A Comparison of the Yaesu FT-817 and the Icom IC-703

By Malcolm Smith G0DPT

The two transceivers compared are both owned by myself, the FT-817 from new some years ago and the IC-703 relatively recently second hand this year from the original owner who realised he wanted an IC-7000 and sold it to me with only a few hours use as new. The IC-703 was the non-plus model (i.e. without 6M, but had the UT-106 DSP option fitted). Most amateurs are more than familiar with the specifications of the two transceivers, so there is little point repeating them here, but both manufacturers' websites quote the current specification of each.

Yaesu FT-817

When the FT-817 was announced, I knew immediately that I was going to buy one as soon as the dealers started having stock. When I first joined a radio club, the smallest way to get 160m to 10m, 6m, 2m & 70cms in one Yaesu package, was in a FT101/902 series HF transceiver and FTV-901R transverter package weighing in at around 35Kg and being dependent upon a mains supply present or generator for power. The output of the FT-817, although just 5W, is just over 1Kg by comparison and powered internally by 8 x AA battery cells. This opened up a new world for lightweight QRP operators, with a transceiver that would fit in many outdoor coat pockets and simple wire antennas in another.

Unlike earlier examples of "portable" HF transceivers, the FT-817 is far from a basic transceiver and is feature rich. This comes at a price of having only a small display screen area and few buttons on the front panel, so operation is via sets of menus. I appreciate why it's been done and accept its use, but unlike most users, I have never really learnt to love this method of using a transceiver. I'm sure I'm one of the few. The success of this transceiver and those which were marketed after to compete with it probably came as a great surprise for Yaesu, who must have sure felt it would be a second transceiver that would get light weekend or holiday use - as it was portrayed in advertising. Instead, thousands saw the opportunity for a new way of operating HF outdoors, and many amateurs pressured for space indoors were able to sell off older equipment and reclaim space back within the house. A transceiver really marketed as a second HF transceiver rapidly became the only transceiver, replacing the mobile as well in many cases.

The FT-817 has had some reliability issues, and I'm left wondering to some extent if it has been caused by its own success through amateurs seeing the diverse use it can be put too. Certainly the RF finals have been upgraded in later ND models, although some have had terrific abuse and never suffered any problems and some have been 'kid glove' treated and failed. However, despite some concern the model has overall proved reliable.

The FT-817 comes with an antenna, which is really not great on any frequency apart from 2m & 70cms, so for HF operation, there are a variety of options. Almost immediately upon launch, a whole world of antennas and accessories for the FT-817 and those small transceivers that followed became commercially available. I bought an ATX walkabout for 80m to 6m, but I found I distrusted the internal SWR meter and the front panel BNC connection is placed under considerable stress with such a large antenna.

Of course, one of the cheapest and highly effective antennas is a long wire with an ATU. The big disadvantage is having something else to carry and connect up, but something has to give for space if you fit so much in one small box. I have tried a number of ATUs over the years, and like the Mizuho KX-3 (which is really a receiver ATU but will work well with transceivers up to 10W output), the MFJ-971 (watch internal build quality) but is quite large to carry, but for matching long wires the SGC SG-211 mini smartuner is excellent, small and runs off batteries that will last for years. That's the one I kept.

Icom IC-703

Icom launched the IC-703 some years later and it's clear that they listened to the grumbles about the FT-817. The IC-703, is almost twice the weight of the FT-817, doesn't run on internal batteries and the current model doesn't cover 2m or 70cms. Yet in spite of these differences, it's very much an alternative to the FT-817 designed from understanding the way amateurs started to use small HF portable transceivers.

Within moments of using it, although this transceiver is also menu driven like the FT-817, you feel with the large display, solid case, and superb receiver that you have a 'proper' HF transceiver and not a portable - indeed many IC-7800 owners who have both give very favourable reviews of the IC-703 in comparison. The output in the shack connected to a PSU (or in a mobile installation) provides 10W output and drops to 5W output running on an external battery. The biggest and most useful feature is the internal ATU, which works extremely well.

For portable operation, the IC-703 needs an external battery. I looked at many options, including Icom's own (LC-156 backpack, BP-228 battery and BC-155 charger) and eventually bought them as a package deal from a radio shop on the other side of the world, as even after carriage and import duty, it was considerably cheaper than buying locally. I was somewhat sceptical about the backpack, but I have to say that was completely unfounded and is very well made with the transceiver and battery cushioned and catered for well (although there is very little room for non-radio needs on a walk) - and with the separation cable (like the IC-706), it is possible to operate as pedestrian mobile with the backpack on, a suitable aerial coming from the back and operating the control face - watch no one treads on your trailing counterpoise!

The Icom model has had a few failures with finals, but mainly with IC-703+ models although Icom do appear to be swift in resolving any problems.

Summary

In conclusion, both radios are great for outdoor portable use, but they tackle how this is achieved in different ways. If you truly want a portable to put in your pocket and have the VHF & UHF bands available, there's only one choice - the FT-817. If you are only an HF operator who is looking for the shack transceiver outdoors and are happy with a heavier load, the IC-703 will be for you. Both transceivers are sufficiently different to be unable to recommend one over another; both are competent at receiving and sending CW and SSB, so which bands you operate and from and where, will help you decide if this kind of low power transceiver interests you.

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Links

Support page for the FT-807, including other links
http://www.ka7oei.com/ft817pg.shtml

Abridged details for the Yaesu FT-807
http://www.rigpix.com/yaesu/ft817.htm

Icom IC-703 details
http://www.icom.co.jp/world/info/ic-703/index.html
http://www.amcom.nl/ham/ic-703.htm

