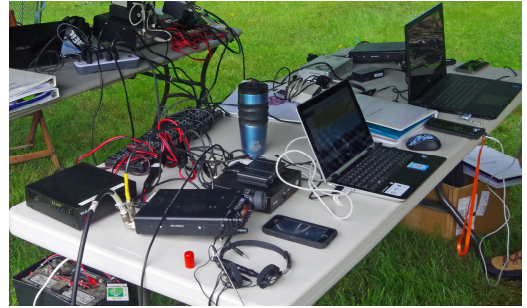


How do I?

An occasional series

This week: Computers and ham radio;
tips for co-existence



This is going to be an odd article. Elsewhere in this series we have discussed various radio operating programs like **WSTJ-X** and **FLDIGI**. We have also taken a look at logging programs such as N3FJP **AC Log**, the N3JFP specialty logs (Field Day, contesting) and utility programs that set the time on your PC or otherwise make life easier.

This is not a computer article. We are going to assume you are fairly familiar with PCs running the Windows Operating System. A lot of this stuff will fall into the categories %Why didn't I think of that? or Why haven't I been doing that?

1. If you plan to use a computer in the shack, if possible dedicate it to radio. I understand that not everyone can do that. But it helps.

Once you have your sound card and other settings configured for **WSTJ-X**, and you then change the set up for a **ZOOM** meeting, you need to change it back. That takes us to item 2.

2. Keep a record of the settings for every piece of software and hardware used. For example, if you use a PC for FT8 on HF with a HF rig, then use the same sound card with an FM rig to receive SSTV images, you need to reset a bunch of stuff. Write it down, or save screen shots (Windows Snipping Tool or CTRL+SHIFT_PRNT SCRN) and keep a check list.

3. RF in the shack. Your transceiver has to meet some pretty rigid FCC rules. Mice and USB cables do too, but some may not conform. Snap-on ferrite chokes are your friend. Wind a couple of loops of the affected cable around the ferrite core. Then, snap the core shut



4. Back up everything! Redundantly! Frequently! Storage is pretty cheap.

5. Expect that you will have to become an IT expert! I am old enough I remember when magazines printed the line by line code for DOS programs, usually followed by corrections, additions and improvements suggested by other readers over the next few issues.



Somewhere in the past 30 years that went away and we seem to expect EVERYTHING to be plug and play. And PLAY WELL!. If the smart phone app is clunky, just delete it. Right?

That expectation may be good when buying Microsoft products or antivirus software, but most, not all, amateur radio software is written by amateurs and distributed free (think WSTJ-X and FLDIGI and MMSSTV and MMRTTY.) Even Scott Davis N3FJP sells his products for very little (Scott's programs work well!). The user is expected to READ THE MANUAL and have some knowledge of what they are

doing. A lot of software has a groups.io forum or other community. Please join it, follow along, do not hijack threads to ask your question and identify yourself. Politeness will generally get you help. Demands never will. Over the years I have spent several enjoyable hours on the phone helping someone install or troubleshoot their software after they asked for help nicely on a forum.

A lot of the software was written for DOS. Then the better programs got rewritten for Windows. But what ran on Windows 3.1 and XP may not run on Windows 7 or 10. While not a radio program, Lotus 123 is a good example. I first used it in college on a 5 1/4+floppy disk. The current (last version) dates from about 2001. Every time I change computers I expect to lose it, and it does some things better than Excel. It will run on Windows 7. I had to junk Microsoft software that ran on XP on but not 7. Lotus 123 will run on Windows 10 IF it was a win7 box with Lotus123 that was upgraded. But it will not install on Windows 10. Some radio software that may be bundled with hardware may not work well any more, if at all.

6. Going along with 5: Stuff happens. It's a computer. It's a computer running non standard software used by a very small community. WSTJ-X and JT Alert seem to crash a lot. Do they really? Not sure, but it seems like it since it is ALWAYS when trying to reach a new grid square, a new state, or a new country. Never seems to happen when you are trying to contact grid square EM83 for the hundredth time! So just stop, restart it and continue on. No reason to send a nasty email saying the software is junk. That is not helpful.

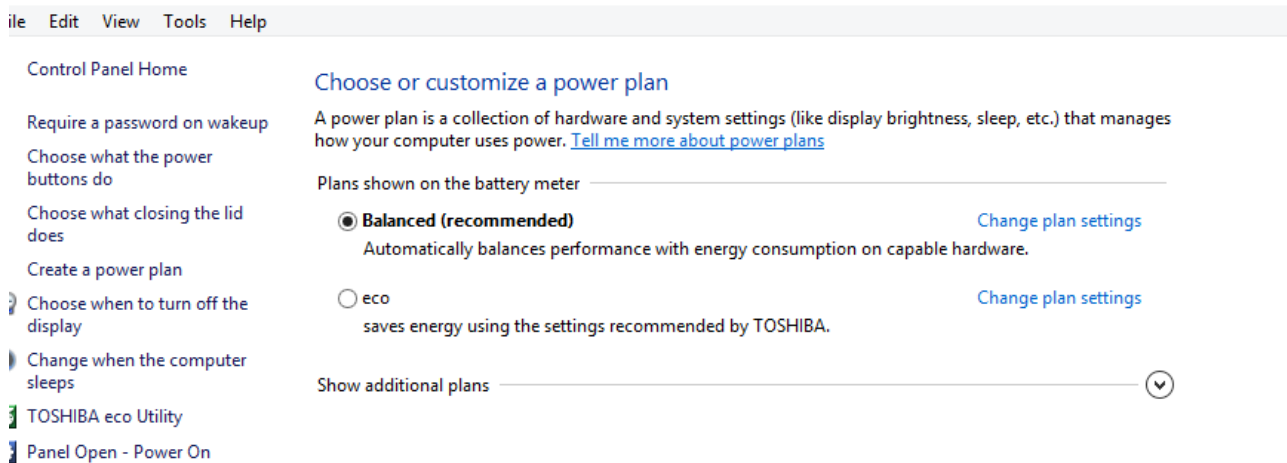
And just because it happens once is not a bug. Look at the online community archives-is there a pattern of reports?

7. PCs these days rely on USB ports. There are not a lot of ports provided by the Manufacturer. So an external USB hub is often necessary. Please, buy a powered hub. Your play satisfaction will improve!

8. Downloading software. The Internet is a dangerous place. Lots of malware. Use a good antivirus suite like AVG Internet Security, keep it up to date and you will generally be OK. If downloading from a manufacturer's website: West Mountain Radio, N3FJP, the Princeton University server for the WSJT-X software or SourceForge.net (FLDIGI), you will be ok. HOWEVER a good antivirus program will delay the download while it does a very thorough virus/malware check. Why? Popular, commercial programs get downloaded thousands to tens of thousands of times a day or week. I am not sure how many FLDIGI users are on the planet, but when an update comes out, it may be downloaded 2,500 times in the next week.

That is not a lot. So when you try to download FLDIGI, expect your antivirus software to be skeptical. It is not necessary to run to every forum you belong to screaming that the FLDIGI software is unsafe. That is not helpful.







9. Power management. Back when PCs were the size of a Video Cassette Recorder and used cathode ray tubes, they had power demands about like a refrigerator. That is a lot of watts and manufacturers worked hard to bring that load down. The Windows Control Panel has a POWER OPTIONS tab. In some versions it's called Device Manager/ Human Interface Devices/ USB input device/



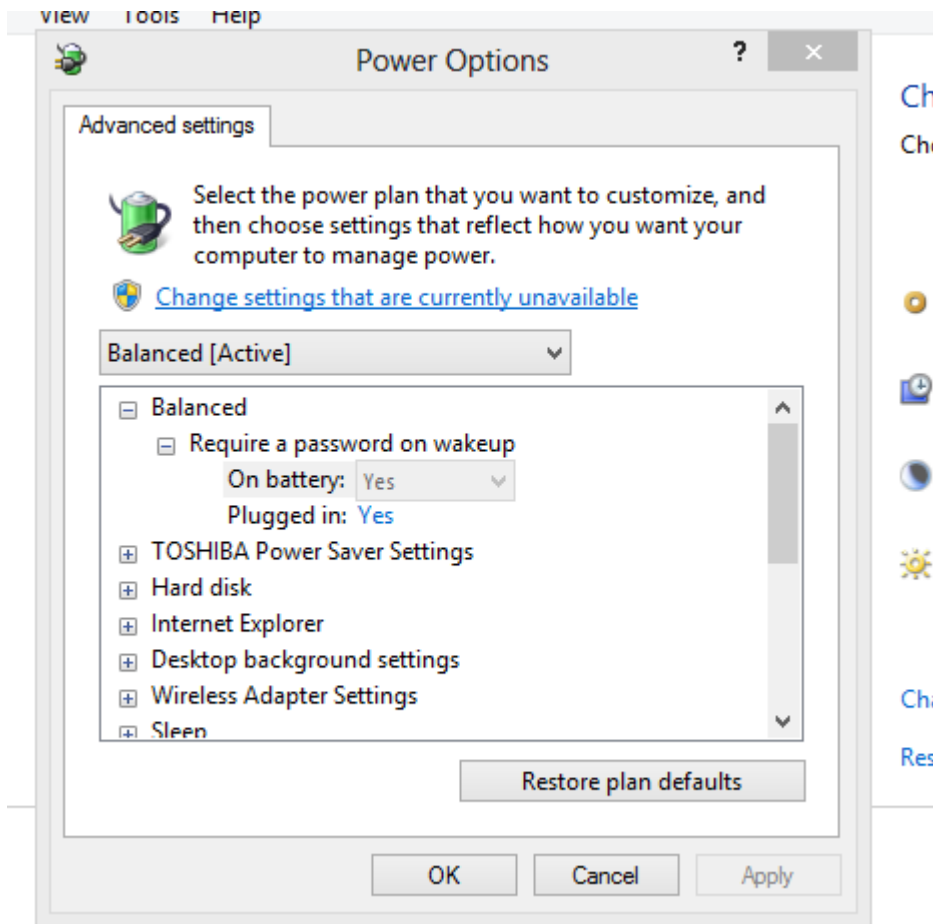
Create a Power Plan: name it and click next.
On my office+computer my power plan looks like this:

Change settings for the plan: My Custom Plan 1

Choose the sleep and display settings that you want your computer to use.

	 On battery	 Plugged in
 Dim the display:	<input type="text" value="1 hour"/>	<input type="text" value="Never"/>
 Turn off the display:	<input type="text" value="1 hour"/>	<input type="text" value="Never"/>
 Put the computer to sleep:	<input type="text" value="1 hour"/>	<input type="text" value="Never"/>
 Adjust plan brightness:	<input type="range" value="50"/>	<input type="range" value="50"/>

Why? I do not want the USB ports and other hardware to power off while the computer is on. Click on CHANGE ADVANCED POWER SETTINGS.



Scroll down to USB settings

- [-] USB settings
 - [-] USB selective suspend setting
 - On battery: Enabled
 - Plugged in: Disabled

On my radio PC I have both **On Battery** and **Plugged In** set to disabled. This will prevent the PC from powering down the USB ports and devices.

Catch ya on the air!