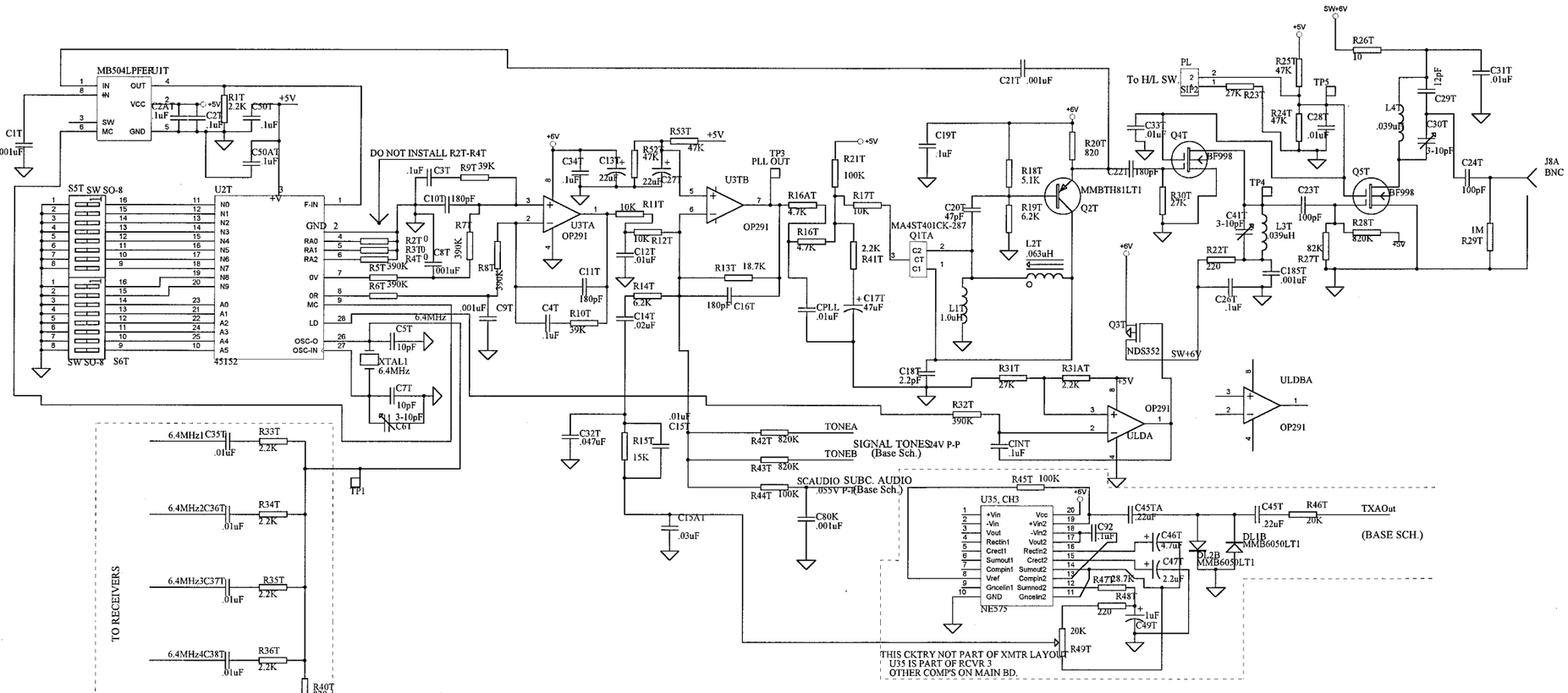
Changes: R33T - R36T to 1K, R40T to 820, R37T & R38T to 820, R22T to 220, R26T to 10, C7T to 12p, C45T to .22

Add: R? = 820, C? = .001, C? = .22, R? = 100, C? = 470p

Note: Check C45T on PCB (make sure pad is not grounded)



Title	**BASE TRANSMITTER**
Size	C
Number	
Revision	D
Date:	18-Oct-1999
File:	G:\CHRIS\...\xmtrd.sch
Sheet of	
Drawn By:	WH

Note1: Need more 6V filters

Note2: Try extra 25kHz filter

Note3: Add 390K to ground next revision

Note4: Need to make connection on next revision

Note5: .22uF could be used instead of .47uF for C163

Board Rework

1) Base Rcv#2 Unground and connect to 5V => C111 & R95

2) Base Rcv#4 Ground C122

3) Base Rcv#4 Connect C151 to U32 pin 1

4) On all receivers, C155 x 12, all .1uF

U30 MB504LPFER

C110 .001uF

C111 .1uF

R130 2.2K

DO NOT INSTALL R131-133

S8 SW SO-8

S9 SW SO-8

U31 45152

6.4MHz From xmtr PLL

C114 180pF

C116 .1uF

R138 390K

R131 390K

R132 0

R133 0

R134 390K

R135 390K

C112 .001uF

R136 390K

R137 390K

C113 .001uF

U32B OP291

C115 120pF

C117 .1uF

R139 39K

R140 5.1K

Note2

R95A 100K

R141 10K

R142 2.2K

C118 47uF

C120 .001uF

C119 .1uF

R143 6.2K

R145 820

R144 10K

C121 47pF

Q10A MA4ST401CK-287

L6 1.0uH

L7 .063uH

Q11 MMBTH81LT1

C123 180pF

C122 1.5pF

RCVRX - From U2, Base Sch.

L8 HELICRES toko 271mt-11xxa

R147 100

C126 .001uF

L9 .039uH

C124 0pF

C125 3-10pF

C127 100pF

Q12 BF998

C128 .1uF

AGC R148 100K

C148 .1uF

U33 SA626

FL4 SFE10.7MA8-A

RSSI TP1

CT See Table 1

CTA 0pF

L10 180uH

C136 .01uF

MMBD6050LT1 D9

+5V RE 100K RD 27K GND RA 18.7K

CF .1uF

OP291 UXA

RB 47K

CC .1uF

C129 .1uF

C130 .1uF

C131 .1uF

C132 .1uF

C133 .1uF

.47uF C163 Note5

R157 1.5K

Note3

C140 .001uF

FL5 SFE10.7MA8-A

C135 10pF

R150 270

FL6 CDA10.7MG20-A

C155A .1uF

C134 2pF

Q13 BSS138

R158 100K

+C153 2.2uF

R159 20K

TABLE 1

CH.	Freq.	CT // CTA (uF)
1	32.77K	.12
2	46.6K	.082
3	36K	.10
4	28K	.12 //.047
5	38K	.10
6	30K	.12 //.047

+6V +C154 22uF

R85 10K Q6 2N3904

U25 XR2211

C137 820pF Film

.001uF C157

C145 .1uF

R149 470K

R151 See Table 2

8200 R154

C146 .001uF

R84 10K

U34 MIC5207

Note1

+C138A

+C157A 100uF

C139 .1uF

+C138 10uF

C147 470pF

RCVx_LED

3Vref

20K R160

U35 NE575

+C142 2.2uF

C144 22uF

C141 2.2uF

C155 .1uF

Note4

RCVR 3 Only

C76 47pF

Note: B section of Ch3 U35 (only) is used for XMTR

C143 1uF

R166 5.1K

U32A OP291

C150 22uF

C149 .1uF

C152 .22uF

RCVx_AUDIO

R169 100

R170 100K

C151 180pF

R151 Value Vs Freq. TABLE 2

CH.1	32.768	36.5K
CH.2	46.608	24.9K
CH.3	36	32.4K
CH.4	28KHz	41.2K
CH.5	38	30.9K
CH.6	30	38.3K

Change: R166 to 5.1K, Delete C156 , C124 to 0p, Add R140A & C109

COMP. VALUE TABLE, AGC CKTS

RCVR CHANNEL	1	2	3	4	5	6
OP-AMP	U8A	U23A	U8B	U23B	U24B	U24A
A	R101	R98	R104	R109	R107	R108
B	R102	R99	R103	R100	R96	R97
C	C88	C89A	C89	C90	C88A	C94
D	R83 (1&3)			R106 (2, 4, 5 & 6)		
E	R105 (1&3)			R111 (2, 4, 5 & 6)		
F	C87 (1&3)			C93 (2, 4, 5 & 6)		
PS FILTER	C91					

Title: **BASE RECEIVER (6ea)**

Size	Number	Revision
C		D
Date: 18-Oct-1999		Sheet of
File: G:\CHRIS\...\Receivrd.sch		Drawn BWH

June 1, '99: Change R63A to 2.2K, R63 to 5K pot., R67 to 16.2K, R66 to 47K, C57 to .0033, R2 to 0 to 5, R1 to 10

RF AMP

RECEIVER COUPLER

BASE-MIXERS & CONTROL LOGIC

Size: C	Number:	Revision: D
Date: 18-Oct-1999	Sheet 6!	
File: G:\CHRIS\...\Based.sch	Drawn By: WH	