Racal RA17 Ser. No. N371, 3rd report, 01/04/19

This is the third progress report on the refurbishment of RA17 MK1 serial number N371. All the relevant components have now been replaced and the receiver is now running very nicely although a couple of issues were discovered during this stage of the work.



Refurbishing the 1MHz Oscillator, Harmonic Generator and Harmonic Mixer stages is always therapeutically rewarding, although as can be seen, the components in the compartment on the left (Harmonic Mixer and 37.5MHz amplifiers) are fairly tightly packed. Originally the 220nF capacitor (top left) was incorrectly wired across part of the HT circuit. Its replacement is now correctly wired across the heater supply. The 470-ohm resistor to the left of the original rectangular 220nF capacitor is odd in that it is far older than any of the other 1957-vintage resistors in that its banding follows the pre-war 'body-tip-spot' system. This resistor was 'too easy' to remove, leading me to believe that the original resistor had been replaced. Was this the reason the heater choke in the filter compartment for this area had been over-heated? The yellow wire (bottom right) originally 'fell off' pin 6 of the Harmonic Generator. The joint has since been made good. The receiver was again powered up and tested and found to be working, however there was still some noise on the recovered audio. Maybe refurbishing the 2nd Mixer would clean this up?...