ReenactorPro

PRO TIPS:
Map Reading

Lesson 1: What is a map and why should we care?

A *map* is a symbolic representation of an piece of ground. The information it contains will vary with its intended use. A driving aid map drawn from GPS data contains just enough information to indicate the routs you will be traveling—anything more than the bare necessities would make the map too busy and complicated for a driver to take in at a glance. A city map shows streets and important locations. Decorative maps are designed to be pleasing to the eye.

A military map has two functions. The first is to represent all the features of the mapped area that provide information important to the military eye: they allow the leader to inspect the map and draw from it a picture of the battlefield that will allow him to plan and direct a battle.

That's a lot of information, and military maps are designed to make that information less confusing and more informative. There is a lot of art that goes into that design, and the result is actually beautiful in its own way.

So, why should a reenactor be familiar with map reading?

Since you asked:

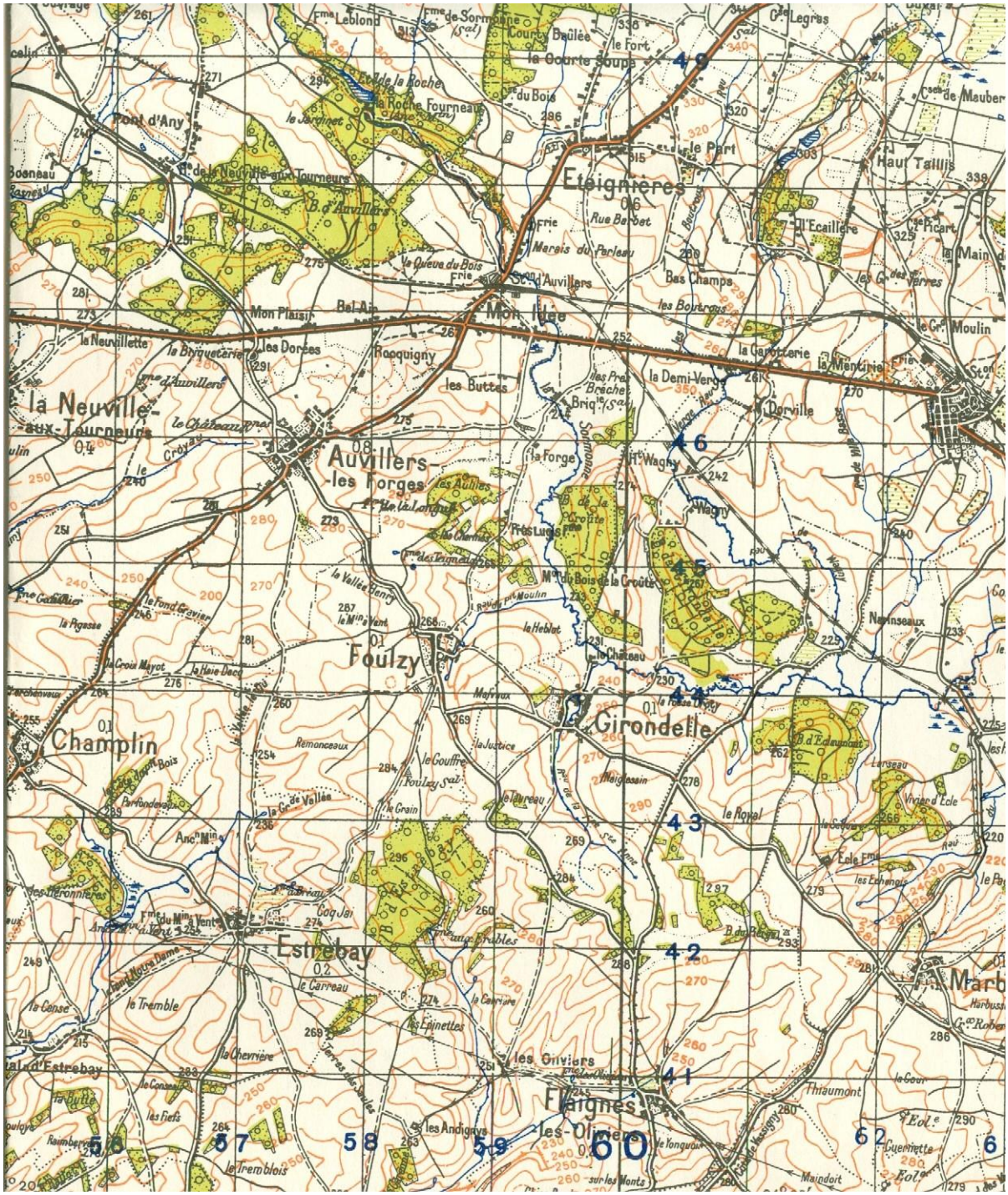
1. **Because soldiers have to learn it**. Map reading is a basic soldier skill. Asking why a reenactor should learn about it is the same as asking why he should learn the manual of arms—*because soldiers do it*. And it's not a trivial skill. If you are a squad leader or above in the hobby, and if your unit ever goes to the field, you should be able to read a map well enough to (a) go somewhere without getting lost, and (b) understand the military implications of the ground.

2. **Because it helps you find where you are and how to get somewhere else**. Ever wander around the snowy woods at Indiantown Gap and wonder where you are? Unless you spend a lot of time in the training area (not just a few hours every year) you can't navigate by recognizing familiar landmarks. Places in the woods have a tendency to look alike; roads and trails twist and turn. Using a map and compass and your map skills can be the difference between finishing your mission and wandering around aimlessly. (Learn from the legendary Captain Sobel.)

3. **Because it tells you a lot about how to move, shoot, and fight**. This is called *terrain analysis* in the trade, and it is the flip side of finding your way. A military map allows you to size up the battlefield at a glance—identify areas with cover and concealment, find key terrain that dominates the battlefield, assess routes of movement and find obstacles and choke points, assess the slope of the ground and spot problem areas like swamps, streams, and narrow passages. Maps help a leader develop what is called the *trompe l'oeil militaire*—the "military stroke of the eye."

What is a military map?

Thank you for asking. Let's skip the words for a moment and just look at one. I'll use a US military map from WWII for starters.



This is a 1944 topographic map in scale 1:50000 of an area near the French-Belgian border. The map sheet title is SIGNY-LE PETIT. This articular sample suevives because an officer at the Command and General Staff School

at For Leavenworth, Kansas, used it in a map exercise; after he left for Europe, he stashed his course materials in a trunk for 60+ years until his descendents put the relics up for sale on Ebay.

This is only a sample. The full map is printed on a 24x19 inch map sheet, which would be unreadable shrunk to fit an 8.5 x 11 page. To appreciate this masterpiece you need to look at the rich detail.

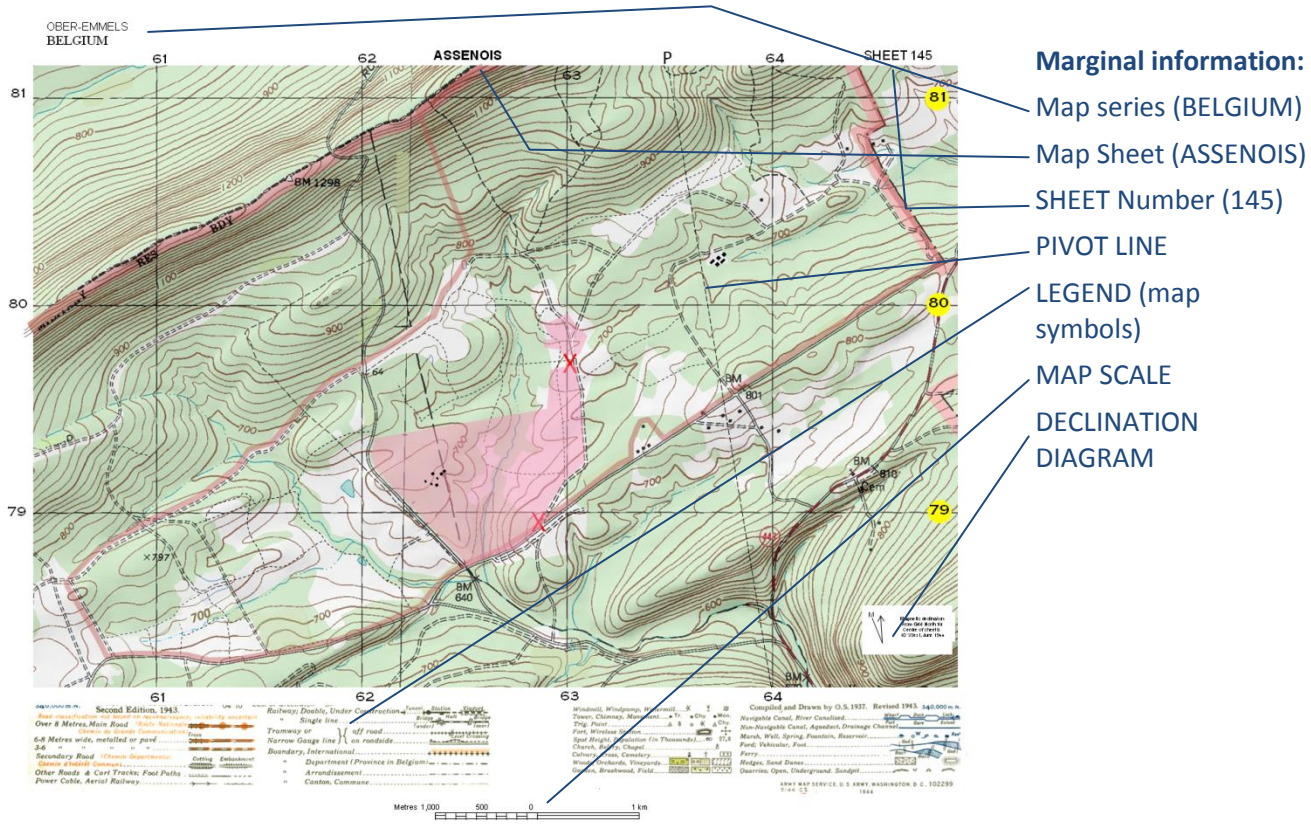
Two fatures make this map essential to a soldier.

1. **It is a topographic map**. A topo map shows the three-dimensional features of the terrain—hills, valleys, slopes, and other features. These have an effect on military operations, and being able to see them on a map is a big help in planning and fighting a battle. (Yes, you could just jump in a jeep and check it out in person, but the enemy might not cooperate.) The fine irregular brown lines brown lines—"contour lines"—show the shape (contours) of the ground if you know how to interpret them. But is something you have to learn to do. So read on.

2. **It has a map grid**. The vertical and horizontal black lines are "grid lines." The vertical lines run off the top and bottom of the map and they all meet at the north and south geographic poles (not quite the same as the magnetic poles, but we'll get to that later). The horizontal lines are meridians; they run off the left and right sides of the map sheet and continue all the way around the world, meeting at the other side. What you see printed on the map is a tiny area of the all-powerful Military Universal Transverse Mercator projection of the surface of a round planet projected onto a flat plane. Since we're usually going to be fighting over a tiny patch of ground on a wide world, you won't have to worry much about what happens to the grid outside your map (but you can find all kinds of good stuff about it by checking out **FM 21-26 Advanced Map and Aerial Photograph Reading** in the resource library of this site. FM 21-26 is NOT for the faint of heart or math phobes.

The grid allows you to find yourself or any other feature on the map expressed as **grid coordinates**. This provides a lot more precision than "a little south of Girondelle." We'll discuss use of grid coordinates in a later lesson; try to restrain your excitement.

3. **It provides context and reminders**. A map sheet consists of the map itself and **marginal information**, which is a bunch of useful information in the margins. Here is the basic map used annually at Foirt Indiantown Gap. It is a modern map, but the conventions of military maps have not changed much since 1944.



I've made some modifications to conventional design for the Gap Map simply for clarity and to provide sheet space for other uses (e.g., the Field Order text). Some common marginal information has been omitted (for example, the depiction of adjoining map sheets; we will never move off this map sheet (or I hope we won't!) so I saved a little space. But I have kept:

The MAP SERIES: this is for historical look and feel. This is from the BELGIUM series.

The MAP SHEET title is ASSENOIS (which was used in the 2017 Gap field exercise—the sheet name changes every year with the scenario).

The SHEET NUMBER

The PIVOT LINE is not always found on maps; however, it's discussed in **FM 21-25 Basic Map and Aerial Photograph Reading** (in our reference library) and is included to provide an easy reference for the local difference between GRID NORTH and the north indicated by your compass.

The LEGEND (a reminder of the meaning of map symbols).

The MAP SCALE, which shows the size and detail shown on the map (this map is a special scale—around 1:12,500).

The DECLINATION DIAGRAM shows the difference between grid north, true north (the direction to the North Star) and magnetic north. We'll discuss this later.

LESSON SUMMARY

1. Map reading is a basic soldier skill, just like marching in step or manual of arms. If you are representing an American soldier in WWII, learn the things he knew.

2. A military map provides two vital things:

—A method of land navigation: how to find where you are, where you want to go, and how to get there.

—A way of visualizing the whole battlefield at a glance, understanding the advantages and disadvantages of fighting there: observation and fields of fire, cover and concealment, obstacles, key terrain, and avenues of movement.

3. Military maps are special kinds of topographic maps that are suited to use in war. They include information specific to the terrain, plus marginal information providing context.

LESSON 2 will introduce you to map symbols.

References: for more on these subjects, visit the following annotated manuals in our reference library:

FM 21-25 Basic Map and Aerial Photograph Reading. This is the fundamental reference for every soldier.

FM 21-26 Advanced Map and Aerial Photograph Reading. This is maps for geeks—it has a lot of good information, but you REALLY have to love maps to master it.

FM 21-30 Conventional Signs, Military Symbols, and Abbreviations. Hieroglyphic for soldiers—the symbols we routinely use, including map symbols.