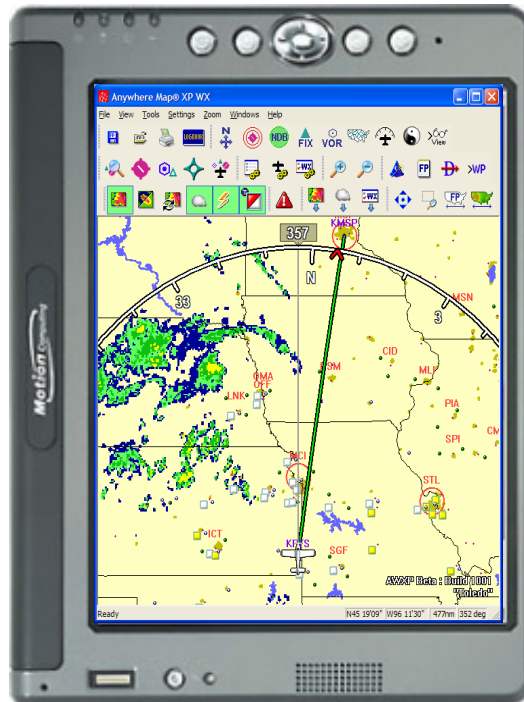


AnywhereMap XP and AnywhereWx XP

Installation & Users Manual



Anywhere Map®

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Use of this product is at the pilot's own risk.

This product should never be used as the sole source of information for decision-making.

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Conventions in the manual:

1. Bluetooth and “BT” refer to the wireless communication between devices such as GPS and the XM radio. BT and Bluetooth may be referred to interchangeably.

Please Note: This manual is in the process of being updated to match the new version of the software, which was a complete re-write from the prior. We apologize for this manual being incomplete. The content in it is, however, accurate and applicable to the new version and use of the Motion tablet computers. For updates to this manual, check out our website at www.anywheremap.com/documentation.

Check out www.anywheremap.com/videos for more information and instructional videos!!

GETTING READY

You will save yourself a bunch of time and frustration if you read this section BEFORE YOU DO ANYTHING!

1. If you bought an entire system from us INCLUDING the Motion tablet computer, then we have installed the software on it, activated the XM radio (if you bought a weather system), connected the GPS and XM radio, configured the system, and tested it. There is nothing for you to do except:
 - a. Register the software
 - b. Follow the directions on the fold-out sheet that shows how to power up and install the system in the airplane.
 - c. Do NOT perform the steps in Chapters 1 - 4.
 - d. Use the remaining sections in this manual for reference.
2. If you bought only the software from us or the software, GPS, and XM unit, then you must follow Chapters 1 – 4 completely.
3. If you are a computer professional, you may know other ways to configure peripherals such as the GPS and XM unit. We strongly recommend you follow these instructions and resist the temptation to “ad-lib”.
4. Once everything is installed and configured, be careful to follow the antenna placement instructions on the fold-out sheet that came in the documentation package. Antenna placement for the XM radio is CRITICAL to continuous successful operation.

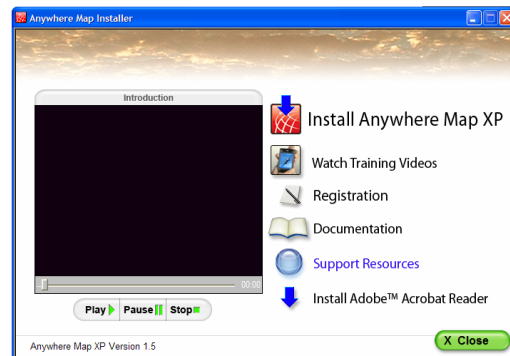
1. SOFTWARE INSTALLATION

!!! VERY IMPORTANT !!!
IF YOU ARE USING THE TRACKER USB GPS, DO NOT ATTACH THE TRACKER USB GPS UNTIL AFTER THE SOFTWARE HAS BEEN INSTALLED!

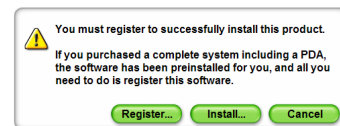
System Requirements – Windows PC with Windows 98, ME, 2000, XP or XP-Mobile; at least 200 MB spare storage space and at least 128 MB of memory recommended.

- 1) Insert the AnywhereMap XP or AnywhereWx XP Software CD into your computer's CD drive. When the installation window opens as shown at right, do the following in this order:

- a) Register the software:
 - b) Click the "Registration" link
 - i) If you already own other registered Anywhere products (i.e. Map, Wx, or Pocket Plates), then:
 - (1) log in using your username and password and
 - (2) verify the information displayed and
 - (3) click **Next**.
 - ii) If this is the first product you have ever registered with us,
 - (1) click on **Create a New User ID**.
 - (2) Fill out the information requested and
 - (3) Click **Next**
 - iii) Select the number that corresponds to the number of software products you're registering. Click Next.
 - iv) Carefully enter the software serial number from the sticker on the inside of the Anywhere XP software CD case (and also those from any other software CDs we sent you). The serial number is case sensitive so pay close attention to capitalization. Click **Next**.
 - v) Confirm all the information and you're done! Thanks for registering the software!



- b) Install the Software
 - i) Click on **Install AnywhereMap XP**.
 - ii) On the Next page (See right), click **Install....**
 - iii) The Setup Wizard begins. Simply click **Next** and follow the prompts for a **Full Installation**. Where the Databases are listed, leave them defaulted unless you live outside the lower 48 US states. Click **Next**.
 - iv) The confirmation page confirms your selections. If all is acceptable, simply click **Install**.
 - v) The GPS driver will be installed next. A window will pop up titled "Texas Instruments UMP Installation" telling you drivers need to be loaded and asking you to Accept the License Agreement for the drivers. Then click to Install.
 - vi) The Windows Driver Installer will now open. If a Software Installation Warning pops up telling you that the software has not passed Windows logo testing, please click **Continue Anyway**.
 - vii) Two USB drivers will be installed so you'll go through this process (m & n) a second time.
 - viii) The directions prompt you to connect your USB GPS to the system and then to follow the default selections for installing the USB drivers.
 - ix) Click **Finish** on the Completing Setup Wizard window.
 - x) Click the "X" on the upper right of the Installation window to close the Installer.
 - xi) Re-boot your computer to activate the USB drivers.
- c) Watch the Training Videos listed on the CD and also check out the website for the latest training videos and information at www.anywheremap.com/videos.



2. STARTING AnywhereMap XP or AnywhereWX XP FOR THE FIRST TIME

An AnywhereMap icon should be located on your desktop as a result of the installation process named "AWXP". Double-click it to open the program. If not, click **Start, All Programs**, look for the **AnywhereMap** folder, then click **AnywhereMap XP**.

The first time the software is run you will see the window at right appear. Into this entry box you must enter the product activation code that inside the CD case. Carefully enter the serial number located on the sticker in the CD case. This is case sensitive and the last letter is ALWAYS capital. (So "I" is capital i, not small L.)

Having entered a valid ID code, the software will start when **OK** is clicked. You will never need to do this step again, however this screen is available for your review in the Help menu of the application.



3. SETTING UP A GPS

NOTE: If you have a Motion tablet computer, you may want to watch the training video that describes the Bluetooth connection process.
www.anywheremap.com/videos




Most new systems use wireless GPS receivers that transfer data to the computer via the Bluetooth communication protocol. These GPSs may still have power cord that keeps their internal battery charged while flying, but the data they broadcast is sent to the computer (and subsequently to AnywhereXP software) via a Bluetooth radio transmission. In order to use a Bluetooth GPS, your computer must have Bluetooth capability with internally or via the addition of an adapter that is inserted into the PCMCIA or Compact Flash slot, depending on which your computer has available. The GPS10 that we supply with our systems is shown at upper right.

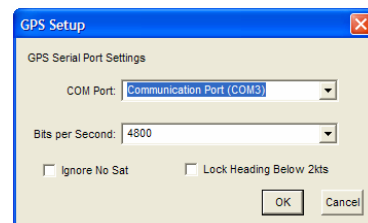
Other GPSs connect to the computer directly using a wire that plugs into the USB (Universal Serial Bus) connector port. Our Tracker USB GPS is shown at right. When you install AnywhereXP, the USB driver (software in the computer that lets the Tracker USB GPS talk to the computer's operating system). These devices are also powered by the computer through the USB port as well.



Bluetooth GPS Set Up

All computers are different and therefore it's difficult to show one way to make Bluetooth connections. But there are some general steps we can describe that should help you get connected.

1. Make sure AnywhereXP is NOT running. If it is, click the red "x" in the upper right corner to close it.
2. If your computer does not have Bluetooth internally, then purchase a Bluetooth adapter that will work with one of the adapter slots your computer has, and follow the directions for installing that device.
3. If your computer does have Bluetooth internally (or once you have finished installing the Bluetooth adapter described above) then open the Bluetooth Manager software to prepare for the GPS set up. You may find a Bluetooth icon in your system tray in the lower right corner of your display that looks something like the icon at right. 
4. Look for the button or check box that allows you to turn on the Bluetooth radio. Without this turned on, you will not be able to connect to any wireless devices.
5. Turn on your GPS. For the GPS10, press the power button on top of the unit until a blue light begins flashing. It will flash about twice per second when it is powered on but NOT connected.
6. Your Bluetooth Manager software should give you the option to Create a new connection with a button that says something like "New", "New Connection", etc.
7. Once clicked, the system will search the airwaves for Bluetooth devices in range. Once the search is complete it should list the wireless devices that it found. The GPS should be listed – in our case it will list GPS10.
8. Click once on the GPS10 listing, then click Next (or similar) to proceed.
9. In most cases, the connection will be set up automatically. Toward the end the status progress window will list the COM port to which the device (the GPS) has been assigned. Remember this number or write it down. You'll need it the next time your run AnywhereXP.
10. In some cases the software may ask for a code for the GPS. If you have the GPS10 from us, use the code 1234. Then proceed with the default responses for a Bluetooth device set up until it is complete.
11. Once complete, close the Bluetooth Manager.
12. Start AnywhereXP.
13. Make sure the GPS is turned on. If possible, put the GPS outside where it can see satellites. Be careful to not place the GPS more than 30-40 feet from the computer and make sure windows are nearby. Otherwise the Bluetooth signal may not reach between the two units.
14. Click the menu Settings, then GPS Settings. The window at right will appear.



15. Click the arrow on the right side of the COM Port box to open the list. Select the COM port that the Bluetooth Manager assigned when you created the connection in the previous steps. Leave the rest of the settings as they are.
16. Click OK.
17. The flashing blue light on the GPS10 should flash about 5 times in fast succession, then begin a slow flash, once every 2 seconds. This is your indication that the GPS is connected to the computer.

If the GPS is outside and if you have the Flight Info overlay window open (see Overlay Windows) you should see 0 knots, your approximate GPS altitude, and the number of satellites the GPS currently has locked. If the GPS is inside, you should see 0 knots and NoSat. If the connection has not been made to the GPS, you will see NoGPS. If the proper COM port has not been set, you'll see NoComm in the lower pane of the Flight Info.

Tracker USB GPS Set up

It is important that you do NOT connect the Tracker USB GPS before installing our software on the computer. If the Tracker GPS was installed prematurely, windows will connect the wrong device driver to the Tracker and it may require a call to Tech support to resolve this issue.

Before calling Tech support, you should check our online Knowledge Base for any information on the Tracker USB or other problems you may be having. There are many useful tips and tricks in the knowledge base and it is available 24/7.

To use the software with the Tracker USB, simply run Anywhere XP and plug in the GPS to the USB port on the computer. Windows should automatically detect the GPS and configure it. You still have to tell the Anywhere XP software which GPS to use. This need only be done once and is accomplished by selecting Setup GPS from the File Menu.

If more than one COM port is listed in the Com Port dropdown list, select the TIUMP USB serial port (this name may vary on Windows 98 and ME). Select 4800 for the Baud rate, and Click OK. If the GPS is working properly, within a few seconds the NoGPS flag in the Flight info box, will change to NoSat, indicating that data is being received from the GPS, but that the GPS does not yet know where it is located. Once the GPS knows the location, the NoSAT message will turn into a display of the number of satellites being used. If the GPS is unplugged or loses the signal, NoSat or NoGPS will re-appear in a few seconds.

If you are using another GPS, connect the GPS to the tablet / Laptop according to the manufacturer's installation instructions before AWXP is started. Select that GPS from the drop down list provided in GPS Setup.

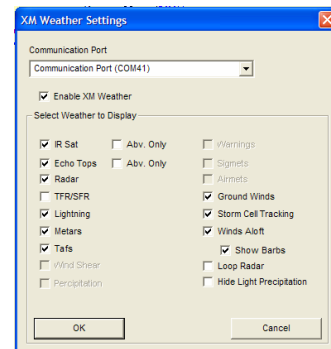
4. SETTING UP XM WEATHER

NOTE 1: These instructions assume the XM receiver is already activated. If you bought it from us, it has been activated even if you did not buy a complete system from us.

NOTE 2: You **MUST** have DC power to perform this set up. The XM unit draws **MORE** than 1 amp of current and therefore many AC/DC converters **WILL NOT RUN** the XM unit properly. If you do not have enough power, the XM unit may not connect or operate properly even though it appears the power is fine.

NOTE 3: If you have a Motion tablet computer, you may want to watch the training video that describes the Bluetooth connection process. www.anywheremap.com/videos

- 1) If it is running, close AnywhereXP software.
- 2) Connect the DC power plug to the XM receiver by gently inserting the silver metal plug end of the power cable into the receptacle located on the XM receiver labeled "Power". You **MUST** have power to the XM receiver for it to operate, even if you are using a laptop and USB connection. The USB connection will **NOT** supply power for the XM unit!
- 3) Plug the small XM antenna into the XM receiver using the pink end on the antenna and inserting it into the right-most connector that is labeled "RF In". Place the antenna in clear view of the southern sky and while it may work inside, outside is best for a strong connection.
- 4) Insert the power plug into the car/aircraft cigarette lighter plug. There are two LED lights on the XM radio. One is on the upper front edge just above the word "WxWorx". It should be alternating between red and green. The second light is on top of the XM radio between the red/green LED and the top center of the unit. It should be flashing blue.
- 5) If you have a Bluetooth (BT) XM radio, then follow the steps under this section number 5. If you are using the USB wired connection for the XM radio, then skip to section number 6 below.
 - a) Make sure the XM unit is powered and that the antenna has **FULL** and **UNOBSTRUCTED** view of the high southern sky.
 - b) Start your BT Manager software and begin creating a connection just the way you did for the GPS.
 - c) The XM radio will be called "XM BLUE" in the list after the search for BT devices is complete.
 - d) You will need a passcode for the XM radio. When prompted, use the numeral 0 as the passcode.
 - e) At some point the BT Manager should tell you it is creating a modem connection on COM [x]. Make sure you record the COM port that is being assigned to the XM connection.
 - f) During the connection set up process, the computer will connect to the XM radio. You will know this has happened when the red/green light changes to solid green and the flashing blue light changes to solid blue.
 - g) Near the end of the connection setup, the connection will be broken once again. This is normal.
 - h) Once completed, close the BT Manager.
 - i) Start AnywhereXP.
 - j) Click on the menu Settings, then XM Weather Settings. The window shown at right will open.
 - k) Open the COM port drop-down box and select the COM port assigned during XM radio BT setup.
 - l) Check the "Enable XM Weather" box.
 - m) Make sure the weather products associated with your XM plan (Aviator Lite or Aviator) are checked on and then click OK.
 - n) It will take several seconds for the window to close. In doing so, the connection to the XM radio will be made and the red/green light will change to solid green and the flashing blue light will change to solid blue.



- o) If you have the Weather Info overlay displayed, you will see the status change from INIT to REQST to GOOD. This lets you know you have a good connection to the XM radio and also a good satellite signal.
 - p) Refer to the Weather Information chapter to get more information about how the XM weather works, how long you should wait for it to display after start-up, etc.
- 6) For the USB connected XM radio do the following substeps.
- a) Insert the USB cable into the port on the XM receiver labeled “Data” and the other end into a USB port of your computer. The computer should “see” the XM receiver and pop up a box that shows “new USB device detected” or similar message.
 - b) If the computer does not, then leave the USB cable connected, close the software and restart it. This allows the software to see that the XM box is connected and ready for use.
 - c) Start the AnywhereXP software, click on the **Settings** menu, then on **XM Weather Settings**. This opens the XM Weather Screen (see right) and allows you to specify how the XM receiver will be connected to your computer and also what weather products you’d like displayed.
 - d) Drop down the Communications Port box and select the proper port for the XM box connection. This will most likely be the Communications Port USB selection.
 - e) Click the check box for Enable XM and also on the products you want to have displayed. These can also be toggled on and off using toolbar icons on the map screen. Click OK.
 - f) The green LED on the upper front of the XM receiver should illuminate.

Your XM radio is now configured.

Make sure you check www.anywheremap.com/support for our knowledge base articles that may help troubleshoot XM set before you call our tech support line. Do not call XM for support.

5. CONFIGURING THE WEATHER DISPLAY

AnywhereXP Weather will display weather data derived from two networks: The XM WX Satellite network and the AnywhereLink Internet.

XM versus AnywhereLink

XM is a continuous broadcast of weather data files that requires the XM WX radio for operation. Depending on the subscription plan you have, the NEXRAD (radar), METARs, TAFs, etc are received directly into the computer and displayed on the AnywhereMap presentation.

AnywhereLink is a request-reply network that accesses data files that are on our servers in Kansas. When your computer is connected to the Internet (such as over a wifi or other network when you're NOT in the airplane) you can retrieve weather data files that are similar to those received over the XM network. This is handy for flight planning, etc. and eliminates the need to take the entire XM system out of the plane to access weather for those tasks.

You must have a subscription for each service in order to receive weather data from them. This chapter describes general weather product control. For specific information about each network, see the applicable chapter.

IMPORTANT: If you are using XM, do NOT use the toolbar icons that have the arrows underneath unless you have an AnywhereLink subscription and are specifically intending to use it! Using these toolbar icons disables XM reception and you must specifically turn it back on.

Controlling the weather display

The following icons control various weather capabilities in AnywhereWx XP.





This is the Weather toolbar:



If you are using the XM weather feed, the system continuously sends weather data to the computer. You simply toggle the products on and off the display as required using the TOGGLE icons. See table below.

If you are not connected to the XM system but you have an Internet connection or you are using the Globalstar satellite connection, you must request weather data from the servers each time you want it. This is done using the "download" icons. See table below.

	Toggles radar (NEXRAD) data on and off.
	Toggles light precipitation on and off.
	Toggles radar looping on and off. Looping steps through the last several radar images and puts them "into motion" showing movement, growth and decay, etc.
	Toggles satellite imagery on and off. (not available on XM feed)
	Toggles lightning on and off.
	Toggles METAR / TAF graphics on and off.

	Opens the Wx Set Up screen for configuring AnywhereLink. DISABLES XM!
	Retrieves radar (NEXRAD) across Globalstar or AnywhereLink. DISABLES XM!
	Retrieves satellite imagery across Globalstar or AnywhereLink. DISABLES XM!
	Retrieves the weather products checked in the Wx Set Up screen all at one time. DISABLES XM!

6. CONFIGURING ANYWHERE LINK

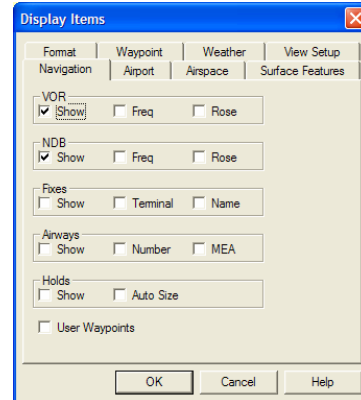
AnywhereLink is an additional subscription available from Control Vision that allows you to access weather products directly over an Internet connection instead of using your XM or Globalstar network that you use while in flight. This allows you to plan flights on the Anywhere XP software almost anywhere.

To configure AnywhereLink, click View, then Wx Settings. You **MUST** enter your subscriber username in the Weather Username box at the bottom left. Then, simply click on the various weather products that you wish to see listed. Once configured, simply press the icon that applies to the weather product you want to download. **This assumes you have an Internet connection.**

7. SETTING UP THE MAP DISPLAY

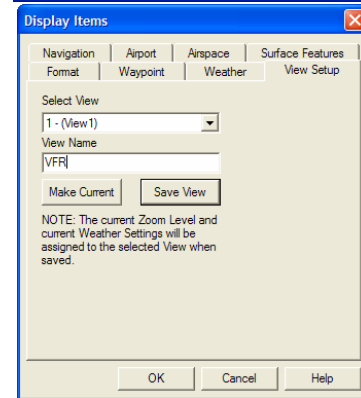
The new version of AnywhereMap XP (Map only or Map/Wx) has tremendous flexibility in map presentation. We provide six map presentations, each of which can be customized to your specific flying requirements and preferences. These map configurations are called Views.

To open the View Setup window, simply click **View**, then **View Settings** or, if a keyboard is attached, press the letter “s”. The window at right shows the initial View window which shows the Navigation tab. A series of check boxes is there to allow displaying or hiding the various navigation items.



The same holds true for each subsequent tab seen in this window. Each contains a series of checkboxes that allow you to specify which items to show on the map and which to hide.

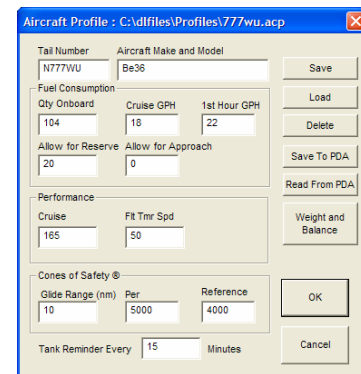
Once you have a configuration to your liking, tap on the **View Setup** tab (see image at right) to save these settings and name the map configuration in a way that makes it easy for you to remember how it is configured. In the example at right, View 1 is being renamed **VFR** view and probably has airspaces turned on, airways off, and perhaps terrain turned on.



9. SETTING UP AN AIRCRAFT PROFILE

Let's begin by **profiling** the aircraft we are flying, a Beechcraft A36TC Bonanza. In that way we'll have meaningful flight planning results, anticipate our fuel consumption and time in the air, and provide a glide ratio for Cones of Safety to draw safety nets around airports along our route.

Click **Settings**, then **Aircraft Settings** and fill out the information boxes for your aircraft.



Enter Fuel Consumption and performance data from your Pilots Operating Handbook. **Cones of Safety** establishes a glide ratio and can use any two values that result in a ratio. For example, if you know your aircraft has a 7:1 glide ratio, enter 7 miles and 5300 ft. to establish that ratio. Use your aircraft's tail number and make and model for ID. Remember to type in a reasonable interval in the **Tank Reminder** window. This prompts you from the screen to switch fuel tanks and keep your in-flight load balanced. Click **Save** to store this profile. Click **Load** to view a list of previously stored profiles, select one and load it.

A word of caution about Cones of Safety: Be conservative in establishing a glide ratio; your POH was written for a new airplane. Also remember that the Cone is drawn without regard for prevailing winds, so gliding from a downwind position will result in a necessarily longer glide with greater loss of altitude.

Weight and Balance

Click the Weight and Balance button found at the right side of the Aircraft Profile window. This opens a window that allows entry of weight and balance data for the aircraft whose profile is being entered in the Aircraft Settings window.

Click the check box labeled “Lock Arm Values” to unlock the arm data values and open them for entry. See the example at right. Using your POH, enter the proper values for the arm lengths of each position described by the label. For example, if the arm length associated with the Pilot station is 43 inches, then enter 43 in the Arm column across from the Pilot.

To add flexibility you can use other positions in place of those listed. For example, in the case of a three row, six seat aircraft such as the Bonanza you can use Pilot to be BOTH front passengers, Pax 1 for both middle passengers, and Pax 2 for the rear seat row. What ever arm lengths you use sets the position for the weight you enter later as you load the airplane.

Once the arms are entered for the stations, re-check the “Lock Arm Values” box to lock them. This way, you only enter weights for each flight in this airplane. See the new example at right.

Now enter the weights associated with this specific flight. When you're done, click OK.

The screenshot shows the 'Weight & Balance' dialog box. The 'Weight and Arm Settings' table is as follows:

	Weight	Arm
Empty AC	2500.0	72.0
Fuel	0.0	70.0
Oil	0.0	30.0
Quarts	0.0	110.0
Baggage	0.0	0.0
Pilot	0.0	65.0
Pax 1	0.0	74.0
Pax 2	0.0	90.0
Misc	0.0	0.0
Weight	2500	72.0 CG ARM
Moment	180000	

The 'Lock Arm Values' checkbox is unchecked. The 'Fuel' section has radio buttons for LBS, AvGas (Gal), and Jet-A (Gal), with AvGas (Gal) selected.

The screenshot shows the 'Weight & Balance' dialog box with updated values. The 'Weight and Arm Settings' table is as follows:

	Weight	Arm
Empty AC	2500.0	72.0
Fuel	74.0	70.0
Oil	12.0	30.0
Quarts	30.0	110.0
Baggage	0.0	0.0
Pilot	400.0	65.0
Pax 1	250.0	74.0
Pax 2	0.0	90.0
Misc	0.0	0.0
Weight	3648	71.2 CG ARM
Moment	259600	

The 'Lock Arm Values' checkbox is now checked.

You are now left at the Aircraft Settings window where you're ready to Save this aircraft profile. Click Save. This opens the Save Profile window and allows you to give the profile a name. We suggest the tail number of the aircraft.

There is no limit to the number of aircraft profiles that you can create and save.

To load a saved profile, simply open the Aircraft Settings window and then click Load. Select the aircraft profile to load and click Open. The profile is now loaded and ready to use.

The screenshot shows the 'Save Aircraft Profile' dialog box. The 'Save in:' dropdown is set to 'Profiles'. The file name field contains '777NW.acp'. The 'Save as type:' dropdown is set to 'Aircraft Profiles (*.acp)'. There are 'Save' and 'Cancel' buttons at the bottom right.

NOTE: After loading a new profile, don't forget to set the weights for the flight you're about to take!

8. ANYWHERE MAP XP BASICS

These are a few concepts that will make using AXP (map or weather) simpler.

1. Airport Lookup

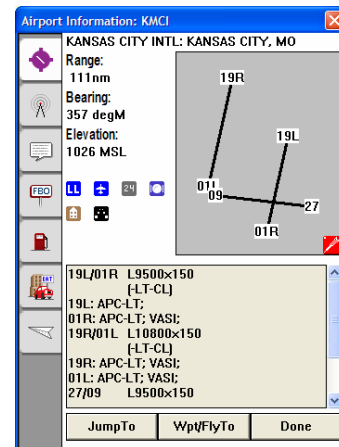
There are two ways to look up information for a specific airport (or any item for that matter):

- Double-tap the airport (item) that you see on the map, or
- Use the associated look up symbol (airport, navaid, waypoint, or universal).

For example, to retrieve airport information for Kansas City International, tap the airport lookup symbol (same symbol as used on a sectional chart). A window opens that lists all kinds of information about the airport.



As you can see from the example at right, there are tabs on the left edge of the Airport Information window that break the data into categories: basic airport data, communication, airport data (like the AFD), FBO data (from www.100LL.com), fuel prices (from www.100LL.com), hotel and restaurant information (from www.Hotels.com) and approaches (currently only the non-precision approaches and the virtual ILS are available).



At the bottom of this window you'll find the map orientation and flight planning selection buttons.

“Jump To” repositions the map to the airport (or any other item) described in the window.

“Waypoint / Fly To” adds the item into the flight plan. (See flight planning for more information)

“Done” closes the window and leaves the map positioned where it was when you looked up this information.

2. Navaid / Fix / Waypoint Lookup

In the same way that airport information can be retrieved as described in item 1 above, nav aids, fixes, and waypoints can also be retrieved. See the following symbols.

Navaid / Fix Lookup:



Waypoint Lookup:

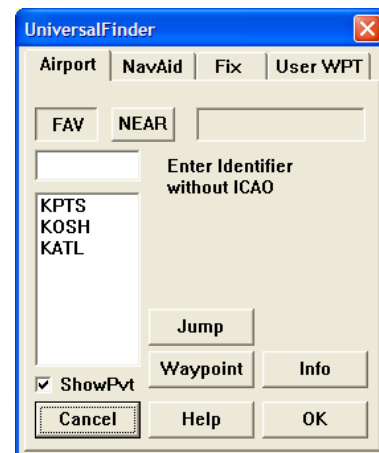


3. Universal Finder



The Universal Finder allows you to retrieve information about all navigation items under one symbol. It also is a very powerful tool for quickly finding items thrown at you by ATC. Clearance changes are a perfect example. They generally start with you going direct to some fix you can't spell. The universal finder makes it quick and easy to find these obscure items without spelling them out all the way.

When ever you begin entering information in the universal finder entry window, a list that conforms to the entry is generated saving you time and frustration.



9. FLIGHT PLANNING MADE EASY

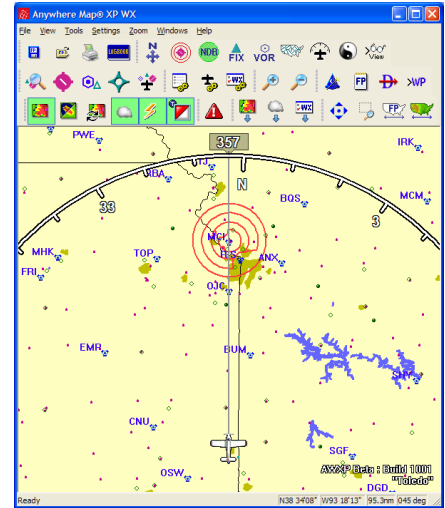
Flight planning is simple and straight forward. To keep it simple, always plan using the following steps:

1. Create a "Direct To Destination" flight plan from the departure airport.
2. Add the waypoints in the order in which they will be encountered.

A. Direct To Destination

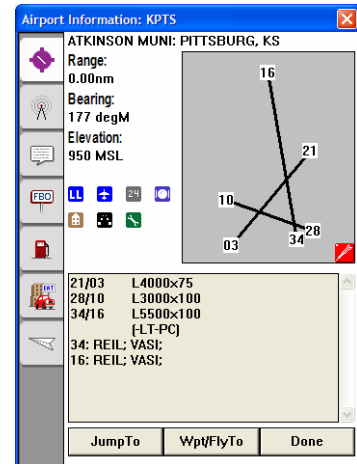
Example: Flight from PTS to MCI

Aircraft is located at PTS, Pittsburg, KS. We are flying to Kansas City International.

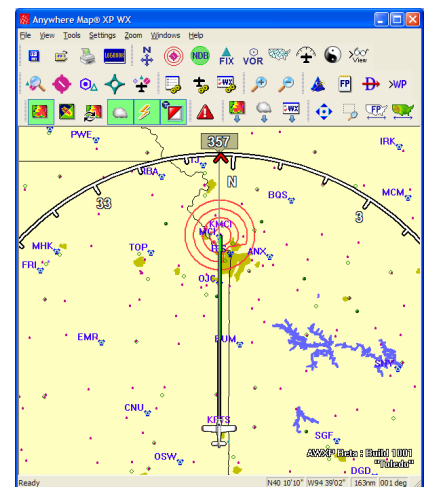


Click on the **Airport Search Tool** (or Universal Finder). In the window that appears, type in the ICAO code and the airport's identifier. If you do not know the identifier, type in the airport name. If you're using the software in the US, you do not need to use the K in the ICAO box. Simply enter the three-digit identifier in the box and tap OK.

The airport information window opens for you to verify that this is the airport to which you want to fly. Once verified, tap Wpt/Fly To.



A single-waypoint flight plan is now activate direct to Kansas City.

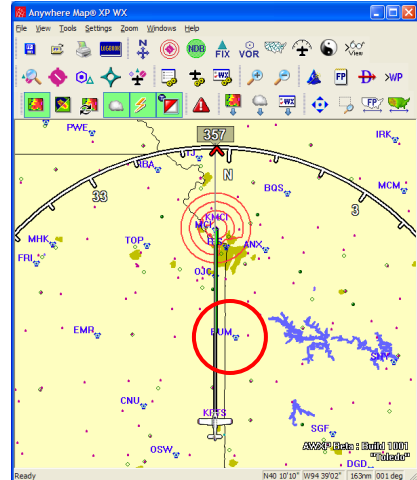


B. Add Waypoints

Just like the airport lookup, you can select any navigation items in either of the same two ways: double-tapping the map on the item or using the associated lookup icon in the toolbar.

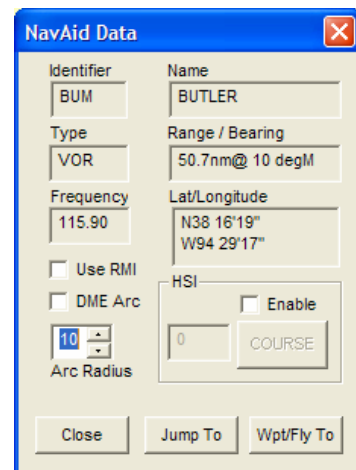
Example: Add BUM VOR as a waypoint.

Double-tap the VOR icon for BUM, the Butler VOR.



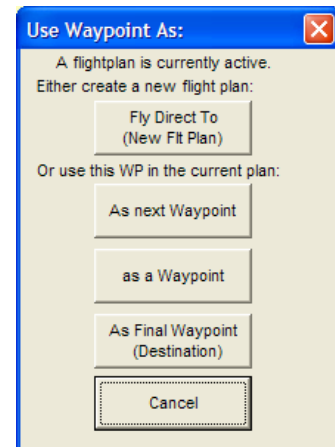
The VOR Information Window opens and shows you the details on the navaid.

Tap Wpt/FlyTo.



A new window opens that gives you control over the order in which this item (BUM VOR) will fit into the existing flight plan.

- You can make BUM the new destination, removing MCI all together by tapping “Fly Direct To”.
- You can make BUM the next waypoint (the one you will fly to from your current position) by tapping “As Next Waypoint”.
- You can add BUM to the flight plan based on its sequence along the line from departure to destination by tapping “As a Waypoint”. This is the one you would normally use. Do NOT use “As next waypoint” unless you truly want to go to the waypoint you’re adding from your current position. In almost all cases, you will use “As a waypoint”.
- You can make BUM the final destination and fly there AFTER you fly to MCI by tapping “As Final Waypoint”.



Continue adding waypoints in the same fashion, by tapping them on the map or looking them up using the icons.

Refer to the website and training videos for more information on flight planning and other features of AnywhereMap XP. Also, AnywhereMap for the PDA works the same way and many features document there work the same way with this software.

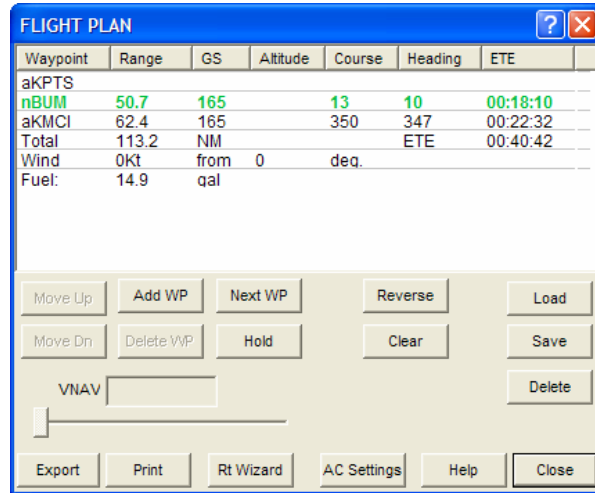
C. Reviewing the Flight Plan

Tap the Flight Plan icon to open the Flight Plan Manifest. This shows the entire plan and allows changes, saving, loading, and setting up of VNAV to waypoints in the flight plan.



The **Flight Plan Manifest** (right) is arranged by Leg number, Waypoint Name, Course, Heading, Distance, Ground Speed [calculated] and ETE [calculated]. In the example, we added a wind vector (16 kts at 160 degrees), reflected in the final calculation. **Tip:** On your return trip from Davis, load this flight plan and tap the **Reverse** button to flop the flight plan.

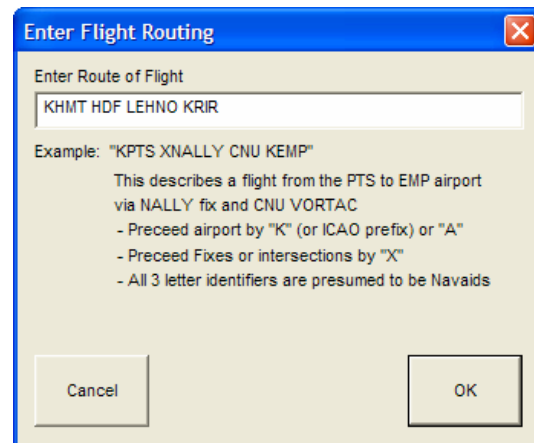
To save this flight plan, go to **File > Save Flight Plan F11**. Name the plan something that reflects the origin and destination like PTS 2 MCI.



ROUTE WIZARD

Sometimes it is more practical to write out a flight plan than to build one graphically, leg by leg. Anywhere XP's Route Wizard uses a simple shorthand to sketch out the elements of a flight plan. Tap on the **Route Wizard Button <show>** (or go to **View > Route Wizard R**) (or simply type **R**).

In this example we will create a flight plan from **KHMT** (Hemet Ryan Airport) to **KRIR** (Flabob Airport) by way of Homeland VOR (HDF) and LEHNO Fix.



10. USING THE WEATHER SOFTWARE

A. Available Weather Products – XM WX and AnywhereLink

The following weather products are available for display on the AnywhereMap XP using XM WX and AnywhereLink:

Weather Product	Accessed Via	Description	Udate Freq
NEXRAD (radar)	XM, G*, AWLink	Graphical, 7 color	5 mins
METAR/TAF	XM, G*, AWLink	Text and graphical depictions	12 mins
Echo Tops	XM	Graphical, shades of gray	12 mins
Satellite IR	XM, G*, AWLink	Graphical, shades of gray	XM: 12 mins, G*/Link: 1 hr
Lightning	XM, G*, AWLink	Graphical, lightning bolts	5 mins
Winds Aloft Fcst	XM	Graphical	12 mins
Storm Cell Track	XM	Graphical / Text	1.25 mins

AnywhereWx for XP can access weather via the XM WX weather gear and also via the Internet using a subscription (priced separately) to AnywhereLink. When you activate the AnywhereLink connection, the XM connection is disabled and you must re-enable it when you get in the airplane.

B. Timing and receipt of weather product updates

XM Weather

XM is a continuous broadcast of the weather data to the XM radio in the airplane. The data is broadcast to the airplane in individual computer files, one for each weather product (i.e. a radar file, lightning file, etc.). The broadcast is serial, that is, one file at a time. Therefore, the files are sent on a schedule that keeps the weather data current but also allows many difference files to be sent.

The broadcast schedule is shown in the table above. This important to know because after you turn on your system and see the GOOD status in the WX Info box, it can still take several minutes before any weather data is displayed. Many customers make the mistake of pressing buttons to “get the weather”. This is not applicable to the XM broadcast operation and will further delay getting weather displayed. Simply follow the start up procedures, verify you have a GOOD signal, and then go about your taxi and departure duties. In most cases you will see radar and other weather products long before you actually depart.

AnywhereLink and Globalstar

These systems use request/reply instead of continuous broadcast. Therefore, you initiate the weather retrieval by pressing an icon or button on the iPAQ (or tablet) and then the current files are sent to the iPAQ from the server on the ground via the Globalstar satellite phone or the AnywhereLink (via wifi, cell phone, Internet connection, etc.)

The data is sent in individual computer files just like XM but you can select which weather products to retrieve and when to get them. The files are updated on our servers on a regular basis so you can be sure that each time you retrieve them, you’re getting the latest available.

The server update schedule is approximately as follows:

- NEXRAD (radar): updated every 5 minutes
- IR sat photo: updated once per hour
- METARs/TAFs: updated once per hour
- Lightning: Update once per minute

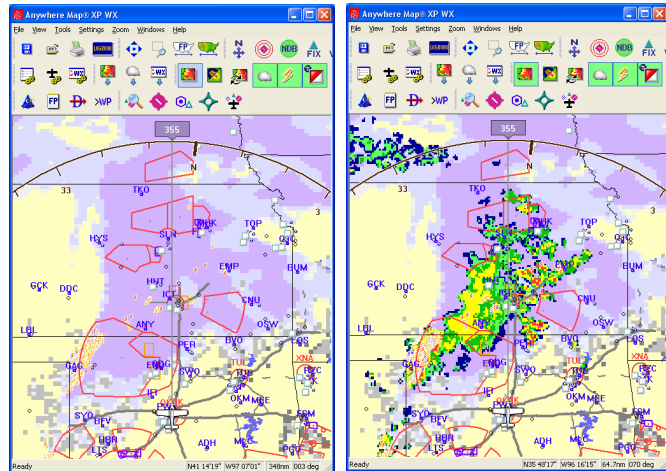
C. Sequence of Display on AnywhereMap

The sequence of display on the map is important to understand because some information can obscure other information, depending on the intensity of the weather conditions, map zoom level, etc. (See below for an example of how NEXRAD overlays satellite imagery). The order that the AnywhereMap “paints” the weather products, from first to last (on top) is:

1. Echo Tops or IR Sat Image
2. NEXRAD
3. Lightning (slowly cycles on and off)
4. METAR/TAF Flags

The reason it’s important to know this is because, for example, there are times when there is so much lightning activity that the lightning strike graphics can actually obscure the NEXRAD graphics since lightning is painted on top of NEXRAD. (That’s a whopper of a storm!) So it is useful to turn the lightning off (that’s also why we flash it on and off) so you can see the NEXRAD radar presentation unobscured by the lightning. To see the complete echo top presentation, you need to turn off NEXRAD (radar), and so on.

NEXRAD Off NEXRAD On

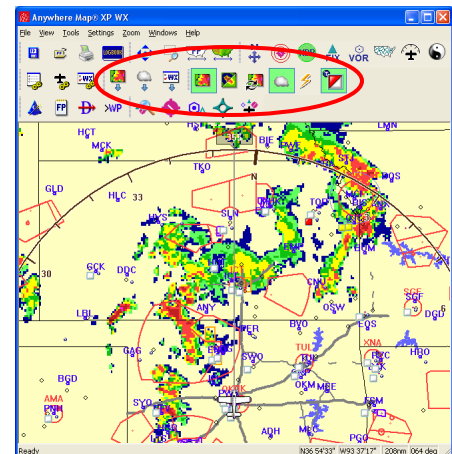


D. Turning weather products on and off

Generally a pilot wants to see radar (NEXRAD), which is the color-coded Doppler radar presentation, and so you’ll normally want that product turned on for display. However, there are other weather products that can clutter the screen and are not useful depending on weather conditions. There are two places to control weather product display.

Via Toolbar Icons

The tool bar contains the icons for turning weather products on and off. You can control NEXRAD, METARs/TAFs, Echo Tops / IR Sat, Light Precip, Lightning, and Radar Looping.



IMPORTANT! If you see tool bar icons that are weather related that also have blue arrows protruding from the bottoms of the graphics, these are AnywhereLink icons and will initiate weather retrieval over an Internet link (requires a separate subscription) Pressing them will also disable XM weather connections and at least, cause some head-scratching. Please do not use these toolbar icons unless you specifically choose AnywhereLink.

Via Settings

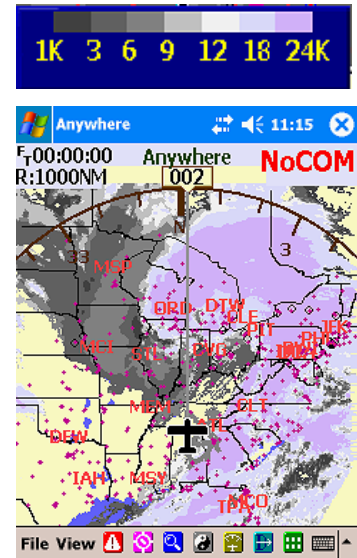
- a. Tap File > Settings > XM Weather
- b. Notice the check boxes. Turn the weather product displays on or of using these check boxes.
- c. Also see “Views” for information on how to save weather settings as part of a user defined view.

E. Weather Products in Detail

1. NEXRAD (Radar): This is the same color-coded precipitation view that is commonly seen on TV and Internet weather sites. The levels of color (**least intense** < blue, dark green, yellow, orange, red, magenta and white > **most intense**) denote the levels of precipitation intensity as measured by a network of Doppler weather radar systems across the lower 48 states. Since Doppler radars see not only precipitation but also precipitation intensity based on turbulence, the color-coding provides excellent information for pilots to decide where to fly and where not to fly. From our experience, we can simplify your enroute weather avoidance decision-making by providing the following advice:
 - a. The NEXRAD file is a static, composite “snapshot” of the entire US radar that is updated every 5 minutes and sent to the AnywhereMap system every 5 minutes. It is very accurate since nearly every spot in the US is looked upon by at least two Doppler radars. So the others surrounding it generally cancel the attenuation that can occur with any individual radar. The NEXRAD presentation is very accurate but remember: it is a static snapshot! That means the actual conditions can be different! **Use the presentation to determine where you WON'T fly, and circumnavigate those areas by a large margin.** The goal is to complete a trip that you wouldn't otherwise take, not do it in the fastest time!
 - b. **Do NOT fly in any yellow color area** unless you are POSITIVE that the precipitation is associated with non-convective activity. If it's convective, give yellow areas a berth of at least 10 and even better, 20+ miles. We aren't kidding here folks.
 - c. It might go without saying, but we'll say it anyway: **DO NOT fly anywhere near any red, magenta, or white color radar tiles! THERE ISN'T ANY SITUATION WHERE THESE COLOR TILES DENOTE ANYTHING OTHER THAN SEVERE, AIRFRAME BUSTING CONDITIONS. DON'T DO IT. DON'T EVEN GET NEAR THEM.** This isn't our lawyer talking; this is one group of pilots telling another. If you get near these areas, you're going to get hurt.
 - d. Areas of lighter precipitation can be flown through as long as you keep the following in mind: if it's cold, you might get ice, REALLY FAST. If it's convective, these areas can still be very turbulent and can turn into nasty conditions very quickly.
 - e. “Clear” areas between cells can be flown through with the following in mind: you are in a convective situation. You need to know if conditions are building or diminishing. If building, the space between the cells can close before you get through. Remember, all Datalink NEXRAD systems have a delay of several minutes from real time. Come visit us in Kansas next May if you want to see the difference 5 minutes makes in thunderstorm development! If the area in which you're flying is IMC and the cells are embedded, the space between the cells should be wide – like more than 30 miles – or don't go through go around. If you're VMC, then compare what you see out the window with what's on the AnywhereMap. Finally, if one gap is closing, others are too. Make SURE you have a way out. Forward is not the only direction the aircraft can go.
 - f. If you use AnywhereLink, there are two lower levels of light precip below the blue on XM NEXRAD: “dithered” blue and “dithered” green. These show very light precip and can be handy when the air is very cold (you might get ice) and to denote virga (you might get bounced around a bit).
2. Echo Tops (XM only): Echo tops are the highest (in altitude) radar echo returns in each 1 mile square area, color coded in shades of gray from dark (a low top) to light (a high top). Echo tops are easily confused with satellite imagery of clouds. A stratus cloud that has no precip and no turbulence will not even show on an echo top presentation. A cloud can actually be much thicker (and have a higher top) than the echo top shows. The easiest way to differentiate them is to remember: echo tops are created by radar and cloud images are created by satellite imagery (pictures). Echo tops normally mean more to the high altitude guys than those of us down low. And since NEXRAD is painted on top of echo tops (on AnywhereMap) most of the time you won't even see the echo top presentation unless you turn off NEXRAD. However, there can be instances where the echo top is helpful down low. For example, you might be skirting around some individual cells at night. You might be avoiding the NEXRAD areas but decide to fly through

a few of the echo top areas that protrude out from under the NEXRAD. Be aware that these areas are lead in areas to the cells. There isn't enough activity for NEXRAD to pick it up, but radar still sees something. You would be wise to either go around, or tighten your belts.

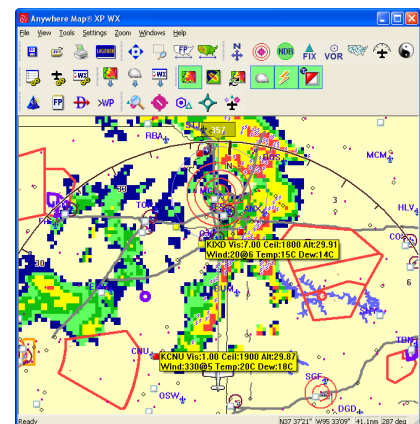
3. IR Sat Photo: The sat image is a satellite picture; color coded to cloud tops and is truly the tops of the clouds, within a thousand feet or so. Below 12,000 feet msl the colors break every 3,000 feet. Above 12,000' there are only three additional color breaks. See the diagram at right for details and a very cool example of the sat image from a winter low-pressure system. For most general aviation aircraft that fly below 12,000', the sat photo is most useful to locate areas of clouds versus clear areas and also to estimate the tops of the overcast on cold days (i.e. can I get on top and out of the cold clouds?)
4. Light Precip: To de-clutter the screen and only show the nasty stuff, you can turn off the light precip colors. Be aware that if you turn it off, you can possibly miss seeing some areas that are developing in a convective situation.
5. METAR/TAF: This is the pesky text-based data that is provided by larger airports, some airports with ASOS/AWOS and also forecasts from NWS. They come to AnywhereMap via text files and we place the text under the airport information screens for their associated airports. Since we hate having to read the things for basic information like ceilings and visibilities, we also convert these two data values to a graphic that displays on the map.



- a. When "turned on" the METAR flags show on the map next to the airport that generated the data. The flag (see diagram) is split diagonally – the upper left corner is the ceiling and the lower right is visibility.
- b. They are each color coded to VFR/IFR conditions and are independent of one another. Consequently, you can see at a glance whether the observed conditions for ceiling and visibility at an airport are VFR (white), marginal VFR (yellow), IFR (red), or low IFR (purple).
- c. If a TAF (forecast) has been received for that airport, a small square is attached to the upper left corner of the METAR flag. Since the TAF covers a time period, there is no graphic that represents data values like the METAR. Therefore, you have to look under the associated airport information screen to see the TAF text.

	Ceil. >3000 ft Vis. >5 mi
	Ceil. 1-3000 ft Vis. >5 mi
	Ceil. 1-3000 ft Vis. 3-5 mi
	Ceil. 500-1000 ft Vis. 1-3 mi
	Ceil. <500 ft Vis. <1 mi

- d. If you want to see the basic METAR text, simply single-tap the METAR flag. A box will pop up that shows the basic METAR info such as shown at right.
- e. If you want to see all details of the METAR and the TAF data, simply double-tap the airport symbol for which the METAR flag is associated. Then tap the WX tab. The METAR is decoded at the top for easier reading (do you remember all the METAR precipitation codes???) and the complete coded METAR is just below. If a TAF was received for that airport, the TAF is below that and can be accessed by scrolling down.
- f. METAR/TAF info is received on the XM link for entire US while in flight about every 12 minutes. You will be amazed at the increased safety and pro-active flight management that can be done when you have this data updated continuously while enroute. Unless weather conditions are changing very rapidly (like a cold front, or fog forming) there is no reason to be surprised by the weather at your destination or your fuel stop. You can watch it the entire time you're in flight!



- g. To see the weather at ANY airport while enroute, regardless of if that airport is displayed on the map at the time, simply tap the airport icon (bottom toolbar) and then tap in the airport identifier. Then tap the WX tab. You can read the latest conditions for that airport without even seeing it on the map. Once again, the ability to pro-actively make destination, fuel stop, and fuel management decisions enroute is truly fantastic!
6. Winds Aloft (XM Only): When turned on, you'll see blue wind barbs in a grid on the map that uses the standard convention for direction and velocity. You can select the altitude for which the forecast wind barbs are shown or select "Follow Altitude" so the barbs represent the forecast at your current altitude.
7. Storm Cell Tracking (SCIT, XM Only): When a large thunderstorm cell is present and you zoom in to a close range, you'll see green dots inside the cell areas. Each dot represents one storm cell. If you tap the dot, the cell information will appear in a pop up box for a short time. The information includes cell identification number, direction of movement, velocity, tops, precip (hail, etc.) and even shear values (for rotation). Obviously, if there is an SCIT icon in the cell, it's a significant cell and you should give it a VERY wide berth.
8. XM Signal Q: Sets the weather age number in the upper left corner of the screen to alternate with the quality of the XM signal as seen by the XM antenna. Useful just as a quick check of XM signal quality.
9. Lightning: Turns lightning on or off. The lightning file is static just like all the rest and shows cloud to ground strikes for the entire US. It is sent to the AnywhereMap system every 5 minutes, just prior to the NEXRAD file being set.

Installation Guide Updates

Please check our website as new versions of XP are released along with associated release notes and videos on how to operate the software. www.anywheremap.com/videos

NOTE: Not all features in AnywhereMap for Pocket PC are in AnywhereMap XP. Many of these features will be added through time.