

JOHNSON MAPPING SOFTWARE & PLOTTING SEMINARS

Mike Johnson, Seminar Author & Instructor, also Dealer for:

Deed Plotter+for Windows (by Greenbrier Graphics)& the All Topo Maps (by iGage Mapping Co.)

"Computer Plotting of Legal Descriptions for the Layman[®]" Seminar

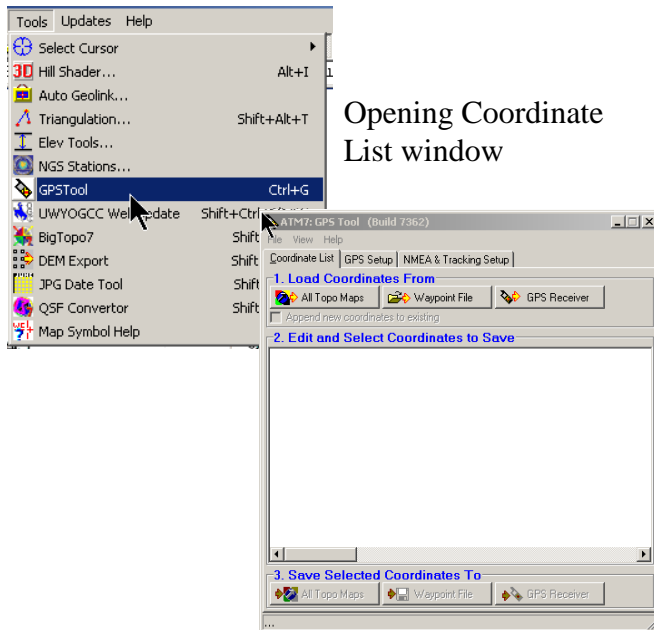
"Real Estate Mapping Computer Tools[®]" Seminar

GPS and the All Topo Maps - A great REAL TIME combination.

Using recreational level GPS units like Garmins, etc., with the All Topo Maps is very easy. Let's first talk about the settings in the GPS to match up with the printed USGS topo maps, you MUST have your GPS set to be using the NAD27ConUS setting and have the correct time, etc.

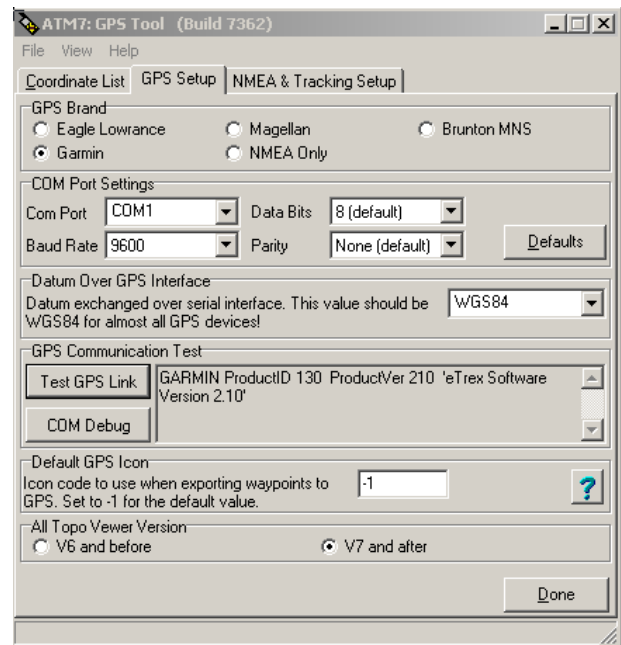
Let's say that you have been using your GPS and have gathered some track file or some waypoints that you want to display over the All Topo Maps application. Or better, let's do some "real time" tracking a capture a track file while it is happening.

- 1). Connect your GPS to the computer with the data cable.
- 2). If the All Topo Maps is not running, start it. Or if it is already on, Click the Tools menu item.



Opening Coordinate List window

Click on the GPS Setup

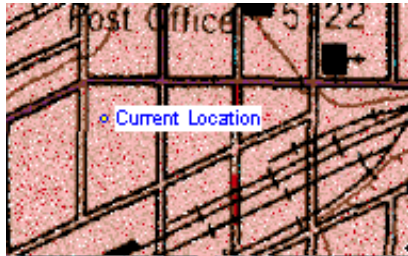


- 3). Click on the GPS Setup tab heading and select your Brand name of GPS or NMEA only.
 - a). For non-USB GPSs, the COM1 is usually the correct port, but it may be another. For USB GPSs select a USB connection setting.
 - b). The other setting are appropriate for a Garmin.
 - c). See in the Datum Over GPS Interface, that it says WGS84, that is okay, the program makes the conversion to NAD27 to correctly display over the map.
 - d). Click on the Test GPS Link and the name of your GPS will appear if it is really communicating with the software.

4). If you are bringing in an existing track, then you can ignore this step, but should read it for future reference. Now to get the live “real time” tracking going, you need to click on the NMEA and Tracking Setup menu tab.

- a). Click in BOTH the Real Time GPS Tracking options.
- b). The Position indicator should now be Green.

5). A small “symbol” dot should appear with the words “Current Location”.



(You can edit the “Current Location”, to other indications, but we’ll leave it for now.)

6). You now can just Minimize the GPS tool box, DO NOT CLOSE IT or it does not work !

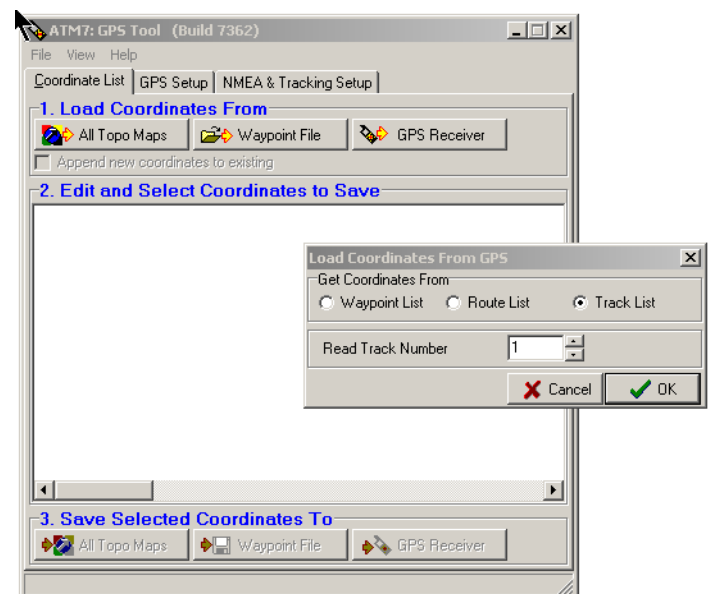
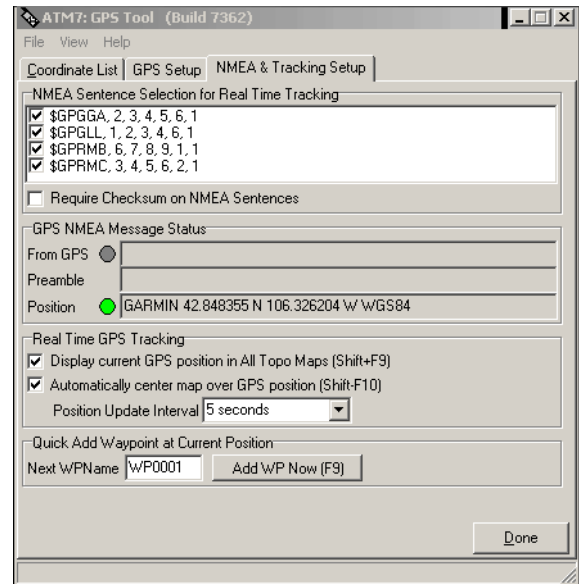
As you are tracking along, you may come to the edge of the topo map that you are viewing. Don’t worry, the All Topo Maps will automatically loads the adjacent map and continues tracking.

Now let’s say that you have completed what you wanted to track, or you have collect a group of Waypoints and you want to download from the GPS and display over the topo map.

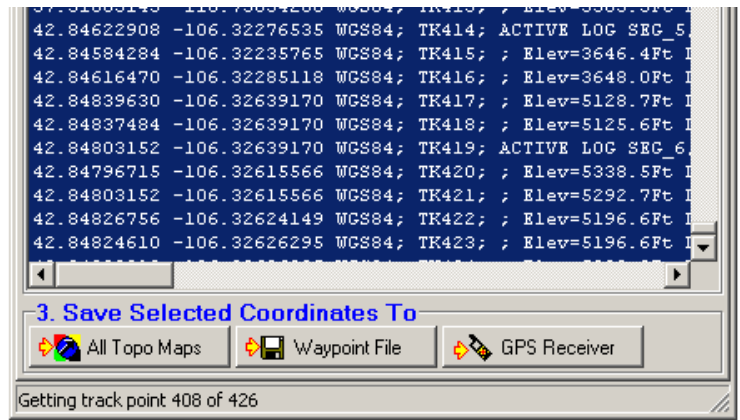
7). Go to the Start Bar and Maximize the GPS Tool, then click back on the Coordinate List Tab. Since you want to download information from the GPS, the #1 Option reads: “Load Coordinates From” and you Click on GPS Receiver.

The small box appears to give you the option of a Waypoint List, Route List or Track List. I usually select the Tract List.

You get another choice “Read Track Number”, I usually use #1. (Garmins tend to run tracks together, so I suggest that you be prudent with your tracks and download frequently and then clear the GPS memory)



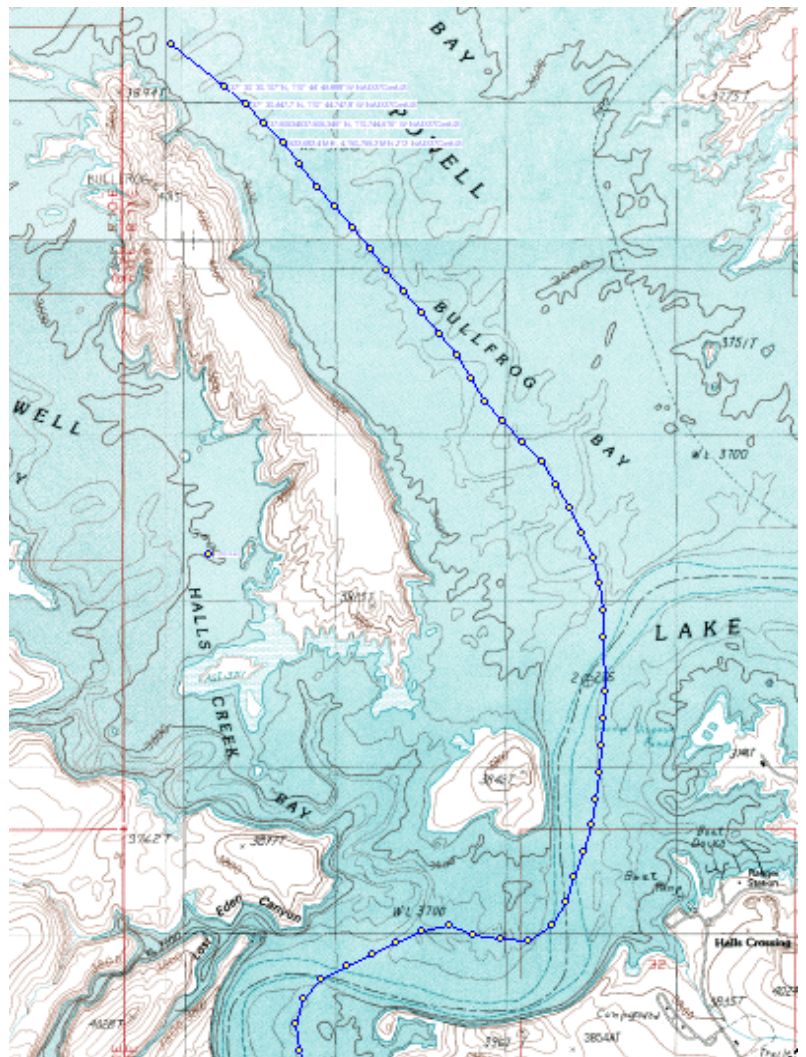
You will see the “Getting track point” numbers counting up to the total on the right, then the whole screen fills with the captured Lat./Lons (or UTM’s) in the blue field.



8). At this point you want to Save your Selected Coordinates to a Waypoint file. Name it something that make sense to you, don’t just go with the defaults. This file name MUST end with a “.hwp” The All Topo Maps will use a default path to the folder of the C:\ATM7Pro\User folder. You can save it in any folder you can remember.

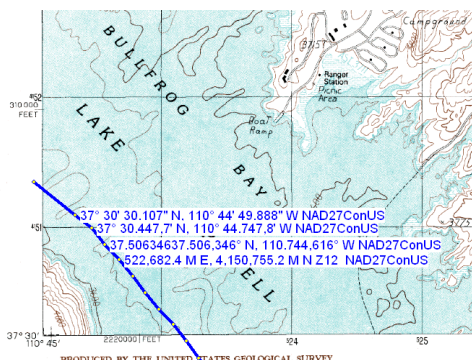
9). To display this newly saved waypoint (or hwy = Hyper WayPoint file), Click on the Annotations menu tab and browse to where ever you saved it and open it.

10). Below you see the result of opening and displaying the saved waypoint file (also known as Annotation Source Files), over the top of the correct topo map. Or, “Edit” the current Annotation source file and “hilit” a Lat./Lon listing and click on the JUMP option at the top of the menu and the program will open the correct map where that Lat./Lon is located.)



As you can see the file starts just off this map and I told the All Topo Maps program to display some of the point in Degrees-Minute-Seconds format, Degrees-Decimal-Minutes format, Decimal-Degrees format and UTM coordinates.

To the right you can see the resulting map, when I used the Big Topo Feature and “seamed” parts of the adjacent maps together to make a 3 X 4 mile map.



Using the GPS and the All Topo Maps is a great feature and it really does NOT take long to learn how to do it.