

SKYVIEW INITIALIZATION STEPS

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The Skyview software can be downloaded from the SWWP site here:

<http://www.engr.colostate.edu/wac/Skystream.html>

You can also find the Skyview software manual (Rev D) at this site. Page 12 in the starts the section about establishing the link to the turbine. There are also some troubleshooting tips on Page 13.

The Xbee receiver and the transmitter on the turbine have an exclusive relationship so that they will only communicate with each other. But the receiver can be moved to a different computer. But there are a few steps needed to make sure that the handoff goes smoothly.

1. Unplug the Xbee receiver from the original computer (if any) and let it set for 5 minutes.
2. Turn off the turbine and let it set for 5 minutes too to let the capacitors drain fully.
3. Plug the Xbee receiver into the computer BEFORE turning on Skyview. The laptop should recognize the device but if not, you may have to get the driver files from the Skyview zipped file that you downloaded (or from the disk).
4. Start Skyview and go to the Turbine Setup page. If all is well so far, you should have the first two green lights lit on the right side of the screen.
5. Enter the turbine ID (in the form xxxx-yyyy) in the proper box and enter a nickname (like YourSchool_turbine). Then select the ADD button.
6. There will then be a 60s countdown for the software to find the turbine. During this time, turn the turbine back on so that the Xbee's can "find" each other. You can always restart the count if you run out of time.
7. The software should find the turbine. It will list the turbine in the "My Turbines Found" box at the bottom.
8. Select the turbine (although it may also just select it already when the software finds it). At this point, you should have all 5 green lights running on the Skyview screen. If not, try closing and restarting the Skyview software.
9. You may have to repeat these steps a few times – it is easy to get the steps out of order. If you are struggling, to get it connected, give me a call on my cell at 970.213.8163.

Assuming you get five lights lit, you want to make a note of the signal strength in the bottom left corner. If you are standing at the base of the tower or so, you should have a signal strength of about -40 dB or so. As you walk into the school, the signal strength will become more negative (weaker). At about -70 to -80 dB or lower, the signal will be too weak to establish a link.