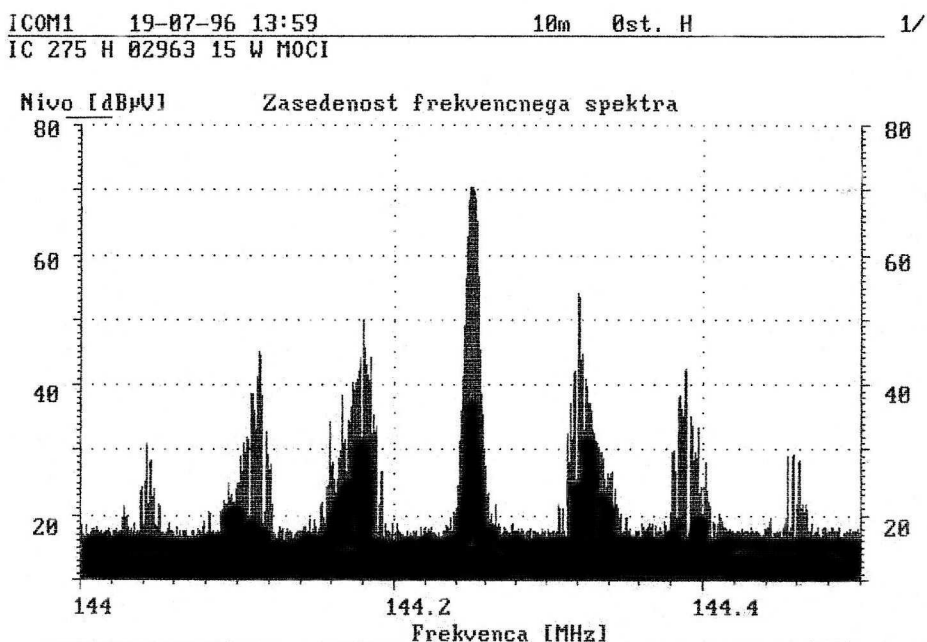


IC-275H reduced power splattering : solution by Marjan - S51MW

Here is description of troubles with IC 275H we discovered back in 1996:

IC 275H **splattering only with reduced power** at +/-70kHz , +/-140 kHz (and so on...) from transmitting frequency. This splatters (+/- 70kHz) are, with some stations, only 15dB below main signal. Splatters are very strong on SSB (normal talk) and not so strong in CW, where they sounds like clicks. **With key down there are no splatters**, also when you whistling in microphone. You can easily hear this, when you listening to IC 275H station with other station, plus or minus 70kHz from transmitting frequency. Splattering completely dissappears with full power, but when you driving linear amplifier this is not the case...

Here is the picture of 1 minute talk, with power reduced to 15W on IC-275H, from spectrum analyser (with memory ON). Imagine, how the band can look like, if there is five stations like this, driving 1kW amplifires in 50km radius?



We tried to get some help from ICOM on internet, but no response. So we asked Marjan - S51MW, our club member, to solve the problem. Here it is, what he did on our (S50C) club station:

Troubles are on MAIN UNIT and you must change:

R253 = 220 ohm (before 150 ohm)

C196 = 4u7/10V tantalum (before 0.47u) ATTENTION !!! + is on GND

Move white wire from one side of the R253 to other side of the same resistor, that is on C196. This is correct in schematic diagram of the MAIN UNIT, but ICOM made a mistake on PCB...

After this changes, splattering completely gone.