## THREE MULTIMODES REVIEWED



Anyone who has kept an eye on advertisements in this and other publications can't have helped noticing that recently there has been an increase in the number of multi-mode 2m rigs available. The choice can at times be a little bewildering if one has no local 'emporium' where comparative tests can be carried out. Even then, a few minutes 'twiddling' is hardly sufficient to realise the potential or discover the idiosyncracies of modern 'all singing, all dancing' rigs. I must come clean at the outset and declare an interest in one of the following rigs, for I bought it a few months ago. When I was asked to carry out this comparison I jumped at the chance but with one reservation; how would my pride and joy stand up to the others? Hopefully it will not be too obvious which rig is mine but if a little bias slips in please forgive me — over £350 is a lot of money to throw away!

The three chosen for com-

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## Under starter's orders: from the left Yaesu FT-480R, Icom IC290E, Trio 9130.

parison are the Yaesu FT48OR which appeared at the end of 1980, the Icom IC290E which followed in late 1981, and the Trio TR9130 which surfaced rather — hesitantly in summer 1982. The TR9130 may be the newest rig but it is really the TR9000, which has been available for a couple of years, with some 'user suggested' modifications.

## Documentation

One of the many criticisms made about the 'modern' radio amateur is that he/she tends to be relying more and more on black boxes, with little thought as to what goes on inside. It seems that Yaesu and Icom have done their bit to dispel this rumour. These two manuals are extremely comprehensive making the new owner feel thoroughly at home with his purchase, whether a newcomer or old hand.

The Yaesu manual is 36 pages long with four well-drawn, large circuit diagrams on unfolding sheets. The operating instructions are fairly clear but I have one small gripe about descriptions of the frequency range and synthesiser steps since the USA version (model A) is assumed throughout. The description of the circuit operation is very thorough and the external socket connections are shown clearly. Four well-labelled photographs of the opened rig allow the inquisitive to find their way around the set and it is a very nice touch that the next two photographs show all the alignment and test points in the rig along with comprehensive instructions on setting up the transmit and receive sides. The final page of the manual