|ZUTI| Friction setup

For MDS mod for IL2 Sturmovik v4.08/4.09

Table of content

1. Description

Friction mod, either as stand alone mod or incorporated mod in MDS mod enables mission builders to set up predetermined areas with specific friction that is transferred to aircraft landing gears. Default value for IL2 makes your ride off airfield a very bumpy ride at best. In most cases, you will tear your gears off, break your aircraft nose, tear off wings or just explode. It depends on your skills and plane. My humble opinion is that this was not the case for ALL surfaces and the result is this mod. Mission maker or map builder can now decide which areas they want to be usable for landing and/or take-off operations by marking them and giving them specific friction values. They can do this in two ways:

- by using dedicated tool that I have written to extract those areas from test missions or
- by assigning friction values to home bases in FMB under home base properties.

Both ways have their pluses and minuses. The second option is easier but is limited to home base objects. First option takes a little more time but is way more flexible as it allows you to make any meadow TO or landing ready.

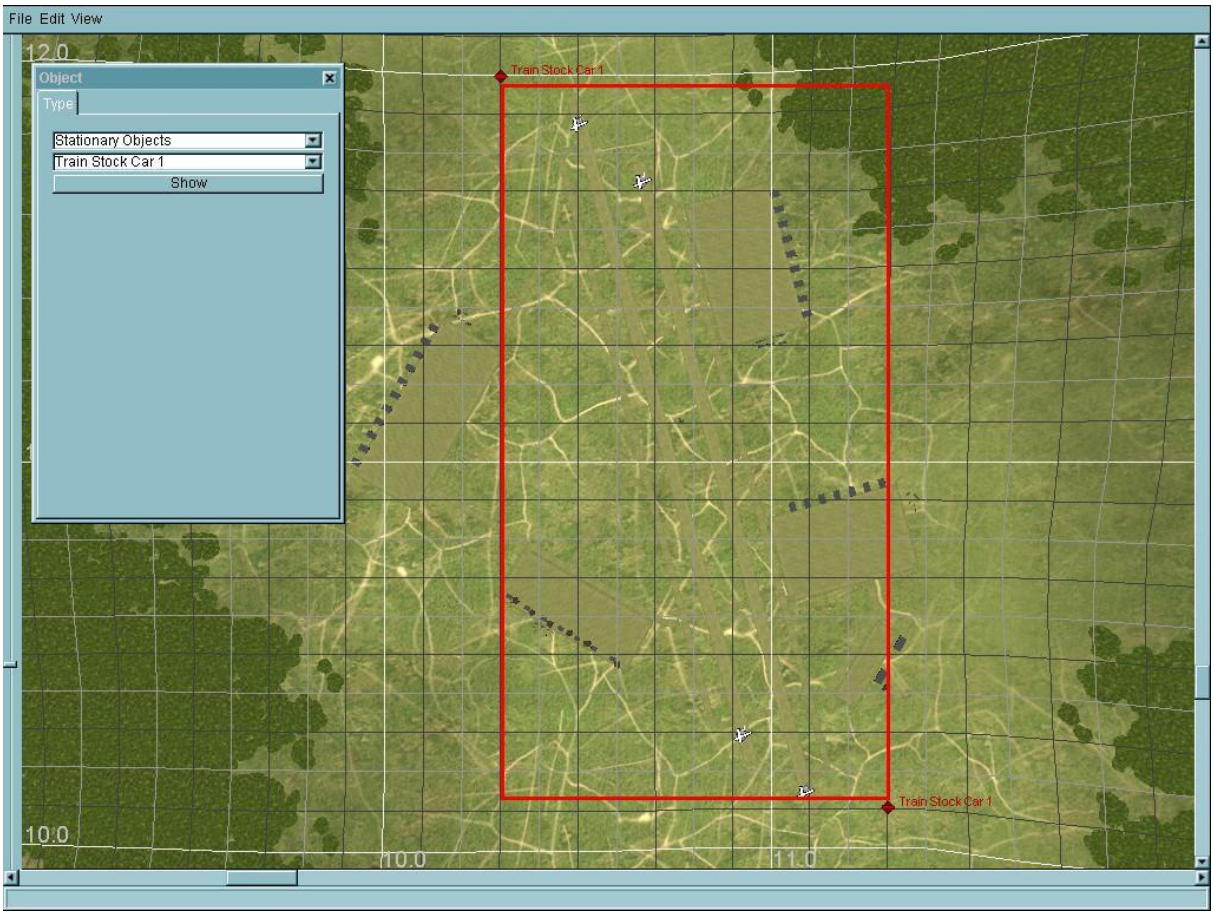
Another very important part of this mod has to do with R/R/R operations for MDS. That part **requires** that pilot lands his plane on such area. So, this guide might be handy for all you mission and map makers.

2. Creating friction area by using dedicated tool

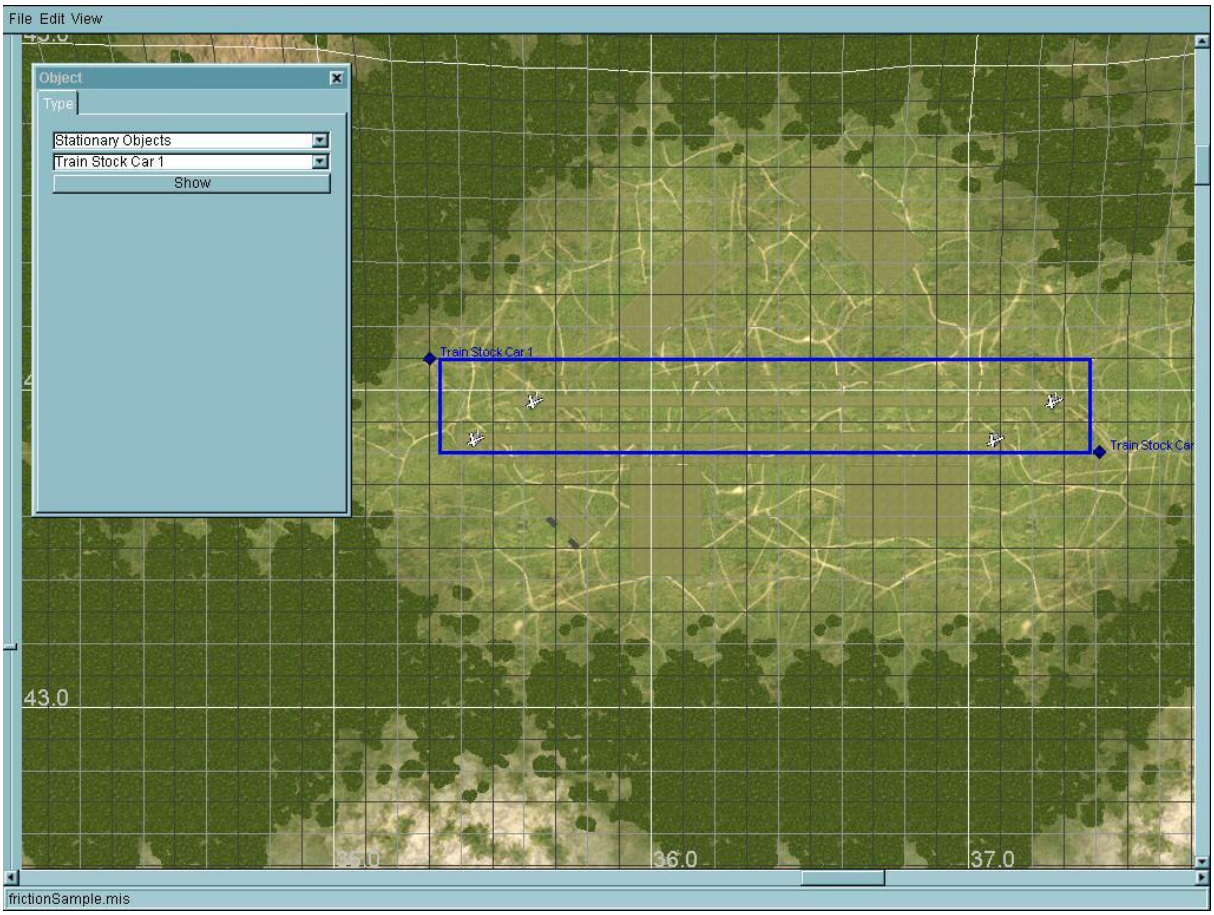
This option is the one I personally prefer as it gives you as a mission or map maker much more possibilities. And as you'll see it is **very** easy to set up.

Let's load IL2, start FMB and load one map. For this test lets use "Pacific Islands" map. Do this on empty map. What does that mean? Well, if you created one complex mission for Pacific Islands map, don't mark friction areas on it! Just load Pacific Islands map in FMB, like we did, and mark friction areas there. Leave your mission file intact!

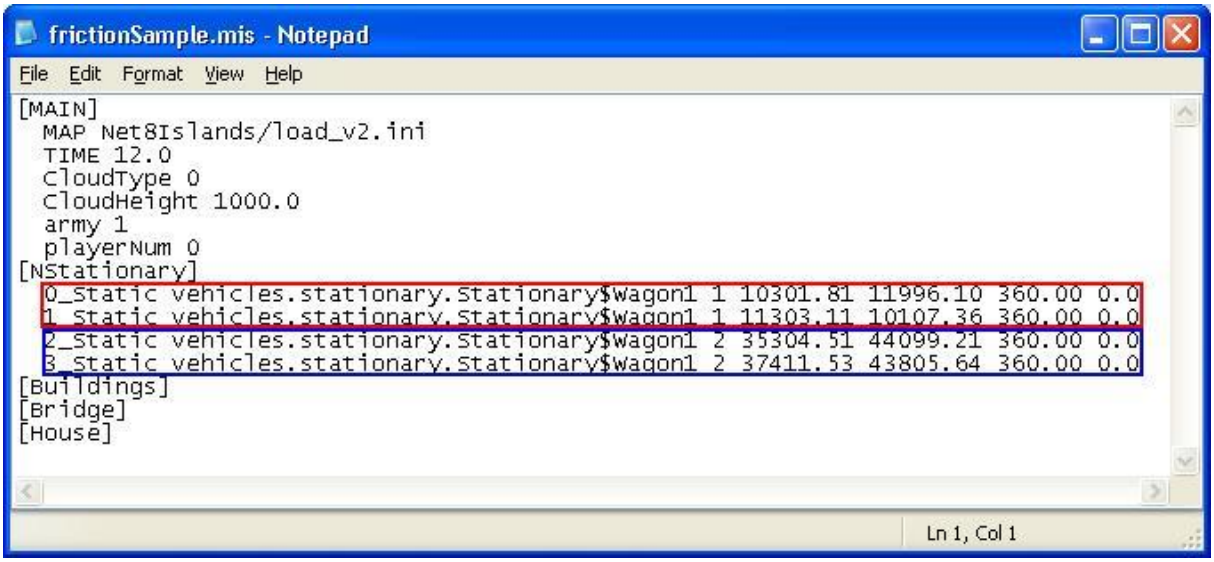
Once that one is open, decide which area you want to make land operations friendly and mark it using **stationary objects** menu in FMB. Look at the picture below. It shows how I marked an area with two stationary objects (train stock car 1). **Rule of thumb to follow is: first mark upper left corner, then lower right one.** By doing so you will get a square area that I have marked with red lines.



Let's create another friction area, for the upper right island base. Note that static object color is of **no** importance at all. I have also marked this square with blue lines, just to make it easier to picture the whole thing.



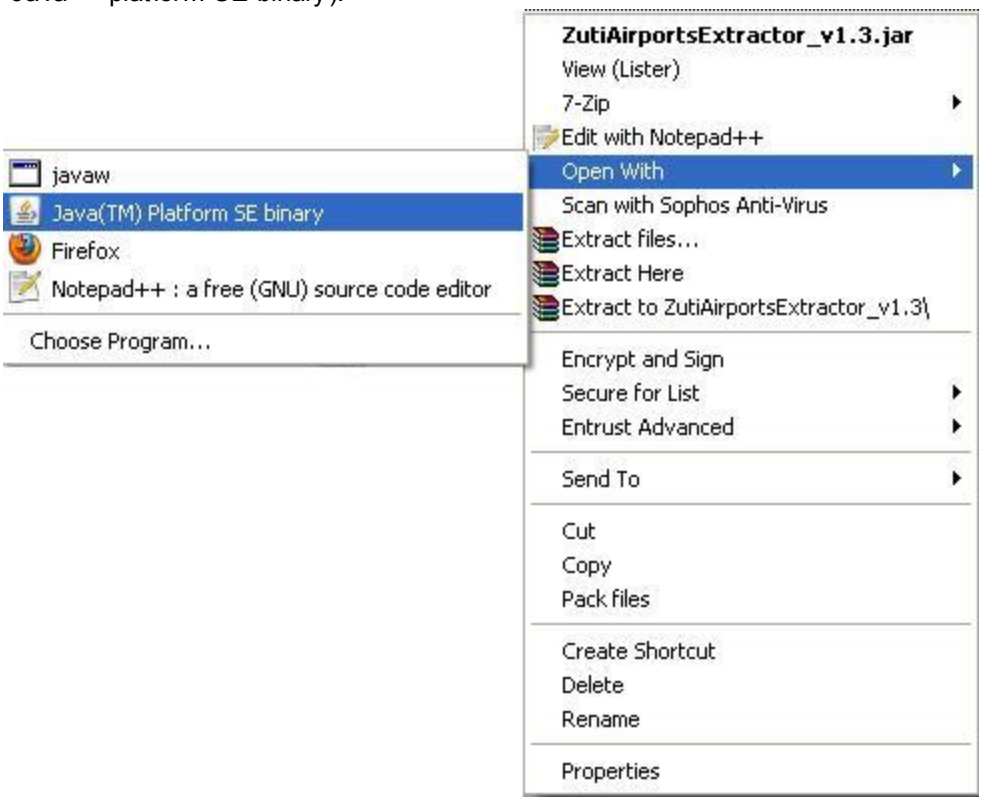
So, that is done. Save your work (for this tutorial, file name is "frictionSample.mis") and exit IL2. Mission content looks like this:



I removed all MDS specific entries, so the mission file looks nicer but you don't have to. I told you to use stationary objects because the tool that we'll be using next only looks at [NStationary] section and well, stationary objects are stored there. As you can see, first two entries are our first friction area and second pair is last area. If you can't make the lines, check red/blue squares ;) OK, let's start that

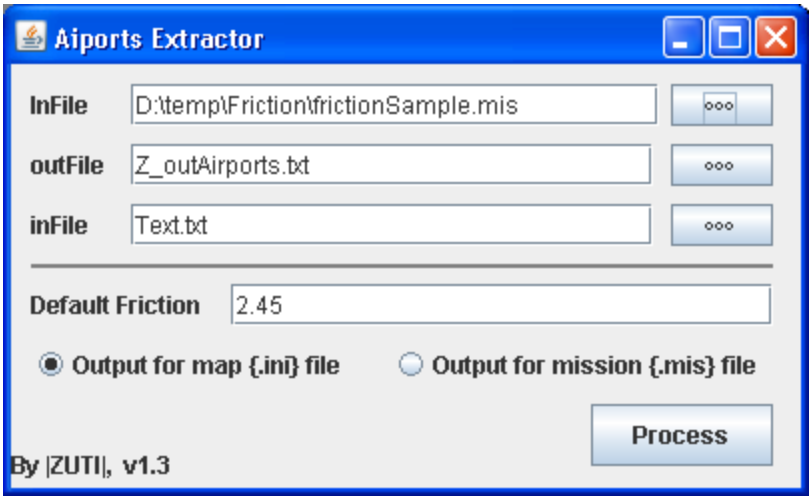
mystic tool… you'll have it under MDS folder in Tools subfolder. It's called ***ZutiAirportsExtractor_v1.3.jar***. Version number might differ, but v1.3 is currently latest release. It reads lines in pairs. Each pair is friction area. That is why marking order is so important (**upper left first, lover right second!**).

To run it you have to double click it or, press left mouse button on it, select "Open with…" and select "Java ™ platform SE binary).



If even that does not start it and you are sure you have java installed, try this: in the folder where the tool is, create empty file called "run.bat". Edit the file and insert this line: "java –jar TOOL_NAME". Replace "TOOL_NAME" with whatever jar file that you want to use. For us, replace it with "ZutiAirportsExtractor_v1.3.jar". Save your work and double click run.bat. This should finally start the application.

The tool looks like this:



It's fairly straightforward. The first field has to point to your created mission file that holds friction areas data. In our case, this is frictionSample.mis file. Second field specifies where the output file with created friction entries will be (default place is location from which your application is started) and the

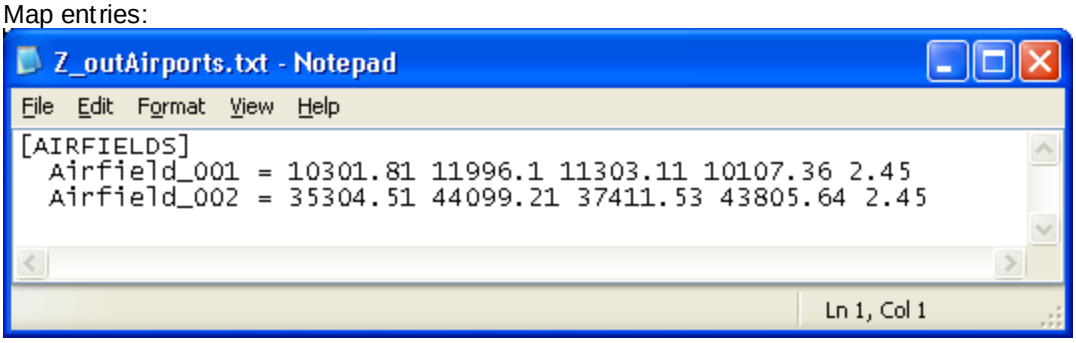
last field is useful for map makers. If they place text info objects inside friction area, they can point to that text file here and the application will match those texts with friction areas. I'll show you the result of this function for my Slovenia map but not for out test sample, since we are creating mission and not a map.

The second part of the application requires you to enter friction value for your areas. Yes, one for them all but you can alter them by hand later on. Default IL2 value is 3.8, and it's very bumpy. Default for the program is 2.45 and it is quite fine. Planes with narrow gears will still have some problems though. So you can even lover it, if you want.

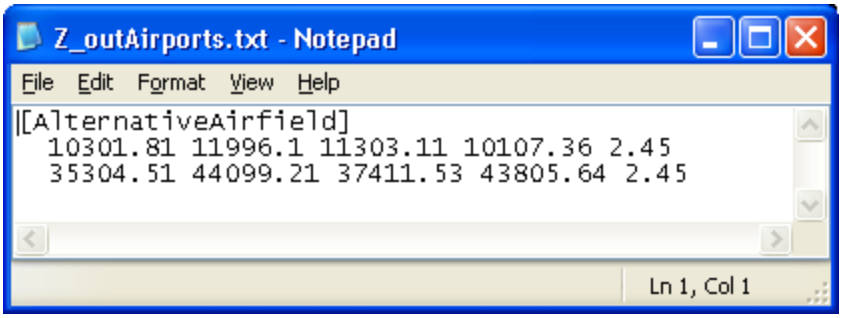
Last two options are dependant of the type of output we are creating. If you'll be entering your friction areas in your map load.ini file and by doing that making those areas not mission but map defaults, select first option. But if you are creating your friction areas for your mission only and thus making them mission specific, select second option. Then press "Process" button and wait till it's done. During execution the application will report how many airports/friction areas it found. For our case, it should read 2. And it does:

Next window will show you how many were exported. We should also have 2 here, and we do:

Here are results for both output options:
Map entries:



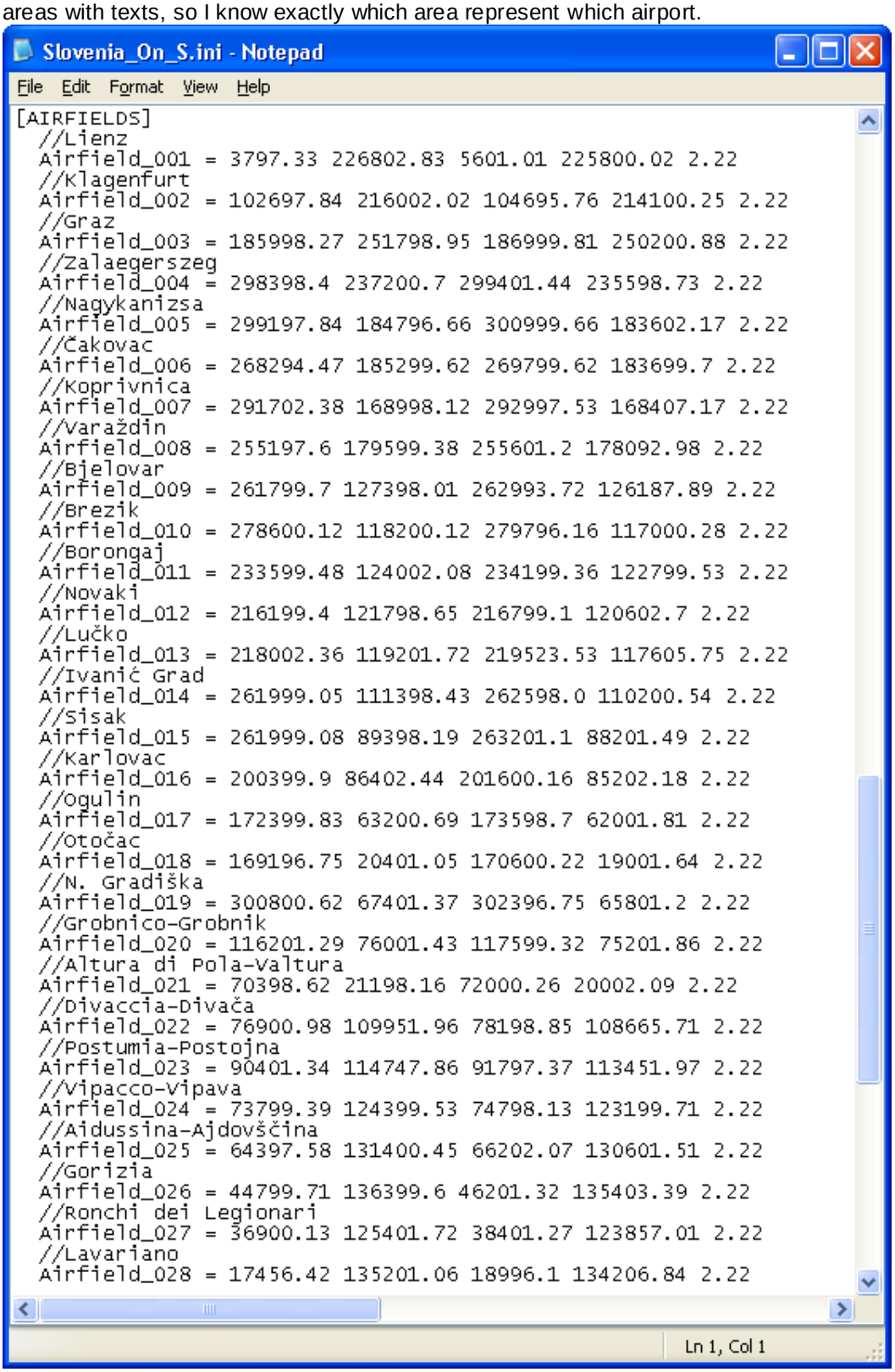
Mission entries:



All that you have to do now is copy everything in your output file and copy it somewhere in your load.ini or .mis files, depending of what you are creating. And you can alter friction areas, if you want. Last parameter is the one that holds that info.

That's that.

Oh, and before I forget, this is a sample from my Slovenia map, where I also used text file to match areas with texts, so I know exactly which area represent which airport.

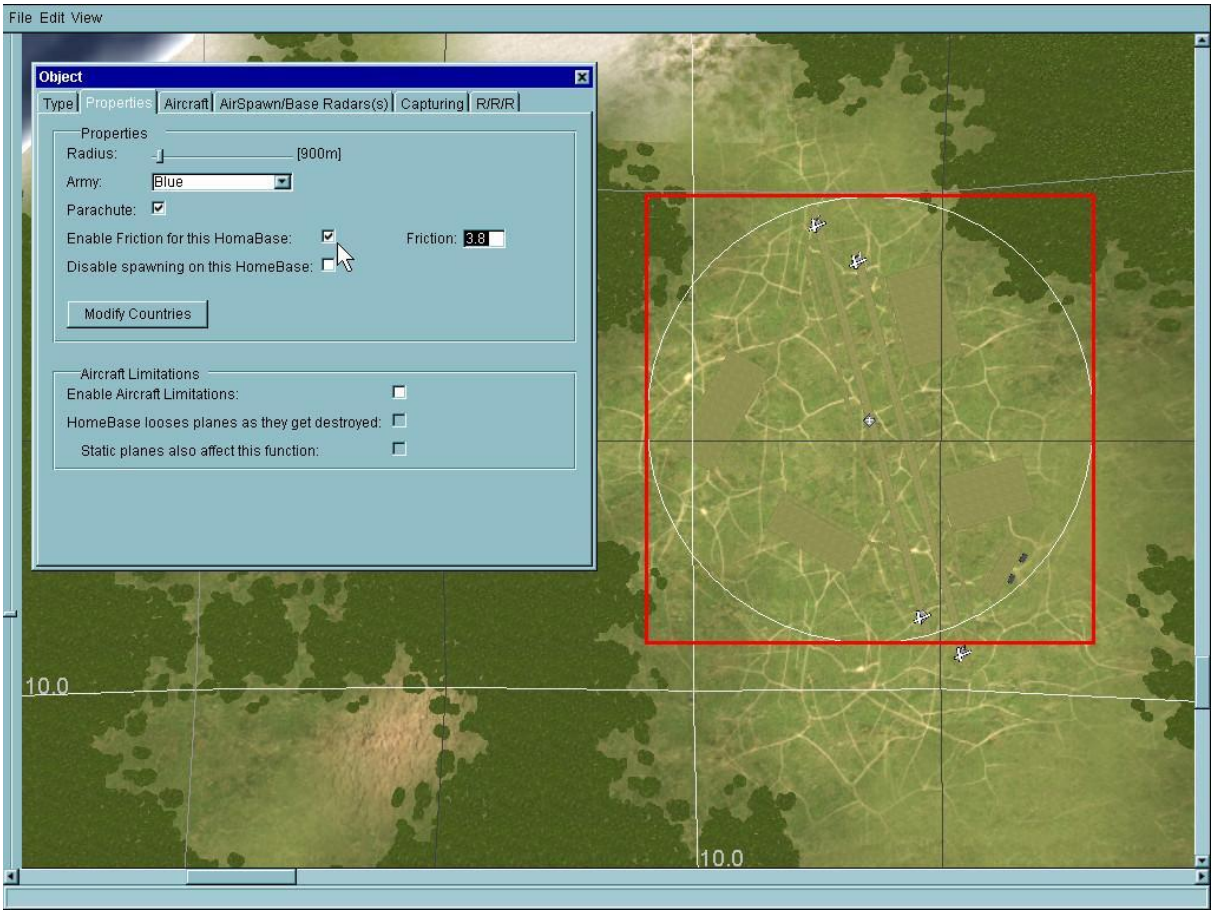


3. Creating friction area by assigning friction values to home bases

This option is a bit easier to set up as it requires less work but it is also more limiting since it can be set only to home base objects placed on the map.

What you have to do is open your mission in FMB and click on desired home base. Then click on “Properties” tab and enable “Enable friction for this HomeBase” option. I advise you to change friction value as 3.8 is default IL2 value and is very bumpy.

Here is how it looks for out test mission:



Again, we are talking about squares, not circles. What you need to do next is just to save your mission and you’re good to go.

4. The end

That's it. You should be mastering this in no time.

Cheers,
|ZUTI|