

What's in your memory bank?

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Over the past few years, manufacturers of ham radio gear have introduced many features that have made the equipment we purchase seem more like a computer, with touch-screens, color displays, and so on. Many of the ham radios available today have lots of memory channels. I've been especially impressed with the Icom ID-5100 dual-band mobile rig, and the Kenwood TH-D74 tri-band hand held. Both of these are great rigs, with a lot of features that can be easily accessed from the menu controls or with third party software. Both have 1000 memory channels that can be divided between multiple groups or memory banks; 26 different groups (A-Z) for the Icom and 30 groups (0-29) on the Kenwood. Each memory channel or group can use up to 16 characters in the description label, while also displaying the frequency. That's quite an improvement over many rigs that can only display 6 or 7 characters with either a channel name or frequency but not both.

As net control mentioned a few minutes ago, you should have these local channels stored in your rig's memory channels. But what else should you put there and how do you organize your memory?

Here's how I have organized my memory channels:

Local

Nearby repeaters that I can generally hit anytime, in Giddings, LaGrange, Smithville, etc. I will typically label the channel with the name of the town and the callsign, for example: La Grange – N5FRT. If a description is too long to fit within 16 characters, I'll drop some letters from the town name to make it fit. For example, Smithville-KC5WXT. I also have channels in this group for common simplex frequencies.

DX

You probably recall times during this net when other repeaters could be heard due to skip conditions. I did a search and found several repeaters in the state on this frequency but using different sub-audible tones. I entered those repeaters and their tones in different memory channels in this group, so I can tell very quickly if we have skip conditions towards Corpus Christi, Pearland, or East Texas. I also entered several repeaters in the Houston area. This could be done for numerous locations, if you had a target area in mind.

Digital

I put the standard dozen or so Packet frequencies and D-Star frequencies in this group (the 5100 is not ideal for packet, but it can be done). I have several MMDVM hotspots setup for D-Star, each on a different frequency which makes it easier to switch between reflectors.

EMCOMM

I put all the channels listed in the Williamson County ARES ICS-217 form into this memory group. I'm not too crazy about how those channels were originally labeled on that list; for example, one channel is listed as V32R. However, with the enhanced labelling available on my Icom and Kenwood radios, I can add info to make the original labeling a little more descriptive. For example, V32R is now V32R-Austn-N5OAK.

Satellites

There are a number of satellites that can be worked on dual band FM rigs, including the International Space Station, HAMSATS, and several NOAA weather satellites. I use one side of the rig for transmit and the other for receive. These are dual band, dual display transceivers, that operate independently from each other.

As satellites move quickly across the sky, the received frequency will shift due to the Doppler Effect by as much as 20 kHz. I have entered several memory channels above and below the stated receive frequency, so I can quickly follow the shift in frequency. For example, the International Space Station uses an uplink of 145.99 Mhz and a downlink of 437.800 Mhz. I transmit using the left side of the rig on 145.99 and listen using the right side, starting 10 kHz higher on 437.810. The frequency will shift as the satellite gets closer, so I have to decrease the frequency to 437.805, then 437.800 when it's overhead. Then 437.795, and 437.790 when it finally gets out of range. These channels are labelled as follows:

#700 – ISS-Uplink

#701 – ISS-Down+10

#702 - ISS-Down+5

#703 – ISS-Center

#704 – ISS-Down-5

#705 – ISS-Down-10

I have a number of memory groups setup for monitoring frequencies outside the ham bands. Neither the Icom or the Kenwood will transmit on these frequencies.

GMRS / MURS/FRS

Although none of these rigs will transmit on these frequencies, I added the GMRS/MURS/FRS channels to this group for monitoring purposes. GMRS is General Mobile Radio Service and has 30 channels in the 462 and 467 Mhz band. MURS is Multi-Use Radio Service and has 5 channels in the 151 – 154 Mhz band. FRS is the Family Radio Service that has 22 channels that share frequencies of the GMRS band.

Lee Co agencies

This includes Fire, EMS and County Sheriff dispatching frequencies that I occasionally monitor.

Aeronautical

Both of these rigs will also receive the Aeronautical band (~118-130 Mhz AM mode). Using the scan function over a period of several days, I was able to identify about two dozen active frequencies which I added to this memory group to monitor.

Trains

Having an active railroad running thru Giddings, I've found a couple of railroad frequencies in the 160 Mhz band to monitor.

Shortwave

Although the Kenwood hand held is a Tri-band transceiver, it can also receive from 100 Hz to 524 Mhz (AM, FM, CW, USB, LSB, D-Star). It's limited by the rubber duck antenna, so an outside antenna helps a bunch. But I can program any HF frequency into a memory channel in order to monitor the output of my Icom 7300 HF rig. This was very useful when I started using some digital modes (like FT8, PSK31, etc) and didn't know what the digital signal was supposed to sound like.

I can scan the memory channels, either sequentially all channels, or by just a specific group of channels such as just the EMCOMM channels.

My Icom 7300 HF rig has 100 channels, but no groups. I typically use those memories for established HF nets, like the Maritime Mobile Net, Texas ARES HF Net, or the Texas Traffic Net. I also have stored the standard frequencies for the various digital modes, the 60-meter ham channels, and the standard time signal stations such as WWV, WWVH, and CHU. I also will setup a temporary memory channel for those times when I'm working split frequencies, or working a contest to track down an elusive DX station easier.

This is just one way to setup memory channels which has worked for me over the years. You may have some other ways of doing this, and I'd love to hear about it.