naval Torpedo Station .....	N Torp S
Naval Training Station .....	NTS
Navy Yard .....	NY
Navy or Naval .....	Nav
Noncommissioned Officer .....	NCO
November .....	Nov
Number .....	No

O

Observation (Group) (Squadron) .....	Obsn (Gp) (Sq)
Observation Post .....	OP
October .....	Oct
Officer .....	O
Officer in Charge .....	OinC
Ordnance Officer .....	OO
Operation .....	Op
Operation Order .....	Op O

P

Pack (Train) .....	Pk (Tn)
Park .....	Prk
Patrol .....	Pat
Pay Clerk .....	PCLk
Paymaster Sergeant .....	PmSgt
Photographic Section .....	Photo Sec
Pioneer .....	Pion
Platoon (Commander) (Headquarters) .....	Plat (Com) (Hq)
Point .....	Pt
Pontoon .....	Pon
Post Quartermaster .....	PQM
Postal Section .....	Post Sec
Private .....	Pvt
Private First Class .....	PFC
Provisional .....	Prov
Provost Marshal .....	PM

## Q

Quartering (Detachment) (Officer) .....	Qr (Det) (O)
Quartermaster (Section) .....	QM (Sec)
Quartermaster Clerk .....	QM Clk
Quartermaster Sergeant .....	QM Sgt

## R

Radio (Section) .....	Rad (Sec)
Radio and Panel Section .....	R & P Sec
Radio Station .....	Rad Sta
Railroad .....	RR
Ration Distributing Point .....	RDP
Rear Admiral .....	R Adm
Rear (Echelon) (Guard) .....	Rr (Ech) (Gd)
Receiving .....	Rec
Reconnaissance Officer .....	Recon O
Refilling Point .....	RP
Regiment (Regimental) .....	Regt (Regtl)
Regimental Executive Officer .....	R-Ex
Adjutant .....	R-1
Intelligence Officer .....	R-2
Plans and Training Officer .....	R-3
Supply Officer .....	R-4
Regimental Machine-Gun and Howitzer Officer .....	RMGHO
Regimental Headquarters .....	RHQ
Regimental Reserve Line .....	RRL
Regulating Officer .....	R O
Repair (Section) (Unit) .....	Rep (Sec) (Unit)
Rifle (Company) (Platoon) (Squad) .....	R (Co) (Plat) (Sqd)
Road Junction .....	RJ

## S

Searchlight .....	SL
Second Lieutenant .....	2d Lt
Secretary of the Navy .....	SecNav
Section .....	Sec
Senior Officer Present (Afloat) .....	SOP (A)
September .....	Sep
Sergeant .....	Sgt
Sergeant Major .....	Sgt Maj
Service (Battery) (Company) .....	Serv (Btry) (Co)
Ship Fire Control Party .....	SFC Pty
Shore Party .....	S Pty
Small Arms Ammunition .....	SA Am
Specialist First Class .....	Spl 1cl
Special Troops .....	Sp Trs
Squad .....	Sqd
Squadron (Headquarters) .....	Sq (Hq)
Squadron Adjutant .....	Sq-1
Intelligence Officer .....	Sq-2
Operations and Training Officer .....	Sq-3
Supply Officer .....	Sq-4
Staff Sergeant (Clerical) (Mechanical) .....	Stf Sgt (C) (M)

Station .....	Sta
Submarine .....	Sub
Submarine Base .....	Sub B
Subwave .....	Sbwv
Supply Corps .....	SC
Supply (Officer) (Section) .....	Sup (O) (Sec)
Supply Sergeant .....	Sup Sgt
Surgeon .....	Surg

### T

Tactical Group .....	Tacgp
Tank (Company) .....	Tk (Co)
Technical Sergeant .....	Tech Sgt
Telegraph (Section) .....	Tg (Sec)
Telephone (Section) .....	Tp (Sec)
Train (Master) .....	Tn(Mr)
Training Station .....	Trasta
Training Squadron .....	Drillron
Transport (Company) (Officer) .....	T (Co) (O)
Transport Division .....	Transdiv
Transport Group .....	xaps
Transportation (Company) (Platoon) (Section) .....	T (Co) (Plat) (Sec)
Trench Mortar .....	TM
Troop (s) .....	Tr (s)
Truck Section .....	Trk Sec
Trumpeter .....	Tpr

### U

U.S. Army .....	USA
U.S. Marine Corps .....	USMC
U.S. Navy .....	USN

### V

Veterinarian .....	Vet
Vice Admiral .....	VAdm
Visual .....	Vis

### W

Wave .....	Wv
West Coast Expeditionary Force .....	WCEF
Wire Section .....	Wire Sec

### Y

Yard (s) .....	Yd (s)
----------------	--------

## SECTION XXII

The abbreviated titles shown below are authorized for use in official correspondence where brevity is desirable:

TITLE	WRITTEN
Commander-in-Chief, U. S. Fleet	Cincus
Commander Battle Force	Combatfor
Battle Force	Batfor
Commander Scouting Force	Comscofor
Scouting Force	Scofor
Commander Submarine Force	Comsubfor
Submarine Force	Subfor
Commander Base Force	Combasefor
Base Force	Basefor
Commander Battleships, U. S. Fleet	Combatus
Battleships, U. S. Fleet	Batus
Commander Battleships, Battle Force	Combatships
Battleships, Battle Force	Batships
Commander Battleship Division	Combatdiv
Battleship Division*	Batdiv*
Commander Cruisers, U. S. Fleet	Comcrusus
Cruisers, U. S. Fleet	Crusus
Commander Cruisers, Scouting Force	Comcruscofor
Cruisers, Scouting Force	Cruscofor
Commander Cruisers, Battle Force	Comcrubatfor
Cruisers, Battle Force	Crubatfor
Commander Cruiser Division	Comcrudiv
Cruiser Division	Crudiv
Commander Destroyers, U. S. Fleet	Comdesus
Destroyers, U. S. Fleet	Desus
Commander Destroyers, Battle Force	Comdesbatfor
Destroyers, Battle Force	Desbatfor
Commander Destroyers, Scouting Force	Comdescofor
Destroyers, Scouting Force	Descofor
Destroyer Flotilla	Desflot
Commander Destroyer Squadron	Comdesron
Destroyer Squadron**	Desron**
Commander Destroyer Division	Comdesdiv
Destroyer Division	Desdiv
Commander Aircraft, U. S. Fleet	Comairus
Aircraft, U. S. Fleet	Airus
Commander Aircraft, Battle Force	Comairbatfor
Aircraft, Battle Force	Airbatfor
Commander Aircraft, Scouting Force	Comairscofor
Aircraft, Scouting Force	Aircofor
Commander Carrier Division	Comcardiv
Carrier Division	Cardiv
Commander Minecraft, U. S. Fleet	Cominus
Minecraft, U. S. Fleet	Minus

TITLE	WRITTEN
Commander Minecraft, Battle Force Minecraft, Battle Force	Cominbatfor Minbatfor
Commander Mine Squadron Mine Squadron	Cominron Minron
Commander Mine Division Mine Division	Comindiv Mindiv
Commander Training Squadron Training Squadron	Comdrillron Drillron
Commander Submarines, U. S. Fleet Submarines, U. S. Fleet	Comsubus Subus
Commander Submarine Squadron Submarine Squadron	Comsubron Subron
Commander Submarine Division Submarine Division	Comsubdiv Subdiv
Commander Train Squadron Train Squadron	Comtrainron Trainron
Commander in Chief, Asiatic Fleet	CinCasiatic
Commander Yangtze Patrol Yangtze Patrol	Comyangpat Yangpat
Commander South China Patrol South China Patrol	Sopatcom Sopat
Commander Special Service Squadron Special Service Squadron	Comsperon Speron

Notes.— \* "Divisions" will be abbreviated "Divs."  
 \*\* "Squadrons" will be abbreviated "Rons."

## SECTION XXIII

### Standard nomenclature list authorized for naval vessels:

TYPE	CLASS	SYMBOL
Battelship	Battleship	BB
Monitor	Monitor	BM
Cruiser	Heavy Cruiser	CA
	Light cruiser	CL
	Flying-deck cruiser	CF
	Aircraft carrier	CV
Aircraft Carriers	Aircraft carrier	CV
	Destroyer	DD
Destroyer	Destroyer leader	DL
	Submarine	SS
Submarine	Submarine	SS
	Mine-laying submarine	SM
Mine vessel	Mine layer	CM
	Light mine layer	DM
	Mine sweeper	AM
Patrol vessel	Eagle	PE
	Submarine chaser	PC
	Gunboat	PG
	River gunboat	PR
	Yacht	PY
Auxiliary	Crane ship	AB
	Collier	AC
	Destroyer tender	AD
	Ammunition ship	AE
	Provision storeship	AF
	Miscellaneous auxiliary	AG
	Seagoing dredge	AGD
	Lighthouse tender	AGL
	Hospital ship	AH
	Evacuation hospital ship	AHP
	Cargo ship	AK
	Deep-hold cargo ship	AKD
	General stores issue ship	AKI
	Aircraft supply ship	AKV
	Lightship	AL
	Net-laying ship	AN
	Oiler, or fuel-oil tanker	AO
	Gasolene tanker	AOG
	Transport	AP
	Animal transport	APA
	Artillery barge	APB
	Cavalry transport	APC
	Administration flagship	APF
Supporting gunnery ship	APG	
Labor transport or barrack ship	APL	
Mechanized artillery transport	APM	
Nonmechanized artillery transport	APN	
Troop barge, Class A	APP	
Troop barge, Class B	APT	

TYPE	CLASS	SYMBOL
	Aircraft transport	APV
	Repair ship	AR
	Cable repair or laying ship	ARC
	Floating drydock	ARD
	Heavy hull repair ship	ARH
	Heavy machinery repair ship	ARM
	Salvage vessel	ARS
	Aircraft repair ship	ARV
	Submarine tender	AS
	Submarine rescue vessel	ASR
	Ocean-going tug	AT
	Aircraft tender (heavier-than-air)	AV
	Aircraft rescue vessel	AVR
	Distilling ship	AW
	Water tanker	AWK
	Airship tender (lighter-than-air)	AZ
District Craft	Boats:	
	Ambulance	YH
	House	YHB
	Barges:	
	Fuel-oil	YO
	Oil storage	YOS
	Pontoon stowage	YPK
	Sludge removal	YSR
	Stevedoring	YS
	Torpedo testing	YTT
	Water	YW
	Derrick:	
	Floating	YD
	Seaplane wrecking	YSD
	Dredges	YM
	Ferry boats and launches	YFB
	Floats, car	YCF
	Lighters:	
	Ammunition	YE
	Ash	YA
	Covered	YF
	Garbage	YG
	Open	YC
	Pile drivers, floating	YPD
	Pontoons, salvage	YSP
	Scows, heating	YHT
	Tugs:	
	Harbor	YT
	Motor	YMT
	Workshops, floating	YR
	Vessels, district patrol	YP
Aircraft (Heavier-than-Air)	Bombing	VB
	Observation	VO
	Fighting	VF

TYPE	CLASS	SYMBOL
	Torpedo	VT
	Scouting	VS
	Patrol	VP
	Utility	VJ
	Training	VN
	Experimental	VX
Airship (Lighter-than-Air)	Rigid airship:	
	Scouting	ZRS
	Patrol	ZRP
	Training	ZRN
	Nonrigid:	
	Observation	ZNO
	Scouting	ZNS
	Patrol	ZNP
	Training	ZNN
	Kite balloon and balloon:	
	Observation	ZKO
	Training	ZKN
	Metal, experimental	ZMX

"X" before a class indicates that it is a merchant ship converted to that type.  
 "O" before any class designation represents obsolescent vessel.

## SECTION XXIV

**1. March table.**—The operation order for the march may be accompanied by a march table, particularly when the details of the march are not subject to change and can be foreseen in detail. The march table is a combined location and movement schedule and contains:

- a. The location of subordinate units.
- b. Organization of columns or serials.
- c. Time of starting the march of serials when different from the general hour prescribed in the operation order.
- d. Time for clearing areas or terrain features enroute in order to avoid interference within the command or with other commands.
- e. Route to be followed or zones of action.
- f. Staging areas en route.
- g. Final destinations.

The march table affords a convenient means for transmitting to subordinates the many details pertaining to the march, the inclusion of which in the body of the operation order would tend to confuse or would make the order unduly lengthy. An independent division operating at a distance from other forces will rarely ever require a march table, but when moving as part of a corps, or when moving through an area in which interference with march columns may occur, it is often necessary to carefully compute a schedule of movements and to publish it in a march table.

**2. Preparation of a march table.**—The preparation of a march table requires more or less time and careful attention to details.

a. The first step is the determination of the bivouac areas for the different elements of the division at destination.

b. The next step is the determination of the route or zone of action for the move. (For a division two or more roads, one of which should be suitable for motor transportation, are desirable.) The crossing of columns should be avoided if practicable. Should it be necessary for columns to cross, priority in crossing will be established after careful calculations to prevent interference and unnecessary delays. Traffic control posts may be established at critical points along the routes of march.

c. The next step is to form the various elements into serials and to determine the time length of each. In general, this requires a consideration of:

- (1) The tactical requirements of the situation.
- (2) The functions of the various elements during the march, if any.
- (3) The relative location of the various elements at the start and their relative locations at destination.

d. The nature of the various elements must also be considered. Motorized units should not be grouped with foot troops and animal elements, due to their widely different rates of march.

e. Quite often it will be advisable and permissible to have those serials with the higher rates of march move last over a route, and to prescribe that they start their march at an hour which will enable them to utilize their full rate of march from start to finish. This is particularly applicable to motorized elements, which habitually move by bounds. If routed between two serials of lesser rates of march they will delay the slower serial in rear.

f. When different organizations are assembled in one serial, a commander is designated.

g. If an advance guard is used, allowance must be made for the elongation of the column due to the advance guard intervals.

h. The final step is the preparation of the march table. In general, serials should be listed in the order of march from right to left. The exact hour at which the march is to start is prescribed in the operation order. This applies to the leading serial in each column and when the serials that follow start the march at other hours, notation of this fact may be made in the column of remarks in the march table. The march table serves as a time table and from it each serial commander should obtain the hour of starting the march and all instructions necessary to avoid interferences with other serials.

i. A zone of action is prescribed when a serial is to have the full use of an area along the route. This applies particularly to large serials when all roads in the area may be used or when there is a tactical responsibility for the zone. The route is prescribed when only one road is to be used. A serial may be given two roads instead of a zone embracing them when the intervening area is not available for full use.

j. Bivouac and staging areas for the serials are prescribed and are stated in brief terms, not only for the benefit of the serial concerned but also for the purpose of giving the entire command a picture, or complete plan, of the movement.

k. Times for movements are carefully computed and when practicable a fair amount of clearance should be allowed between serials as a safety factor.

l. The language used in the march table should be brief and explicit.

m. When there is danger of interference, F-3 should have a march graph prepared by means of which danger points will be readily seen.

3. **March graphs.**—a. A march graph is a graphical representation of the march of a body of troops and is useful to those whose duty it is to plan the march of a large body of troops or to regulate traffic. From it the location at any hour of the head and tail of each serial can be readily obtained. The march graph is prepared on cross-section paper. The vertical scale to the left, with point of origin at the bottom, serves as a distance scale in yards or miles and shows the relative locations along the route of towns, crossroads, other important terrain

features, the forward boundary, and the rear boundary of bivouac areas. The horizontal scale serves as a time scale in hours, beginning at the left with the hour at which the first serial starts the march. Serials are represented on the graph by horizontal lines, drawn to scale, equal to their time length. The time length of a serial is obtained by dividing the road space of the serial in miles by its rate of march. The result obtained represents the time that it takes the serial to pass a given point. The line which represents the actual time length of a serial is plotted opposite the place on the vertical scale from which the head of the serial begins the march. The left end of this line is plotted above the hour on the horizontal scale at which the head of the serial begins the march. Another horizontal line of the same length is drawn opposite the point on the vertical scale representing the rear boundary of the new bivouac area. The left end of this line is plotted over the hour on the horizontal scale at which the head of the serial reaches the rear boundary of its new area. The ends of these two horizontal lines are connected by diagonal lines which represent the rate of march. The diagonal lines show the hours at which the head and tail of a serial reaches or clears, respectively, points noted on the vertical scale.

b. March graphs are made in the following manner:

(1) On a piece of cross-section paper, select a point near the lower left hand corner at the intersection of a horizontal line and a vertical line and mark it "O". Mark the right end of the horizontal line with the letter "X" and the upper end of the vertical line with the letter "Y". The horizontal line "OX" serves as the time scale and the vertical line "OY" as the distance scale.

(2) On the horizontal scale under the letter "O" enter the hour at which the march of the first serial begins. On the vertical scale the letter "O," represents the intersection of the forward boundary of the rearmost serial with the route taken. On the vertical scale enter, at their proper distances from the point of origin "O," the names or designations of well defined points along the route of march. All points of reference entered in the march table should be plotted on this scale as well as other points of special importance such as towns, crossroads, and road junctions.

c. March graphs are prepared by the troop movement subsection of F-3's office. The march graph may be prepared before the march table and from it may be obtained the data to be incorporated in the column of remarks of the march table in regard to the hour of starting the march clearances, and other restrictions for each serial.

d. If the march table is prepared independently of a march graph, it is well to check the column of remarks by means of a march graph before publishing the march table to the command.

(HEADING)

ANNEX No. .... TO OPERATION ORDER No. ....

(Date) ..... 193. .... (Time) .....

MARCH TABLE

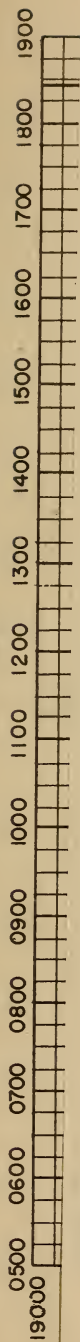
SERIAL NO.	ORGANIZATION	PRESENT LOCATION	INITIAL POINT	ROUTE	LOCATION BY (Time)...	REMARKS (Instructions relative to march and release of units)

Note: (Information relative to priority and blocks.)  
(Authentication)

(Signature)

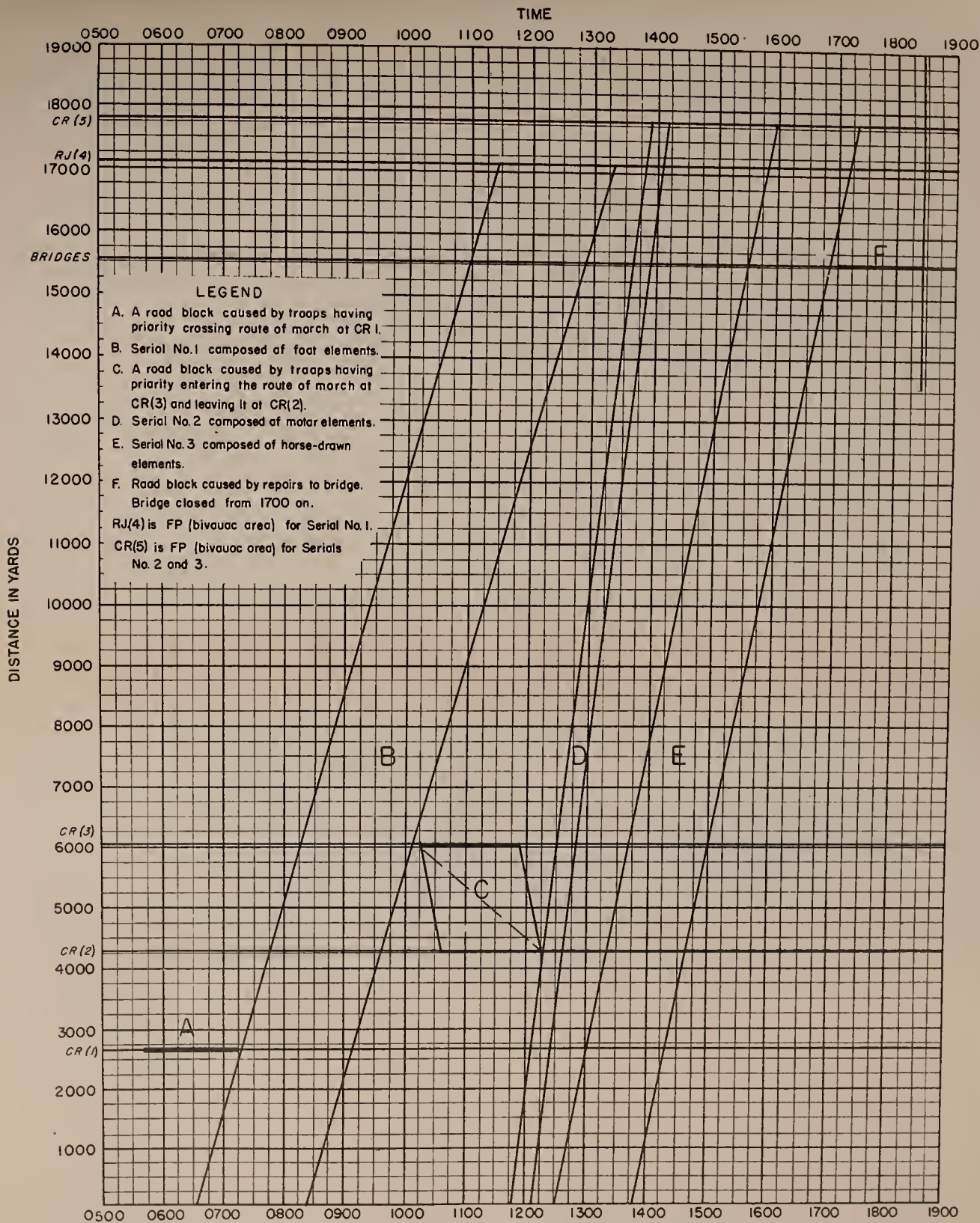
# SAMPLE MARCH GRAPH

TIME





# SAMPLE MARCH GRAPH





IP Initial point  
 FP Final point  
 a Hour march may begin  
 b Hour march must end

Blocks  
 Distance from IP:  
 X hour block begins  
 Y Hour block ends

### COMPUTATION SHEET

For determining hours to be entered in march table.

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Serial No.	Organization and rate or march	IP and time distance to it	Length of serial in minutes	Block(s) and time distance from IP	Time to clear block(s) (4+5)	FP and time distance IP to FP	Time to clear FP (4+7)	Earliest hour may pass IP (a+3)	Latest hour before block(s) (X-6)	Earliest hour after block(s) (Y-5)	Latest hour after block(s) (b-8)	Times may pass IP	Hour serial to pass IP
1													
2													
3													

Note:—To test clearance at FP: 14+8 of any serial should be the same as or earlier than 14+7 of the serial following.



## SECTION XXV

### GLOSSARY

**Active Defense.**—That class of defense designed to gain a tactical victory by developing and temporarily containing the enemy, and then striking a decisive blow.

**Advance by Bounds.**—Advance by a series of successive movements of a unit as a whole, whether it be an organization, a train, or an establishment.

**Advance On.**—Used when doubt exists whether the unit will actually reach the designation mentioned.

**Advance To.**—Used when it is reasonably certain that the designated destination will be reached.

**Alert Phase.**—The period from the time that the enemy arrives within striking distance of a base until the time he occupies transport areas preparatory to a general attack on the base. A period of time during which troops stand to in response to an alarm.

**Approach Trench.**—Also called an approach. A trench intended to provide protected communication between the front and rear elements of a defensive position.

**Assault.**—The final phase of an attack against any particular element, wherein the offense moves forward to determine the issue by close combat.

**Assault Line.**—A line of assault units.

**Assault Unit.**—A unit committed to the attack, and intended to execute the assault.

**Assembly Area.**—An assembly position (see next par.) or an area containing a number of them.

**Assembly position.**—An assigned locality in which an organization or train is grouped or is to be grouped preparatory to further action, such as an attack or a retreat.

**Attack, Coordinated.**—An attack in which the efforts of the various offensive elements are regulated and combined into concerted action. For the contrary case, see Attack, Piecemeal.

**Attack, Holding.**—An attack designed to hold the defense in position on the front thus assailed and to prevent them from withdrawing any portion of their forces and employing them, or any reserves, against that part of the attack making the main effort of the whole.

**Attack, Piecemeal.**—An offensive action in which the attacks of the elements of a command are not concerted as to time. For example, an attack in which the leading elements are committed to action, the rear elements being engaged as they are brought forward. For the contrary case, see Attack, Coordinated.

**Area, Critical.**—Those areas from which uninterrupted controlled fire can be delivered into the vital Area.

**Area, Vital.**—The anchorage of the base and a limited amount of land nearby on which to establish the base facilities.

**Axis of Signal Communication.**—The line designated by stating the controlling points through which a command post moves or is to move. These points are not necessarily successive locations of command posts, though they may be used as such if circumstances dictate. The first point or place named is the initial location for the command post in the particular operation.

**Band of Fire.**—Fire, grazing at least in part and preferably from the muzzle to the farther end of the beaten zone, delivered by one or more pieces with the same mission, and by a weapon of such character that a single piece produces a cone so dense as to make it probable that a man will be hit when crossing the line of fire at top speed. An important use of bands of fire is their delivery along final protective lines.

**Barrage.**—A barrier of fire produced, except for the anti-aircraft barrage (see note below), at the forward end of the trajectory, and designed to be laid on an area close to friendly troops, irrespective of the presence of the enemy therein, its purpose being to screen and protect the friendly troops by inflicting losses on the enemy and by impeding and preventing his movement or fire. Barrages may be moving or fixed, and may be used offensively or defensively. See also Concentration.

**Note.**—An anti-aircraft barrage is one designed to intercept the flight of hostile aircraft. The inclusion of all but the forward end of the trajectory obviously does not apply to this type of barrage.

**Base, Advanced.**—A protected overseas locality to which the fleet, or units thereof, can retire for protection, repairs, supply, and recreation, and from which it can operate offensively. Usually of a temporary character.

**Base Area.**—That area including the anchorage within the harbor and the amount of land adjacent to the harbor essential to and on which the fleet shore establishments are located.

**Base Defense Force.**—The Base Defense Force is that force, usually comprised of naval and military elements, detailed to defend a base.

**Base, Main Home.**—A main home base is one within the continental territory of the country, from which the fleet can operate at all times and which is designated to maintain the fleet in all respects both in peace and war.

**Base, Main Outlying.**—A main outlying base is one without the continental limits of a country, having as many of the attributes of a main home base as practicable, and designed to be a strong point of support for the fleet and from which it can be maintained for limited periods in war.

**Base, Subsidiary.**—A subsidiary base (home or outlying) is one that contains some of the fixed elements of a main base and which, while not capable of supporting and maintaining the whole fleet, may so care for portions of it.

**Battalion Reserve Line.**—One of the lines of the battle position or of any reserve battle position, established by the strong points of the reserve elements of battalions holding the line of resistance. See Battle position and Strong point.

**Battery.**—A fire unit of two or more pieces actually emplaced, as on the ground, on a vessel or war, or in aircraft. Also applied to such a unit (for example, of machine guns) when changing position from one emplacement to another.

**Battle Position.**—A defensive position on which the principal effort of the defense is concentrated.

**Beach.**—That portion of the shore line normally required for the landing of a force of troops approximating one infantry assault battalion. It may be a portion of the shore line constituting a tactical locality, such as a bay, to which ultimately may be assigned a force larger or smaller than a battalion.

**Beach Area.**—Comprises a series of contiguous beaches, mutually supporting, permitting a landing on a broad front.

**Beachmaster.**—A naval officer detailed to control the beach from the high water mark seaward. He is responsible for the debarkation and embarkation of all troops and material at the beach and for all shore to ship transportation and communication except communication for fire control.

**Beach Party.**—A detachment of naval personnel detailed to assist the Beachmaster.

**Beachhead.**—The beachhead is a zone contiguous to the beach the possession of which insures the maneuver space and terrain features requisite for a further advance, permits the continuous landing of troops, equipment, and supplies without serious interference from the enemy and insures the security of the shore establishments after the landing has been effected.

**Beachhead Line.**—An objective prescribed for the purpose of fixing the limits of the beachhead zone.

**Belt of Fire.**—A barrier of fire produced by the combination of two or more converging bands of fire having no gaps large enough to endanger the tactical integrity of the defense.

**Boat Assembly and Rendezvous Diagrams.**—Shows the assembly areas of empty boats preparatory to debarkation, routes to gangways, and rendezvous areas of loaded boats.

**Boat Assignment Table.**—A table showing the organization of boats into boat divisions, boat division formations, and the personnel carried in each boat.

**Boat Diagram.**—A sketch showing the arrangement of personnel and material in a boat.

**Boat Division.**—A subdivision of the boat group, organized for transporting a platoon, company, or other tactical subdivision within the landing group.

**Boat Group.**—A group of boats organized for transporting a combat team or some other similar tactical unit.

**Boat Flotilla.**—An organization comprising two or more boat groups.

**Boat Pool.**—Additional boats assigned to transports to aid or replace boats which become inoperative prior to and during the landing.

**Boat Rig A and Ramp.**—A platform and portable ramp designed to permit the landing of tractors, trailers, 75 mm. guns, and other vehicles from standard 50-foot motor launches.

**Boat Space.**—The space and weight assigned in a boat to a marine, with his individual combat equipment. The individual with combat equipment is assumed to weigh 224 pounds (one-tenth of a long ton) and to occupy 13.5 cubic feet of space.

**Boundary, Sector.**—A line limiting a defensive sector at its right, left or rear. The right and left boundaries of a sector are designated by naming successive points from rear to front.

**Center of Resistance.**—An organized tactical locality consisting of two or more strong points, so disposed as to provide for all-round defense, under unified command and usually garrisoned by a battalion of Infantry.

**Class of Defense.**—The method of conduct of defensive combat as determined by the mission of the defending force and by the enemy's situation. The usually recognized classes of defense include the active defense, the passive defense and delaying action.

**Clear.**—Used to indicate that all elements of the designated organization shall have passed the indicated place.

**Combat Formation.**—A formation suitable for entering the fire fight.

**Combat Group.**—See Combat Post.

**Combat Patrol.**—A patrol having a primary mission that involves fighting.

**Combat Platoon.**—See Front-line unit.

**Combat Post.**—The smallest organized tactical locality in the defense, its garrison varying from a few men to a rifle platoon. The garrison is always prepared to resist attack from the flanks and, when practicable from the rear. The expression "Combat Group" is often used to indicate the garrison of a combat post.

**Command Post.**—a. An establishment provided in the field to facilitate the operation of a headquarters, exclusive of its rear echelon if there be one. It is the center from which a commander exercises command, from which the staff operates, and to which all communications for the commander are directed.

b. Also, the location of the establishment mentioned in a, above.

**Communication Trench.**—A trench intended primarily for circulation within a defensive position, both perpendicular and parallel to the front. In the former cases it is an approach trench. In the latter it connects the organized tactical localities along the several lines of the position; see also Parallel Trench.

**Complete Type Trench.**—A type of trench constructed with a view to facilitating both circulation of personnel and delivery of fire.

**Concentration.**—Fire produced by projectiles directed upon a common target. A concentration differs sharply from a barrage, as the latter is a barrier of fire laid on an area irrespective of the presence of the enemy therein, whereas the former is directed upon some designated target for a limited time.

**Connecting Group.**—A patrol detailed to operate in an interval in order to maintain connection with an adjacent unit and to furnish information as to the situation.

**Control Points.**—Reference points which are marked by buoys, boats, or small craft for use as aids to navigation for the vessels and boats of the attack force.

**Counterattack.**—An attack launched by part of a force against an attacking element, with the purpose of relieving pressure; or an attack launched by part of a defending force to regain portions of the defensive area which have been captured by the enemy.

**Counterpreparation.**—Prearranged fire, to be delivered while the enemy is forming for attack, with the object of breaking up his formations and preventing the attack from being launched. Such fire may be delivered by infantry weapons as well as by artillery.

**Cover.**—To screen, conceal, or insure the security or protection of another force or locality. Natural or artificial shelter or protection from fire or observation, or any object affording such protection.

**Debarkation and Approach Schedule.**—Contains instructions necessary to insure troops being debarked from transports and landed in accordance with the prescribed plan.

**Debarkation Schedule.**—A detailed schedule for each boat group showing the following information for each boat in the group:

Designating number of the boat.

Personnel embarking in boat.

Time to come alongside, and place. The time to shove off.

Instructions for taking approach formation.

Instructions for handling material to be taken ashore.

Formation and time of assembly for embarking in landing boat.

**Defensive Position.**—Any area occupied or organized for defense.

**Defensive System.**—A series of organized areas arranged in depth for coordinated use in the defense of a certain area.

**Demonstration.**—An exhibition of force, or movement, indicating an attack.

**Deny.**—To prohibit the effective use of any area or terrain feature by the enemy.

**Deploy.**—a. To extend a unit or any of its subdivisions in front, or to separate its elements (or those of its subdivisions) laterally, for a battle purpose. A corresponding extension from front to rear is called disposition in depth.

b. Specifically, to extend into combat formation.

**Deployment Diagram.**—Shows graphically how the boat group deploys into the various landing formations.

**Depth.**—The space from front to rear in any formation, including the leading elements.

**Distance.** (naval).—The space, in any direction, between individual ships or boats.

**Embarkation Group.**—A task group, for transportation overseas, of combatant and service troops, normally a Marine Brigade with attached Force Troops. It should be embarked on a transport division.

The embarkation group is designed to fit into some task of every plan prepared for the various contingencies in any given operation.

**Envelop.**—To attack simultaneously the opposing front and one or both flanks. If both flanks be attacked, the operation is called a double envelopment.

**Exploitation Line.**—The exploitation line is a line in advance of the final objective beyond which subordinate commanders will not exploit local successes without higher authority and to which reconnoitering and security detachments will be pushed immediately by units occupying the beachhead line.

**Final Protective Line.**—A predetermined line along which, in order to stop assaults, it is intended to place grazing fire, fixed as to direction and elevation, and capable of delivery under any conditions of visibility.

**Fire Superiority.**—A situation existing when the fire action of one adversary prevents the other from delivering a fire capable of accomplishing its primary purpose.

**Fire Trench.**—A trench constructed to facilitate the delivery of small-arms fire.

**Flank.**—The right or left of a command when facing an opposing force. The designation "right flank" does not change when a command is retreating.

**Follow.**—To come after. Also indicates that a rear element regulates its advance on an element in front.

**Force, Attack.**—A task organization of the fleet especially constituted for the conduct of landing operations.

**Force Beachhead Line.**—The objective prescribed for the Force attack. It fixes initially the limits of the beachhead area. Ordinarily as a matter of security, it will be necessary to clear all enemy resistance up to this line, but it is not necessarily a defensive line to be occupied and organized as such. It is, however, a tentative main line of resistance in case of counter attack prior to the advance from the beachhead, and it is occupied and organized to the extent demanded by the situation.

**Force, Landing.**—That portion of the attack force which conducts operations ashore.

**Form of Defense.**—The character of the defense as determined by tactical dispositions and measures taken for defensive combat. The forms of defense are the deployed defense, the position defense, and the zone defense.

**Front.**—The space occupied by a given element measured from one flank to the other, including interior intervals.

**Frontage.**—The lateral dimensions of the area of responsibility of a given element; for example, in attack, the width of its zone of action; in defense, the width of its sector.

**Front Line.**—The line formed by the most advanced elements, exclusive of local security, in any given situation. See Front-Line Unit.

**Front Line-Unit.**—A unit located on the line of the most advanced elements, exclusive of local security, of a defensive position or of an assault, formation.

**Group.**—A number of men formed for a specific purpose. A tactical unit formed for convenience of two or more batteries. See Combat Group.

**Group, Attack.**—A subordinate organization of the attack force.

**Group, Task.**—A force organized to carry out a specific task.

**Group, Transport.**—That portion of the attack force composed of transports and utilized for the transportation of the landing force.

**Head.**—Leading element of a column no matter in which direction the column is facing.

**Hold.**—Retain possession by force of a position or terrain feature.

**Home Base.**—One within the continental territory of the country, from which the fleet can operate at all times, which is designed to maintain the fleet in all respects, both in peace and in war. Example: Naval Base, Hampton Roads, Va.

**Infiltration.**—The act of passing troops in relatively small numbers, through gaps in, or weakly held portions of, a hostile position.

**Initial Point, or I. P.**—Place at which the various subdivisions of a command are required to arrive at the proper time to join a marching column.

**Intermediate Beachhead Line.**—A line which, if not prescribed by higher authority, may be prescribed by subordinate commanders when desirable, and particularly where beaches are not contiguous, for the purpose of protecting the beaches from machine gun fire.

**Interval.**(naval)—The space in any direction between groups of ships or boats, measured between the corresponding ship or boat in each group.

**Landing Area.**—Comprises the shore and sea areas involved in the landing operations. A large overseas expedition may require the use of more than one landing area.

**Landing Attack.**—A forced landing of troops on a shore, or an attack immediately following a landing.

**Landing Diagram.**—Shows graphically the tactical formation of a boat group for the landing.

**Landing Group.**—A landing Group is a task group for the movement from ship to shore. It includes all personnel for landing in the same boat group.

**Landing Schedule.**—The landing schedule is a schedule showing the organization of a force into landing groups. This schedule is prepared jointly by the Marine and Naval Commanders concerned.

**Liaison.**—A condition such that two or more persons, through the flow of information, are mutually cognizant of each other's situation or intentions. In the usual case this term is applied to conditions existing between commanders, headquarters, and units, in combat.

**Limiting Point.**—The point of intersection of the right or left boundary of a sector with one of the lines of a defensive position, its purpose being to insure the junction, on a boundary, of the corresponding lines of adjacent sectors.

**Line of Departure.**—A coordinating line which the leading elements of assault units are directed to cross at a designated time, in order to insure coordination between units and arms.

**Line of Resistance.**—The line in any defensive position on which the principal resistance of a position is to be made.

**Loading, Commercial.**—Utilizes to the maximum the ship space and does not contemplate tactical employment of the troops on landing until their equipment, other than personal equipment, has been issued to them. This method of loading is applicable to movements from an established port to an established and well secured port. Troops moved by this method are not available for tactical employment in landing operations against hostile forces.

**Loading, Combat Unit.**—In which certain units, selected because of their probable destination and employment in landing on hostile shores, are completely loaded on one ship with at least their essential combat equipment and supplies immediately available for debarkation with the troops, together with the transportation for the organization when this is practicable. This method of Unit loading is particularly applicable to units which probably will be required for an assault on hostile shores by a landing from small boats. Such an operation against any one beach will require a combat team. This, of course, is subject to modification to meet special requirements. Combat teams will be loaded in such manner as to permit simultaneous debarkation.

**Loading, Convoy Unit.**—In which the troops with their equipment and supplies are loaded on transports of the same convoy, but not necessarily on the same transport. This allows a considerable utilization of ship space, particularly by using this method of loading to fill in space on transports carrying combat unit loaded organizations. Troops which are convoy loaded are available for tactical employment only when landed at established beachheads, and after the lapse of time necessary to assemble them on land, with their equipment and supplies.

**Loading, Organizational Unit.**—In which organizations with their equipment and supplies are loaded on the same transport, but not so loaded as to allow debarkation of troops and their equipment simultaneously. This is somewhat more economical in ship capacity than is combat unit loading. It permits debarkation of complete units available for employment as soon as the troops and their equipment have been assembled on land. Like combat unit loading, this method permits diversion enroute, by complete ship loads, from the destination originally intended.

**Loading, Unit.**—Gives primary consideration to the readiness of troops and materiel for combat purposes immediately on landing rather than utilization of ship space.

The degree of readiness for employment depends upon the degree to which organizations are unit loaded as follows:

Combat Unit Loading.

Organizational Unit Loading.

Convoy Unit Loading.

**Local Security.**—a. The protection which an element obtains through the use of small detachments so disposed as to provide immediate close protection for the element concerned.

b. The protective elements utilized for the purpose indicated in **a** above.

In a more specific sense, this term is used to indicate the protective elements disposed in the immediate front of the main line of resistance. Another expression, "combat outposts," used in this same particular sense, will be found in certain texts.

**Main Effort.**—That part of an attack where the greatest power is concentrated against the opposing force for the purpose of gaining a decision.

**Main Landing.**—A main landing is that landing on which the successful carrying out of the mission depends.

**Main Line of Resistance.**—The line of resistance of the battle position.

**Maneuver Area.**—An area assigned to a combatant vessel or vessels while supporting a landing or while defending a base.

**Maneuver.**—A movement based on tactical conditions, made according to the nature of the ground and with reference to the position and movement of the enemy.

**Mask.**—Any natural or artificial obstruction which affords concealment from view or protection from fire. Fire is also said to be masked when its continuation would result in casualties to friendly troops between gun and target.

**Mass.**—a. A formation in which subdivisions are separated by space less than full distance or full interval. Also used in military parlance in the popular sense of a large body, as a mass of maneuver.

**Meeting Engagement.**—A collision between two opposing forces neither of which is deployed for combat.

**Mission.**—A specific task plus the purpose therefor.

**Mutual Fire Support.**—Reciprocal protection of the front, rear, or flanks of adjacent organized tactical localities, by the fire of their garrisons.

**Naval Base.**—Is a center from which men-of-war can operate and be maintained, and may be of a permanent or temporary character.

**Navigational Reconnaissance.**—Navigational reconnaissance is that reconnaissance made for the purpose of verifying and supplementing existing hydrographic and meteorologic data on the theater of operations; determining, from a navigational standpoint, the suitability of beaches and sea area required for the conduct of a landing; locating mined area, under-water obstacles and other obstructions; selecting suitable approaches to landing areas; preparing sailing directions, and establishing necessary aids to navigation.

**Objective.**—A terrain feature to be reached, or a result to be accomplished in the course of a military operation.

**Observation Post.**—A station, sometimes especially prepared or improved for the purpose, which is designed for or used for observation of the enemy, of our own troops, or of the ground.

**Obstacle.**—Any feature, either natural or artificial, which hinders approach to a position. Obstacles are classified as protective and tactical.

**Obstacle, Protective.**—An obstacle designed to prevent the sudden entrance of hostile forces into the works of the defense.

**Obstacle, Tactical.**—An obstacle designed to hold the attacker under fire of the weapons of the defense.

**Organization of the Ground.**—The adaptation of selected terrain for defense by the construction of works for the purpose of interfering with and delaying hostile attacks, primarily by the delivery of fire; of providing protection from hostile fire; and of facilitating command, movement, supply, and evacuation.

**Outlying Base.**—A base without the continental limits of the country. A strong point of support for the fleet from which it can be maintained for limited periods in war. Example: Naval base, Hawaii.

**Outpost Area.**—That part of the area in front of a battle position in which a part of the defensive force is disposed for observation and security and for delaying or disorganizing general attacks. It consists of mutually supporting organized tactical localities, or a more or less fully organized position. A line of resistance is always prescribed.

**Outpost, Position.**—A defensive position located in the outpost area to provide observation and security and to delay or disorganize attacks.

**Parallel Trench.**—Also called a parallel. A trench, the general direction of which, is parallel to the front. Parallels are generally constructed as fire trenches. Again they may be, in part or entirely, of the complete type permitting both fire and communication. See Complete Type Trench.

**Passive Defense.**—The class of defense designed solely to hold a specified area, position, or front against attack.

**Penetration.**—The act of piercing the opposing front.

**Phases.**—The execution of an overseas expedition divides itself into the following three phases, and plans are made accordingly:

(1) **Embarkation Phase** consists of all preparatory measures taken to assemble the troops, their equipment, supplies, and transportation at or near the port of embarkation and the loading of the troops and supplies on the transports.

(2) **Movement Overseas Phase** is the period from the time the expedition sorties from the port of embarkation until the attack forces rendezvous within their landing areas.

(3) **Landing Phase** begins with the movement of the expedition from the rendezvous within the landing area, and continues until the landing forces are securely established, on shore.

**Plan.**—A method of procedure, embodying the commander's decision in a given situation together with a detailed scheme for the employment of each element of his command in order to carry his decision into effect.

**Position Defense.**—That form of defense utilizing a single well-organized position.

**Precede.**—To go before. It also indicates that the leading element in a column regulates its march on the rear element.

**Raid, Landing.**—A raid usually made for the purpose of destroying enemy facilities and establishments. Usually involves a small force, having surprise, limited penetration inland and a quick withdrawal.

**Reach.**—Indicates that the leading element of an organization shall arrive at the indicated place.

**Regimental Reserve Line.**—One of the lines of the battle position or of any reserve battle position, established by the organized tactical localities prepared for occupation by the regimental reserves.

**Route Column.**—A close-order formation suitable for marching; usually, in the infantry, column of squads.

**Scheme of Maneuver (Attack).**—That part of the commander's plan which applies to the command as a whole and which prescribes certain movements and efforts of assault units, designed to contribute to the success of the entire attack.

**Screen.**—The prevention of hostile observation of the strength, dispositions, and movements of a command, usually by a detachment therefrom.

**Secondary Landing.**—Landings outside the immediate area of the main landing made prior to, coincident with, or subsequent to the main landing, which directly or indirectly support the main landing.

**Sector.**—A subdivision of a defensive position or of a defensive system, assigned to a commander as an area of responsibility. It is delimited laterally, except on exterior flanks, by lines approximately perpendicular to the front, and at the rear by a rear boundary. To the front, the area of responsibility extends to the maximum effective range of the weapon of longest range with which the garrison is armed. See Boundary, Sector.

**Sector, Boundary.**—See Boundary, sector.

**Secure.**—Gaining possession of a position or terrain feature with or without force and making such dispositions as will tend to avert any danger of its destruction, obstruction or loss.

**Security.**—That protection resulting to a command from the adoption of suitable measures to retain for itself the necessary freedom of action, and to prevent surprise, observation and annoyance by the enemy.

**Seize.**—To gain possession of some objective such as a hill, town, or other locality.

**Shore Party.**—A special task organization of the landing force which aids the movements of combat units and initiates administrative activities ashore during a landing.

**Shore Party Commander.**—A Marine officer, who is a staff officer of the senior marine commander on the beach, to control marine administrative activities ashore between the high water mark and the area of combat during the initial phase of a landing.

**Serial.**—An organization for movement on roads, composed of units having a uniform rate of march.

**Stand To.**—To be prepared to take the firing position in a trench.

**Strong Point.**—An organized tactical locality consisting of two or more combat posts under unified command, disposed laterally or in depth, or both, and usually garrisoned by a rifle company. It is generally so prepared as to provide protection to the front, the flanks and, when possible, to the rear.

**Subwave.**—An irregular line of boats in a wave. It consists of one boat division, or two or more boat divisions landing simultaneously.

**Support Line.**—One of the lines of the battle position or of any reserve battle position, established by the combat posts of the supports of companies holding the line of resistance.

**Switch Position.**—A defensive position, oblique to the front, connecting other positions of a defensive system to each other. Its purpose is to prevent hostile penetrations from being exploited to the flanks, and to serve as a base of departure for counterattacks.

**Tactical Locality.**—A terrain area which, because of its location or configuration, possesses tactical significance in the particular circumstances existing at the time. On the defensive it may be any area which, because of its relation to a defensive organization in general, may well become a part thereof; preferably it should possess natural defensive strength. Examples of organized tactical localities are combat posts, strong points, and centers of resistance.

**Tail.**—The rear element of a command.

**Trace.**—The projection on the ground of one of the lines of a defensive position; or, for trenches, the line where the front interior slope of a parallel or the right slope of an approach intersects the natural ground surface.

**Transport Area.**—The water area assigned transports or other vessels for debarking troops and materiel.

**Turning Movement.**—A form of attack in which the command is separated into two forces which operate beyond supporting distance of each other; one force is designated to hold the enemy, while the other, usually the stronger, makes a detour to strike him in the flank or rear.

**Task.**—A specific undertaking, assigned or assumed.

**Wave.**—A wave is one boat group, or two or more boat groups landing abreast, when operating in a tactical formation for landing.

**Zone Defense.**—That form of defense in which the organization of the ground and of the garrison is extended in depth by utilizing an outpost area, a battle position, and—if desired—one or more reserve battle positions. The successive positions may be connected by one or more switch positions. See Outpost area: Battle position: Switch position.

**Zone of Action.**—An area of responsibility, usually defined, except on exterior flanks, by the designation of lateral boundaries, and assigned to a unit in a situation expected to involve movement of that unit as a whole: For example, advances, attacks, withdrawals, retirements.





**MARINE CORPS SCHOOLS**  
**MARINE BARRACKS, QUANTICO, VIRGINIA**

12 July 1938.

**TACTICAL NOTES AND REFERENCE DATA,**  
**MARINE CORPS SCHOOLS**

**Changes**  
**No. 1**

“Tactical Notes and Reference Data, Marine Corps Schools” is changed as follows:

Page 44, Section XIV, par. 2: Strike out entire paragraph.  $\angle$

Page 44, Section XIV, par. 4: Change to read as follows:  $\angle$

4. **Frontages.**—Frontage, both for the attack and defense, is measured by the number of battalions employed in the assault or on the main line of resistance. Frontages will vary between wide limits depending on the type of terrain, the amount of artillery and other support, and the enemy dispositions. In general, the following frontages will apply to the Marine Infantry Battalion:

	Battalion 1936 WS Tables	Battalion 1938 Tables
<b>Attack:</b>		
Strong, sustained attack	300-600 yds	275-550 yds
Holding or secondary attack (normal)	600-1000 yds	550-850 yds
Holding or secondary attack (fire action only)	to 1800 yds	to 1500 yds
<b>Defense:</b>		
Determined or decisive defense	600-800 yds	600-800 yds
Defense for a limited period of time such as a delaying action	800-1600 yds	800-1600 yds
A screen with no depth	to 2400 yds	to 2400 yds
Advance guard in “contact imminent” formation	to 1800 yds	to 1500 yds
<b>Outpost:</b>		
Observation & Security	3000-5000 yds	3000-5000 yds
Resistance	Same as battalion in defense with like mission	Same as battalion in defense with like mission

**NOTE:**—Frontages in the defense do not take into account the employment of extra machine guns. When extra machine guns are employed, frontages should be correspondingly increased.

Page 45, Section XIV, par. 6  $\checkmark$  a: Change to read as follows:

a. **Rate of advance in the attack.**—In planning artillery and other support it is necessary to estimate the expected rate of infantry advance. This rate will vary between 100 yards in 3 minutes and 100 yards in 8 minutes depending upon the element of surprise, the amount of artillery and other support, the degree of enemy resistance, and the type of terrain.



MARINE CORPS SCHOOLS  
MARINE BARRACKS, QUANTICO, VIRGINIA

28 September, 1938.

TACTICAL NOTES AND REFERENCE DATA  
MARINE CORPS SCHOOLS

Changes

No. 2

“Tactical Notes and Reference Data, Marine Corps Schools” is changed as follows:

Page 45, paragraph 5 (Location of Units in Deployed or Position Defense), under “Light Artillery” change to read as follows:

Light Artillery:

75-mm Pack	Howitzer.—1000 to 5000 yards behind MLR.
75-mm Gun.	—1500 to 6000 yards behind MLR. (both echeloned in depth.)



Page 47, par. 8 a: Change to read as follows:

a. The time required by the commander and his subordinate commanders (to include platoon leaders), in turn, to make their reconnaissances and issue their orders for the attack will vary greatly in different situations. The following are reasonable time assumptions for determining the earliest hour of attack:

- for a reinforced brigade ..... 3 hours 15 minutes
- for a regiment ..... 2 hours 15 minutes
- for a battalion ..... 1 hour 15 minutes

Page 55, Section XV: Insert the following table:

**TABLES OF ORGANIZATION, U. S. MARINE CORPS,  
Approved 1938**

**TABLE 13: The Marine Infantry Regiment:**

	Strength	Road Spaces in Yards			Total
		Foot Troops	Foot Troops & Unit Transportation	Trains	
Rifle Company	120	75	75	—	75
Platoon	35	18	18	—	18
Machine Gun Company	158	94	178	—	178
Platoon	46	23	50	—	50
Battalion Headquarters					
Company	147	84	141	—	141
81 mm Mortar Plat.	72	36	75	—	75
Communication Plat.	25	13	22	—	22
Battalion	665	423	564	150(1)	714
Headquarters Company	169	100	148	75(1)	223
Anti-Tank Plat.	67	34	55	—	55
Communication Plat.	39	20	38	—	38
Service Company	89	45	42	55	85
Transport Plat.	58	29	26	55	69
Regiment	2253	1509	1977	580(1)	2545

NOTE:—(1) Motorcycles and passenger cars are not considered as occupying road space.

Page 60, Section XVIII, par. 1, line 16: Insert after the words "37mm Gun," the words "(old type)."

Page 60, Section XVIII, par. 1, line 17: Change to read as follows:

81mm Mortar	
Heavy shell (maximum) .....	1280
Light shell (maximum) .....	3280



Library of the Marine Corps



3000202677

1011