

unable to get any sensible copy to start with. Try the higher part of the 14MHz band, or, if you possess a general coverage receiver, tune through the 8MHz band. I am quite sure that you will find some sort of copy there.

If by now you feel sufficiently confident, then switch on the transmitter and have a go. I must tell you at this point *not* to worry about typing speed... RTTY is not a rat-race, not even in contests. Most RTTYers are very tolerant of newcomers. The only thing is this: do keep you overs short. Five minutes is enough to start with in the early days and never over ten minutes.

If joining a QSO or replying to a CQ call try and zero beat your mark frequency with that of the other station, and then start your transmission with half a line of RYRYRYRY (it helps the other operator to tune you in). Follow this with Carriage Return (C/R) Linefeed (L/F) Letters (LTRS) G4XXX G4XXX de G4YYY G4YYY C/R L/F LTRS LTRS... and you're off! (Its also a nice practice to type in the time in GMT, after the callsigns; if nothing else it makes log keeping much easier). At the end of every line send at least one sequence of C/R L/F LTRS LTRS and in conditions of weak signals, QRM etc, throw in a few more for good measure. As with all modes, a good number of hours spent listening/copying before actually turning on the 'Transmit' switch gives invaluable operating instruction. Shown in Fig. 5 is a copy of an actual RTTY QSO which I had with G3MEJ on 144.600 MHz FSK.

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CQ CQ CQ CQ CQ CQ DE G3RDG G3RDG G3RDG G3RDG G3RDG G3RDG
CQ CQ CQ CQ CQ CQ DE G3RDG G3RDG G3RDG G3RDG G3RDG G3RDG
CQ CQ CQ CQ CQ CQ DE G3RDG G3RDG G3RDG G3RDGG PSE K K K
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RYRYRYRYRYRYRYRY
G3RDG G3RDG DE G3MEJ G3MEJ.... HALLO THERE KEN HOWS THINGS?
G3RDG DE G3MEJ PSE K
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RYRYRYRYR
2133 GMT
G3MEJ DE G3RDG...OK THERE PAUL. NICE TO WORK YOU AGAIN.
I CALLED YOU THE OTHER EVENING BUT YOU MUST HAVE BEEN OUT.
I GOT NO ANSWER. YOU ARE 589 589 WITH ME THIS EVENING
SO BTU.. G3MEJ DE G3RDG PSE K K
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RYRYRYRYR
G3RDG DE G3MEJ FINE KEN. WELL I HAVE JUST HAD A CALL FROM
DOWNSTAIRS SO I WILL SIGN WITH YOU NOW. SEE YOU AGAIN SOON
G3RDG DE G3MEJ AR SK
G3MEJ DE G3RDG OK PAUL WELL IT IS A SHORT ONE BUT ALL THE BEST.
TILL NEXT TIME.
G3MEJ G3MEJ DE G3RDG G3RDG AR SK... TIME 2145 GMT
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Fig. 5. RTTY contact on 144.600MHz FSK.

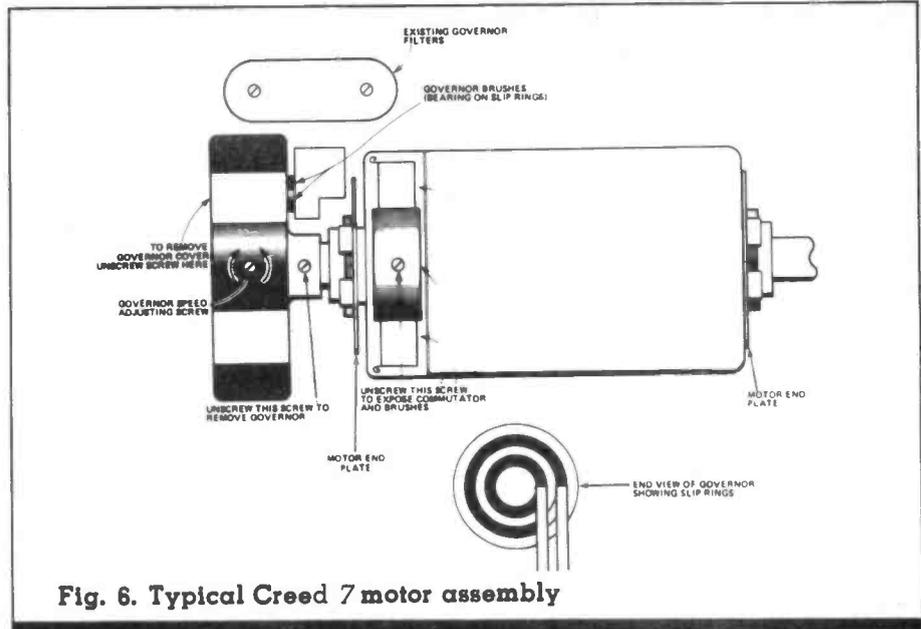


Fig. 6. Typical Creed 7 motor assembly

### Activity

Most amateur activity will be found on the HF bands especially around 14090 KHz, but there is a strong and growing interest in VHF printing on 144.600 MHz (FSK) and 145.300 (AFSK) with a little activity on 70cms. There is now an RTTY repeater operating on 70cm. Under the terms of the new licence (January 1977) British amateurs are allowed to transmit data on VHF and higher frequencies so that from time to time signals may be heard which just print garble. Under the latest licence schedule (22nd March 1982) amateurs are now allowed to transmit RTTY on 160 meters between 1.810 and 1.850 MHz at the same power input as that used for phone transmissions on this band.

On the HF bands amateur RTTY

is transmitted as FSK in the upper part of the CW sub-bands, for example in the 3.5 MHz band our slot is around 3.590 MHz. The other RTTY frequencies over the amateur spectrum were given in my previous article. On VHF two modes are in use as mentioned above. AFSK on 145.300 MHz is used for local 'ragchews' with a range of about the same as phone, and 144.600 MHz FSK which is used for greater distances.

Of all the bands, twenty metres is the most popular but Sunday mornings produce a high 'G' activity on 80 metres before and after the BARTG mid-day news bulletins. There is also some activity on 40 metres (7040kHz), and the Continental countries are active most evenings for those who prefer to range further afield. VHF printing varies throughout the country so I suggest that you contact local RTTY enthusiasts to check on the level of activity in your area. BARTG provides membership lists to all its members annually and to new members on joining.

Each week there are several news bulletins transmitted, the most well established being that of PAOAA (Fridays 2030 GMT on 3.600MHz + or - QRM at a speed of 50 bauds). PAOAA also transmits the bulletin at the same time on 14090kHz at a speed of 45.45 bauds. There are several German news bulletins transmitted at various times on Sundays. There is also the BARTG news bulletin which is transmitted by various stations covering most of England and Wales, primarily on 2 metres, but