the benefit of any new readers who did not see them before — and with the added suggestion that if you do not mind mutilating your copy of *Ham Radio Today* you could with profit cut out these tables, paste them on a small card and hang them near the transceiver in the vehicle — or keep them readily to-hand in the glove box.

But Which Band?

With both the 2m and the 70cm tables before him the mobile operator may be in a state of some doubt about which band to use. There is a simple answer: If your funds allow, use both.

In practice, a 70cm installation in the vehicle will produce more rewarding contacts than on 2m because, for one thing, the population on 'Seventy' is at present lower than on 'Two' and there is thus more repeater time available. For another, many fixed stations on 432MHz use multi-element vertical beam antennas that present to any repeater a signal enormously stronger than anything offered up on 'Two' by those exiguous omni-verticals which are still so widely used (and more's the pity).

An additional bonus arises from all this: because there are many very loud beamed signals available from fixed stations on 70cm the chance of arranging a simplex contact from a mobile installation is very promising for much of the time.

To equip oneself with both 70cm and 2m means of course having two antennas on the car roof, with the consequent need to separate them from one another — as far as is mechanically possible. Always use magnetically mounted antennas: they are easier to remove when the vehicle must be left unattended and the presence of several conspicuous 'skyhooks' might attract the attention of would-be thieves.

Table 1 — the repeater channels on 2m

Channel No	FM repeater input at	Repeater output at
R0	145.000MHz	145.600MHz
R1	145.025MHz	145.625MHz
R2	145.050MHz	145.650MHz
R3	145.075MHz	145.675MHz
R4	145.100MHz	145.700MHz
R5	145.125MHz	145.725MHz
R6	145.150MHz	145.750MHz
R7	145.175MHz	145.775MHz

Note: At 2m inputs are *low* and outputs *high*.

Table 2 — the repeater channels on 70cm

Channel No	FM repeater input at	Repeater output at
RB0	434.600MHz	433.000MHz
RB1	434.625MHz	433.025MHz
RB2	434.650MHz	433.075MHz
RB3	434.675MHz	433.075MHz
RB4	434.700MHz	433.100MHz
RB5	434.725MHz	433.125MHz
RB6	434.750MHz	433.150MHz
RB7	434.775MHz	433.175MHz
RB8	434.800MHz	433.200MHz*
RB9	434.825MHz	433.225MHz
RB10	434.850MHz	433.250MHz
RB11	434.875MHz	433.275MHz
RB12	434.900MHz	433.300MHz**
RB13	434.925MHz	433.325MHz
RB14	434.950MHz	433.375MHz
RB15	434.975MHz	433.375MHz

* At present widely used for simplex: not yet allocated to repeaters.

** Designated for use by RTTY repeaters.

Note: At 70cm inputs are *high* and outputs *low*.

Practicalities

Having equipped himself/herself with a transceiver for either 2m or 70cm (or preferably both), the mobile operator new to the repeater scene and setting out for the first time to see what it looks like will, if wise, do a lot of listening first to ascertain how other local 'mobileers' are going about gaining access to the local 'box'.

What will be discovered is that the majority of repeaters in the UK are opened by offering them a tone-burst (and before you buy a rig for mobile use make sure it wears a button labelled 'Tone' or 'Access' or something similar). When offered a tone, the repeater identifies itself perhaps by sending its callsign in the morse code, perhaps by a single long dash, perhaps by a single 'dit'. There is no standard method of telling the mobile to go ahead and transmit. Perhaps this is a good thing: at least repeaters (or some of them), possess their own distinctive personalities apart from their callsigns (which they are obliged by licence to radiate at regular intervals).

Many repeaters after receiving a tone-burst require a few words of speech from the interrogating station. This syllabic access is intended to dissuade 'phantom bleepers'. By and large it does. A phantom bleeper *(A term given to people(?), often without a transmitting licence, who attempt to 'access' a repeater by a tone burst merely in order to deny access to others. Thus, by introducing additional syllabic access everyone is required to speak before fully gaining access — and is thus at least somewhat identifiable — Ed.)* attempting syllabic access may be readily tape-recorded and its voice identified.

Operational Procedure

Having opened up the required repeater the user demonstrates his/her expertise in amateur radio communication by swiftly passing whatever information needs to be passed — and then shutting up (or down). The preliminary listening will have indicated how long the time-out period is — which is no excuse at all for using all of the time which a repeater makes available. Waffling through 'the box' is selfish and denies its use to others who maybe waiting, who may indeed be anxious to ask their way through your own town. One person's