

My take on the Icom IC-7700

I owned an IC-765 for sixteen years. The IC-765 served me well, and I reluctantly sold it after I saw the Yaesu FT-2000 at HRO in Salem, NH during a sojourn back to our old homestead in York Harbor, Maine. At the time, the FT-2000 was just appearing here in the US, and HRO had received their first shipment (a couple of them) the day before I arrived. I was impressed with the features of the FT2K ... so much so that I bought it right on the spot. At the time, there were no FT2K "reviews" published, so the *lousy* receiver was not yet recognized ... but the many shortcomings of the FT2K is a different story. Suffice it to say that the shortcomings of the FT2K finally got to me, and I plotted to sell it.

I now had my eye on the IC-7700, which received excellent reviews and demonstrated excellent receiver performance specs. The pricing on this rig vacillated from about \$6,600, to a low of \$5,500 during the Christmas season of 2008. Two things made me hesitant to take the plunge: first of course, was the price. Being retired and considering the condition of the stock market and my ever-dwindling 401K, the additional outlay of funds was going to be difficult, even with cash in hand from the sale of the FT2K system (FT2K + DMU + cw filter + keypad). Then, there was the absence of Dual Watch. One of the features I became accustomed-to with the FT2K was the dual receiver, which was a **great** convenience feature during split DX operations. Because of that, I gave serious consideration to the TenTec Orion II, which also packs dual receivers, however, I abandoned the OII option due to ongoing concerns cited about the stability of the OII software, and, the lack of direct access to radio parameters via knob or buttons (the abyss of the menu system).

So, I finally decided I would go with the IC-7700. (I got a chance to **see** one at the Boxboro Hamfest in the fall of 2008). Then, as I was probosculating the purchase, after missing out on the \$5,500 offering during Christmas of 2008, a old friend of mine mentioned that he had one, and that he was interested in selling the beast (it IS heavy). I went over to his house to get some play time with the 7700 – I loved it. My friend (Dick) had owned the rig for about 6 months, and in a wink of an eye he made me an offer I could not refuse. Whammo ... I committed to buy it, then immediately put my FT2K system up for sale. The FT2K sold the same day I put it up for sale, and I withdrew the additional funds from my ever-dwindling 401K. In just a little over a week, I went to my friends house and loaded up the behemoth (bring a fork truck).

The IC-7700 is an elegant radio, and a fitting successor to the IC-765 [which remains one of the best performing radios ever built – see Sherwood receiver test data table @ <http://www.sherweng.com/table.html>].

This is a Big Boy radio - large knobs and buttons, spaced nicely for big boys.

Direct access to virtually every commonly-used radio parameter via knob or button, without the need to enter the abyss of a menu system, which consumes time and energy ... you know, the click, twist, click click routine (what a pain in the ass).

The filtering system works extremely well, as does the Noise Blanker and the Noise Reduction system.

Although I am not much interested in RTTY and PSK, the IC-7700 handles these modes extremely well without the need for outboard gear – I am impressed with the receive decoding of these modes. Installation of an external monitor makes it easier on the old bifocals.

Two hundred watts out on 6M – I love it! That extra 3db over my backup IC-746 can make a hulluva difference on weak signals, and, combined with the 7700's dynamic range, makes a great 6M rig without the availability of a 6M amp.

The 7700 drives my Drake L-7 amp very nicely, as did my old IC-765. The FT2K would not drive the L-7 to its comfortable capacity (I hated that). I just crank down the 7700 a little bit, and tune the L-7 like Rich Measures (AG6K) says, and everything is okey-dokey.

The spectrum scope is gorgeous and is a very handy signal-finding tool, particularly on those quiet bands in the ebb of the sunspot cycle.

The multiple screen display format options are slick ... and the display has a programmable screen saver mode.

Excellent dynamic range and filtering make it possible to copy an S-1 CW signal in the presence of an S-9 signal – terrific.

Silky-smooth QSK.

The 7700 is a very quiet radio ... don't be surprised if you find yourself looking to see if your antenna switch is selected to the dummy load or your antenna.

Although I really like this radio, and it is certainly the best performing radio I ever owned (and I have owned a pant-full) one obvious flaw is the absence of Dual Watch. Yes, I know there are those who say that inclusion of Dual Watch would have degraded receiver performance, but I for one would gladly accept the very minor degradation of receiver performance while the rig was operating in the Dual Watch mode (I am sure Icom could have figured out a simple way to make that switchable to maintain top shelf receiver performance when Dual Watch is not kicked-in). My guess is that the decision to abandon Dual Watch in the IC-

7700 was more about protecting the sales of the IC-7800 than concern about IC-7700 receiver performance.

I dislike the asymmetric bandpass scheme which takes effect when programming the IC-7700 CW bandpass to 600 hz or more - it is annoying. AB4OJ provides an outstanding dissertation on this topic, on his web site, which can be accessed at <http://www.ab4oj.com/icom/audioimg/img.html> .

I wish the receiver included an additional preamplifier section like the FT-2000 Contour control. When I was chasing weak signals it would be very useful. The FT-2K Contour control is a **fabulous** feature, and one of the very few that the FT2K dog-of-a-receiver possessed (63 db 2kc dynamic range – ugh!).

The “Drive Control” takes some getting used-to, since it has to be monitored and adjusted in conjunction with the “RF PWR” control.

The only real problem I have noticed with the IC-7700 is the high SWR upon first dit with my Drake L-7. The IC-7700 delay is fixed, so there seems to be no way around that stock configuration other than the use of my Heil pistol grip to key the L-7 before initiating a CW transmission. I could install a QSK interface, such as the one from Array Solutions or Ameritron, or modify the L-7 by adding a QSK module such as the one from RF Solutions - <http://www.rfsolutions.com.au/> . Or, maybe I will go with a new QSK 3-500 (2) amp from <http://www.grotec.com/> . We shall see.

Three passband filter choices can be programmed, for each mode, which can be recalled with the “FILTER” button. (An array of options accompanies the selection choices, such as sharp/soft profile, and selection of associated roofing filter). Once any of the programmed filters is recalled during normal ops, that selection can then be further tailored (narrowed, widened, skewed) with the TWIN-PBT control. Nifty as this is, I often find myself fiddling with the PBT control after I have already selected the narrowest CW filter I have programmed (I presently have 1kc, 500hz, and 200hz programmed). This tells me I need more than three pre-programmed filters ... I use the 1kc position when scanning the band, and select the narrower positions as conditions warrant.

Overall, this is a great radio. Although mainly a CW operator, I decided to use the Heil PR781 microphone fed directly to the rig, and I receive great audio reports. If you have owned an Icom rig, the user interface for the IC-7700 will be familiar and you will adapt to it easily.