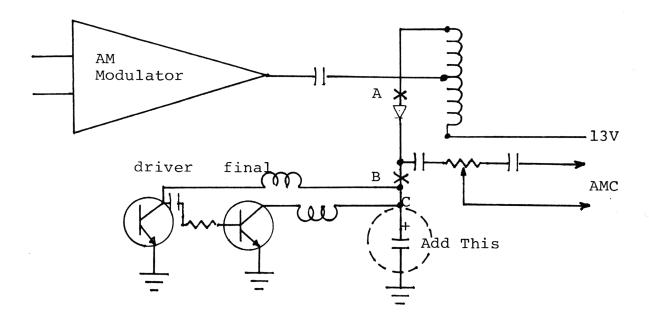
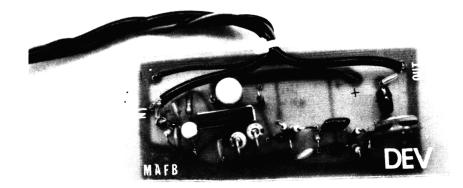
NEW FRONTIER: FM CB

France and England have adopted 27MHz CB with one difference. Instead of the conventional amplitude-modulated carrier, they are using frequency modulation due to less RF interference problems. A standard PLL CB AM radio can be converted to FM easily.

We have designed an IC mike amp. with active filter which connects to the VCO varactor. The voice signal changes the VCO frequency at an audio rate, hence FM. The AM modulator is disabled as shown below:



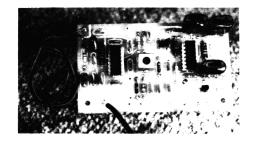
- 1. Cut board at points A and B shown above.
- 2. Run a wire from C over to the power switch (+13.8V). Add an additional 2200uf/25V Electrolytic capacitor at C as shown.



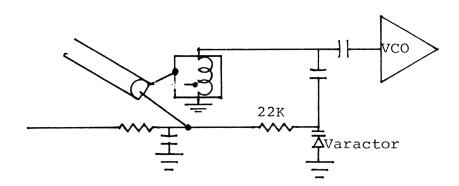
NEW FRONTIER: FM CB (CONT)

Installation of Deviation Board





- 1. Connect RED wire to 9Volt Xmit source.
- 2. Connect BLACK wire to a good ground.
- 3. Unsolder the ground and audio hot wires on the chassis mike con.
- 4. Install the input wires from new board in their place.
- 5. Solder shield of output coax to the VCO CAN. Solder the center wire to the VCO varactor as shown below.

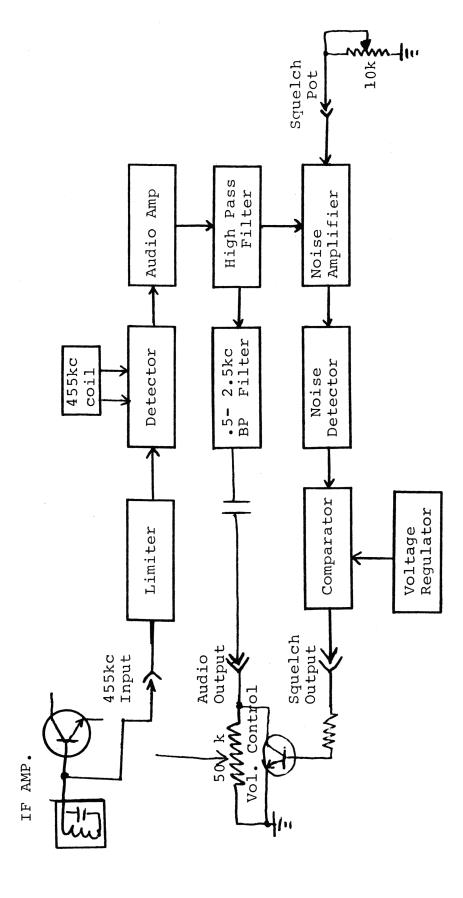


We also have available a high quality FM IF strip for the receiver, which uses the 455KHz IF signal as the input. Also has outputs for noise activated squelch. The heart of the system is the LM3065 FM IF system.

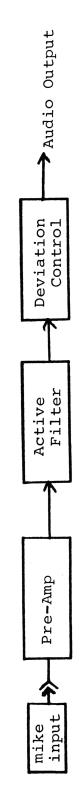
Complete general hook-up instructions are included with the "FM EXPERIMENTER KIT" (#118), which includes the "MIKE AMP/FILTER DEVIATION" board (#118A) and "FM RECEIVER CONVERTER" board (#118B).

One point that should be made is that FM CB will not be found to be the ultimate panacea for all of the problems associated with regular CB transmission, and reception. FM is FM, and as such, will operate on a line of sight basis. One thing that can be said is that when used with a repeater, it can be a very useful way to go.

NOTE: The "MIKE AMP/FILTER" (#118A), board can also be used as a mike amp on AM, and works super in conjuction with the VSB-1!



BLOCK DIAGRAM OF FM RECEIVER BOARD USED IN AM CB CONVERSION



(MAFB) USED TO MODULATE THE ALSO CAN BE USED AS A BLOCK DIAGRAM OF MIKE-AMP-FILTER-BOARD VCO RESULTING IN FREQUENCY MODULATION. PREAMP FOR THE VSB 1 Where Required.