Ham 39 - This Is What We Have, VHF/UHF

Dr. Marc & Rosemary © 240121

1. Again, this weekend, I had requests for personal recommendation on equipment. Ham equipment, like cars and clothes is a personal thing, determined largely by budget. However, we want a common denominator, so anyone can

Icom 2730

recommended, in my truck

Personal

help anyone. When I was on a Disaster Recovery team, you could go in any trailer, whether Tulsa, OKC, or New Orleans and the same equipment was in the same place. This is our system recommendation.

- 2. We will walk the line between very expensive and not so much. I have some of the more expensive for digital and beyond, but that is not what we recommend or have for general use.
- 3. *RADIO*. For applications in our area, your radio should be VHF/UHF rated at 50 Watts for our terrain. Tri-band is nice, but seldom used around here. More power is always good, but the increased dB is hard to differentiate. 80-Watts is little more than 1 dB greater. Higher power radios are typically single-band, not a good idea, if only one radio.
- 4. Of all the VHF/UHF mobile/base radios, the ICOM 2730A is my favorite. It is simple to use, extremely flexible and dependable. It is two totally separate receivers. This is in my truck. The HamFest had the radio at the identical price as Ham Radio Outlet and DX Engineering. Price this week is \$309 then subtract a \$10 discount. Both these companies are very reputable with good customer support. Prices vary depending on sales and promotions. On sale at \$259.
- 5. I have snazzy, large screen Icom 5100, digital, with everything, including a kitchen sink. It costs over \$100 more, and has too many bells and whistles, for normal, analog operation. Don't get me wrong, I have no intention of getting rid of it. Rosemary uses it. But we would recommend the 2730 as a more economic, practical choice, which is what I use.
- 6. **POWER SUPPLY**: You need a 120/12Vdc power supply, with continuous rating of 23 or more Amp capacity, desktop not rack mount. Avoid variable/adjustable supplies, since a slight mis-adjustment can fry a few-hundred-dollar radio. You will want a supply for radio use, which is much less noisy than many knock-off supplies on Amazon. Linear supplies have a transformer, are heavier, more stable, less ripple and interference. The much more common and less expensive supplies are switch-mode. Their cooling fans can be quite noisy.
- 7. A combination power supply / battery charger is excellent to keep your standby battery (when you get it) ready to roll. Battery charger versions include Samlex SEC-1223BBM at \$169. Bottom grade supply is MFJ-4125 at \$130. Optimum is ASTRON RS-35M-AP about \$300. This is our common denominator.
- 8. *ANTENNA*. I have numerous base station antennas and all have trade-offs. These are often homebrew. Gain is desirable, but is not the total deciding factor. Where it is located is more critical. I strongly recommend placing in the attic whether an HOA or not. Put the antenna as high as possible. If you have foil covered insulation, this will act as a shield, keeping radio-waves from reaching your antenna. Experiment to find an effective location. Use proper grounding and lightning protection.
- 9. I have a dual-band aluminum J-pole with 3 elements, a copper J-pole for test use, and a Diamond X-50A colinear. Each costs about \$90. The X-50A is often used on repeaters because of the trade-off in size, gain, effectiveness, and cost.
- 10. *COMPACtenna* is a paradigm shift. Dr. Jack Nilsson is the designer. We have compared notes many times. I have a 7.5" with a counterpoise for use with one radio. It is fabulous. The newer 9" performs even better. All these are very small, but work great. Put as high as possible. Avoid metal roofs. Yes, it works with just 2 counterpoises. The *COMPACtenna* 9" with mount is our common denominator.
- 11. *MOBILE ANTENNA*: My mobile is a 9" tall *COMPACtenna* Dual band at \$110. The small size makes it a winner, since it does not strike the garage door. If you have room, the 9" performs even better. These antennas are less obtrusive on the vehicle and do not look like an antenna farm.
- 12. *COAX:* Depending on where your antenna and radio are located in your house, you will need 25 to 50 ft, RG213/U coax with PL-259 male plugs. This is a large, semi-flexible coax for the high losses of UHF. A short 3 6 ft jumper of RG-8X is acceptable for flexibility. Personally, I prefer either DX Engineering or HRO. Cable Experts makes very good cable. Do not buy Amazon, since you do not know what you will get.
- 13. The common denominator system is Icom 2730A, Astron RS-35, and COMPACtenna.
- 14. This total comes to about \$600, a pretty-stiff hit for most people. That is why I suggest the take it as you can afford option. You do not have to do it all in one day.

 Life is good. Enjoy.

