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The Monthly Newsletter of the Monongalia  
Wireless Association  
Morgantown, West Virginia

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**Next Meeting**  
Feb. 18. 7:30 PM  
Room G084, WVU Engineering  
Bldg.

Building of West Virginia University, on the  
Evansdale Campus.

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## Thanks Randy,

For a really great program at last  
month's meeting. The program, on  
Home Networking of Computers, was  
really useful and interesting.

## Skywarn is coming

A skywarn program by the National  
Weather Service is in the planning  
stages. Bob, N8HGL, is arranging  
dates for the speaker from the Pittsburgh NWS  
to be with us. The meeting will be open to the  
public and will be in April or May. It probably  
will not be on a regular club meeting night  
because of the speaker's schedule. Stay tuned  
for more.

## Next VE Exam

The Monongalia Wireless Association  
of Morgantown, WV, will conduct its  
next regular VE test session on April  
24, at 7:00 PM, in the Engineering Sciences

## Needing a Hamfest Fix?

West Virginia's first hamfest of the  
new year is just around the corner.  
The 25th Annual Fayetteville  
Hamfest will go off on Sunday, February 23 from  
8AM to 2PM.

Sponsored by Plateau Amateur Radio  
Association, there will be major prizes, hourly  
door prizes, and VE testing. Talk- in will be on  
the 146.790 repeater.



"Where are the bargain buys?"

# A Fast Look at Slow Scan TV. Part 2.

*This is the final part of Jim Southern's article on SSTV.*

Last month we learned where to locate SSTV activity on the 20 meter band and we downloaded the freeware program called MMSSTV. Now let's get it all on the air and send and receive some photographs.

Now the heart of the whole operation is the personal computer, with a sound card. I hope that you have a Pentium class machine operating around 100 MHz or better and with the most RAM possible. Bigger, faster is always better, but if you don't have the best don't fret. The MMSSTV will work even on the slowest PC's. The best sound card on the market is the "SoundBlaster" for about \$99.00, and most ham soundcard programs are designed around it. But any soundblaster-compatible card should work.

Let's check our list. Radio, computer with sound card and "Free" MMSSTV software. Now we need to hook it all together, and do it for the least amount.

If you want to go high tech and use a commercially-made interface to key your radio, and do all things automatic, then you can buy one (like the Rigblaster, or the MFJ, or the Rascal). Or, you can build Jan's (KX2A) from the "Solid Copy" issue June 2002. Whichever way you go, the interface will work with other soundcard programs for PSK31, MMTTY, CW, MFSK, or SSTV. . There are several good ones in QST you can build.. Look guys and dolls, if I can build one you can too. Just remember to use good cables. Trust me on that one.

So you want to go cheaper than the cost of an interface? I got the cheapest way to save big

bucks. This is the way to do it. First get MMSSTV program up and running. Then put an extra speaker next to the microphone on the computer or vice versa, and wait for a "Slow Scanner" to transmit a picture. The computer program will do the rest. To transmit, you have to get your picture up on the transmit window. Place the radio's microphone next to the PC's speaker. Click on the red "TX" button and hold the button on the radio's microphone at the same time, and when all the noise stops, unkey the microphone on the radio. I tried it and it works, but the only problem is some computers and radios just do not get along. You know, like brothers and sisters.

Whichever method you use, there are a few adjustments to the sound card that must be done. There must be enough audio to drive the sound card, so you have to turn up the microphone on the computer. The other adjustment is to turn up the computer's volume to the speaker enough to activate the radio's ALC meter to a normal range.

Take notice, the first picture that you transmit or receive will look like garbage. It will have a lot of what is called "slant" to one side (Figure 1). To get everything straight and on track, click on the

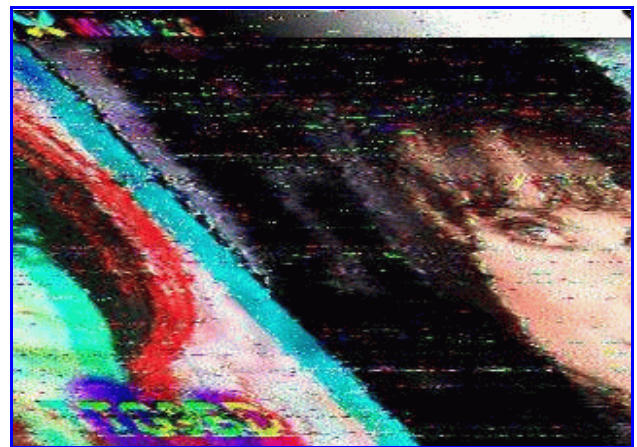


Figure 1.

"option" tab and go to "Setup MMSSTV(O)". Then another window will pop up. On the "RX" file you will put a check mark in the "Auto Slant" box. This will get you started. When things get up and going, you will have to go back to this screen later on and uncheck this box. Each

soundcard works at a different frequency and has to be adjusted to match everyone else's. This is an easy fix and the "Slow Scanners" will be glad to help. These guys just love to fix things, so don't be shy cause the only bad picture is one not sent.

Now come the scary parts. What kind of pictures can I send? (Figure 2). What kind of pictures will I receive? After you have received a few pictures



Figure 2

then you will know what to send. What you receive is a different matter. There is no way to control what you will get. So if you leave the room it is always best to turn off the monitor or close the screen on the laptop. As things go there is always a clinker in the bunch, and there are those Europeans who have a different outlook on life than we do.

Here are types of pictures that you will get. Family pets, different rigs, antennas, Operators and their mates, vacation pictures, children, magazine ads, nose art from vintage aircraft, cars, radio shacks, and a few cheesecake photos. It's like Forest Gump's box of chocolate, you never know what you are going to get. Some could say that it is like the inside of Pandora's box, any jpeg file, or bitmap file, that can be taken off the Internet, ran off a scanner, digital photo, or something stolen from another "Slow Scanner".

The best use of all for SSTV, would be to use it for



Figure 3

search and rescue, disaster relief, or to best express an idea that cannot be put into words.

The biggest problem that I came across running SSTV and PSK31, has been with the power supply believe it or not. If you have a constant power supply you should not have much of a problem when transmitting. But if you have a switching power supply like me, then your radio will jump back and forth from Receive to Transmit. This to is an easy fix. The way I solved this problem was to turn down the rig's mic gain to eighty percent and turn down the RF output to eight percent as well.

Even with a measly eighty watts, I have gotten to the east and west coast of North America, most of South America, New Zealand, Australia, Africa, mid-Europe and England. I'm sure that if I were to use an amplifier a much larger area could be reached and with a lot better quality picture.

The joy of running SSTV has been a real super blast. I have had just as many ups as downs, and that alone would have driven me to the crazy house. Those who know me can tell you that the ride would have been very short. But each hurdle had been a learning experience. The things that I thought were problems was the inter-me telling me that it couldn't be done. Look at me now Maw; I'm on the top of the world.

–Jim, KC8GGX