

How to Make a BMP for Your Scenario Using “The GIMP”

By Bob Cross

Section 18.11.5 of the Manual states as follows:

“18.11.5 Scenario Briefing Illustration

If you place a bitmap illustration (a standard windows BMP file) with the same name as your Scenario file in the Graphics directory, your bitmap image will show up in the Scenario Briefing screen during game loads and when players examine the Scenario briefing within the game. For example, the bitmap for the “Korea 50-51” Scenario is named “Korea 50-51”. You should use a 256 x 256 pixel low-contrast “green brushed” image similar to those already in use. Those of you with a paint program can create the appropriate look by taking a grayscale image and blending with the texture_sce.bmp bitmap located in your graphics sub directory.”

Adding a Scenario Briefing Illustration will give your scenario a professional appearance. Think of it as like the illustration on a wargame’s game box.

Unfortunately, properly blending the image was always a bit more complicated than that passage described, and with the new Graphics Standard used with TOAW III, it has become even more complicated. The blending bitmap is now called “ScenarioPic-template.psd”. And, from its file type, you can see it is in Photoshop Image format, rather than good old Bitmap Image format. You will have to have a graphics program that can read such files, even to make the attempt.

Now, if you’ve got one (such as Photoshop or Paint Shop Pro), fine. But if you don’t, you’re going to find that they tend to be a bit pricey. Fortunately, there is a very good one available for free download on the web. It’s called “The GIMP”, and you can download it here:

<http://gimp-win.sourceforge.net/stable.html>

You will need to download and install the appropriate GTK+ 2 Runtime Environment first, depending on your operating system. Either:

GTK+ 2 Runtime Environment (version 2.8.9, for Windows 2000 and newer; updated installer)

or

GTK+ 2 Runtime Environment (version 2.6.10-20050823, for Windows 98/ME and NT4)

as appropriate.

Then download and install “The GIMP” itself:

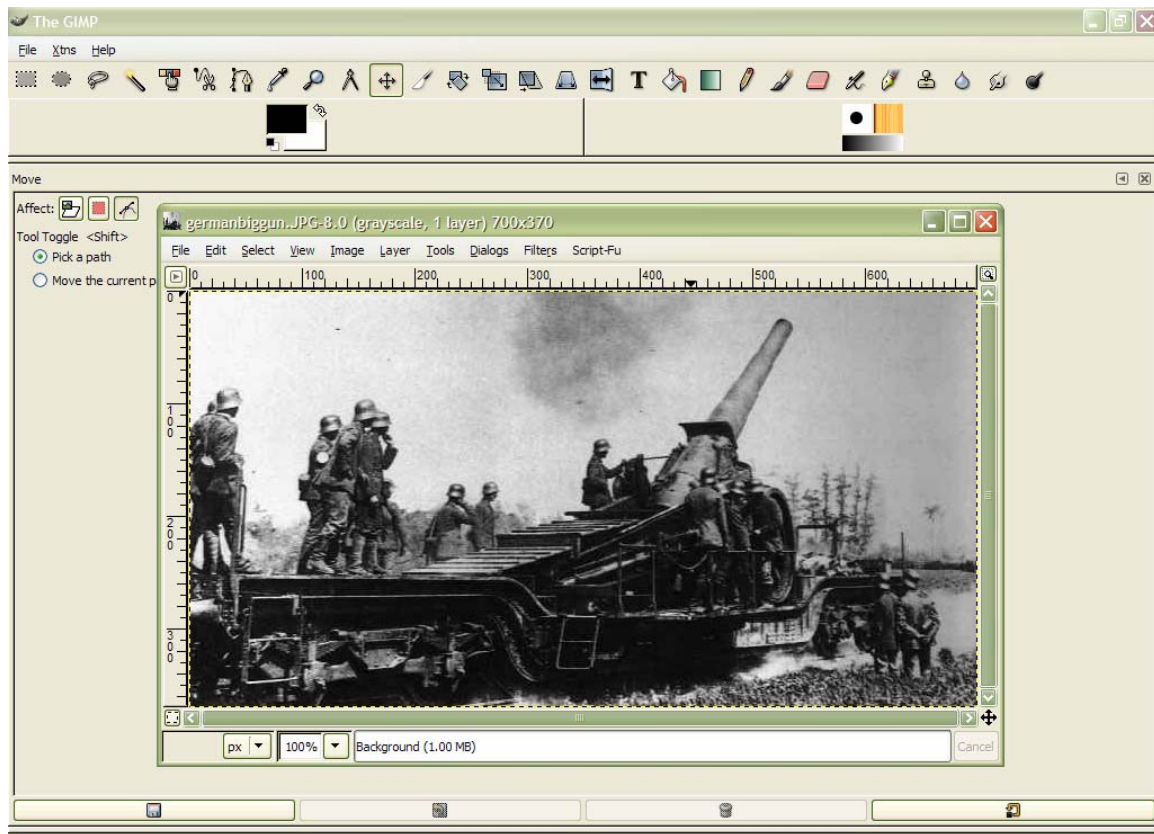
The GIMP for Windows (version 2.2.11)

Finally, you will probably need the help files, although they are optional:

GIMP Help 2 (version 0.9)

All further instruction in this article will assume you are using “The GIMP”, and all illustrations are from that program. If you are using some other graphics system, you will have to translate the steps for yourself. That will make the task a bit more difficult for you, but it should still be doable.

Now let's begin. Run "The GIMP" and have your scenario image ready. When "The GIMP" comes up, open your image using the File pull down. Note that I've done that, using an example image. Such images can usually be found via a web search.

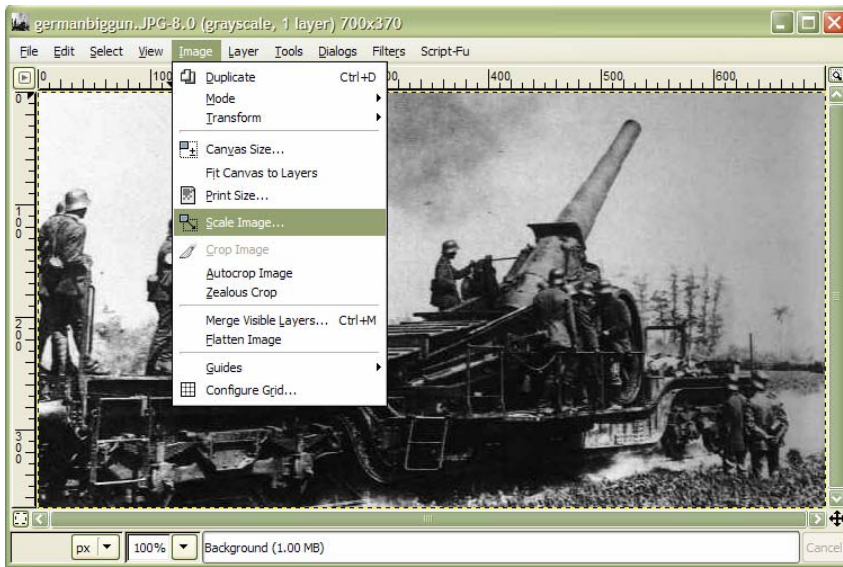


Note that, in this case, the image is 700x370 pixels. That is not the correct size, so we will have to first resize the image. The size required for the new images used for TOAW III is 295x298 pixels. But, as we shall see, part of that is reserved for the frame. The area inside the frame is 287x268 pixels. If you make the image larger than that, everything larger will be covered by the frame. I'd prefer not to have my image clipped by the frame, so I choose to re-size it to 287x268 pixels myself - that gives me full control over what ends up in view.

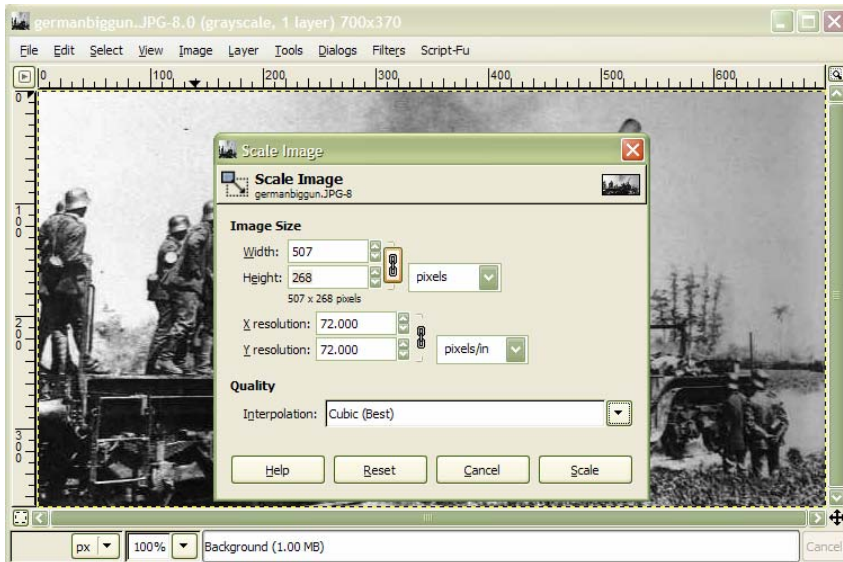
How best to reduce from 700x370 pixels to 287x268 pixels is going to depend on the image. Some images may have a lot of unusable area that could just be clipped. But in the case of the above image, it would all be usable and I would like to keep any clipping to a minimum. Therefore, I'm first going to re-scale the image before clipping anything.

Note that re-sizing your image is a task that could be done in some other, simpler, graphics program, like the Windows Paint program. And some of you may find that an easier way to do it. But it can be done in "The GIMP", so I'll use that to illustrate it.

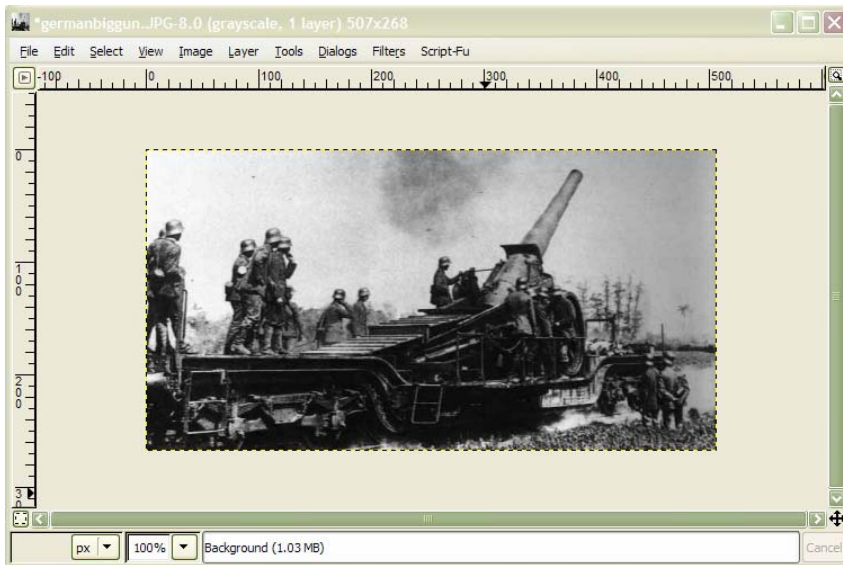
To scale the image, use the Image pull down and select Scale Image... :



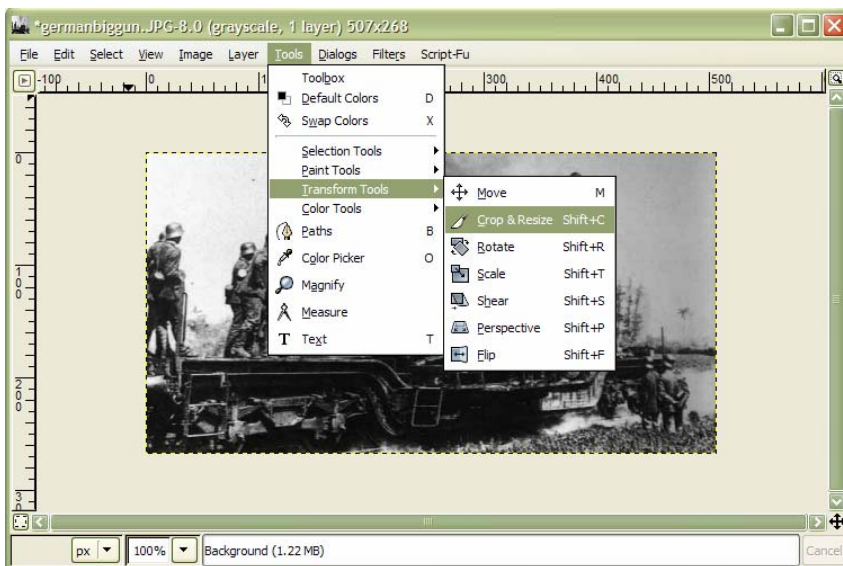
The Scale Image dialog will appear. Since the image is much wider than required, the height is the dimension to scale. I've set it to the required 268-pixel figure. Because the highlighted "links" are enabled, the dialog automatically changed the width to the correct value (507 pixels) to keep the aspect ratio unchanged. I selected Cubic Interpolation for best results. If your computer is low speed and your picture very large, you may prefer one of the other options. Clicking on the Scale button effects the scaling.



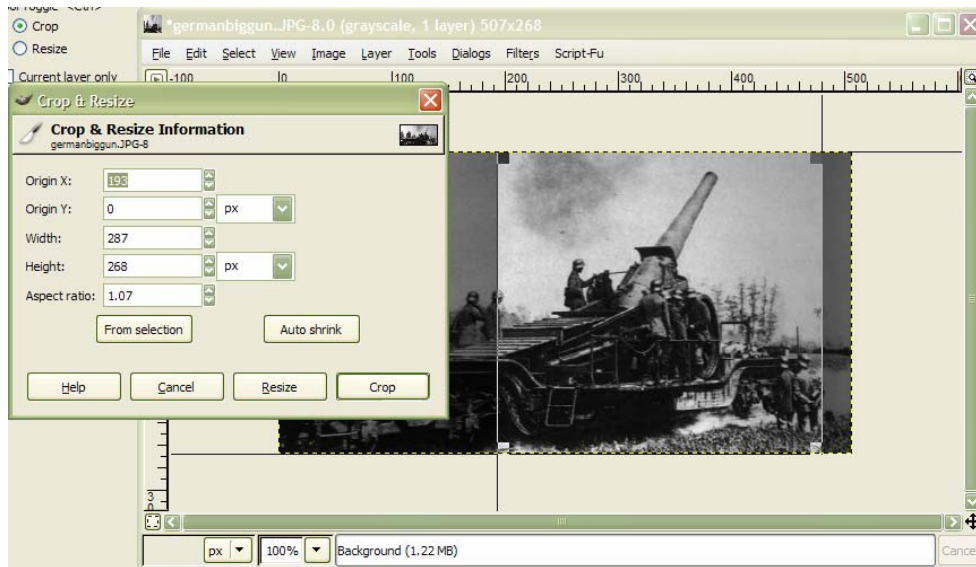
Now the image has the correct height:



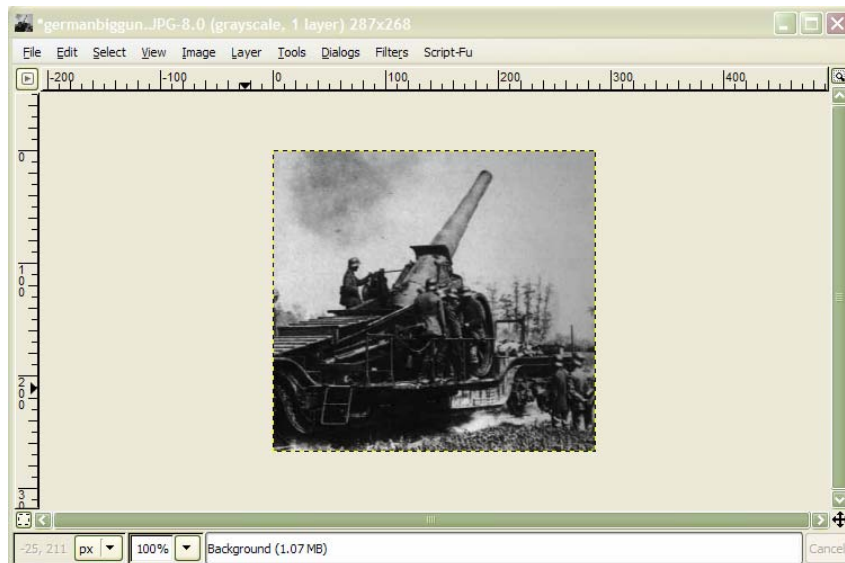
But the width can't be re-scaled without distorting the image. It will have to be clipped. This can be done via the Tools pull down. Select Transform Tools -> Crop & Resize:



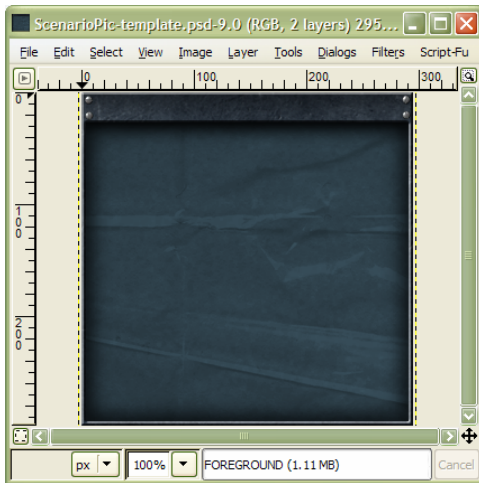
The Crop & Resize Information dialog pops up. The clip window is formed by pressing and holding the left mouse button on the location of the first corner of the desired window, then dragging the window's other corner to its desired location. Since we now do not wish to clip the height at all, those corners should be beyond the range of the height of the image. The target width value is 287 pixels, but it is not necessary to achieve this in one pass, and may be difficult to do so. It's all right to take several passes to get it as you desire, and note that everything you do in "The GIMP" can be undone via the Edit pull down's Undo option. But, in this case, I've completed the clip in one pass:



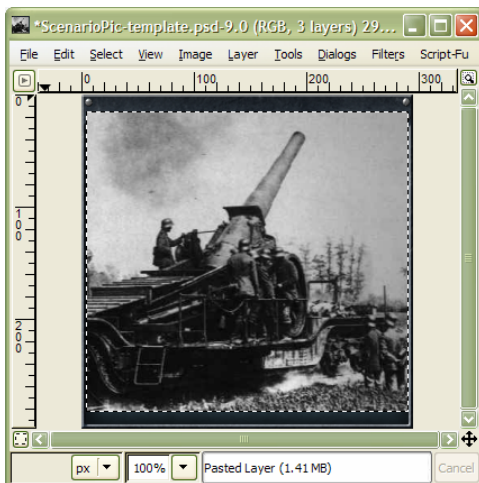
Once the window has been selected, the Crop button effects the result. The final, properly sized image is now ready:



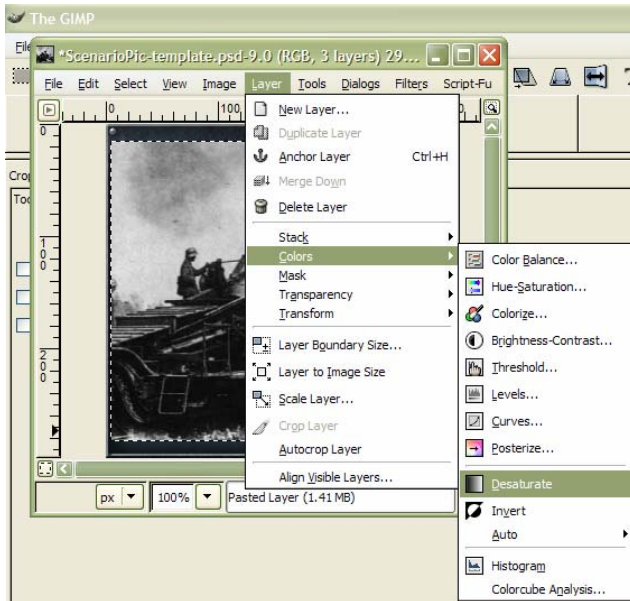
Now open the ScenarioPic-template.psd file. Note the frame mentioned above:



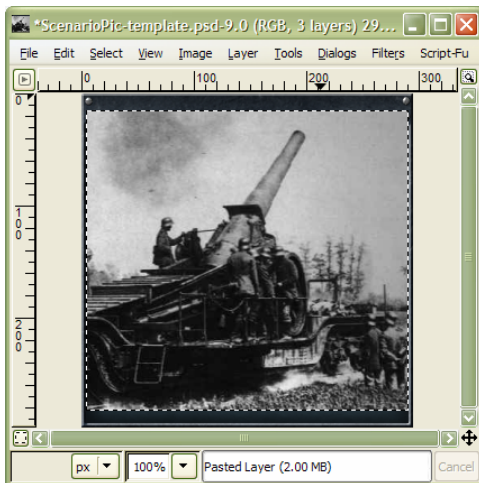
Using the Edit pull down on the image window, select Copy. Then, using the Edit pull down on the template window, select Paste. The image is now pasted on top of the template:



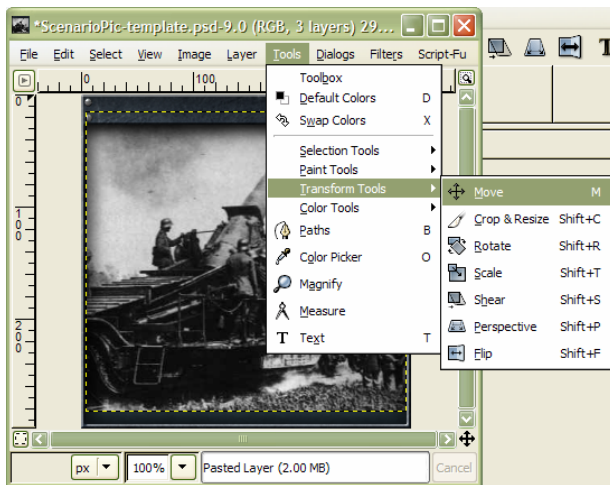
Standard procedure is to desaturate the image before doing any blending. This converts the image to black and white. This image is already black and white, so it will not have any effect on it. But I'll go through the motions anyway, to illustrate how to do it. It is accessed via the Layer pull down -> Colors -> Desaturate:



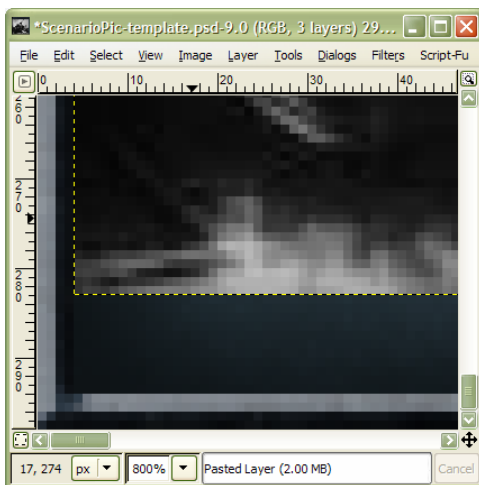
Clicking on Desaturate effects the results (no visible effect in this case):



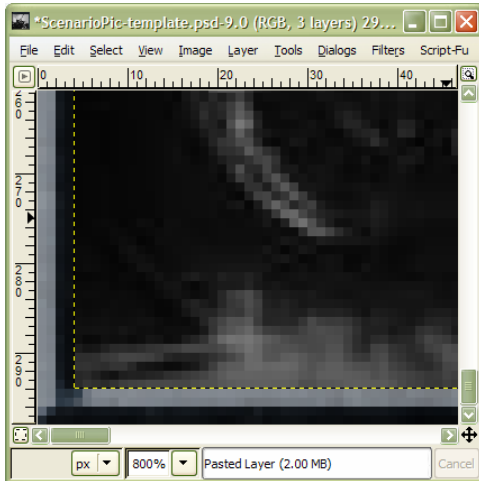
Note that, since it was pasted centered, the image is located correctly horizontally, but not vertically. It needs to be moved to the proper place in the frame. Select Move via the Tools pull down and the Transform Tools option:



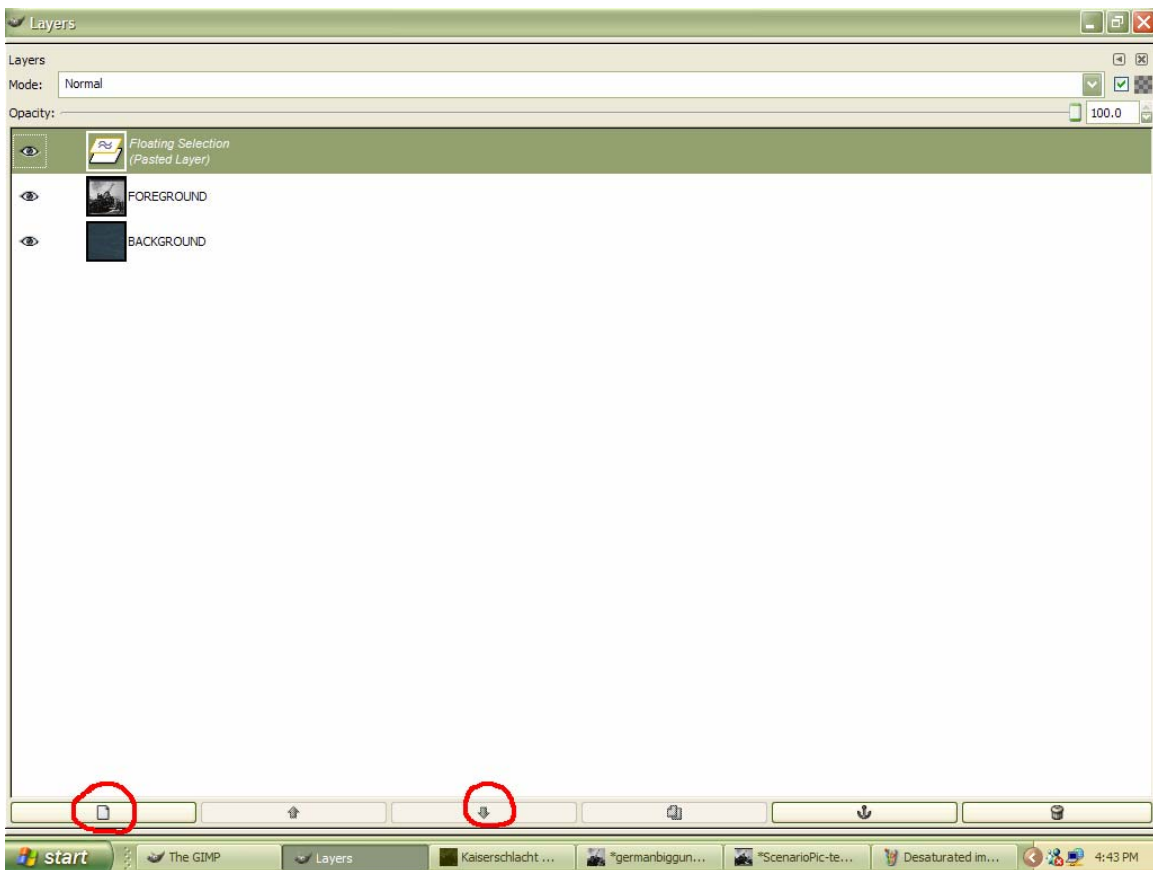
Before moving the image, it will be easier to do so accurately if you first zoom to 800% via the Zoom pull down at the bottom of the window. Then, using the scroll bars, scroll the window to the lower left corner:



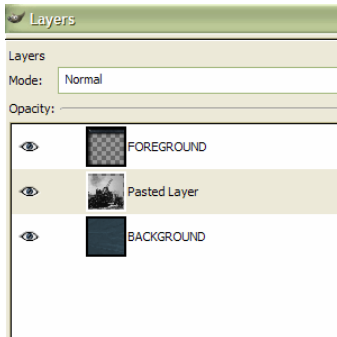
Now it is easy to grab the image and move it into its proper place. Drag the image until its lower left corner is four pixels from the left and four pixels from the bottom:



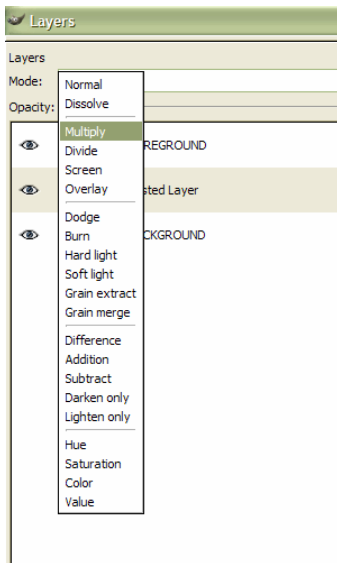
Re-zoom back to 100% using the same Zoom pull down. Now we need to get the pasted image into a layer between the Foreground (containing the frame) and the background (containing the blending image). To do so, switch to the Layers Dialog. If this didn't automatically open when you first ran "The GIMP", then it can be opened via the Dialogs pull down. Note that upon being pasted into the template, the image is called a "Floating Selection". It can't be operated on in that condition. At the bottom of the Layers window, note the "New Layer" and "Down" buttons I've circled below:



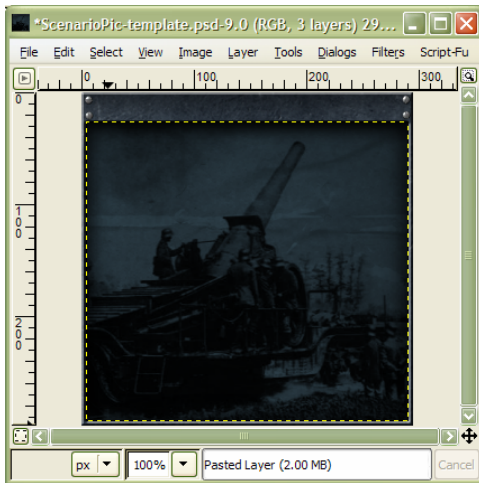
Click the New Layer button with the pasted layer selected. It will then become a new layer, no longer floating. Then click the “Down” button, and the image layer will be moved between the Foreground and Background. Note that the template’s Frame is in the Foreground while its blending image is in the Background:



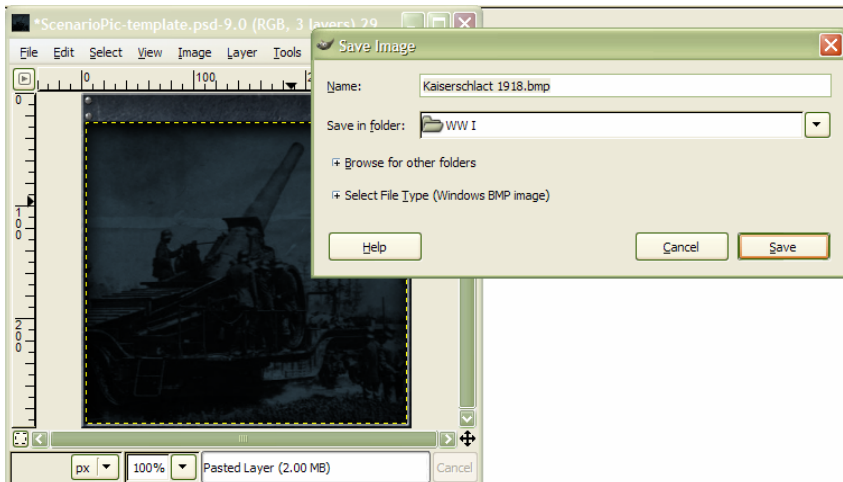
Now we can finally do the blending operation. With the pasted layer selected, click in the Mode window (that says “Normal”) and its pull down appears. Select “Multiply”:



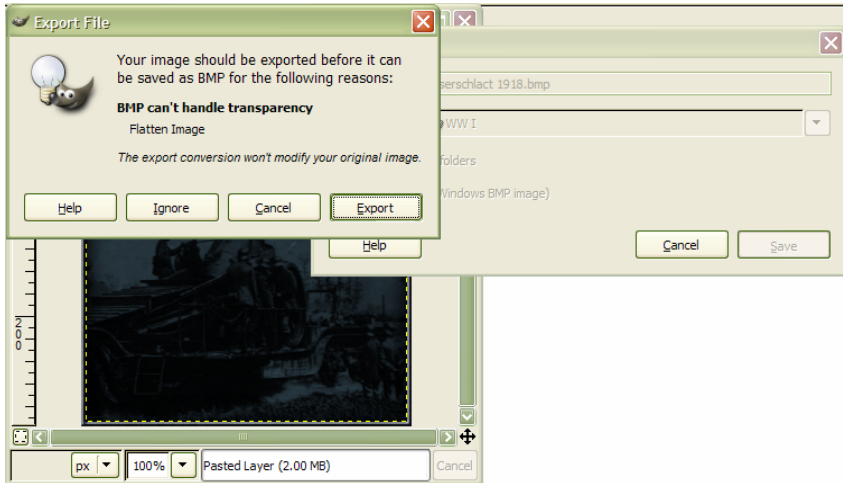
The final result then appears in the template window:



Now all that remains is to save the results. Select "Save as..." from the File pull down. Use the "Select File Type" option and select "Windows BMP image". Then use the "Browse for other folders" option to select the desired destination for the save. Be sure to rename the file to your scenario name. If you forget all this and save over the original template file, the template will be corrupted and you will have to re-create it via the installation process before blending any other images:



Click on the save button and the file will be saved. But first it will ask you to Export the file. Select Export. This will convert the file into a single layer image as required by the BMP format. You could have flattened the image first, using the Flatten Image function, found in the Image pull down, instead. But then you would have to re-open the template if you wished to convert any more images, since that would convert the template to single layer. This way, all you have to do is just delete the pasted layer and the template is ready to convert the next scenario image, if desired.

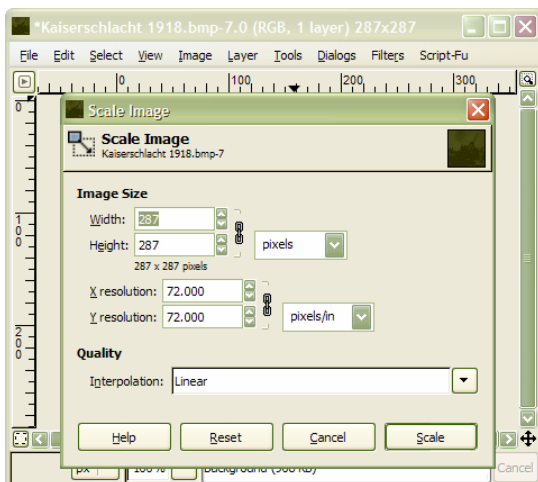


But what if you only have the already blended ACOW image? In other words, the original unblended image has been lost or was never in your possession. That introduces a slight complication. But, as I shall show, “The GIMP” has a tool to solve it.

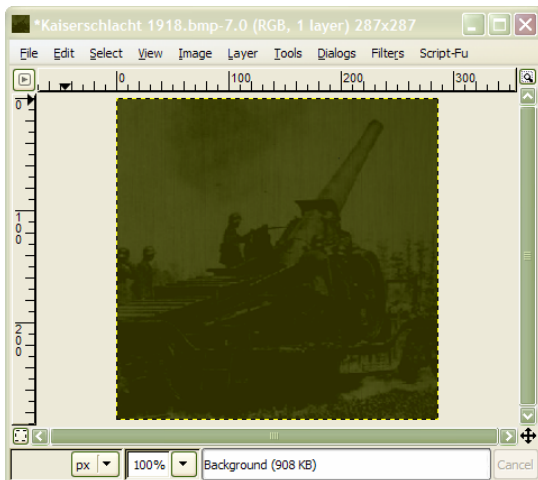
Here, I’m going to work with my already blended ACOW bmp. It’s opened via the File pull down:



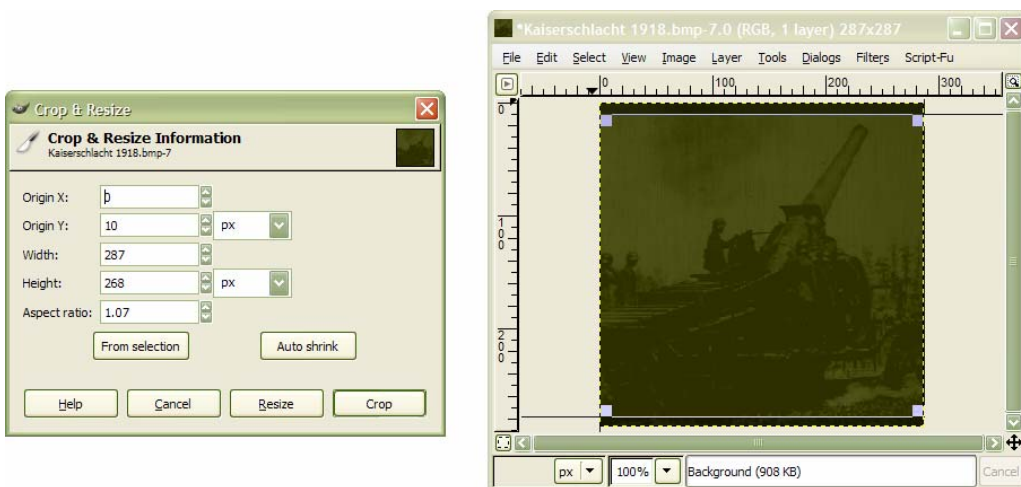
Note that the ACOW scenario image was 256x256 pixels. So it will have to be re-sized to 287x268 pixels first. To avoid aspect-ratio distortion, first re-scale to 287x287 pixels:



Note that, again, with the “links” enabled, changing one dimension to 287 pixels automatically changes the other to the same. Clicking on Scale effects the result:



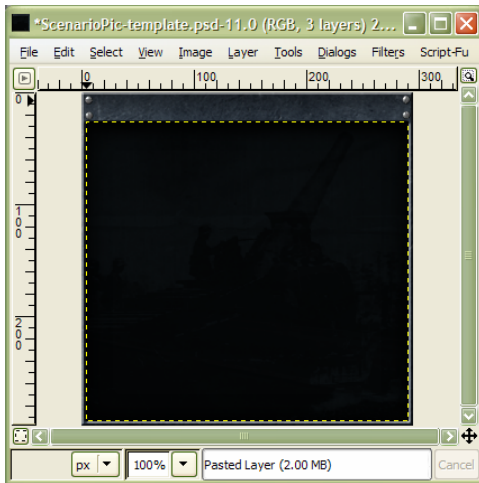
Now, the height must be clipped using the Crop & Resize feature as before:



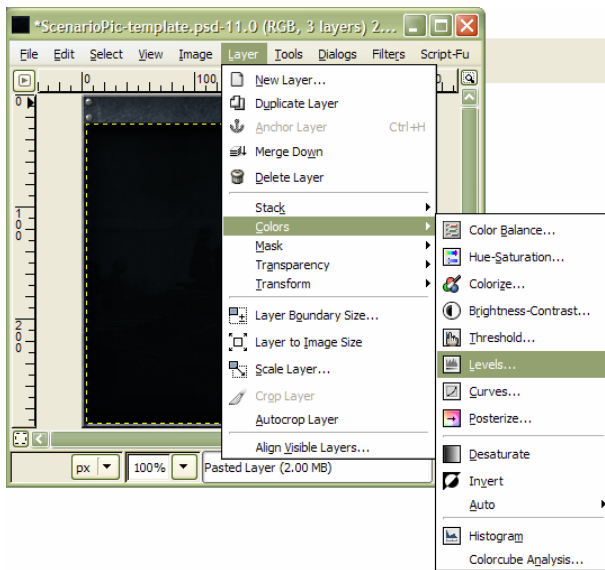
Now the image is the correct size:



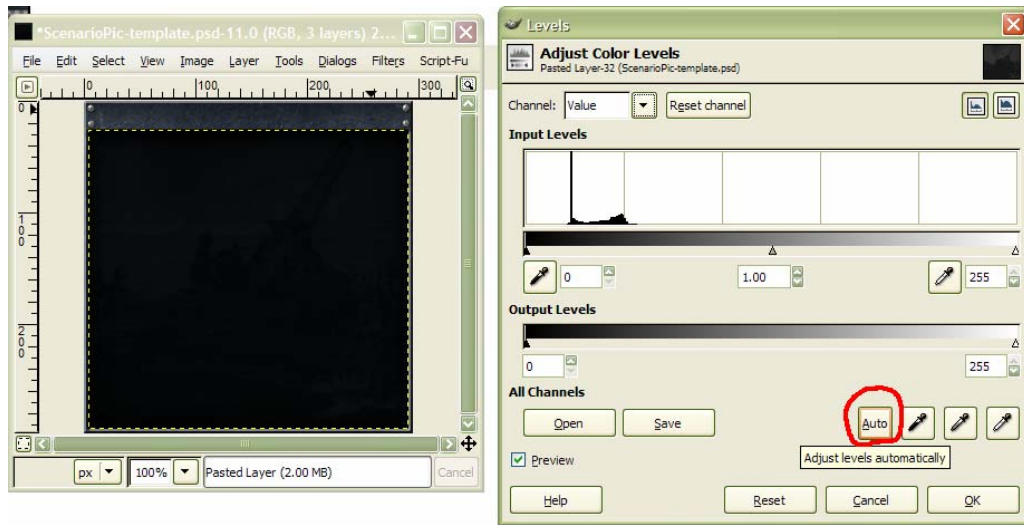
Now complete the blending as in the first example. Note that the results are now much too dark:



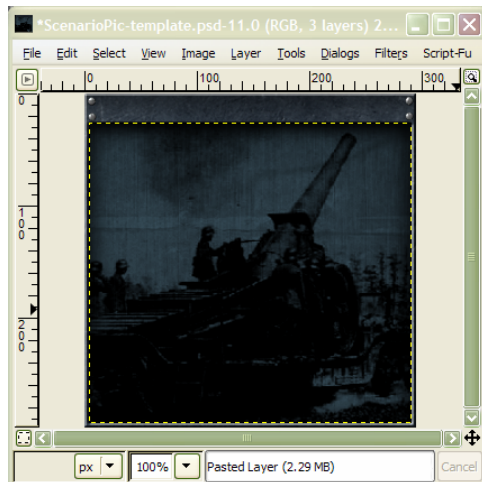
That's because the image started off pretty dark due to the ACOW blending. To correct this, bring up the Levels... dialog via the Layers pull down -> Colors -> Levels... :



The Levels dialog has an Auto button that will adjust color levels automatically. I've circled it below:



Click the Auto button and then Click OK to effect the results. The resulting image is now optimized and should be quite acceptable:



All that remains is to save the results as described above.

Note that the Auto button could have been used in the original example, but it would have had no effect, since that result just happened to end up already optimized. There would have been no harm in using it, however. And, in general, it may be good practice to go to the effort to use the Auto button in all cases. Whenever the end results turn out too light or dark, it can be of use.