September 27, 1979	
HX-1681	Bulletin
No:	
CW Transmitter	HX-1681-1

## 20, 15 and 10 Meter HFO Oscillators Run at 5th Harmonic Frequency Instead of

3Rd

All three HFO slugs (L103, L104 and L105) must be preset to 15 turns down from the top of the coil slug. There is interaction between the oscillators so they must be preset properly for them to operate on the correct frequency. Once preset, each one can then be adjusted properly per the manual.

October 22, 1979	
HX-1681	Bulletin
No:	
CW Transmitter	HX-1681-2

Low Power Output on 10 Meters

Change L302 [PN 45-83] on the Driver circuit board to a 22 K ohm, 1/2 watt resistor [PN 6-223]. The resistor raises the driver tank impedance from 1440 ohms to 1800 ohms, making it easier for the driver tube, V301, to develop the rquired output levels. This change will be made in the next production run.

The driver plate current is a strong function of the grid bias, which is sensitive to the +12 volt power supply. If more power is needed and the driver grid bias (key down without RF drive) is more than -6 VDC, the bias can be brought down to this point by adding a resistor in parallel with R323. Different values may have to be tried; 47 Kilohm, 1/2 watt [PN 6-473] is a good starting point. This lowered grid bias increases key-down plate dissipation on the 12BY7 to about 8-9 watts, which is in excess of its rating. This is okay with CW operation; however, when tuning up, keep the key-down time short.

If the +12 VDC line is slightly low (+11.5 VDC), the RF powr out may be low. The output of the voltage regulator can be increased by 0.7 volts by inserting a Part # 57-27 diode in series with the regulator ground lead. This can be done by cutting the foil between the center lead of U401 and C401. Then solder the diode across this cut with the anode facing U401 and the cathode conected to ground. Perform either one of these second two modifications only if changing L302 does not correct the problem. \_\_\_\_\_ July 29, 1980 HX-1681 Bulletin No: CW Transmitter HX-1681-3 80-Meter HFO Signal Low or Drops Off ++++ Information not yet available ++++ \_\_\_\_\_ October 10, 1980 HX-1681 Bulletin No: **CW** Transmitter HX-1681-4 Output Oscillates on 10 and 15 Meter Bands ++++ Information not yet available ++++ \_\_\_\_\_ November 4, 1980 HX-1681 **Bulletin No: CW** Transmitter HX-1681-5 Rotary Switch Detent Change ++++ Information not yet available ++++ \_\_\_\_\_ November 20, 1980 HX-1681 Bulletin No: CW Transmitter HX-1681-6 Manual Correction ++++ Information not yet available ++++ \_\_\_\_\_ January 28, 1981 HX-1681 Bulletin No: **CW** Transmitter HX-1681-7 Minimizing Key Clicks ++++ Information not yet available ++++ \_\_\_\_\_ April 22, 1981 HX-1681 Bulletin No:

CW Transmitter

## HX-1681-8

## Muting Receivers with Muting Voltage Line Greater Than 40 Volts

++++ Information not yet available ++++

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July 15, 1981

HX-1681 CW Transmitter Bulletin No: HX-1681-9

Sidetone Modulates the Carrier

++++ Information not yet available ++++

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September 25, 1981

HX-1681 CW Transmitter Bulletin No: HX-1681-10

Low Power Output

++++ Information not yet available ++++

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November 30, 1981

HX-1681 CW Transmitter Bulletin No: HX-1681-11

Transistor Q302 Failure

++++ Information not yet available ++++

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April 29, 1982

HX-1681 CW Transmitter Bulletin No: HX-1681-12

Improved Transmitter Operation and Heat Dissipation Around 301

++++ Information not yet available ++++

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September 21, 1984 HX-1681 Bulletin No: CW Transmitter HX-1681-13

Low Power on 10 Meters

On the output filter board, spread the turns of coil L607.

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That's all I show for the HX-1681 (1979-89). Enjoy!