

# TAC NEWS

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March - April 2004

Modeling Excellence Since 1967

## MODELING YOUR FAVORITE BATTLEFIELD

Or Why GHQ's Terrain Maker® is the best scenery system ever!

**H**ave you ever wanted to make a really fine gaming table, one that represents a specific historical battlefield? Do you want to 'own' Gettysburg, or Anzio? How about Arnham-Oosterbeek, or Kursk? We know you have. In this issue of TacNews, we will show you how.

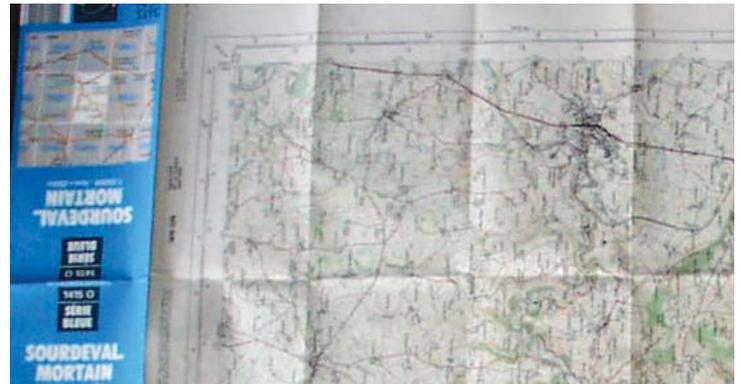
### Pick your battles

In 2004, GHQ will be running several games at HMGS East's annual convention, Historicon. Since the theme this year happens to be World War II, with an emphasis on the Normandy campaign, the gaming crew got together and brain-stormed over the best convention game. We wanted lots of armour, but not to the exclusion of the other combined arms. We wanted something a bit off the beaten path, rather than another "Dog-Green" or "Pegasus Bridge." Something with Americans would be nice. And, most importantly, something that offered either side a chance for victory. After much debate, we settled in on the meeting engagements north of Mortain on August 7th, 1944, when elements of US 2nd Armoured Division ran into the desperate attempts of 2nd Panzer Division to slash west and cut off the break-out from the Cotentin Peninsula. It had lots of Panthers and Panzer Grenadiers, and plenty of Shermans and other US assets. The battle is well documented, and internet photos of area suggested that the terrain is interesting. Some of the fellows set out to reconstruct the orders of battle. My job was to design the gaming board.

### Get a Good Topographical Map

Secondary sources, like Reardon's *Victory at*

*Mortain*, had given us a fair idea of the area. But the detail in most sketch maps is, well, very sketchy, so we set out to get topographic maps.



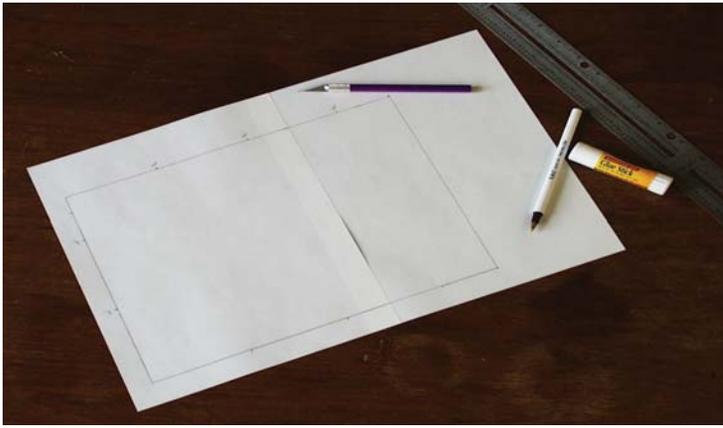
Just like here in the states, all of France has been well mapped. There is the Red Series (100,000 scale) and the Blue Series (25,000 scale): these correspond to America's USGS maps. A trip to the local university got some photocopies of the Red Series map. But for detail, nothing beats the 25,000 series maps. We ordered on on-line. Once it came in, we were good to go.

### Battlefield Math - Part 1

How much map will fit on your table? To answer this question you have to answer a few preliminary questions:

- 1] How big is your table?
- 2] What's the ground scale in your rules?

In our case, the Mortain game will be 4' x 6'4" (or 48" x 76"), and the scale is 1" = 100 meters. Our board will be 4.8 kilometers 'tall, and 7.6 kilometers wide. How big is that on the map?



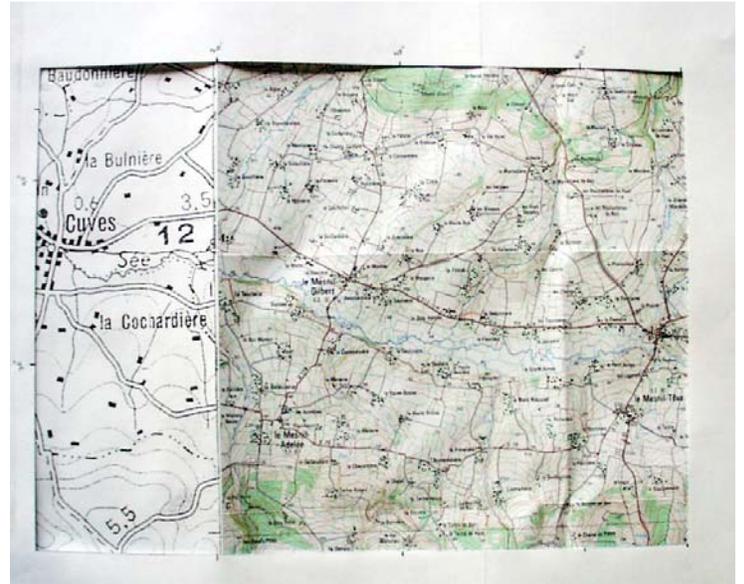
The best way to determine which chunk of the topo map to model is to create a template in scale to your gaming table, and slide it around on the map until you have the terrain features you want. Get a big enough piece of paper and draw a rectangle, with good square corners, the size of the scale tabletop. Use a metal straight edge and sharp hobby knife to cut out a template.

For our Mortain board, we wanted 3 crossing points over the River See, which roughly bisects the map, and the eastern edge of the board to be close to Charence-le-Roussel, the German jumping off point and main Line of Communication (LOC).

Despite our best laid plans, the Blue Series map didn't extend far enough to the west. Rather than order another \$15.00 map from Europe, and wait another month, we could get the major features from the photocopy of the red series map we already had. We enlarged it to scale, and taped it onto the edge of the detailed, full-color 1:25,000 map. The details on the color map will be extrapolated onto the western edge of the board.



We also considered features we did NOT want on the board. The most important of these was a major east-west highway that runs a few 'clicks' south of our map. This would have made it too easy for the Germans to shift forces, and may have unbalanced the scenario. Once we were happy, we taped the template to one side of the map.



## Hexafication & Math - Part 2

You will need a sheet of hex paper. If you have a local gaming shop, they normally stock these. It really doesn't matter how big the hexes are - you will have to photocopy it to the right size, anyway.

Each Terrain Maker® hex is 4" across. In our game's scale, that's 400 meters. Find the scale on the map, and measure 400 meters (17mm). That's how big the hexes should be. Using a photocopier, the hex sheet had to be enlarged to 122%.

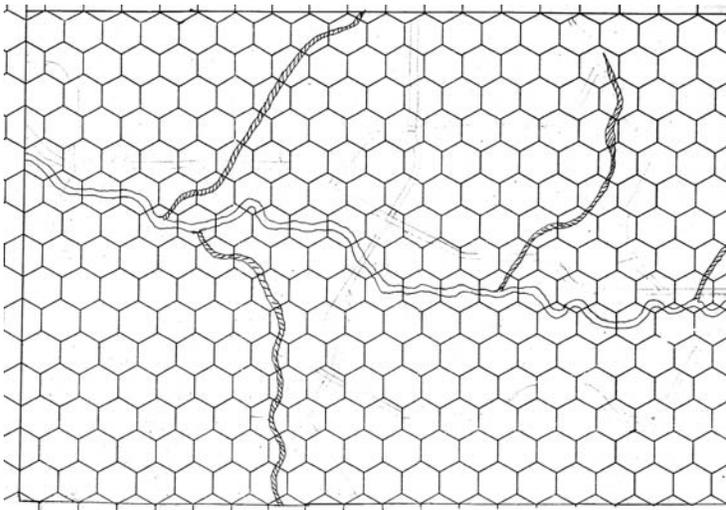
Take this correctly sized hex sheet to Kinkos, and have them make you a transparency of it. (While at the photocopier, get several extra sheets of hex paper - we will use them later.) Align the transparency up with the knockout, and tape it in place. You are now ready to convert this raw data into your personalized Terrain Maker® board!

## Start at the Bottom

If you are new to Terrain Maker®, review the instructions that come with every pack. Streams, waterways, and most roads run from side-to-side, through the center of the hex.

Create your Master Map. You will need a clean sheet of hex paper. Mark off the outer edges of your board in a rectangle (ours is 19 hexes east-to-west, and 18 hexes north-to-south). It eases things if you number the edge hexes, on both axis. Sharpen a pencil, and put your pen away! We will ink the corrected sketch later.

Start with the largest water features: determine the closest hex that your river, stream, shore or lake occupies on one edge of the board, and sketch it on the master map. Continue until this feature is completely sketched.



The Mortain board has several creeks, minor tributaries of the River See. We will be modeling them using the 'thumb-nail gauge' technique. They were then sketched in.

Once you are sure you like the waterways, find a black pen, and carefully ink the pattern. Get the ink in the right place, then use a large gum eraser to remove the pencil lines.

### Road Net Comes Next

Find the pencil, and sketch in the road net. Again, start with the most important roads. Just north of the River See, the blacktopped highway is paramount. Next we added the major crossing roads, with their bridges over the river.

Even in Europe, most towns have at least one intersection where the roads cross a 90° angles - sketch these in now.



Finally, add the most important secondary roads. Consult the map in your secondary sources - If you are using a modern topo map, some of the secondary roads may not have been constructed yet! Don't overdue the

road net: you want enough for rapid movement, without making the entire board roads! We inked the road net - but you might wait until the slopes are added. This way you can make sure the road doesn't do anything 'stupid.'

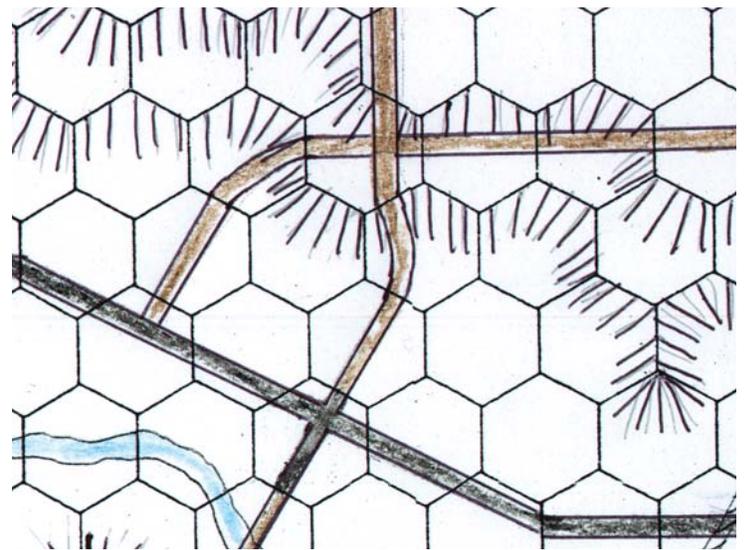
### Up from the Depths

GHQ's Terrain Maker® models hills - topography - with more accuracy than any other gaming terrain system. There are 3 different different slope rates, made of 1/2", 1" and 1&1/2" hexes. For this board, most slopes close to the river will be made of 1/2" (TM1) slope hexes. Farther from the river, near both the north and south edges of the board, the hills are made of 1" TM3 hexes.

Study the topo map. Determine an approximate number of contour lines will rise 1/2" on your gaming table. Generally, we used about 3 to 4 intervals per 1/2". This may sound like a lot, but remember that 1 hex is nearly a quarter mile across.

Start at the lowest level, the river. Using your pencil, mark several lines on each hex, with the ends of the lines touching the 'top' of the slope hex. Remember the patterns used with Terrain Maker® slope hexes, with the slope edges abutting the adjoining hexagon. Work in a line, from hex to hex, all the way from one edge of the board to another edge. Then move to the other side of the river, and sketch in the lowest set of 1/2" slopes there.

Continue working, one elevation line at a time, all the way across the board. Keep in mind the town sites - at least part of the major towns should be flat. This simplifies mounting GHQ Terrain Maker® buildings.



After we had gone up 2 contour lines, we moved to 1" hexes, as they better represent the large hills further from the river valley. These hexes are

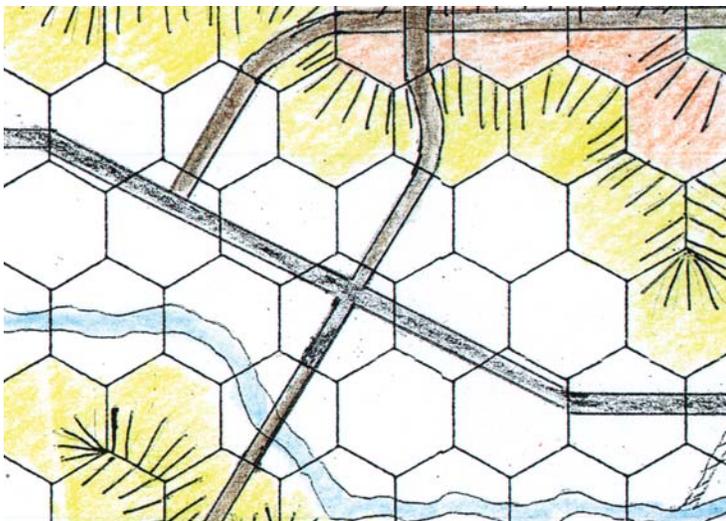
marked with a small circle with a "1" on the map.

Once you are happy with the hills you have sketched, ink the lines, and use the gum eraser to clean up the work. You have now finished your Master Map.



### Adding Color - Part 1 - Hill Map

We make two photocopies of the Master Map. To ease understanding of the mess of hill hexes, it is quite useful to make a "Hill Map," using colored pencils. Here we have left the lowest level, the one with the water hexes, white. We used a yellow colored pencil to shade the first line of slopes, and any 'flat' hexes at the top of that first level. Repeat on the other side of the river. (Trust us, the shades below would be in color!)



Next, use another color (like orange) to shade the next level up. Continue until you get to the 1" hills. There, since they represent two 1/2" levels, we used two different colors per hex.

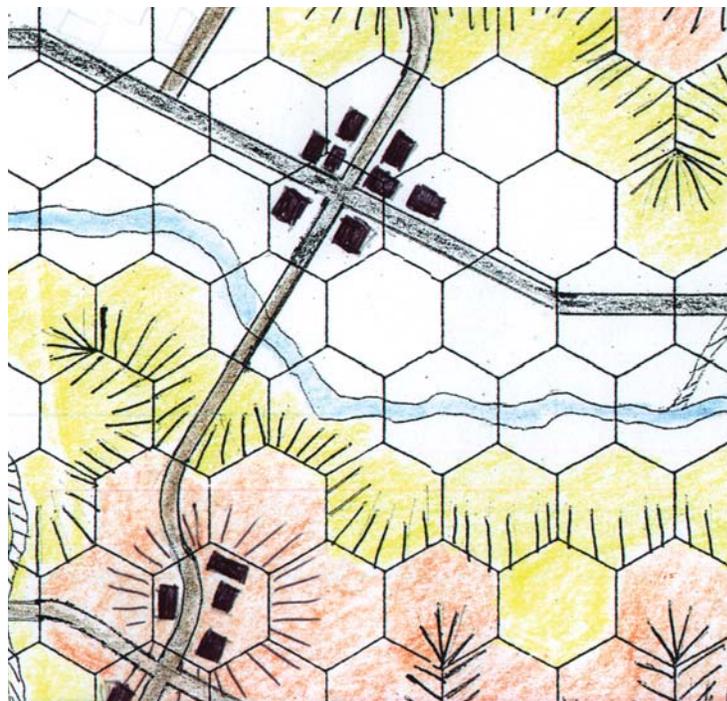
You are now ready to start building the individual hexes of your dream gaming board. With Terrain Maker®, you build a large board one hex at a time. You

can count out how many of each hex type you need, and mass produce them. After you have made the hexes, you can assemble the unpainted board.



### Adding Color - Part 2 - Feature Map

Take the other copy of the Master Map. Use this one to sketch out the man made features not yet found on the Master Map: woods, fields, pastures, orchards, farms, towns, cities, airfields, etc.. Armed with this map, you will know how many buildings and trees to prepare. We assemble the slope hexes first, then assemble the board. We use this map to add the finish to the separate hexes.



### Putting it All Together

In the next several TacNews issues, you will see this mapboard coming together. We will be building this map, and providing you with several scenarios to game on this board. And if you get a chance, come and game on it at Historicon in July, 2004.