

AnywhereMap and AnywhereWx Version 1.8 Release Notes and Known Issues

1. Great circle routing – minimum distance routing for long trips

Now your course line in AnywhereMap is via the great circles routing instead of rumblines. We all know that great circles describe the shortest distance between two points on a sphere. Using them trims a few miles off your course and also makes it easier to use AnywhereMap in conjunction with your other GPS units since the AnywhereMap course line and the one in your primary nav system will match across the entire route.

You will also see that the course line is an arc instead of a straight line. And your track/bearing will change slightly throughout the flight so you can actually fly the arc.

Don't expect the distance saving to be really big on anything other than an epic flight, though. For example, the distance difference on a flight between Pittsburg, KS and Boston, MA is only 4 miles. At the midpoint of the course however, the distance between the rumblines course and the great circles course is about 43 miles! So while great circles will save you a few minutes of flying on this route, it will also keep you looking like a pro in front of ATC.

2. Improved WX settings management

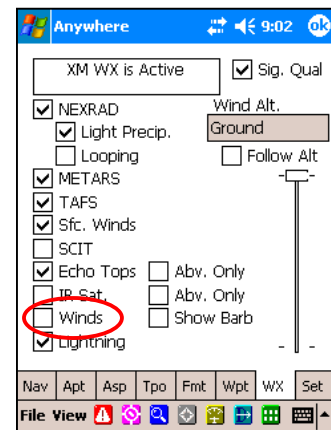
Weather Display Control

It is now easier to control which weather products display on the map. Instead of having to look in two places for display properties (depending on whether the data came across the XM link or via the AnwhereLink) you now control everything from one screen.

To reach this screen simply tap File > View Setup > Weather tab. This newly designed screen shows you the current weather access mode (XM or AnywhereLink) as well as all the weather product display choices.

The winds aloft altitude selector is also displayed here. Simply slide it up and down to select the forecast altitude. Or, tap above or below the slider to move it up or down in 3000' increments. If you check "follow altitude" the winds displayed will be for the forecast altitude nearest your current altitude. Don't forget to tap the Winds checkbox so the wind bars display on the map. (red circle)

By making changes to this screen and pressing OK you will not have altered the current View's default weather settings unless, after making changes to the weather display, you tap the Set tab, and then tap Save View. In other words, the next time you activate this View (by starting the program or changing to another view and then back) the original weather display settings will return.



If you frequently visit this screen to adjust weather display settings, then you may also want to set a Hot Key to take you directly to this screen without tapping any menus. To do so, tap File > Settings > Hot Keys and set the button of your choice to the value “Wx Settings”. Each time you press that button, the WX Settings screen will appear.

Switching Weather Access Modes

There are two ways (“modes”) in which weather can be retrieved and displayed in AnywhereWx. The first is via the XM link using XM weather radio gear in the aircraft. The other is using the Anywhere Link (“AWL”) capability*.

AnywhereLink is unique to AnywhereMap systems in that it allows you to retrieve weather using dial-up and Internet connections. This is useful for advanced flight planning and also to get weather when you are not in the aircraft such as while standing in the FBO (if the FBO offers wireless Internet connections) or in the hotel.

Because the XM link and AnywhereLink establish two different communication paths between the computer and the weather data files, you have to control which link you want to use based on the situation. If you’re ready to fly, then you want XM enabled. If you are on the ground and want weather across an Internet connection you want AnywhereLink enabled.

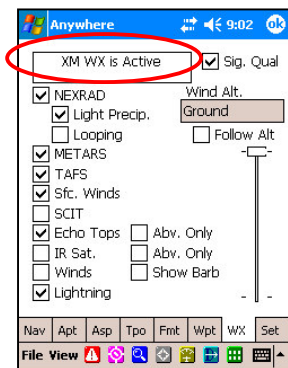
This version of AnywhereWx improves your control of the switch between XM mode and AWL mode.

By the way, if you still need to see the old version of the weather control screen in order to activate an XM weather box or see XM status, simply tap File > Settings > Weather Settings. We do not recommend using the old screen for weather display settings now that the new screen is part of View Setup.

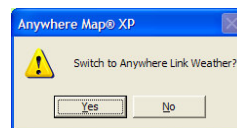
* Separate annual subscription required.

Scenario 1: XM to AWL

Let's assume you have just landed for some fuel and a snack. While the airplane is being fueled you want to check weather again and then file your flight plan. The system is currently in XM mode but just to be sure; tap the File > View Setup > Weather tab (see right). Note at the top, it confirms that you're in XM weather mode (red oval).



We'll also assume you've made the proper connection between your PDA and Internet. To initiate an AnywhereLink retrieval, tap File > AnywhereLink then tap the type of weather product you'd like to retrieve (NEXRAD, METARS/TAFS, etc.) or tap AnywhereLink Downloads and then tap the checkboxes for each weather product you want. Then tap the button Download Selected Items. You will be asked whether you want to switch to AnywhereLink Weather mode. If you answer "yes" the system will switch to AWL mode and the retrieval of the weather you've selected will take place. "No" will cancel the retrieval and you will remain in XM mode.



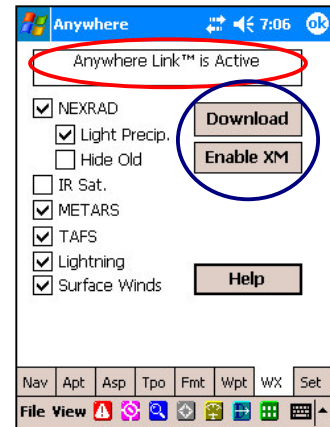
The weather files will be retrieved and displayed on the map just as if you were in XM mode with the following exceptions:

- The radar (NEXRAD) covers the entire US as does the IR Sat (clouds)
- METARs and TAFs only cover the 250 nm radius around the position that the aircraft has on the Map when you make the request for weather. In other words, if the aircraft's position on the Map when you press the icons to retrieve weather is at the same point where you are currently located, then the MET/TAF data retrieved will cover the area in the 250nm radius around your current position. If you re-position the aircraft's position on the Map to somewhere else, such as your final destination, then the MET/TAF data you retrieve will be for the 250nm area surrounding that point.
- Echo Tops, Winds Aloft, and Storm Cell Tracking are not available over the AWL link.
- Lightning is available but requires a separate subscription over and above the AWL subscription.
- TFRs are available across the link and are also updated automatically on the XM link.
- Fuel prices can only be accessed across the AWL link and are NOT broadcast over the XM link.
- 100LL fuel prices can also be retrieved across the link. To do so, open the airport information screen for any airport, then tap the Fuel tab. Then tap the Update Fuel Prices button. The entire 100LL fuel price set is retrieved even though you're only looking at one airport!

Scenario 2: AWL to XM

To continue our fuel stop scenario from the story above, let's say you have emptied one tank and filled a few others. You're ready to depart on the next leg of your journey. When you get into the airplane and start the Anywhere system, you have to switch the system into XM mode.

Start the system normally. Tap File > View Setup icon and then tap the WX tab (see right). Now you'll see the weather tab presented as it is at right, showing that the AWL link mode is still enabled (red oval). Notice that two buttons are now displayed that were not there when XM was active (blue circle). One, "Download" allows you to initiate another retrieval across the AWL link based upon the checkboxes that are checked. The other allows you to switch modes to XM.



Press the "Enable XM" button. The system will connect to the XM receiver and automatic weather reception will begin normally.

Control of Weather Products Displayed

You now control the display of weather products in this single window as shown above. Unlike before, where you controlled AWL weather in a different window from XM, the control is all right here in this one central spot.

3. Drag and Drop Flight Planning ("Rubber Flight Plan")

This is one of the best enhancements we have ever added to our software. It ranks right up there with Cones of Safety and Taxi Express. You can now drag and drop flight plan changes right on the map. Don't try this with a Garmin, you'll hurt yourself!

Creating the "Direct To Destination" Flight Plan

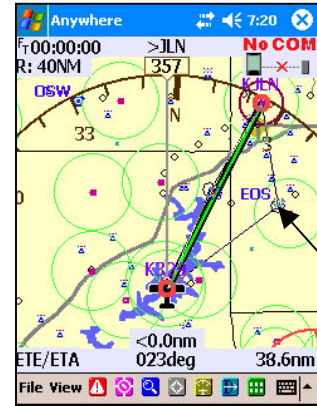
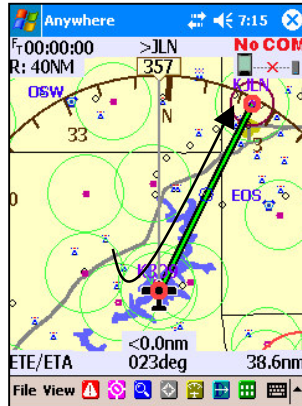
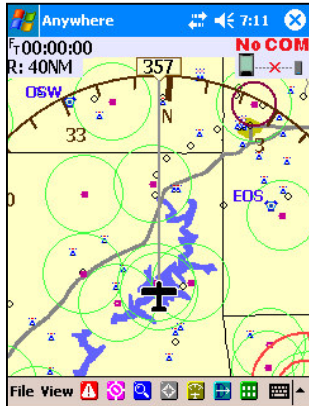
As a seasoned AnywhereMap user, you know that the method for creating a flight plan is to first create a "Direct to Destination" flight plan, then add your intermediate waypoints. AnywhereMap and Pocket Plates take advantage of knowing that your last waypoint is in fact your destination and not just the last point in the flight plan. You can create this Direct To plan in a few different ways: use the Airport Lookup, the Universal Finder, or the Flight Plan Wizard.

Note that on PDA systems, extremely busy screens may be too sluggish to use drag and drop.

Check out our new videos to see the latest examples of flight planning at www.anywheremap.com/documentation.

The new Rubber Flight Plan gives you one more very simple method. Look at the first image, below left. It shows the airplane at Grand Lake, OK (K309); a scenic little airport that makes a killer hamburger. We're going to fly home to Joplin, MO, which is about 25* (MC) from Grand Lake. (JLN is in the upper right corner of the image.)

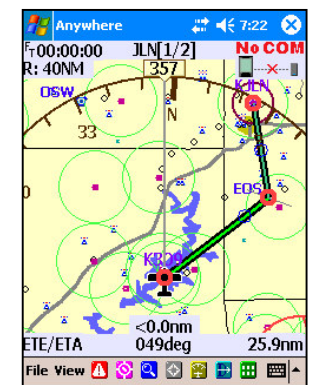
To initiate the drag and drop capability, tap File > Tools > Rubber FlightPlan. Now you'll notice a little red circle on top of the airplane. (see right) That is a "waypoint" designator and denotes that a waypoint is in that position. Since that's also where your airplane is currently located, then that waypoint is the departure point. Pretty obvious.



Here's the cool part. Take your mouse (or stylus) and place it on top of the red circle. Now drag the stylus across the screen toward Joplin. Note that you're dragging out a line. When you get to Joplin airport, let go. Voila'! Instant flight plan. See the second image.

Now notice that you have two red "waypoint" dots and a blue circle that bisects the leg. The red circles are waypoints in the flight plan and the blue dot is the leg bisector.

Let's add an intermediate waypoint. Notice the Neosho VOR (EOS), which is mid-way down the image along the right edge. Let's add EOS as a waypoint. Simply grab the blue leg bisector dot and drag it over to EOS and drop it. The dot will "snap" to the nearest item, which in this case is the VOR. If you drop the dot in the middle of nowhere, then a temporary waypoint is created and given a numerical designator. See the right-most image above and the final image at right.



Now you have three red dots, each one being a waypoint in the flight plan. And each leg has a blue leg bisector that you can use to make even more waypoints.

What else can you do?

- Change the departure point: Drag the red dot on the airplane to another spot.
- Change the destination: Drag the red dot on the destination to another spot.
- Remove a waypoint: Drag the red dot on the waypoint you want to eliminate to the red dot of the preceding or following waypoint.

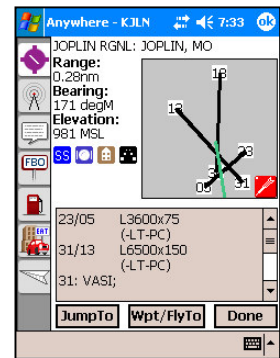
4. Multiple Matches Menu

At wide zoom levels (long range) it has been difficult to double-tap an airport and actually get the airport information to appear instead of a nearby VOR, the city data, or a co-located tower. Now when you double-tap, a list box will appear that lists the items that are located nearby the tap point, allowing you to select the item you really wanted.

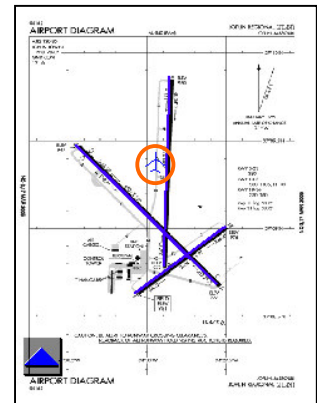
5. Taxi Express™ Calibrated Airport Diagrams

To paraphrase a line from a famous movie, “Getting Lost is Not an Option!” Of course the guys in the control tower forget that our eyeballs are only 48” or so off the pavement instead of 20’ like an airliner captain. That makes it tough to find our way around an airport that has more taxiways than our home airport has runway lights.

Enter Taxi Express. These are pre-calibrated (geo-referenced) airport diagrams that show your position while you taxi. We have around 3,300 diagrams already for use and you can install them from the website. Mostly, we selected multiple-runway airports that have at least one published instrument approach procedure. There are some single-runway airports, but remember that the primary issue here is taxi assistance and avoiding runway incursions. The single-runway airports generally do not have these challenges.



To open a diagram, simply open the Airport Information Screen for the airport of interest (See above right). Note that there is a runway diagram in the upper right corner. If you double-tap the Runway Diagram, the Taxi Express diagram will open (see right). The blue lines overlying the runways on the diagram show that the diagram is calibrated and your position (if it is on or near the airport) will be shown with a little blue airplane icon (see inside orange circle).



6. 100LL.COM FBO and Fuel Data

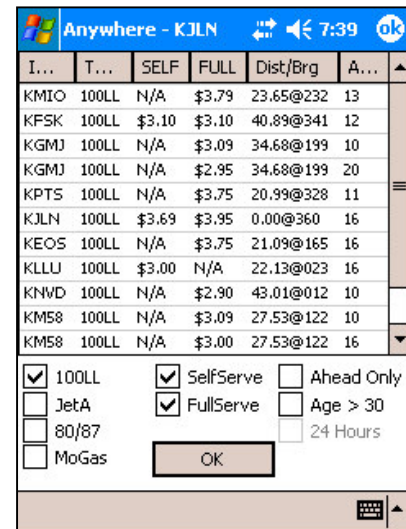
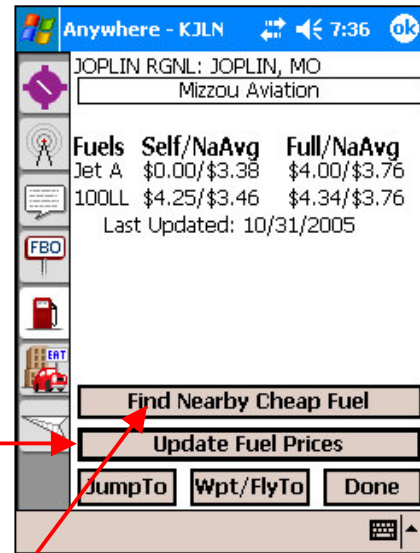
This is the website where FBO information and fuel prices can be reviewed during flight planning. Your AnywhereMap system is unique in that you can also upload the data from 100LL.COM into your portable system and use the data while in flight. No other system can do this.

To update the data in your AnywhereMap software, connect your tablet to the Internet, and then start AnywhereMap. Find an airport and double-tap it to open the Airport Information Screen. Find the Fuel Pump tab along the left side of the window and tap on it.

There is a button along the bottom (see right) named “Update Fuel Prices”. Tap it, and the 100LL data will be uploaded to your system for the entire US. You do NOT need to do this for each airport.

Now that the data is up to date, you can check fuel for any airport that you review. Of course, you can find airports using the Airport Lookup, the Universal Finder, double-tapping an airport on the Map, and using the Find Nearby feature. Once the airport of interest is retrieved, tap on the Fuel tab and then tap the button at the bottom labeled “Find Nearby Cheap Fuel”.

The window at right will open and list fuel in the area with fuel prices, etc. You can also filter the data listed by type of fuel, type of service, etc. If you want the list sorted a certain way (such as by price) then tap on the column header of the column by which you want to sort.



7. Time to Destination

Now you can see distance and ETE to next waypoint OR to final destination. Using the same flight plan from Grand Lake, OK to Jolpin, MO, you can see waypoint info box (below, left) along the bottom of the screen: time to way point in lower left, bearing to waypoint in lower center, and distance to waypoint in lower right.

Many times you need to see similar info for your destination. Simply tap the ETE (To waypoint) to change the number to ETA (arrival at waypoint) and then tap again to get ETD (time to destination) considering all the legs currently in the flight plan.



Time to waypoint



Time arriving at waypoint



Time to destination

Time to next way point is based upon current ground speed and distance. Time to destination is derived as the sum of the following: time to next waypoint plus time to fly each remaining leg of the flight plan.

In order for this to be accurate, you must have your aircraft cruise speed set accurately in Aircraft Settings (File > Settings > Aircraft Settings) and you must also have the current winds aloft. The winds can come from one of three places: 1) XM weather Aviator Plan only, 2) Flight Calculator, and 3) Manually set winds in the flight plan manifest screen.

- 1) If you have XM enabled, the winds will be used in the flight plan automatically as long as you have them turned on in Wx Settings. See Chapter 2 for a reminder on how to control weather settings. If you do not have XM, or if you choose to set winds manually,
- 2) Tap File > Flight Calculations and follow through the calculator, entering the data required. At the bottom you'll be able to see the calculated winds. If you tap "Show Vector", XM winds will be overridden (unchecked) and these winds will be used over the entire course.
- 3) Finally, you can set the estimated winds (based on the forecast, educated guesses, or wishful thinking) in the Flight Plan Manifest. Tap File > Flight Plan. Tap the Winds button, then move the direction and velocity sliders to the proper values. If you want to move them in increments,

tap to the right or left of the slider. To make single-value increments, use the right/left buttons on the “hat switch”. Then tap “Show Vector”. As with the Flight Calculator, using these values overrides the XM weather winds data and disables their display.

To reinstate XM winds, you must go to File > View Setup > Wx tab and re-check Winds. Or, you can tap “Hide Vector” in either the Flight Calculator or Flight Plan Winds control.

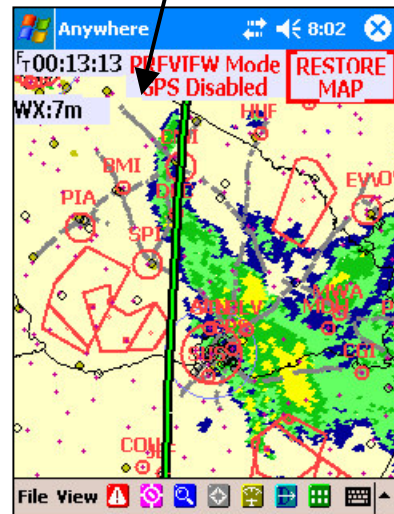
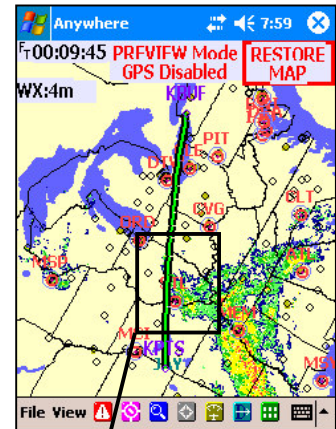
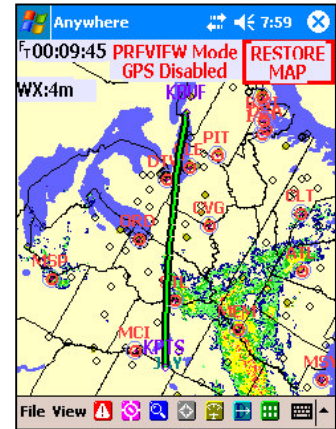
8. Box Zoom

This is a new function that allows you to zoom in on an area by “drawing” a box around the area of interest. One common use is the situation where you zoom out to a very wide zoom range, perhaps to look way down range along your flight course to strategize about weather. In the example at right we’re enroute from SE Kansas to Buffalo, NY. We tap View > Entire Flight Plan to automatically zoom to see the entire route. This lets us view areas of weather across the entire route. The center pane below shows an area of weather about 1/3 of the way to Buffalo. So we want to zoom in on that area.

Tap View > Box Zoom. The Cancel Box Zoom icon now appears in the lower right corner reminding you that you’re in Box Zoom mode and it’s also there so you can cancel this mode if you wish.

Now place your stylus on the screen in the upper left corner of the area you want to view up close. (Point A). Drag the stylus across the screen to the lower right corner of the area of interest. (Point B)

Now release the stylus from the screen. The map immediately zooms to include the area you’ve outlined with the box. (Third image) When you are done viewing the area and want to return to current position, simply tap Exit Preview.



9. Improved airport search capabilities

While relatively minor, we changed the way in which airport searches products result lists. The list is now more accurate and more refined based on your search criteria.

10. Map feature display management improvements

We have also made subtle improvements in the way items on the map display. At wider viewing ranges some of the weather products have drop shadows, which give it better contrast with the map. Other items include 3-dimensional buttons, and highways that display more consistently.

11. Known Issues with Version 1.8

This release includes major enhancements in the reliability and data support of the XM weather formats. The connection to the XM box is now much more robust and will almost always automatically re-link with the box if either the PDA or the weather box is powered off at any time.

- **This software requires Pocket PC 2003 or later to be installed on the PDA. It may not run properly on older PDA's.**
- We have tested this release and it seems very reliable on 22xx, 24xx, 27xx, 47xx, and 55xxPDA's. With all weather systems we recommend strongly that ALL database files be installed on the SD card, with ONLY the application and small files present in "storage" memory. **You should not have more than 7MB** of storage memory in use (See Start>Settings>System>Memory) to run AnywhereWX at any time. These memory issues are not as critical on 55xx and 2490 series PDA's (with Windows Mobile 2005).
- For optimum reliability, we continue to recommend that you reset your PDA (with the stylus in the reset hole) before any flight. This insures that no other applications are running on the PDA, which could interfere with the weather software.
- The Full HSI does not always get enabled when selecting a Virtual ILS or other approach. Suggest you enable the eHSI before selecting the approach.
- Approaches appended onto flight plans sometimes do not work properly, especially if they are using "Fixed" IAP. Suggest using Vectors OR clearing the flight plan before selecting an approach.
- XM winds aloft barbs do not graphically show wind speeds greater than 45 knots. Wind speeds of >45 kts are shown as 45 kts. The correct wind speed (at your location) is always shown in the wind indicator icon.
- We have had a few reported instances of the screen update process freezing, however these have been isolated and impossible to reproduce. When this happens, one can still operate the menus and the toolbars, but the map display remains static. It seems to happen only when changing settings (such as switching from day to night mode, but then only very rarely. If this happens, simply tap File and Exit and restart the program. We will issue a minor update when we track this problem down.
- We have had reports that this software may have problems on Ipaq 41xx series units.
- You must be sure that before running AnywhereWX there is at least 24mb of program memory available for reliable operation. If there is not this much program memory available,

you need to be sure other apps are not running and be sure that the program / storage memory slider is set to maximize program memory.

- The Route Wizard is not working properly. We will correct all issues with this in the next release.
- When zoomed in VERY close (5 miles or less) on smaller airports, the runways can disappear, especially with a white background. The magenta airport symbol does not grow large enough to always provide a backdrop for the white runways.
- The PDA will now semi-automatically re-link to a Bluetooth GPS if the PDA is powered off, then back on.
- Winds aloft value now displays properly in the compass rose on the screen when XM winds are enabled.
- Dual Bluetooth XM weather is now supported on the Dell X51 PDA's with Windows Mobile 2005.
- The aircraft as shown on the Taxi Express diagrams is now easier to see.
- If you run Sim Mode and you tap Tap to Pan or Box Zoom, the aircraft position will change with the map repositioning instead of remaining at current [simulated] position while the Map goes into track-up Preview Mode. This should not occur in Sim Mode and does not occur with a live [real] GPS feed. So this anomaly remains only in Sim Mode.
- The format of TAF's as displayed in the airport info screens has been improved. Each new time period of the TAF now starts on a new line.