

which had come forward at that time precisely met the requirement for 'the greatest good': GB3BC already served the heavily populated areas either side of the Bristol Channel (hence BC), GB3MH in the Malvern Hills was planned to provide an extension of service from Bristol up the traffic flowline to the West Midlands; another would serve the south coast conurbation around Southampton and Portsmouth, and a fourth was planned for London. Truly the GB3PI experiment was gathering its converts!

Because the licences for all repeater stations would be paid for by the national society and because all applications would be vetted by its VHF Committee before they were submitted to the licensing authority, adequate control of the repeater chain was exercised right at the start and has continued very effectively to this day. Logical development of the chain followed, phase by phase. Anarchy was avoided.

For example, one of the decisions taken before the end of 1974 was to limit the repeater spectrum to the frequency area R0 (145.0MHz) to R7 (145.775MHz), thus leaving 145.8MHz (technically within the European repeater orbit) to be preserved in the UK as a widely used net and Raynet frequency (then) and as a satellite frequency (later). Much thought was turned also on which repeaters should go where if co-channel interference was to be mimimized, (It could not be prevented: tropo lift conditions and so on would ensure that at times inevitably more than one repeater output signal would be heard on a given channel).

## Next band up

"But if the available space for repeaters on 'Two' is filling up why don't we try 70cm? There's more room on the next band up."

This is what the more forwardlooking repeater groups were saying by now. Perhaps few of them could have forecast then that within a few years there would be more 70cm repeaters in the UK than 2m ones, and that the even-numbered channels would fill up so quickly on 70cm that it would be imperative to allocate the oddnumbered ones. Yet that is how the 433-435 MHz area has developed. And it all began in 1974 when three schemes were put forward to place repeaters in that 'next band up'.

And who would be the clientele for all these repeaters when they came on stream? Quite obviously, the mobile operators; their operational ranges would be hugely extended with a repeater's aid. There were thousands of them waiting for just such an opportunity. Their numbers happen to be known precisely: nearly 3,500 Class A and over 1,500 Class B held the separate mobile transmitting licence

 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 inp	outs 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	433.050MHz	
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	433.350MHz	
RB15	434.975MHz	433.375MHz	
* At present widely used for simplex: not yet allocated to repeaters.			
** Designated for use by RTTY repeaters.			