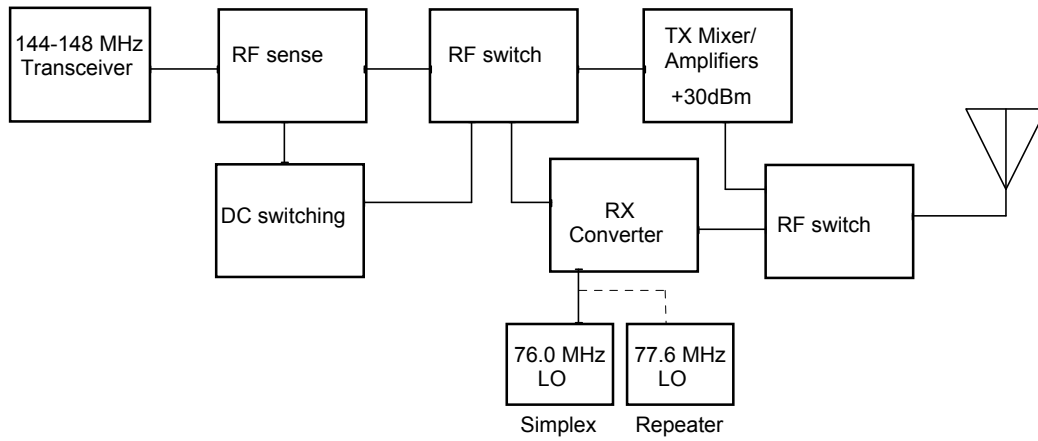
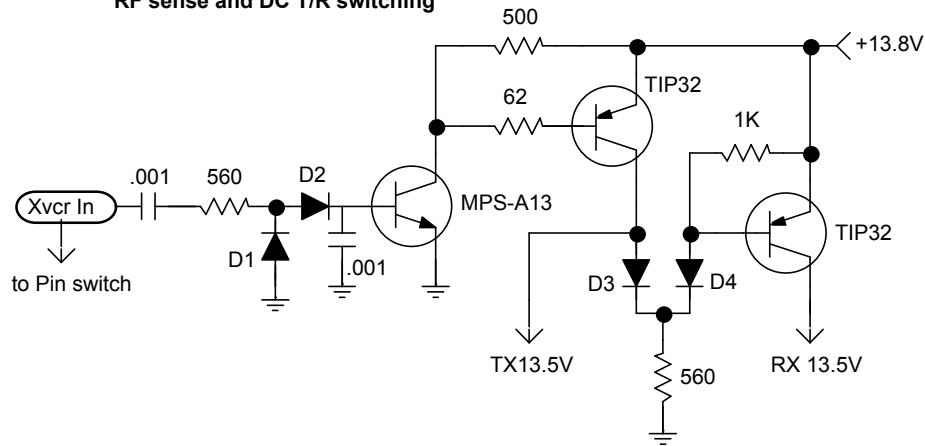


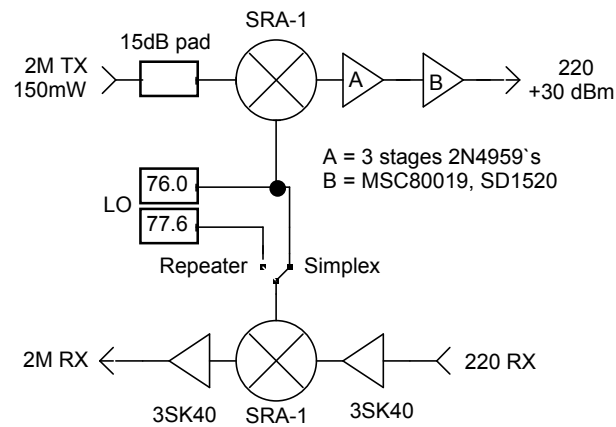
2M HT to 220 MHz Transverter WA3JUF 1980



RF sense and DC T/R switching



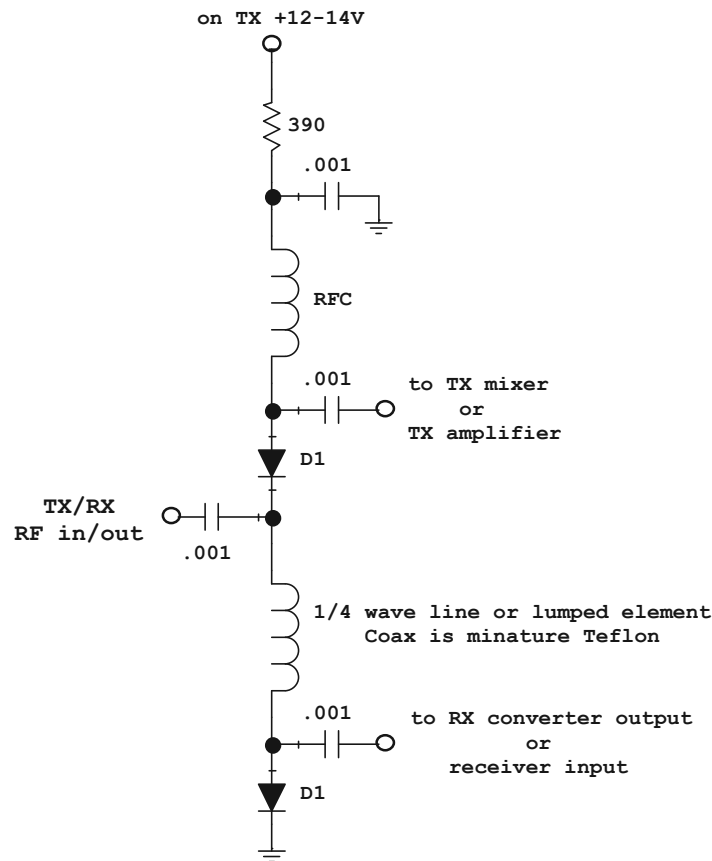
Mixer detail



Pin Diode RF Switch

WA3JUF 1980

used to switch the transverter TX/RX IF
or - used as a TX/RX switch



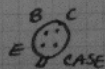
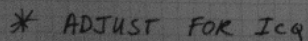
D1: Transverter: UM9401, MPN3401, MPN3404,
MBD101. 10-15W T/R switch: BA182

1/4 wave line: mini teflon
coax, shield grounded both
ends with short leads
28: 0.47uH molded (from memory, no doc)
144: 16" long
222: 9" long
432: 6" long

RFC: 28: 100uH choke
144: 12t #24, 1/8" diam. or Z144
222: 8t #24, 1/8" diam. or Z220
432: 0.68uH molded choke

High power: 1000p SM coupling caps work best.

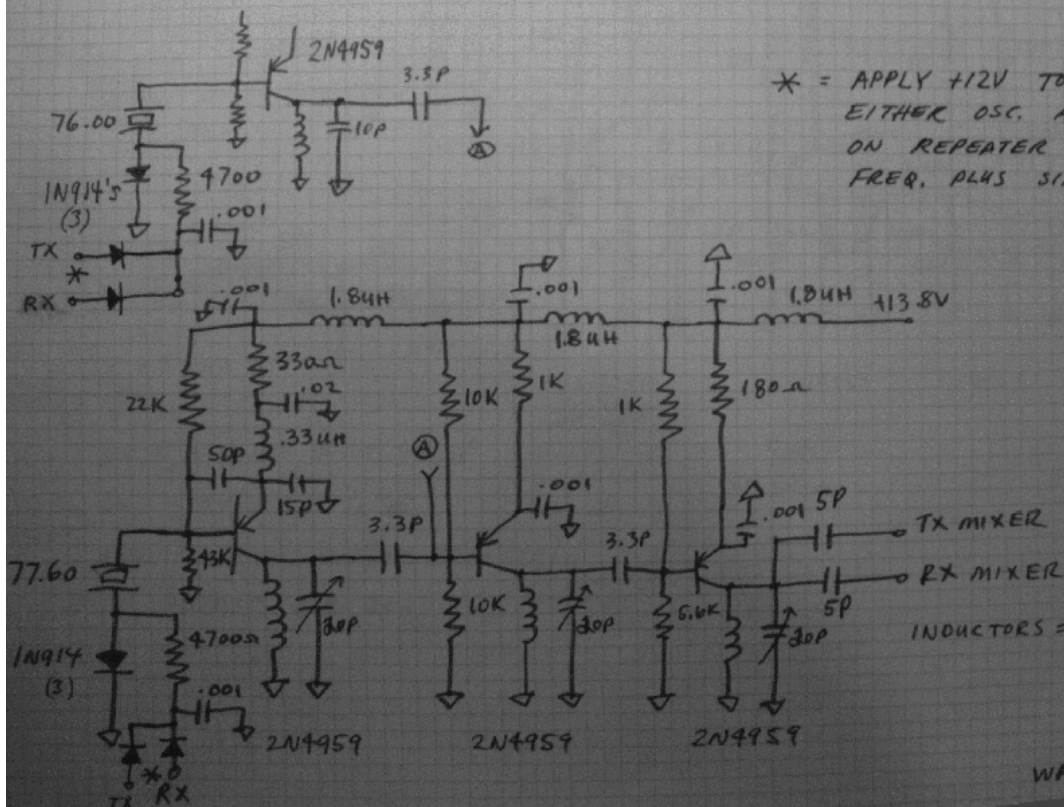
LINEAR



220 MHz TRANSVERTER

LOCAL OSCILLATORS

76.00 AND 77.60 MHz



* = APPLY +12V TO RX OR TX ON
EITHER OSC. ALLOWS TX AND RX
ON REPEATER INPUT AND OUTPUT
FREQ. PLUS SIMPLEX OPERATION.

INDUCTORS = 10T, #26 WOUND
ON JOHANSON 5600
TRIMMERS.

WA3JAF 11/80

2 Meter to 220 Linear Transverter WA3JUF 1980

for use with 2M HT or 2M all-mode Transceiver

Local Oscillator

	Simplex	Duplex
144 IF = 220	$220-144 = 76 \text{ MHz}$	$+1.6 \text{ MHz}$
148 IF = 224		$221.6-144 = 77.6 \text{ MHz}$

2M Xcvr operates in simplex mode, offset is in the 220 transverter
Rcv/Txmit Simplex = 76 MHz L.O.

Transmit on repeater input = 76 MHz
Receive up 1.6 MHz = 77.6 MHz

Simplex:

223.5 Xmit and Rcv $223.5-76 = 147.5 \text{ MHz}$

Duplex repeat mode:

Repeater set 2M xcvr to
222.98 in 146.98
224.58 out rcv up 1.6 MHz with Xvtr in repeat mode

Frequency coverage:

Simplex 220-224 MHz
Repeater 221.6-225.6 MHz

[illegible]

Q1 - 3SK40 (3N200, 3N204, 40673)
L1 - 5t #22 3/16" ID, tap 4t from ground
L2 - 5t #22 3/16" ID
10pf trimmers are JFD pistons or equiv.

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