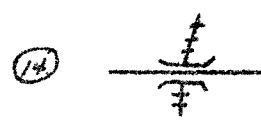
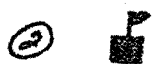
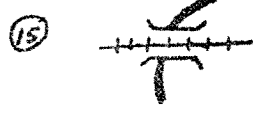
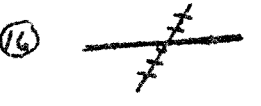
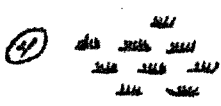
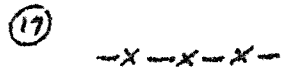
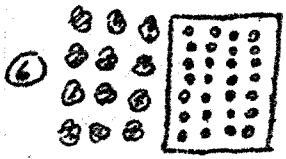
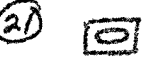
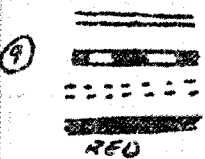
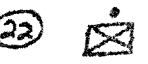
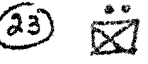
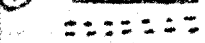
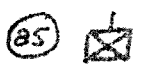
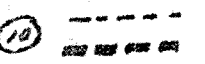
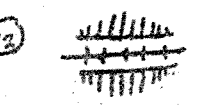
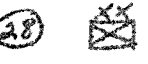


MAP READING

Military and Conventional Topographical Map Symbols used in Map Reading

	Mine		Hiway overpass
	School		Hiway underpass
	Church		Grade crossing
	Grassland in green color		Barbed wire
	Swamp in blue color		Command Post
	Orchard in Green color		Field Artillery
	Woods in green color		Infantry unit
	Lakes and ponds in blue color		Armor unit
	Medium duty road		Inf. Squad
	Heavy duty road		Inf. Section
	Unimproved dirt, etc. road		Inf. Platoon
	Super highway in red		Inf. Company
	Trail (type indicated by heaviness of line)		Inf. Battalion
	Cut (in brown)		Inf. Regiment
	Fill (in brown)		Division
	Tunnel (RR)		Corps
	Plowed or cultivated fields		Army

(Remember in the case of the "x" symbol these represent the stars of the general in command.)

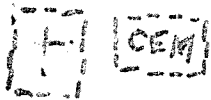
Map Reading

I. Review

- A. Grid Lines
- B. Grid Coordinants
- C. Contour Interval, line, etc.
- D. Previous Symbols

In map reading you have "Conventional" and Military Symbols. The following are the remainder of the conventional symbols we will use in our map reading.

The Military symbols are to be used in our Tactics and Leadership classes in which we set a situation up and you plan the correct action acting as Platoon leader, Squad leader, etc.



Cemetery



Tunnel



RR Fill (in brown)



RR Cut (in brown)

* THESE SYMBOLS PLUS THE OTHERS WILL BE ON YOUR FINAL EXAM FOR THE SEMESTER.



Highway overpass over RR



RR overpass of highway



Grade crossing

II. Military Map Symbols

 Basic symbol for an Army Unit

 Command Post (Flag stands for flag in front of tent)

 Field Artillery (Dot stands for old time cannon ball)

 Infantry Unit

 Armor (Oval stands for the track on a tank)

 Medic (Hospital etc)

 Aircraft

 Squad

 Section

 Platoon

 Company

 Battalion

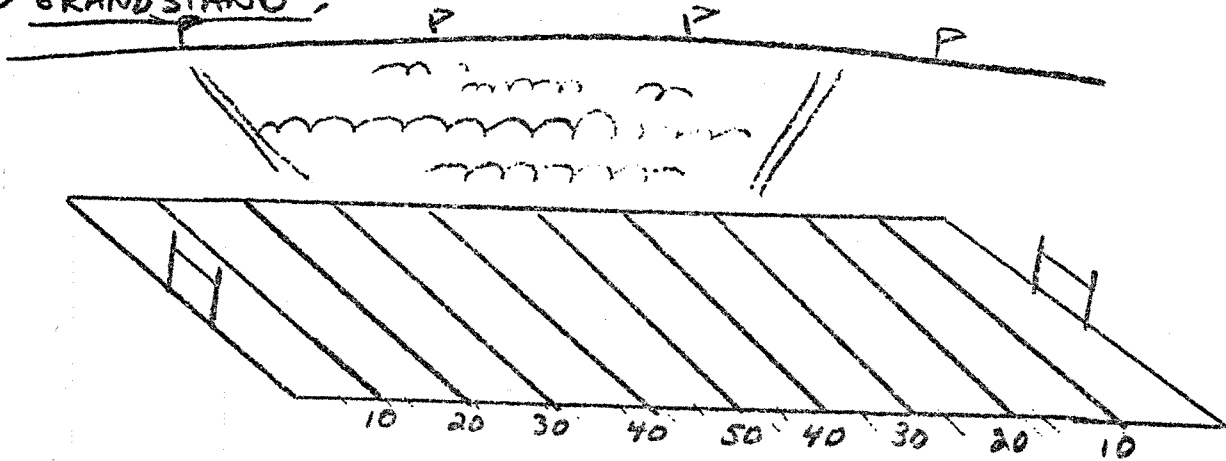
 Automatic Rifle

 .30 cal MG

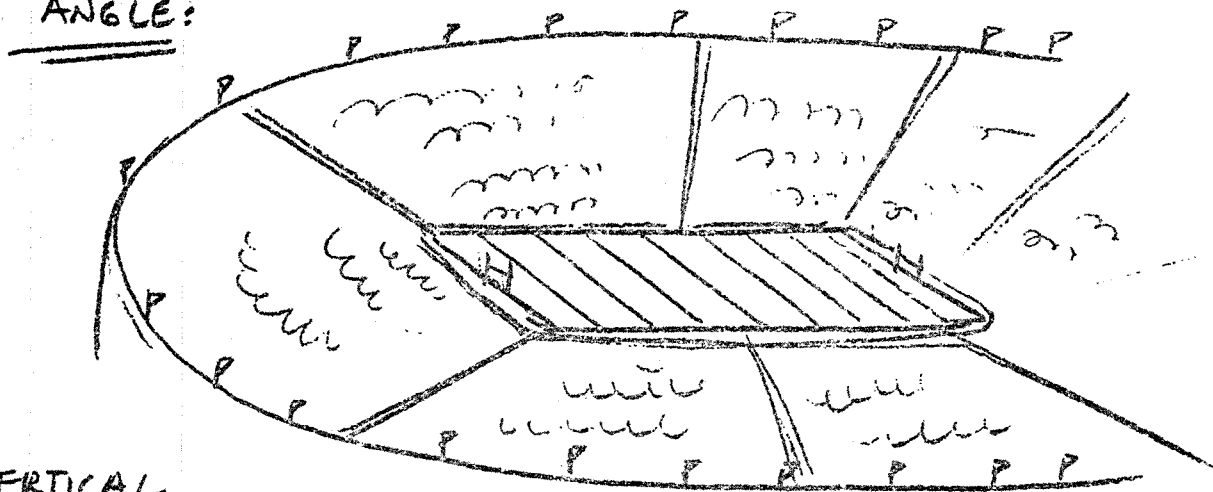
 .50 cal MG

— TOPOGRAPHY —

(A) VIEW FROM GRANDSTAND:

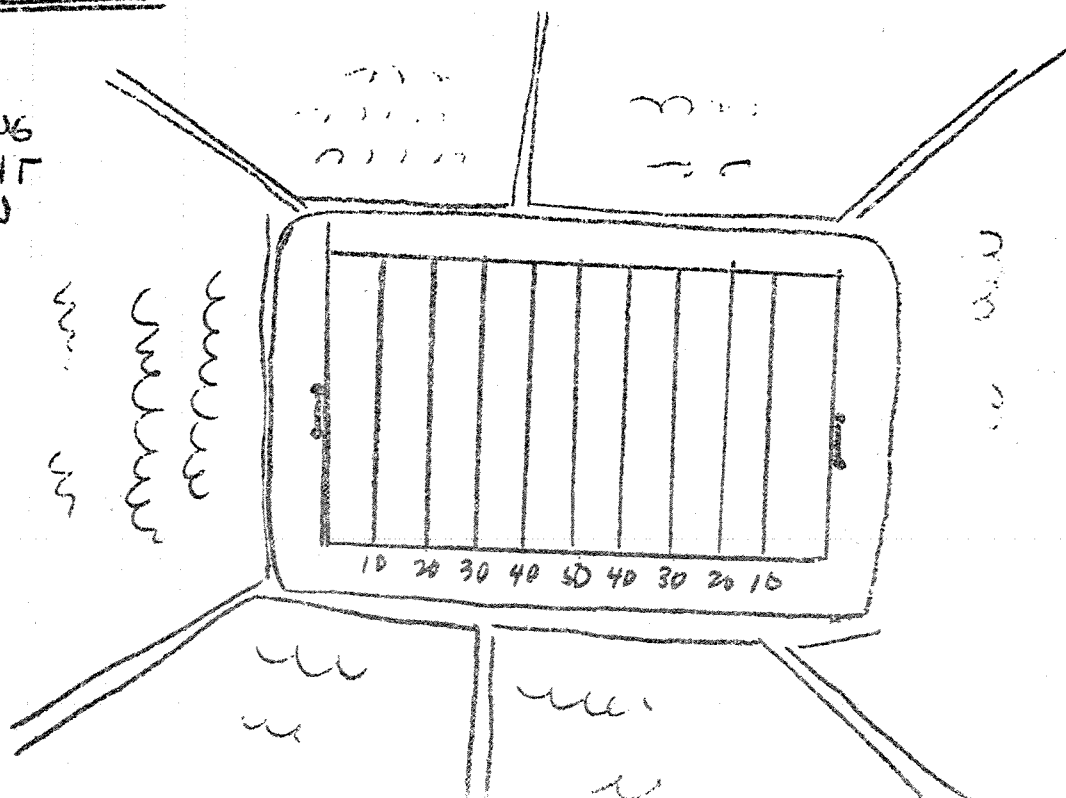


(B) AIR VIEW AT ANGLE:

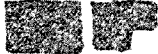
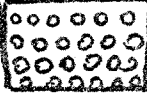
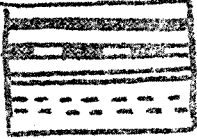
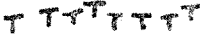


(C) VERTICAL AIR VIEW:

LOOKING
STRAIGHT
DOWN



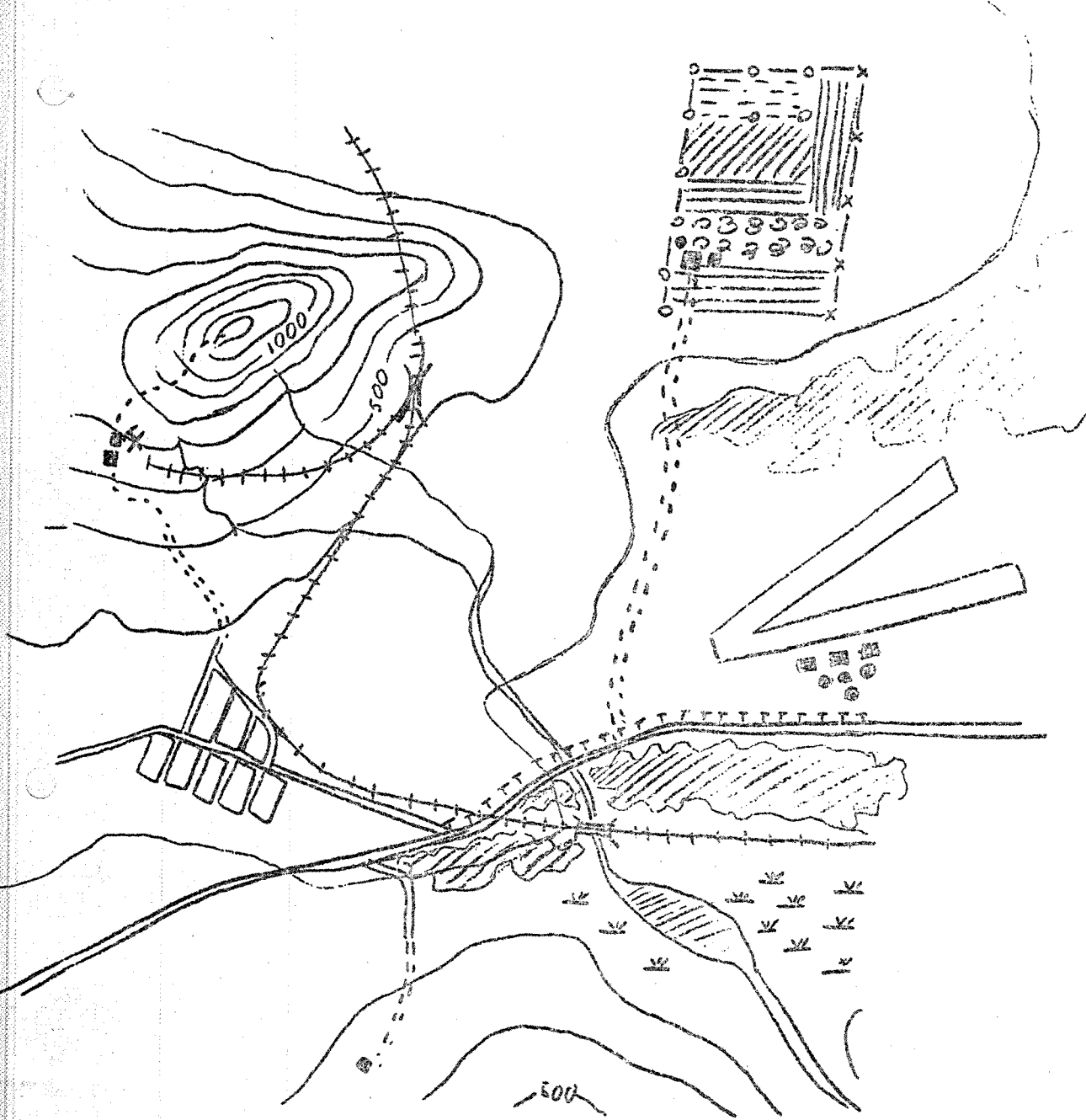
Military Map Symbols

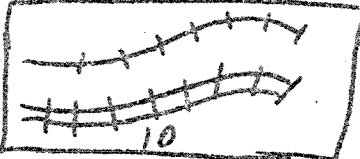
- A.  Any building (may be in various shapes)
- B.  School
- C.  Church
- D.  Plowed fields
- E.  Grassland (in green)
- F.  Swamp (in blue)
- G.  Orchard
- H.  Woods (in green)
- I.  Lakes and ponds (in blue)
- J.  Roads
- K.  Trail
- L.  Telephone lines
- M.  Stream (in blue)
- N.  Railroad Track

* Map Symbols
are your guide
posts — in the military
your life may depend
on knowing what they
mean!

Over the coming months in Cadets you will familiarize yourself with many other map and military symbols- but be sure you do first things first - learn these then each new series as they come....

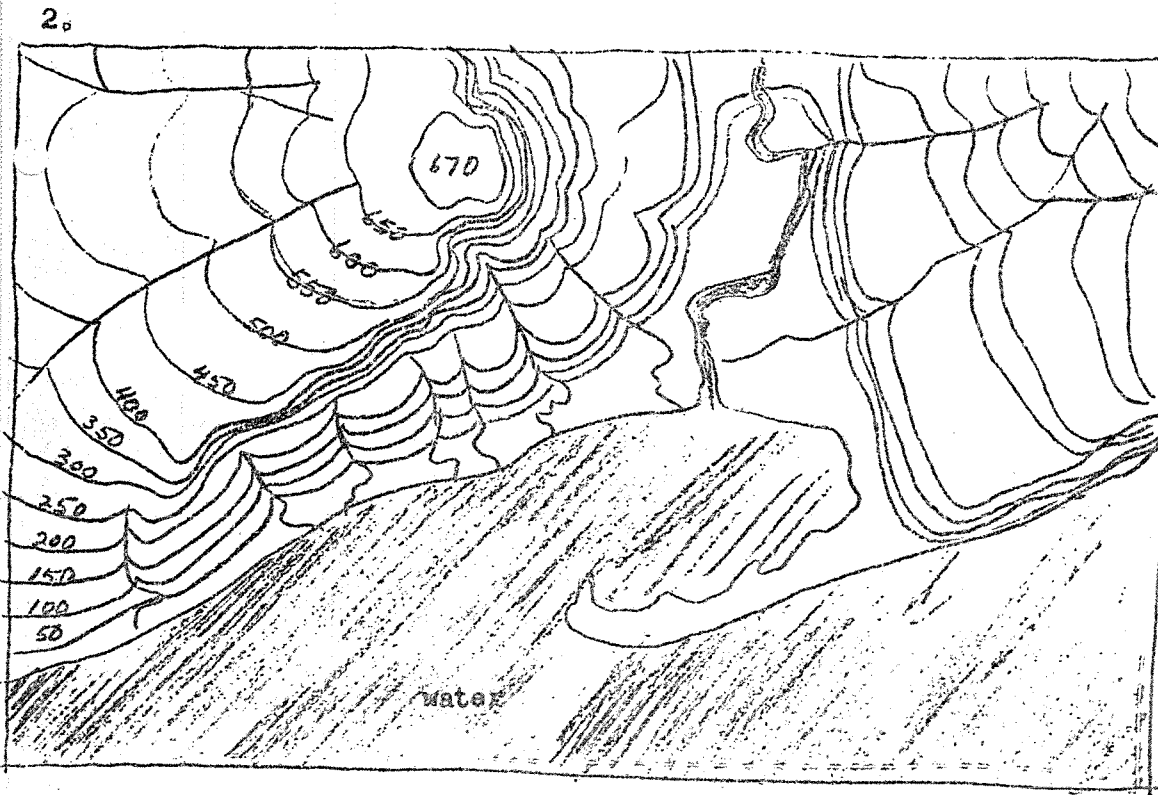
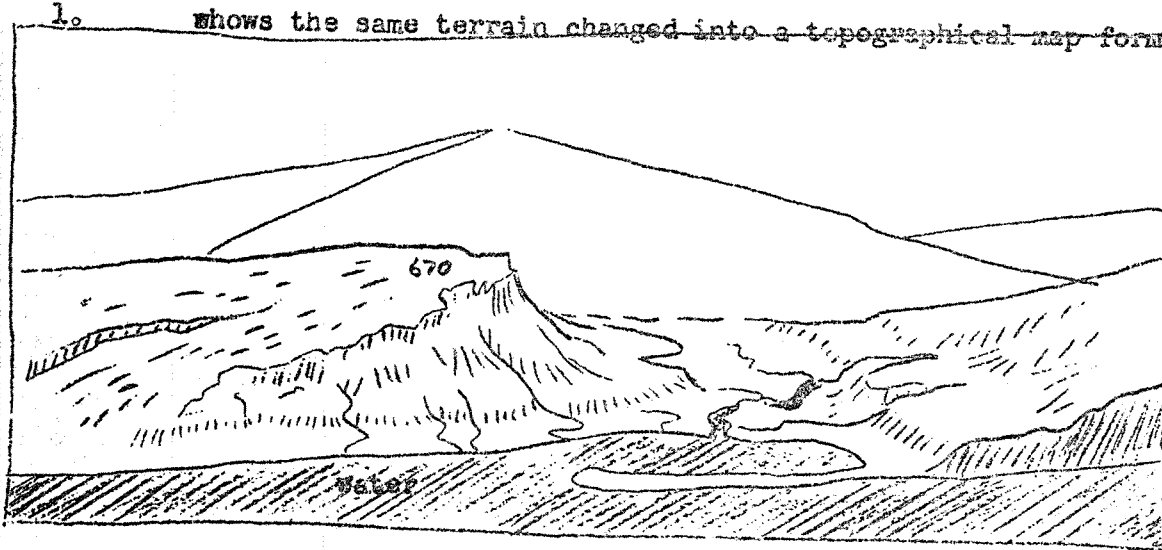
MAP READING- SYMBOL RECOGNITION



- | | | | | | |
|-------------|---|-------------------|--|---------------|---|
| Mine: |  | Barbedwire Fence: |  | Storage Tank: |  |
| Farm: |  | Railroad: |  | | |
| Wire Fence: |  | Bridge: |  | | |

MAP READING HOUR #2

The following is an illustration of what a Topographical map would look like using first a recognizable piece of terrain. Picture nr. 1 shows the land the way it would look if you were in a ship 500 yds out from the shore. Picture nr. 2 shows the same terrain changed into a topographical map formation:

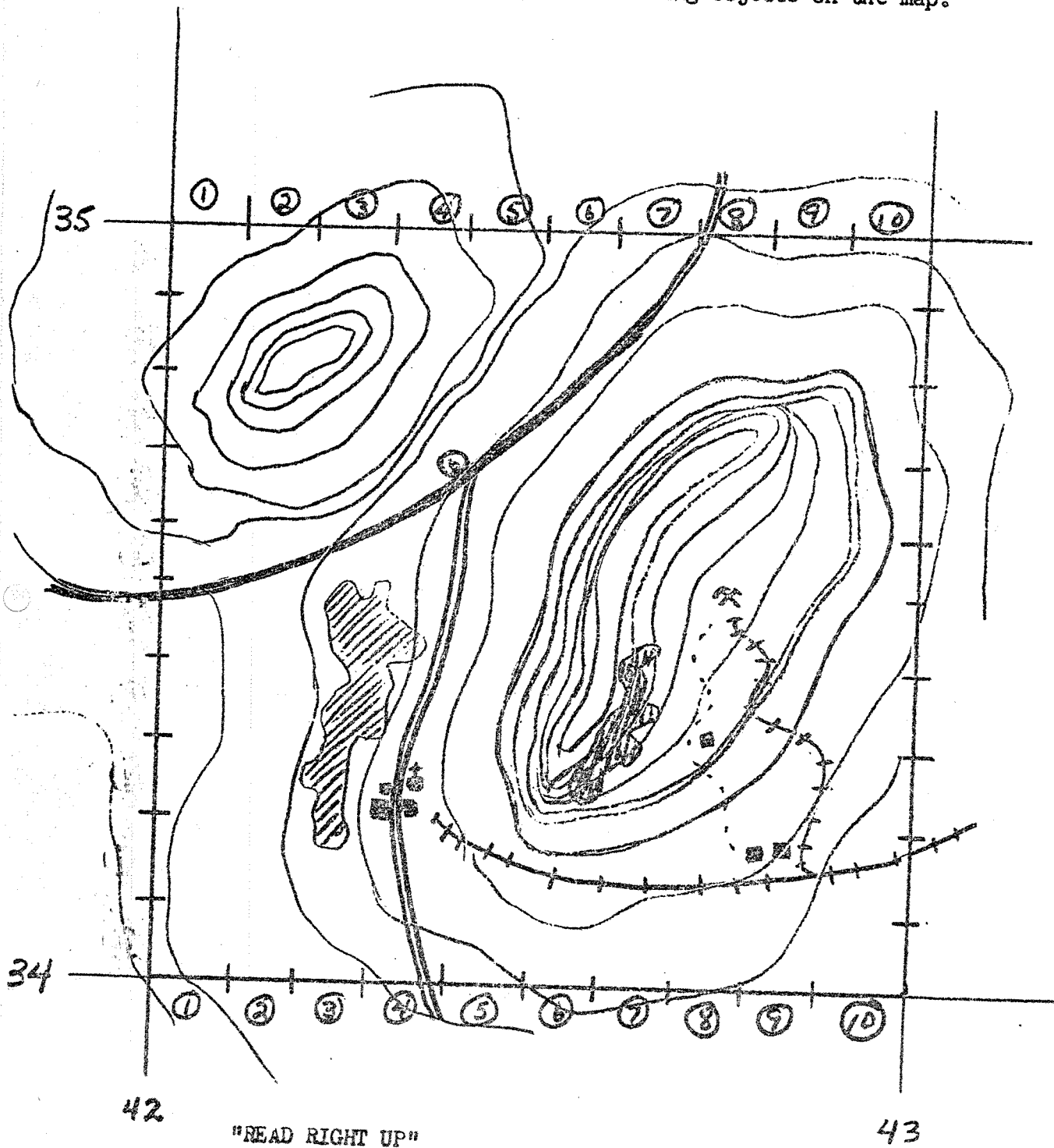


When looking at these two pictures look at the way the topographical map shows the steep cliffs in the center and on the right. Also note the way the erosion is shown. When looking at a Topographical map try to visualize the terrain and its contours.

MAP READING

GRID COORDINANTS

Every grid square is to be divided into 10 equal parts vertically and horizontally. This helps in locating objects on the map.



What is at 424 343?

What is at 429 345.5? and

424.5 347?

Map Reading

Scale:

In Map Reading there are two types of scales:

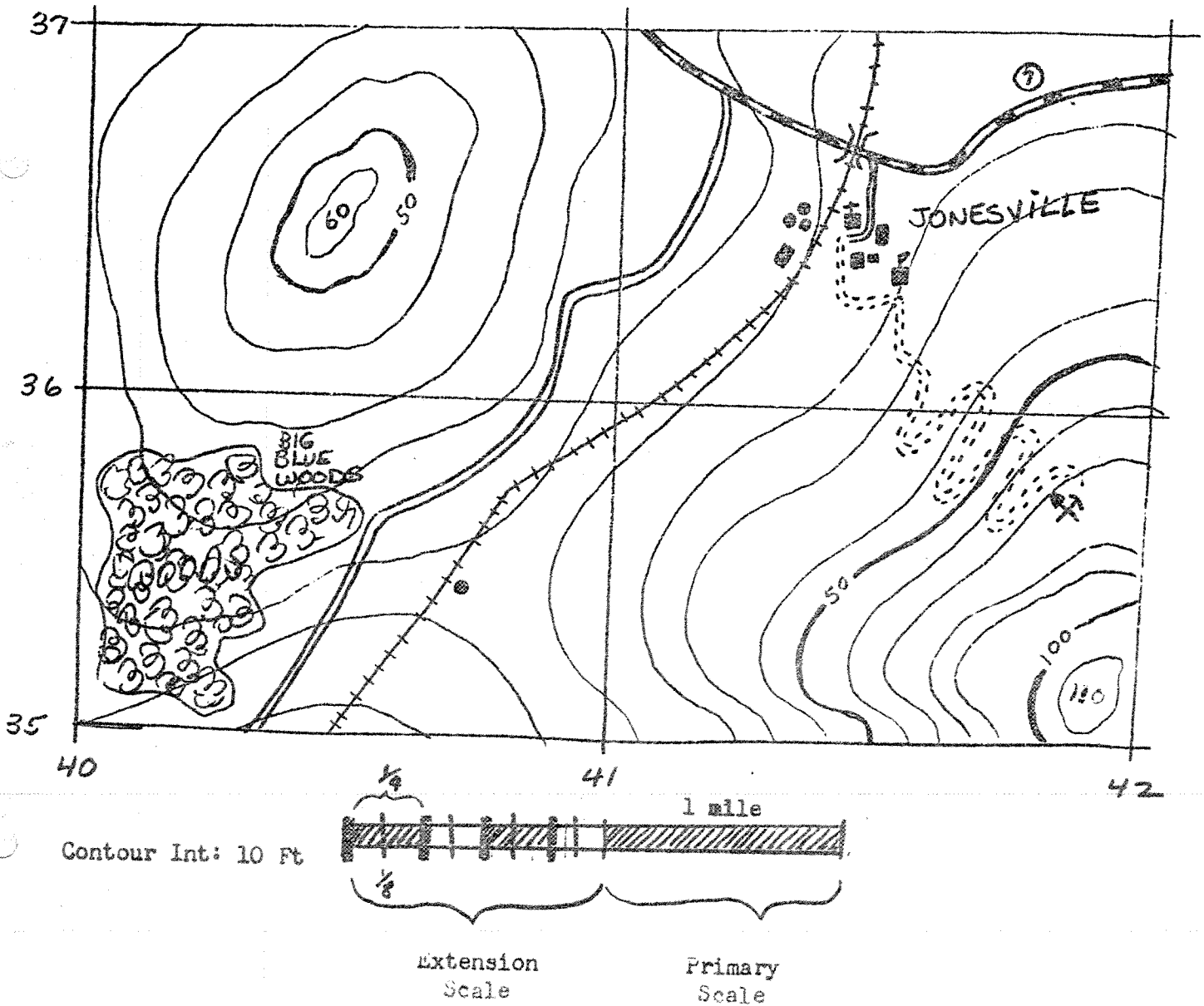
- Primary
- Extension

In Map Reading there are two types of methods for figuring distance:

"As the Crow flies" and "By way of lanc features"

Using the following diagram find how far it is from Point A to B, c to d, e to f, and g to h. Find the distance as the crow flies with points a,b,c,d and find actual road distance for points e,f,g,h.

Point: A 405364 to B 407354 G 415365 to H 418358
C 418358 to D 414365
E 415367 to F 407354 (BY RR)



Aides to Map Reading:

1. The meaning of COLOR on the map:

- A. Black - stands for all works of man, except roads, place names, grid lines.
- B. Blue - stands for all water features.
- C. Green - Stands for all wooded areas other than vegetation as indicated in legend.
- D. Brown - Stands for contours, contour numbers, cuts, fills, etc.
- E. Red - For road classifications.

2. Contour Line Characteristics:

- A. A closed curve indicates hilltop, peak, or knob.
- B. Elongated contours indicates a crest of a ridge.
- C. Uniform slope indicated by equally spaced contour lines.
- D. Concave (Swayback) slope indicated by contour lines close together at top and farther apart at bottom.
- E. Convex (humpback) slope indicated by contour lines close together at bottom and farther apart at top.
- F. When a contour line touches another this indicated a cliff or sharp vertical.
- G. V Shaped contour lines characterize V shaped valley or stream(eroded) contours. (The closed end of the V shape always points upstream)
- H. U shaped contour lines show ridge contours. (Closed end of U shape point downhill)
- I. To make contour lines easier to figure every 5th line is darker or wider.
- J. Elevation is show in a break in the contour line- (_____ 500 _____)
- K. Elevation on maps is figured at zero (0) at Sea Level on up.....

REMEMBER THIS INFORMATION FOR FUTURE MAP READING CLASSES

MAP Reading

I. Concave hills

A. example: 

1. close contour lines at top;
wide contour lines at bottom.
2. good visibility for you; bad
cover for enemy (if you are on
top) and vice-versa.

II. Convex hills

1. wide contour lines at top;
close contour lines at bottom.
2. poor visibility for you; good
cover for enemy (if you are on
top) and vice-versa.

III. scales

- A. primary
B. extension

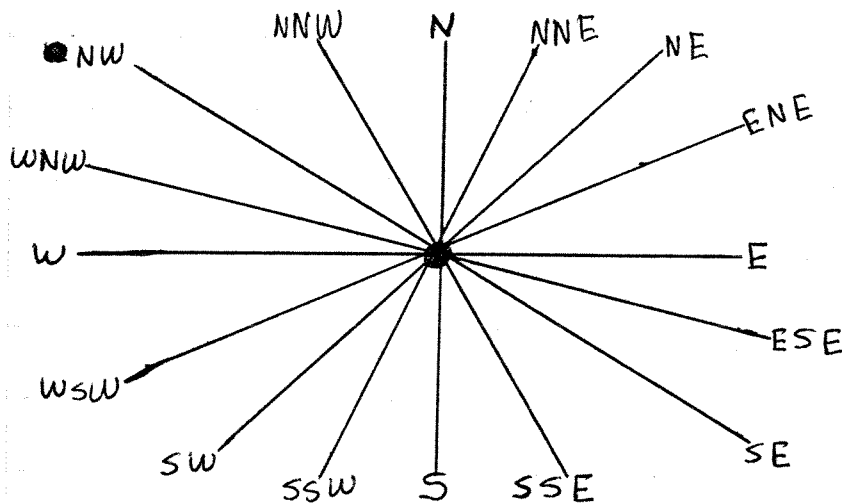
1. 10ths

IV. rule for good map reading

- A. read right up for grid co-ordinates

Map Reading

I. 16 general points on a compass
A. example:



II. General rules

A. all military maps are created so that north is at the top; south at the bottom; east at the right; and west at the left.

III. Military symbols

A.  - unit of any kind (standard)

B.  - infantry

C.  - artillery

D.  - armor

E.  - armored infantry

F.  - squad

G.  - section

H.  - platoon

I.  - company

J.  - battalion

K.



- area occupied; symbol at top indicates type of unit the area is occupied by.

Map Reading

I. Topographic symbols

A. conventional

1. used by civilians

B. military

1. used by military only

II. General colors

A. Blue

1. all water, streams, swamps, etc.

B. Green

1. forests, vegetation

C. Black

1. all man made objects, grid lines, and place names.

D. Red

1. freeways or 1st class roads

E. Brown

1. contour lines, contour numbers, desert and arid areas

III. All topographic symbols are pictures of whatever subject they are concerned with.

ILLUSTRATE MAP READING PART CONVENTIONAL SIGNS AND MILITARY SYMBOLS

In map reading it is necessary use a large number of signs and symbols to show objects that can be shown no other way. The conventional signs are the easiest to understand since they largely resemble the objects that they represent. We show you a few so that you get the idea but after that we expect that you will use common sense to work out the meaning of the sign. The Military symbols are a little more difficult since they entail the learning of both organization and a shorthand method of listing military units.

CONVENTIONAL SIGNS

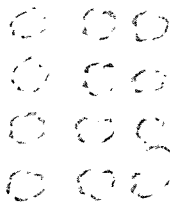
Vegetation
(GREEN)



WOODS

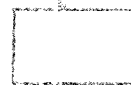


WOODS

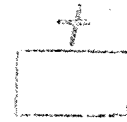


Orchard

BUILDINGS
(Black)



School

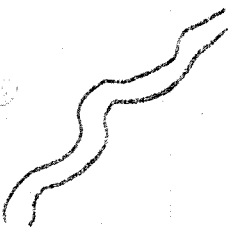


Church



Ruins

WATER
(BLUE)



River



Swamp



Lake

ROADS



Heavy Duty



Light Duty



Dirt Road



Trail



Bridge

RAILROADS



Tunnel



1 Track



2 Tracks



Barb Wire Fence

BM X 137

BM A 137

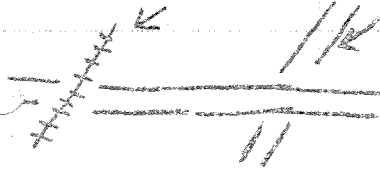
Bench Marks

Or Spring

Well

RR OVER PASS

Highway Under Pass



WATER BLUE
Steady Stream all year flow

May be dry



MILITARY SYMBOLS



A box or square is used to represent any military unit

C.P.



Add a flaggy staff and you have a command post.

O.P.



A Triangle represents an observation post

Sign on top of box indicates size of unit. Sign inside box type of unit.

Squad

Section

Platoon



Infantry

Artillery

Armored

Company

Battalion

Regiment



Armored Cavalry

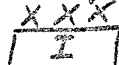
Armored Infantry

Airborne Infantry

Combat Command or Brigade

Division

Corps



Army
~~XXXX~~
XXXX
FIRST

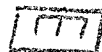
Army Group
XXXXXX
13

Chemical



Anti-aircraft

Amphibious



Engineer



Military Police



Transportation



Medical



Ordnance



Signal

B Co 16th Inf.

B  16

2nd Platoon
A Co 10th Bn.

XX  91

91 Inf. Div.

2A  10

O.P. 2nd Platoon
A Co 10th Bn.

2A  10

C.P. 1st
Armored Div.

XX  1

XX  3

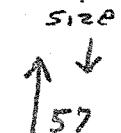
C.P. 3rd
Armored Division



Light M.G. or Auto Rifle



Hvy M.C.



Recoilless Rifle or Rocket Launcher

Mortar



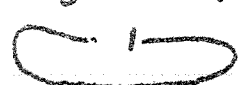
Cannon



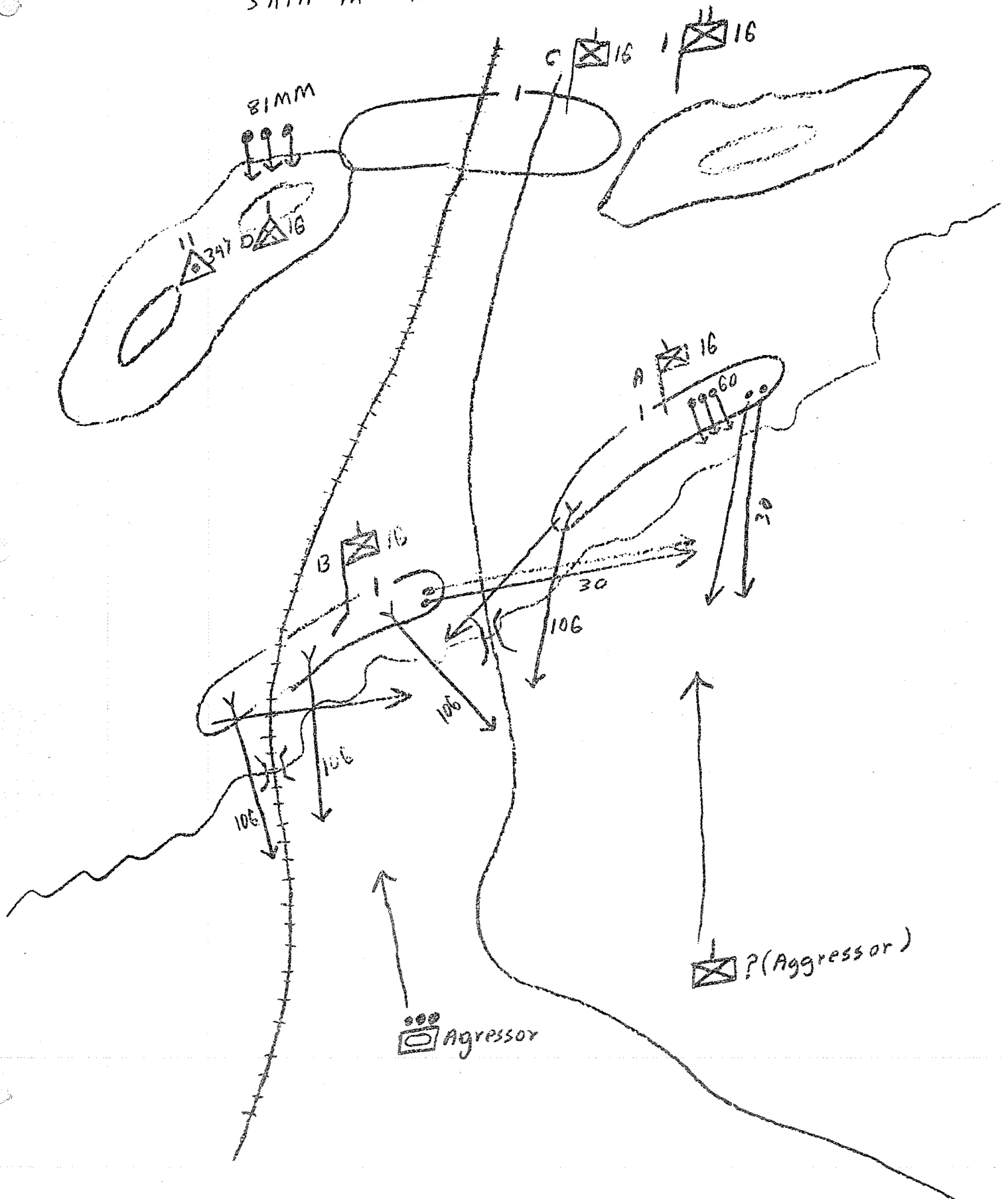
Area occupied by a platoon

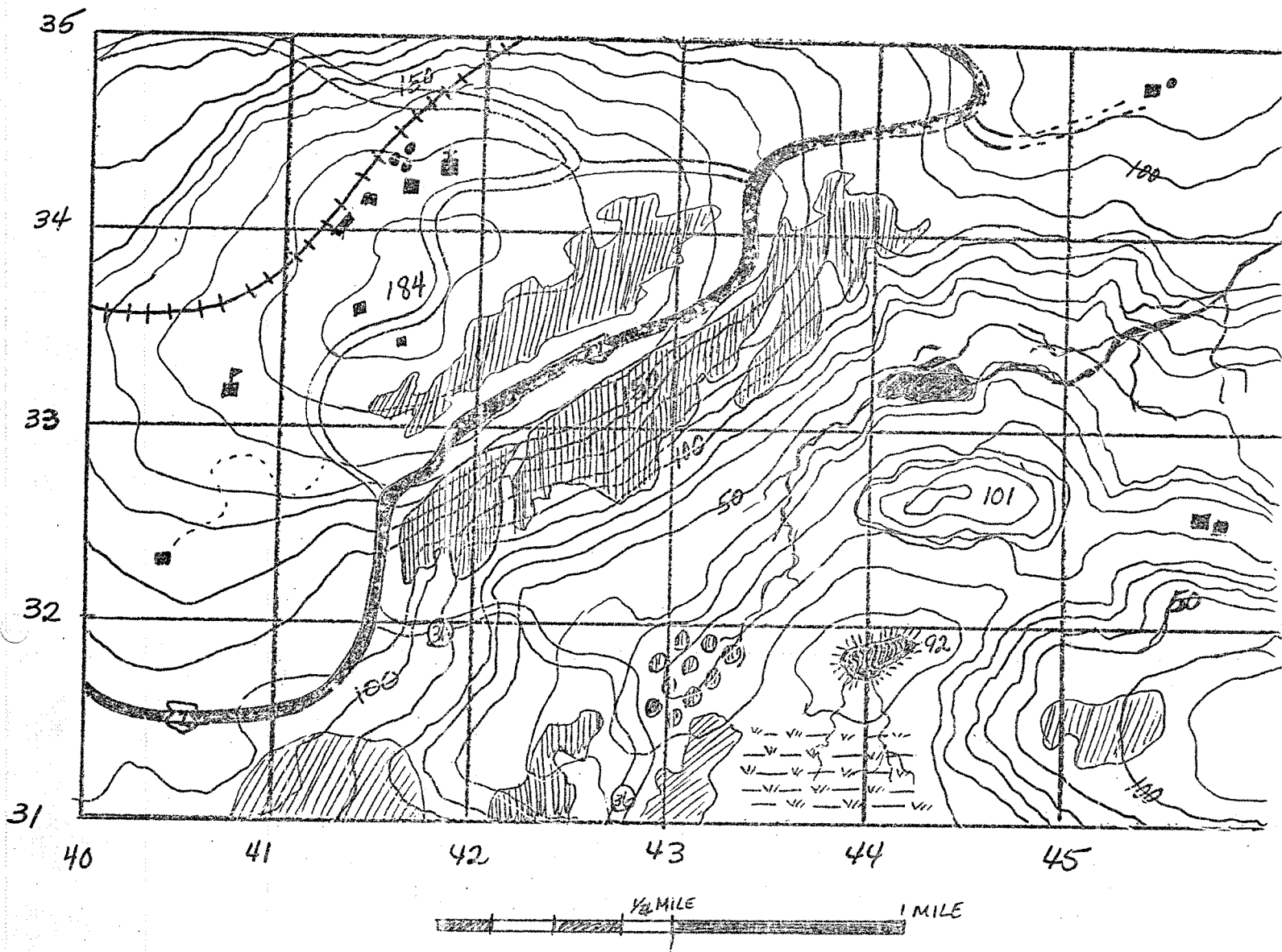


Area occupied by a company



Here is a rough map showing
some military units. Try your
skill in identification.





25/8/11465