

Some form of plug-strain relief would be welcome. Yaesu and Icom both seem to be catering for the larger car, if the lead length is anything to go by! Another hair splitting point is the position of the fuse in the lead. The Trio and Icom rigs have this near to the set, whereas the Yaesu has it closer to the free end, which invariably means a quick hunt under the carpet/dash etc if replacement becomes necessary.

Mobile mounting

I have owned an FDK700, FM only, rig for a couple of years and have frequently longed for a third hand while struggling to align it exactly into the channels of the mobile mount, before tightening up the side screws individually. Consequently this is one feature that I now check up on at an early stage when comparing different rigs. The 480R has a system similar to the FDK but I found it considerably easier to mount. The other two rigs have quick release systems which are very easily mastered. The 290E mount has the rather useful feature of a clip and loop which can be used to padlock the rig into its mounting. This seems a thoughtful feature but is unlikely to deter the determined thief.

Microphone

The microphone is, to my mind, often ignored in reviews which seems rather odd for, unless you are going to use a mobile mic (and if you don't, you ought to!) or you have a base station mic on a stand, you are going to be clutching this little wonder for many hours. (Why can't they make left-handed mics?) Microphones seem to be sprouting controls everywhere nowadays and it is with some pleasure that one finds the Trio mic small, simple and lightweight, with just up/down and push to talk (PTT) buttons. The Yaesu's PTT is slightly more positive and nice to the touch but the Icom's PTT is awful with a very thin plastic overhanging lip which could easily be caught and, one would imagine, broken. (I didn't try it!). Also the Icom's up/down buttons are very stiff and guaranteed to give you a sore thumb if you like using this feature.

Looking at the rigs themselves,

the 480R looks very neat and most impressive, but, with so many similar looking and rather small buttons all in a line, I can foresee problems with mobile operation. Also the 480R has three slide switches mounted on the *underside* of the set. One's obvious fears are confirmed when you notice the many warnings about using stands etc to prevent damage to them. The 9130 is also most impressive, although possibly the least aesthetically pleasing due to many different types of controls and less formal panel layout. However, this does have the advantage of making quick or mobile operation much easier, due to the grouping of controls for a particular type of function. Unfortunately the 290E gives a first impression of being rather shoddy; the simplex/duplex switch seems particularly cheap and nasty, and I would not be surprised if it caused problems after a few years' operation. The *priority* button looks as though it is an afterthought, having a panel hole drilled about three sizes too large for it. Also due to other controls the priority button is very difficult to get at, but perhaps that's the idea!

The next step was to get inside the rigs and here the first problem arose for the 480R takes quite some time to get into (what's to hide?). Perhaps there's a knack to opening it which I couldn't find (no chance of carrying out quick mods here). All three rigs are pretty crowded in-

side and the general impression is that of good quality construction.

The 480R is possibly the 'messiest' with wires everywhere and no attempt at a cable-form. Also there are many components which appear to be put in as modifications/afterthoughts which could make circuit tracing awkward. Much of the inside is protected from vibration by a thin layer of plastic foam which is a nice touch but making it difficult to get at in a hurry. The 290E has evidence of the extensive use of plugs and sockets for board connections and access to the components, except for one double stacked pair of boards, is quite good. Trio have gone to a lot of trouble to neaten up the inside of the 9130, with extensive use of plugs/sockets and neat cable-forms around the sides of the boards. This rig again would present problems if the need arose to 'dabble', due to the compactness of the boards.

As far as the speakers are concerned, the 480R comes off best with a 3in square, 2W speaker, the 290E has a 2¼in round, 0.3W one (well it says 0.3W on it!) and the 9130 has a miserly 2in round one of unspecified power rating. All three rigs seem to employ a final RF power amp module rather than discrete components and while there is no apparent reason to doubt their durability, I feel sure that many people will feel a little wary of their inclusion with a view to easy repairs.

TABLE ONE

DYNAMIC RANGE IN dB AS CALCULATED FROM TEST 6
TRIO 9130: 95dB ICOM 290E: 93dB YAESU FT480R: 87dB

DYNAMIC RANGE IN dB AS CALCULATED FROM TEST 7
TRIO 9130: 62dB ICOM 290E: 73dB YAESU FT480R: 66dB

DYNAMIC RANGE IN dB AS CALCULATED FROM TEST 12
TRIO 9130: 80dB ICOM 290E: 73dB YAESU FT480R: 83dB

DYNAMIC RANGE IN dB AS CALCULATED FROM TEST 13
TRIO 9130: 60dB ICOM 290E: 52dB YAESU FT480R: 57dB