Minding the Metadata

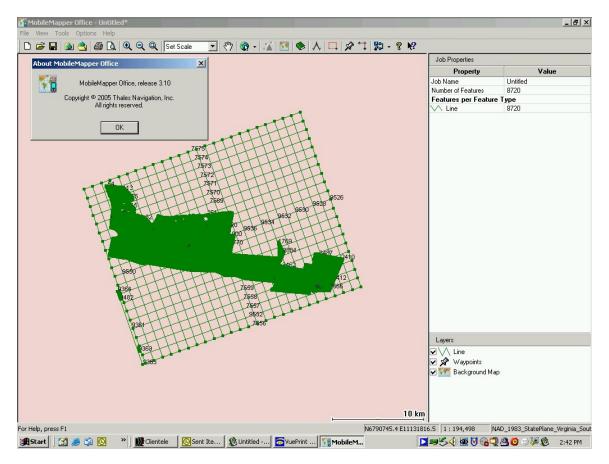
Or

OOPS! What happened to my map?

A shape file with a projection file is easy to import to MobileMapper Office. First import the projection file so the coordinate system defined by the projection file can be used for the project. Choose the coordinate system for the project and import the shape file. This is not a complex task. It is described in the manual and further described in application notes available from the ftp server at

ftp://ftp.thalesnavigation.com

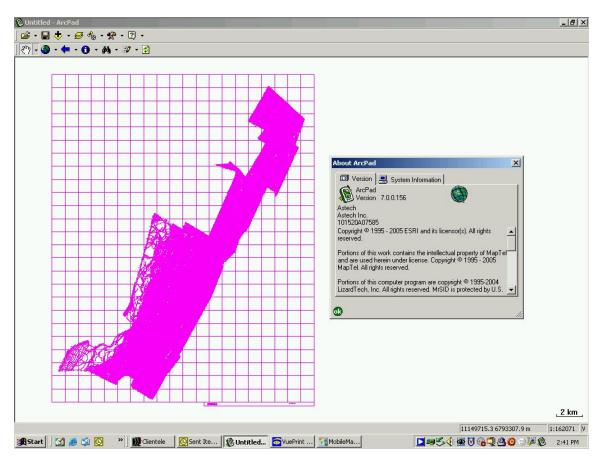
A very nice contour map with a projection file would make a great background map for work in MobileMapper. A little work and the map is ready!



But wait a minute! This map is all wrong. It is twisted and turned and zooming out shows that instead of being in Highland County, Virginia, USA it plots on top of Turkey.

What is wrong with this software?!?!?!

The map looks just fine in ArcPad.



Why does it fail to look right or plot in the right place in MobileMapper Office?

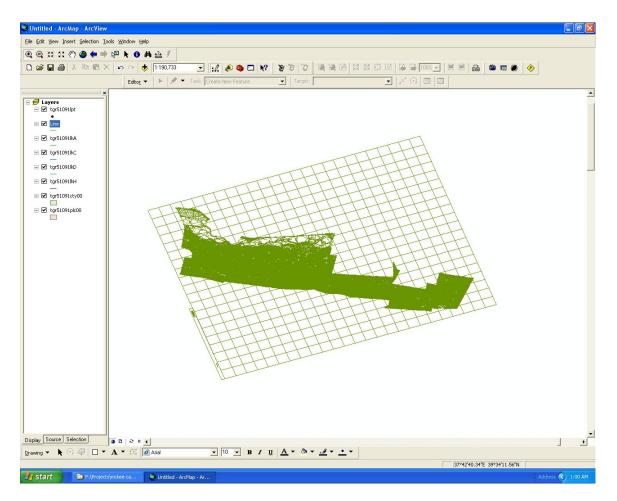
Investigation reveals that there is something odd about the coordinates. It is time to compare one set of maps with another. What can be used for the comparison?

One of the options available to all of us is the TIGER maps. They are downloaded in shape file format from the Geography Network. A projection file that matches the metadata in the maps is assigned in a matter of minutes. The Highland County, Virginia shape files will show us where in the county this contour map is located.

Getting to the bottom of this story is easy.

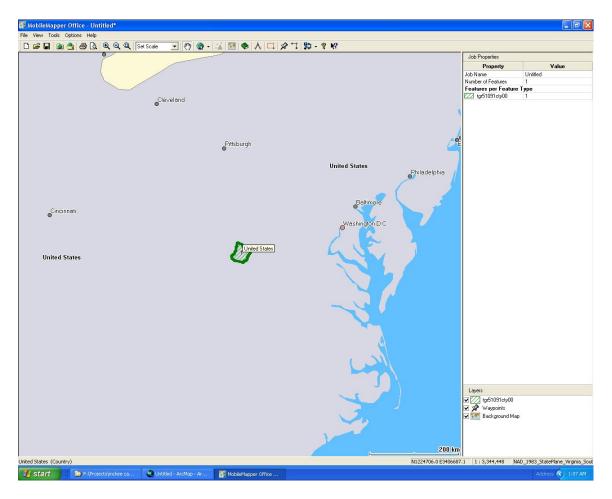
Or is it?

With the TIGER maps in ArcGIS 9.1 on the screen the contour map is added to the map view. But the contour map does not appear anywhere on the map of Highland County, Virginia. A zoom to the extent of the map reveals two dots on opposite sides of the screen. Zooming in on the right hand dot reveals the contour map.



Why does this map look like the map after it was imported to MobileMapper Office? Why does it have strange coordinates? This places the map on the other side of the world!

Is it possible that the coordinates in the shape file are not a match for the coordinate system defined by the projection file? We can get a clue about that by importing one of the TIGER maps to MobileMapper Office.



This is more like it. The problem with the contour map is not solved but at least what is being done with the file import makes sense.

Mapping professionals know that metadata is critical to the job. If we map on one coordinate system but assign a projection file from a different coordinate system we can end up with a map on the other side of the world.

Phil Stevenson March 3, 2006