

RTTY The Long Distance Typewriter

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To some people, swimming the channel or climbing a mountain is their idea of a hobby but mine is somewhat more leisurely and a lot less energetic. By just sitting down at my teleprinter and typing a few words I can be in touch with another enthusiast on the other side of the world watching his machine print out almost instantaneously what I am typing in my shack.

It was largely due to the research and hard work of one Frederick Creed (who worked for the Central & South American Telegraph and Cable Company in Peru) and who became frustrated with the then used method of sending messages by telegraph. In 1890 he developed from an old typewriter a machine which enabled complete Morse signals to be punched into paper tape.

Creed's system formed the embryo teleprinter of today, but the first teleprinter as we know it, came from the USA — the Morkrum teletype machine which operated on a 5-unit start-stop signalling code and was a direct printer, that is to say, it printed messages directly from incoming signals instead of a punched tape.

The first experimental teleprinter service to be used commercially was operated by the press in 1915, and in 1917 the 'United Press' completed a contract for three private lines. From this small beginning grew the worldwide use of 'Telex' as the commercial version

is called. It only really got under way after the last world war, but amateurs became interested and started to use ex British Post Office machines in the early 1950's. Radio amateurs, of course, do not use landlines and so naturally their messages are sent and received by radio. When I first saw this in operation at a radio society exhibition on the stand of the British Amateur Radio Teleprinter Group (known to all as BARTG), I was hooked. The idea of watching a piece of machinery actually printing a message in front of my eyes uncontrolled by human hands was simply magic to me. I immediately scoured the classified advertisement columns of the radio magazines for a secondhand teleprinter. In due course I was able to obtain a machine together with a 'terminal unit' or 'demodulator' (which is necessary to change the incoming signals into a means of operating the teleprinter, which I shall refer to later on), and risked at least a slipped disc carrying it to my shack.

What it is

No doubt many of you, licenced amateurs and shortwave listeners alike have tuned into something that sounds like 'jingle bells' in various parts of the band and wondered what it was. That is RTTY or Radio Teletype, and it is a method of communication where the sender types a message on a keyboard and the distant operator sees it appear in print,

on a roll of paper or a length of paper tape.

Where to find amateur RTTY

Amateur RTTY operates on the 6 HF bands as follows: 3.6; 7.04; 10.145; 14.1; 21.1; and 28.1 MHz, all frequencies plus or minus a few kHz. Although most of the long distance contacts seem to be on the 14MHz band, you will also find RTTY operation on VHF and UHF, that is 144 MHz and 432 MHz. These are usually short distance contacts working on 'autostart'. I shall discuss this later. The arrangement of the RTTY segments of our amateur frequencies is shown in Fig. 1.

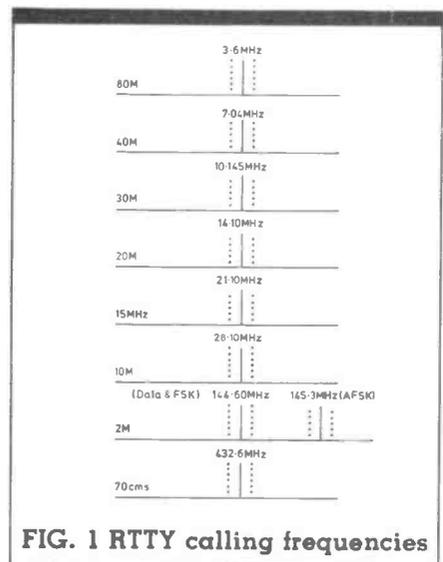


FIG. 1 RTTY calling frequencies