

DX Monitor

Devoted Exclusively to Broadcast Band DXing

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We've got a couple columns missing this week and a couple others that are smaller than usual, but like a couple of weeks ago it's a blessing. We're able to fit in part one of another of Mark Connelly's blockbuster, Heathkit type construction projects. This week we've got part one, which tells you how to build it. Next week, we'll have part two, which will tell you how to use it.

FLASH TIPS

We'll open this week's issue with a few hot flashes. Don Kaskey has informed us that KLLK-1250 in Willits, CA is now on the air. They started broadcasting sometime around 10/24.... WTPR-1470 in Westminster, MD is now constructing a 3 tower array for nighttime operation. They hope to have it in operation by year's end, with 1 kw, per Bill Harms....a friend in Mexico reports that XELD in Autlan, Jalisco has moved from 1240 to 780 with 5kw and plans to boost to 10 kw. The station would like to receive DX reports (if you can get past KROW & WBEM...).....The NRC reports that WLNT-1140 Loudon TN will conduct an ET on MM Nov 21 at 0000-0100 EST with 1 kw. Test will be non directional, using c/w mx, frequent voice IDs, and tones. Reports can be sent to Howard Oberholtzer Jr, CE, WLNT, P.O. Box 465, Loudon, TN 37774.

MORE CATALOGS

Here are some more places with catalogs....
ICOM, noted multimational manufacturer of amateur and SWL equipment has a catalog available free by writing to ICOM America Inc, 2112 116th Ave.
NE, Bellevue, WA 98004.
CAPRI ELECTRONICS, Route 1, Box 91-1J, Canon, GA 30520, has a new catalog on radio accessories, also available free for the asking.
GALAXY ELECTRONICS, Box 1202 - 67 Eber Avenue, Akron, OH 44309, has a new catalog out, which lists scanners, SW receivers (ICOM, Kenwood, Yaesu, Sony, Panasonic), Books, etc. The catalog costs \$1.00, but the price is deductible on the first order.

DO YOU HAVE A TECHNICAL GUIDE?

No? Well, it's time you bought one. The <u>DXer's Technical Guide</u> is filled with receiver reviews, construction projects, and other information on radios, antennas, receiving accessories, etc. If you own a radio or plan to own one some day, then there's something in it for you. To order a copy, send \$5.50 (if you're an IRCA/NRC member), or \$6.50 (everyone else) to the IRCA Goodie Factory, 1422 West 5th Street, Tempe, AZ 85281. P.S.—the g/f also has Almanacs, Foreign Logs, and lots of reprints. Send an SASE to that address for a complete list.

We have several articles and features on hand, including Broadcasting Information, Verifications Signers, another Construction Permit list updater, and various things gleaned from newspapers. Watch for them in the near future. In the meantime, turn the page and start reading the rest of this week's DX Monitor. 73/good DX, and I'll see you next week. bp.

EASTERN DX FORUM

(215) 368-8067 RICHARD EVANS P.O. Box 1294 WALES, PA 19454 NORTH

Karl Jeter, 2115 Scarbrough Road, Stone Fountain, Georgia 30088
I thought it to be high time I wrote in to catch one and all on my latest doin's...one of which wasn't DX, at least from end of April to first of Oct. The first thing should be obvious: a new address! Yes, we purchased our first house, and moved in over July 4th. We are a little farther out in suburbia—at its outer fring, really...and as a result, what seems like a good DX location. There are about 30 acres of woods behind our property, so one 1000' semi-permanent beverage is already up. This one runs NW, and besides lengthening it by at least abouther 500' or so, I also hope to put up another one running S. Results will be in EDXR throughout the season. The Atlanta area locals are weaker here at nite...WQXI-790 & WGST-920 easily nulled into oblivion and although I'm a little further from WSB, that doesn't really matter, hi. There was another development this summer I'd like to announce (and was <u>not</u>, as my wife likes to kid me about, because of the DX-less summer, hi) that we are expecting our first child in March!! Actually, she now sees DXing more favorably, as who but DXers are used to getting up in the middle of the night, hi hi. (I can remember feeding the baby and DXing at the same time--rce) Trips were made to St. George Island in Florida over Labor Day (no bandscan this time, but I did tape airchecks of some of theFla.panhandle locals) and to Nashville, Tenn. for the wedding of former IRCA er Wayne Murphy in June. local radio changes noted of late: of course, the new WDGR-1210 (ex-1520) is well-reported by now, and puts a local-strength into this area with a good "pure" c/w format. WIZY-1120 (ex-1560) in Gordon, Ga. has been heard quite well here, and local WGST-920 has changed its slogan from "Newsradio 92" to "Newstalk 92". Any aircheck collectors please write, especially if you have any vintage 60's T-40 or late 60's-early 70's AOR! Thazzīt for now. 73. (Karl, I have IDs on tape from stations made in the middle '60's if that is what you need--rce) **********

Lack of capital blamed for failure of Centre Radio

By RICHARD LAST Television Staff

LACK of capital, weak sales policy and competition from the oldest established BBC local radio station were blamed yester-

day for the failure of

after only two years on air.

One shareholder said: "They spent far too much on their premises—£600,000 out of an initial capital of opposed by unions involved.

The first year of operation."

The only people in the building yesterday were the official receiver and his staff.

The station want.

'Earliest moment'

They will probably arrange for the service from nearby Radio Trent at Nottingham to be relayed from Centre's trans-mitters, but this move may be opposed by unions involved.

ning yesteruay were the omicial receiver and his staff.

The station went off air at 1 p.m. on Thursday, but transmitters continued to broadcast non-stop music.

A spokesman said: "We feel seed to find the said character of Leicester ought to be able to support its own mitters continued to broadcast ILR station." But the process non-stop music.

getting it on the air, could take up to a year.

The I BA expressed "deep regret" that one of its 43 stations should have been forced into bankruptcy, but pointed out that it was the first failure in 10 years of indepen-dent broadcasting.

'We did everything'

We did everything we could within our rather restricted powers to help," said the IBA spokesman.

Payment of back rental, amounting to £60,000, was de-ferred and might have been written off altogether. The I B A also proposed deferring future rental, in the station could find tresh capital.

But a proposal by Mr Geoffrey Poynton, a former director, was turned down be-cause, the IBA said: "It amounted to a take over rather than fresh capitalisation.

"We would in effect have been giving the franchise to another company without going through the formal process of advertising and selection."

Centre Radio lost £255,000 in its first year, against an esti-mated loss of £85,000.

A succession of chairmen and executives resigned as the company's troubles deepened. At the time of the closure it had 180,000 listeners.

No-one in the industry appears to fear that any other station in the I L R chain could be heading in the same direc-

Mr Brian West, director of the Association of Independent Radio Contractors, said: "The situation is very buoyant. Revenue in July was 35 per cent. up on last year's figures. There could be as many as six stations currently making a loss, but none at a level which might lead to closure."

Capital reappointed

Capital Radio, the largest and most prosperous independent station, yesterday retained the general entertainment radio general entertainment radio contract for London. It will run from October 1984 for eight years.

London Daily Telegraph, 10-8-83 via Ken Lackie



WICHITA, KANSAS 67201

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INTRODUCTION

This article gives construction plans and usage notes for an active parallel tuner with regeneration capability. The high-impedance FET input with switch-selectable coupling levels for different length aerials permits tuning of antennae as short as a 2-ft. car whip and as long as a Beverage over 1000 ft. Aside from wires, the APT-2 can also serve as a tuned gain stage after an active loop; it can also be a tuner/amplifier for a loophead coil. The DKer can fabricate a whole series of loopheads, using cheap ferrite rods available from Etco & other surplus houses.

The frequency range for non-regenerated 'normal' wire tuning is approx. 150 to 8000 kHz. With regeneration, the range is approx. 150 to 2000 kHz.

Even in the non-regenerative mode, tuning sharpness is quite satisfactory for most DX applications. The APT-2 tuner provides pre-selection which, when the tuner is properly adjusted, can eliminate many spurious responses, especially on inexpensive receivers operated in an urban environment. It can also provide considerable gain over the signal achievable by a direct connection of the wire to the receiver. For this reason, it makes an excellent shortwire tuner. Even the signal from a Beverage can be increased, at least in rural areas where overloading isn't a concern.

The regeneration option built into the HPT-2 distinguishes it from the earlier HPT-1, mentioned briefly in my recent article 'Modular Phasing Systems'.

Sharpness and gain can be further enhanced by employing regeneration. Although regenerative tuning is touchy and time-consuming, the results are often well worth the effort. The APT-2, when used in a regenerative mode, allows receivers of mediocre selectivity, such as a car radio, to be readily capable of foreign split MM DX reception. Where only heterodynes were heard against domestic stations prior to using the APT-2 tuner, foreign split DX audio can often be extracted when the APT-2 is 'in-line'.

The APT-2 provides a low-impedance output, suitable for most recejver inputs. All inputs & outputs provide DC-blocking. In non-regenerative mode, the tuner can be used as a wire-tuning module in a modular phasing system.

Figures 1, 2, % 3 are electrical schematics characterising the tuner. Table 1, accompanying Figure 2, gives an idea of 'ballpank' frequency range switch settings to use for a given frequency. Figure 4 is the parts layout 'roadmap' for the fil (Front End Card) subassembly. Tables 2 through 5 are the materials (parts) lists for the APT-2 tuner. Table 6 (hole list) and Figures 5 (a,b,&c) (hole pictorials) will be used to guide the drilling of holes during the APT-2 assembly procedure immediately following Figures 5 (a,b, & c).

This tuner should be a worthwhile addition to any DXer's shack.

fissembly of APT-2 Tuner

- Read the entire article thoroughly to get an idea of how to prepare for APT-2 construction. Keep the article at the workbench, as it will be necessary to refer to it constantly.
- Obtain necessary parts [see parts lists].
- 3. Organise work area: Ensure that area is comfortable, welllighted, and sufficiently spacious. The following tools &
 shop supplies should be available: accurate steel ruler,
 calipers, or micrometer; sharp-pointed metal scribe;
 several sizes of Phillips & 'regular' (slotted);
 screwdrivers; nutdrivers for 4-40 & 6-32 nuts;
 variable-speed electric drill; drill bits (see hole list);
 'pilot-hole' drill bit (approx. dia.=0.08 in.);
 small diagonal cutters; longnose pliers; slip joint pliers;
 soldering.pencil (in the 25 to 45 watt range) with
 holder stand; rosin-core solder; solderwick; solder sucker;
 file; vise mounted on sturdy bench; X-Acto knife; hacksaw;
 and digital-multimeter or volt-ohmmeter.

 $\frac{\text{FIGURE 1}}{\text{Main Schematic: APT-2 Active Parallel Tuner with Regeneration}}$

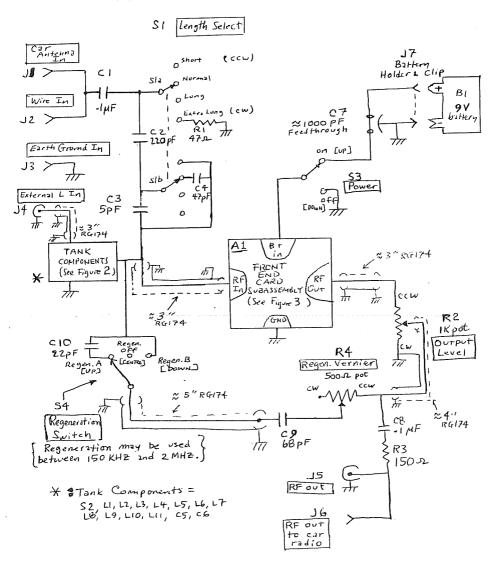
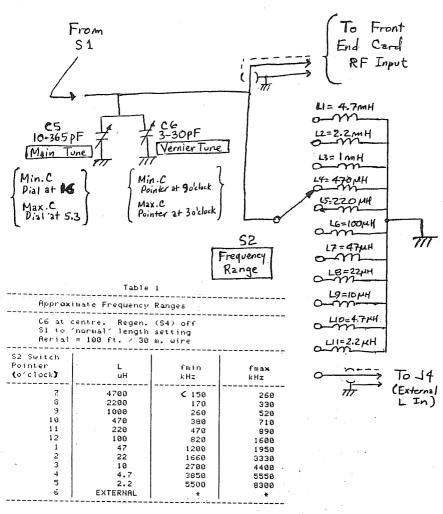


FIGURE 2

Tank Circuit Schematic: APT-2



^{* =} range depends on ext. L value

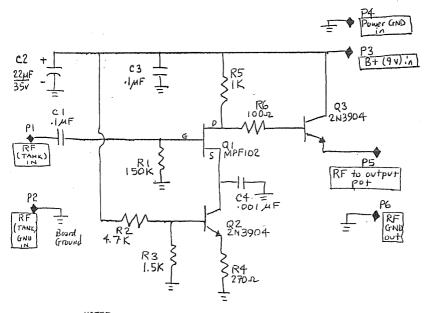
APT-2 Level 1 Parts List

A1	Front End Card sub-assembly	[see Level 3,4 parts lists]
B1	9 volt battery	Duracell MN1604
C1	.1 uF ceramic	RS 272-135
C2	220 pF ceramic	RS 272-133
C3	5 pF ceramic	RS 272-124 RS 272-120
C4	47 pF ceramic	RS 272-121
C5	10-365 pF mini.variable	Mouser 24TR210
C6	3-30 pF air variable	GC/Calectro A1-225
C7	feedthrough cap, approx 1000pF	several Erie or Spectrum types
C8	.1 uF ceramic	RS 272-135
C9	68 pF mica	Mouser 23 DM06 8
C10	22 pF mica	Mouser 23DM022
J 1	Motorola jack	RS 274-712
J2	red binding-post banana jack	RS 274-662
J3	black binding-post banana jack	RS 274-662
J4	BNC jack	RS 278-105
J5	BNC jack	RS 278-105
Jε	Motorola jack	RS 274-712
J7	. battery connector/holder	Acme
L1	4.7 mH	Mouser 43LH247
L2	2.2 mH	Mouser 43LH222
L3	1 mH	Mouser 43LS103
L4	470 uH	Mouser 43LS474
L5	228 uH	Mouser 43LS224
L6	100 uH	Mouser 43LS104
L7	47 uH	Mouser 43LS475
L8	22 uH	Mouser 43LS225
L9	10 uH	Mouser 43LS105
L16	4.7 uH	Mouser 43LS476
L11	2.2 uH	Mouser 43LS226
R1	47 ohin	RS 271-009
R2	1K pot	Mouser 31CB301
R3	150 ohm	RS 271-1312
R4	500 chm pot	Mouser 31CR205
Si	4-position rotary switch	Mouser 10WW034 or 10YX034
\$2	12-position rotary switch	RS 275-1385
\$3	SPDT (on/on) toggle	RS 275-613
S4	SPDT (an/off/on) toggle	RS 275-325
_	hookup wire [as req'd]	RS 278-1296
-	busswire [as reqid]	RS 278-1341
-	RG174 coax.cable [as req'd]	Mouser 515-1156-12

THBLE 3

-2	Level 2	Parts List				
	C5		4-40 X .375 screw	Mouser	529-Y4R6/100	
	C5	[QTY=2]	#4 lockwashers	Mouser	529-PLW4/188	
	C5	[QTY=2]	4-40 hex nuts	Houser	529-40D/100	
	C5		#4 solder lug	Mouser	565-1416-4	
	C6	[QTY=2]	4-40 X .375 screws	Mouser	529-Y4R6/100	
	C6	[QTY=2]	#4 lockwashers	Mouser	529-PLN4/100	
	G1		4-40 % .25 screw	Mouser	529-Y4R4/100	
	62		4-40 X .25 screw	Mouser	529-Y4R4/100	
	e3		4-40 X .25 screw	Mouser	529-Y4R4/100	
	G4		4-40 X .25 screw	Mouser	529-Y4R4/100	
	G1		4-40 hex nut	Mouser	529-40B/100	
	G2		4-40 hex nut	Mouser	529-40D/100	
	G3 G4		4-40 hex nut	Mouser	529-40D/100	
	G1		4-40 hex nut	Mouser	529-40D/100	
	G2		#4 solder lug	Mouser	565-1416-4	
	63		#4 solder lug	Mouser	565-1416-4	
	G4	[ûTY=2]	#4 solder lugs	Houser	565-1416-4	
	J1		#4 solder lug	Mouser	: 565-1416-4	
	J1	[QTY=2]	6-32 % .375 screws	Mouser	529-YER6/190	
	J1	[QTY=2]	#6 lockwashers	Mouser	529-PLW6/100	
	J6	[QTY=2]	6-32 hex nuts	Mouser	529-6CDS/100	
	J6	[QTY=2]	6-32 % .375 screws	Mouser	529-YER6/100	
		[QTY=2]	#6 lockwashers	Mouser	529-PLN6/100	
	J6	[QTY=2]	6-32 hex nuts	Mouser	529-6CDS/100	
	J?	[QTY=2]	4-40 X .375 screws	Mouser	529-Y4R6/100	
	J7	[QTY=4]	4-40 hex nuts	Mouser	529-40D/100	
	J?	[QTY=4]	#4 lockwashers	Mouser	529-PLW4/100	
	Ce.		knob	Mouser	45KH013	
	R2		knob	Houser	45KN013	
	R4		knob	Mouser	45KN013	
	Sı		knob	Houser	45KN013	
	S2		knob	Mouser	45KH013	
	-		chassis box	RS	270-238	
				KS	210-236	

Schematic for Front End Card subassembly (A1 of APT-2)



HOTES

- 1. Component designations for parts on Al are a component designations for parts on H1 are a completely separate entity from the designations of RPT-2 components external to A1. (In other words, C1 of Figures 3 & 4 is a different component from C1 of Figure 1.)
 The nominal power input voltage is +7 to +10 VDC. The tuner may be operated on +10 to +16 VDC: for peak
- performance in that voltage range, change R2 of the R1 subassembly from 4.7K to 18K.

TABLE 4

APT-2 Level 3 Parts List All Front-End Card Subassembly (electrical)

C1	.1 uF monolithic	RS 272-111
C2	22uF/35v	RS 272-1026
C3	.1 uF monolithic	RS 272-111
C4	.001 uF ceramic	· RS 272-126 RS 276-2062
Q1	MPF102	RS 276-1603
02	2N3904 2N3904	RS 276-1603
Q3	283784 150K	RS 271-047
R1 R2	4.7K	RS 271-1330
R3	1.5K	RS 271-025
R4	270 ohm	RS 271-1314
R5	1 K	RS 271-1321 RS 271-1311
R6	168 ohm	K2 511-1911

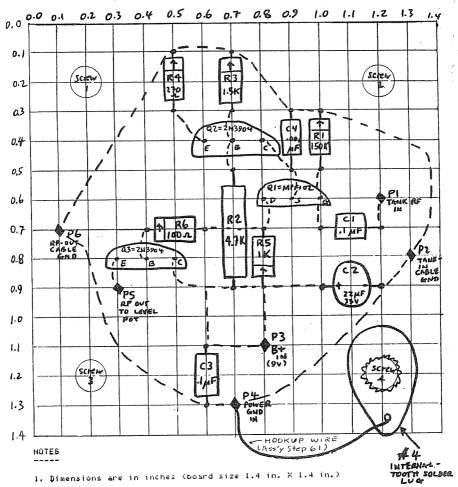
TABLE 5

APT-2 Level 4 Parts List Al Front-End Card Subassembly (mechanical)

Lout -	End Card Subasse	mbib (mechanical)	
P1	pushpin 'flea	-clip(terminal	RS 270-1392
P2		-clip' terminal	RS 270-1392
P3		-clip/ terminal	RS 270-1392
P4		-clip' terminal	RS 270-1392
P5		-clip' terminal	RS 270-1392
P6		-clip' terminal	RS 270-1392
-		to 1.4%1.4 in.1	RS 276-1395
_		-40 X .5 spacers	Mouser 565-2332
		-40 X .25 screws	Mouser 529-Y4R4/100
_		#4 solder lug	Mouser 565-1416-4
_	[QTY=7]	#4 lockwashers	Mouser 529-PLN4/100

FIGURE 4

"Roadmap" for Front End Card subassembly (A1 of APT-2)



- 2. Dashed lines indicate underside wiring (using component leads (Ass'y Step 35) and/or added bare busswire).
- The end of a resistor marked with an arrow (介) indicates
 the LONG LEAD side of a vertically-mounted resistor (5 total),
 R2 is mounted horizontally.
- 4. Mounting & wiring of components is done during assembly steps [5&16,
- Grid lines are only to assist in locating components; they do not imply connections. Crossings of grid lines correspond to the small holes built into the perfoard.

Figures 5(a,b,&c) are the APT-2 HOLE-DRILLING PICTORIALS

For hole locations & sizes, refer to Table 6.

The chassis box (Radio Shack # 270-238) consists of two metal pieces; a top (outer) piece and a bottom (inner) piece. All components are to be mounted on the TOP (OUTER) PIECE. This piece measures approximately 2.906 in. [certically] by 5.175 in. [horizontally] on its TOP side and approximately 2.125 in. [certically] by 2.906 in. [horizontally] on its LEFT and RIGHT sides. Note how hole-locating X & Y coordinates are defined in Figures 5 (a,b,%c).

The numbers adjacent to holes on the pictorials correspond to the hole numbers in Table 6.

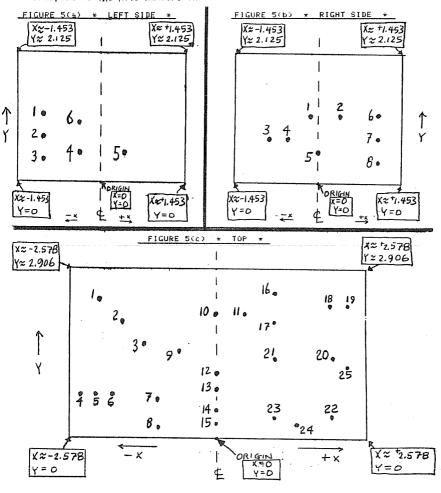


TABLE 6

LEFT SIDE

Hole	Comp.	Description	XCin.)	YGn.)	DIA(in.)	
1	Ji	car ant.jack,screw 1	-1.0	1.144	Ū. 14	
2	Ji	car ant.jack, body	-1.0	0.75	0.5	
3	Ji	car ant.jack,screw 2	-1.0	0.356	Ū.14	
4	JS	GNDin-blk banana jack	-0.375	0.5	0.3125	
5	J2	WIREin-red banana jack	0.375	0.5	0.3125	
6	G4	GND screw for J3	-0.375	1.0	0.0	
TOP		***********		****	******	
Hole	Comp.	Description	X(in.)	YCin.)	DIAGn.)	
1	C5	Main Tune Cap, screw	-2.0	2.375	0.113	
2	C5	Main Tune Cap, shaft	-1.625	2.0	0.277	
3	€5	Main Cap, stator clearance	-1.25	1.625	0.3125	
4	CE	Vernier Cap, screw 1	-2.3285	0.75	0.113	
5	CE	Vernier Can shaft	-2 0525	0.25	0.05	

1	C5	Main Tune Cap, screw	-2.0	2.375	0.113
2	C5	Main Tune Cap, shaft	-1.625	2.0	0.277
3	C5	Main, Cap, stator clearance	-1.25	1.625	0.3125
4	CE	Vernier Cap, screw 1	-2.3285		0.113
5	CE	Vernier Cap, shaft	-2.0625	0.75	0.25
б	66	Vernier Cap, screw 2	-1.7965		0.113
7	S1	Length Switch, shaft	-1.0		
8	S1	Length Switch, tab	-1.0	0.1875	
9	G1	GND screw for S2	-0.625	1.5	0.113
10	\$2	Freq.RangeSwitch, shaft	0.0		0.375
11	S2	Freq.RangeSwitch, tab	0.5	2.125	0.14
12	54	Regen, Switch, shaft		1.125	
13	S4	Regen. Switch, tab		0.875	
14	S3	Power Switch, shaft		0.5	0.25
15	53	Power Switch, tab		0.25	0.113
16	J4	External Coil Jack		2.5	0.375
17	62	GND screw for J4		2.0	0.113
18	R2	OutputLevelPot, shaft	1.9375	2.25	0.3125
19	R2	OutputLevelPot, tab		2.25	0.14
20	81	FrontEndCard, screw 1	2.0	1.375	0.113
21	A1	FrontEndCard, screw 2		1.375	0.113
22	Ĥ1	FrontEndCard, screw 3	2.0	ŭ.375	0.113
23	ñi	FrontEndCard, screw 4	1.ŭ	0.375	0.113
24		BatteryHolder, screw 1	1.375	0.25	. 0.113 _{\text{\tint{\text{\tint{\tint{\ti}\text{\texi}\text{\text{\text{\text{\text{\text{\text{\text{\text{\texi}\text{\texi}\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\texi}\text{}
25	J7	BatteryHolder, screw 2		1.25	0.113
1	**	* * * * * * * * * * * * * * * * * * * *	******	*****	********

RIGHT SIDE

Hole	Comp.	Description	X(in.)	Y(in.)	· DIACin.>
1	C7	B+ in feedthrough cap	-0.125	1.125	ŭ.188
2	G 3	Power-GND-in screw	0.375	1.125	. 0.113
3	R4	Regen. VernierPot, shaft	-0.875	0.75	0.3125
4	R4	Regen. VernierPot, tab	-0.5625	0.75	0.113
5	J5	RF out (BNC)	ŭ.ŭ	0.5	0.375
6	J6	RF out to car RX, screw 1	1.0	1.144	0.14
7	Jō	RF out to car RX, body	1.0	0.75	0.5
8	JE	RF out to car RX, screw 2	1.0	0.356	0.14
****	*****	*********	*****	*****	****

NOTE: Diameters of RIGHT SIDE holes 183 may vary depending upon C7 & R4 used. In general, it is wise to verify hole locations & sizes, based upon the components available at the time of APT-2 construction.

Assembly of APT-2 Tuner (continued)

- Verify that hole locations & diameters in the documentation conform to the parts acquired. Adjust hole list [Table 6], if necessary, before proceeding.
- 5. Use ruler, scribe, & the hole list to mark hole locations on the chassis box. Push the scribe into the metal to a sufficient depth that the 'pilot' drill bit will stay in place when preliminary drilling is done.
- 6. Drill all marked hole locations with the 'pilot' bit.
- 7. Drill all holes with the .113 in. diameter bit.
- Drill all holes listed as .14 in. diameter or greater with the .14 in. diameter bit.

Drill all holes listed as greater than .14 in. diameter and less than or equal to .25 in. diameter with the actual final size bit.

Drill all holes listed as being over .25 in. diameter 10. with the .25 in. drill bit, and then with the actual final size drill bit.

Put chassis box aside (until step 18).

Enlarge the mounting hole of the Main Tuning Capacitor 12. (C5) by means of drilling with a .113 in. bit. But the perfboard (for the Al subassembly) to correct

size (1.4 in. X 1.4 in.). Cuts should be made along Straight rows & columns of board holes.

Drill four .113 in. diameter holes at the eventual screw

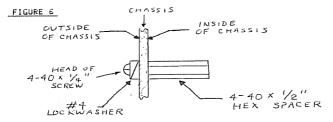
locations near the perfboard corners, as indicated in Figure 4 (the Al layout drawing).

Mount components onto perfboard: refer to Figure 4 15. (layout), Figure 3 (schematic), and Tables 4 & 5 (levels 3 & 4 parts lists).

Connect components together on underside of perfboard; 16. use busswire where necessary. The dashed lines in Figure 4 indicate physical locations of underside connections. The Al schematic should also help. Solder the connections & cut off excessive leads. Screws, lockwashers,& solder lug will be added to Al later.

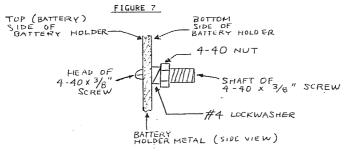
Put the assembled Al card aside temporarily.

Install hardware assemblies at TOP side chassis box 18. holes 20, 21, 22, & 23; refer to Figure 6 to follow. The spacers thereby installed are used for subsequent mounting of the A1 card inside the chassis box.



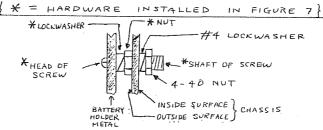
19. Four additional 4-40 X .25 screws, three #4 lockwashers, and a #4 solder lug should be kept aside for subsequent mounting of the HI Front End Card (step 38).

Prepare the battery holder for mounting by installing 20. two hardware assemblies of the type shown in Figure 7. One assembly is to be installed at each of the two holes on the battery clip. The nuts a lockwashers installed at this time are essentially being used as short spacers.



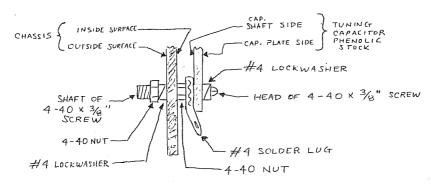
21. Place the battery holder on the chassis box so that its connector clips are close to the right edge of the TOP side of the chassis. The screw shafts of Figure 7 should be inserted into TOP side holes 24 % 25.

22. Mount the battery holder to the chassis with hardware as indicated in Figure 8.



- If desired, reduce the shaft length of S2, the 12-position switch, to about 0.75 in. Luse a hacksaw, place shaft of switch in bench visel. Remove hardware from shaft(until step26)
- 24. Assemble inductors onto the 12-position switch (S2):
 Start by locating the switch pin immediately adjacent to the locating tab [in a counterclockwise (CCW) direction, as viewed from the connection side (back) of the switch].
 Solder one end of the 4.7 mH inductor to that pin; leave the other lead free. To the next switch contact pin, going CCW (as viewed from back of switch), solder one lead of the 2.2 mH inductor. To subsequent [increasingly CCW] pins, install one end of each of the following inductors: 1 mH, 470 uH, 220 uH, 100 uH, 47 uH, 22 uH, 10 uH, 4.7 uH, & (finally) 2.2 uH. There will be one (outer) contact pin left open (that between 2.2 uH & 4.7 mH); the wiper arm (inner) pin will also, at present, be free of any connections.
- 25. Connect all of the free inductor leads together with a busswire to form a circular wire ring about an inch from the switch contact connection pins. Solder leads & cut off excessive wires.
- 26. Install the 12-position inductor [Freq. Range] switch S2 onto the chassis box: switch body inside box; shaft through TOP side hole 10; tab to TOP hole 11. Secure S2 by using the nut & the washer supplied with the switch.
- 27. Remove the OUTER of the two nuts from the shaft of the Main Tuning Capacitor. Do not disturb the INNER shaft nut. Set the outer nut aside until step 29.
- 28. Mount the Main Tuning Capacitor (C5) at TOP side hole 1 by using the hardware assembly depicted in Figure 9. The capacitor shaft should protrude through TOP side hole 2.

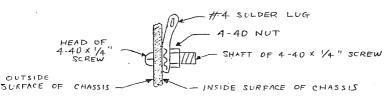
FIGURE 9



- The shaft of the Main Tuning Capacitor should be secured by attaching the nut removed in step 27.
- 30. Place the Vernier Cap. (C6) inside the box so that its shaft protrudes through TOP side hole 5. The rotor lug of C6 should be pointing towards C5. Secure C6 by means of a 4-40 X .375 screw & #4 lockwasher at TOP side hole 7 and with the same type hardware at TOP side hole 6.

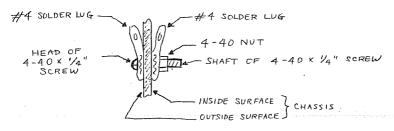
- 31. Mount the 4-position rotary switch (S1) by using the hardware supplied with the switch. The shaft should exit the chassis box at TOP side hole 7; the locating tab should be in TOP side hole 8.
- 32. Mount the SPDT on/off/on switch (S4) at TOP hole 12 [shaft] and TOP hole 13 [tab on locating washer]: use hardware supplied with the switch.
- 33. Mount the SPDT on/on switch (S3) at TOP hole 14 [shaft] and TOP hole 15 [tab on locating washer]: use hardware supplied with the switch.
- 34. Mount grounding hardware assemblies: G4 at LEFT side hole 6, G1 at TOP side hole 9, and G2 at TOP side hole 17. Each assembly should resemble Figure 18.

FIGURE 10

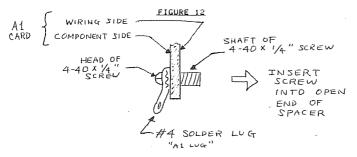


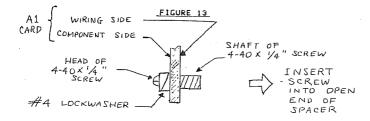
 Mount grounding hardware assembly G3, in accordance with Figure 11, at RIGHT side hole 2.

FIGURE 11

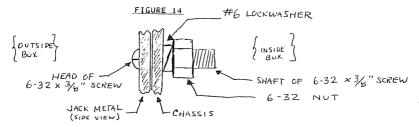


- 36. Install a BNC jack (J4) at TOP side hole 14: use the nut & the lockwasher provided with the jack.
- 37. Install the 1K pot (R2) at TOP side hole 18 [shaft] & hole 19 [tab]: use hardware supplied with pot.
- 38. Mount the AI cand on the four spacers installed in step 17. The component side of the card faces away from the spacers, the wiring side faces towards the spacers. The side of the AI card with P5, the RF-out pushpin, should be oriented so that is closest to, and parallel to, the inside of the chaisis box RIGHT side (which appears to be the left side as you wiew the the inside of the box with the bottom cover off). Figure 12 shows the hardware to be used at the 'card screw 4' location (the lower right corner of the AI card if the card is observed from the underside of the box / component side of card); this hardware mates with the spacer at chassis TOP side hole 23. Figure 13 shows the hardware used at the other three AI card corner holes: these mate with spacers situated at TOP side hole 20, 21, 22.

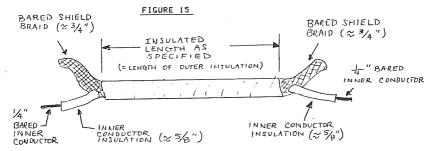




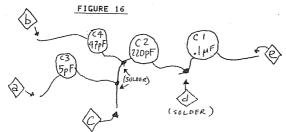
- 39. Install red banana binding-post jack (J2) at LEFT
- side hole 5: use nut & lockwasher supplied with jack. Install black banana binding post jack (J3) at LEFT side hole 4: use nut & lockwasher supplied with jack.
- Install Motorola jack (JI) body through LEFT side hole 2. Position the screw holes on the jack so they line up with LEFT side holes 1 & 3. Mount the jack according to Figure 14.



- Install Motorola jack (J6) body through RIGHT side hole 42. 7. Use the same hardware scheme as employed in Figure 14: J6 is to be secured at RIGHT side holes 6 & 8.
- Install the B+ feedthrough capacitor (C7) at RIGHT 43. side hole 1: use hardware supplied with capacitor.
- Install BNC jack (J5) at RIGHT side hole 5: use hardware supplied with jack. 44.
- 45. Install the 500 ohm pot (R4) at RIGHT side hole 3
- [shaft] & hole 4 [tab]: use Hardware supplied with pot. Install (supplied) dial knob on C5 (Main Tune Cap.). 46.
- Install Mouser type 45KN013 knobs on the shafts of 47. C6, S1, S2, R2, & R4. Set pointers as follows:
 - Pointer at 3 o'clock with C6 plates fully meshed C6
 - Pointer halfway between 9 o'clock & 12 o'clock **S**1
 - with S1 at most-counterclockwise (CCW) position Pointer at 6 o'clock with switch-contactor at 52 presently-open pin between the 2.2 uH & the
 - 4.7 mH inductors. Pointer at 8 o'clock with pot fully CCW R2
 - Pointer at 8 o'clock with pot fully CCW R4
- 48. Prepare five lengths of RG174 or RG188 coaxial cable in the manner of Figure 15. Three of the cables are each to have an insulated length of 3 inches; one should have an insulated length of 4 inches; and one should have an insulated length of 5 inches.

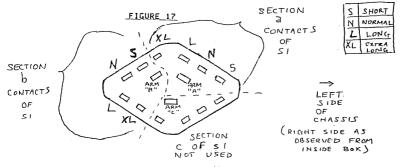


49. Use solder to 'tin' all bared leads of the above cables.
 50. Fabricate the component assembly of Figure 16.
 Make note, of the lead designations assigned.



 Observe Figure 17, a view of the contacts of S1, the antenna Length Select switch, as seen while viewing the inside of the chassis box.

SI POSITION NOMENCLATURE



52. Connect (by soldering, then cutting excess leads)
the component assembly of Figure 16 to S1 contacts of
Figure 17 in accordance with the following list:

lead 'a' to S1, section a, wiper arm
lead 'b' to S1, section a, 'N' contact
lead 'c' to S1, section a, 'S' contact
lead 'd' to 2-inch piece of hookup wire
other end 'd' hookup wire to S1, section b, wiper arm
lead 'e' to J1 (wire in jack)

- 53. Connect a 47 ohm resistor (R1) from S1, section b, 'XL' contact to the upper pin of S3.
- 54. Solder one (shortened) lead of a 150 ohm resistor (R3) to J5. Attach a .1 uF capacitor (C8) to the other lead of R3. (The lead length at the C8/R3 junction should be as short as possible). Solder the free lead end of end of C8 to the R4 CCW pin [the contact of the R4 pot which measures zero-ohms to the R4 wiper arm when R4 is set fully CCW as viewed from the outside (right side) of the chassis box].
- 55. Place a 22 pF capacitor (C10) from the upper pin of S4 to the lower pin of S4. Minimise lead lengths. Solder; then cut off excessive leads.
- 56. Solder the shortened lead of a 68 pF capacitor (C9) to the wiper arm of R4. Let the other C9 lead hang free, until assembly step 59.
- 57. Prepare eleven (11) pieces of insulated hookup wire, each with bared & solder-tinned ends of approx. 3/16 in. The lengths of hookup wire to be prepared are as follows [lengths specified in terms of INSULATED length; add approx. 3/8 in. for total lengths]: 1 in. (2 pieces); 2 in. (5 pieces); 2 for. (5 pieces); 2.5 in. (3 pieces); and 4 in. (1 piece).
 58. Connect BARE SOLID BUSS WIRES (5 total); one wire (of the
- 58. Connect BARE SOLID BUSS WIRES (5 total): one wire (of the shortest possible length) between each following pair of points: [1] J3 & G4 lug; [2] C6 rotor pin & C5 GND lug (that of Figure 9); [3] C5 GND lug & C5 rotor lug; [4] upper pin, S3 & G1 lug; and [5] R2, CW pin & G2 lug. Solder each connection & cut off excessive bussuires.

Install the coaxial cables which were prepared in step 48; 59. These should be installed in accordance with Table 7. [Note: L ring is busswire ring of ass'y step 25]

Table 7

Insulated Length (inches)	End 1 InnerCond.	End 1 Shield to	End 2 InnerCond. to	End 2 Shield to
3 3 4	arm, S2 EXTLpin,S2 P5 of A1 arm, R2 arm, S4	P6 of A1 CW pin, R2	F1 of A1 J4 CCW pin,R2 CCW pin,R4 C9free end	

All connections should be properly soldered & trimmed.

60/61. Install the hookup wires which were prepared in step 57. 60. The first 2 connections to be made are on the outside of the chassis box: [1] solder one end of a 2 in. hookup wire to the POSITIVE (+) battery bracket (J7) terminal; solder the other end of this wire to the external lead of feedthrough C7. [2] Solder one end of a 2 in. wire to the NEGATIVE (-) terminal of the (J7) battery bracket; solder the other end of this wire to the exterior 63 lug.

61. Connect (by soldering) 9 hookup wires on the inside of the chassis box in accordance with Table 8.

Table 8

Ins. Length (in.)	End 1 to	End 2 to
1	S4, upper pin A1 lug (Fig. 12)	P1 of A1 P4 of A1
· 2	Si, section a, arm	C6, stator pin
2	C6, stator pin	S2, arm
2	J5	16
2.5	J1	J2
2.5	C6, stator pin	C5, stator pin
2.5	93, arm	P3 of A1
4	\$3, lower pin	C7

ASSEMBLY OF THE APT-2 TUNER IS NOW COMPLETED. Before 'powering-up', check all wiring against the schematics (Figures 1 & 2 at the beginning of the article). Clean flux from all solder joints with a cotton swab dipped in alcohol. Use an air gun, if available, to blow wire, insulation, & solder scraps out of the chassis box. Screw the bottom cover onto the chassis box with the 4 sheet-metal screws provided with the box. Affix gummed labels, if desired, near controls & jacks.

You may now proceed to the section on Using the APT-2. It is best to practice using the tuner on the MW broadcast band during steady-state daytime conditions in order to gain familiarity with its operation; fading signals could confuse things in the beginning (Continued Next Week. bp) _xc==xc=

RADIO

Phoenix Arizona stations, via Dennis Kibbe

AM

71K 71K

KCY (550)Adult contemporary KTAR (820) Hews/fall SUET (710) Big band EMEO (740)....Easy listening KVVA (860) Spenish KJJJ (810) Country KOCk. (990).....Popular KOCk. (990)....Popular KOKC (1010)...Gospet KOKC (1080)...Dence music KOCK (1190)...Christian

KFLR (1230)...Religious KZZP (1310) Bock KLFF (1380)....Big band KS&N (1400)...News/talk KOPA (1440)...Rock KPHX (1480) ... Spanish KDJQ (1510) ... Rock KASA (1540) ...Religious KNIX (1580)Country

FM RMCR (91.5)....Jazz/NPR KEZC (92.5)....Country KDKB (93.5)....Rock KOCL (94.5)...Olding KOYT (95.5) Beautiful music KMEG (98.9) ... Basutiful music KUPO (87.6)Abum rock KKLT (98.7)Adult contemporary

KIKO (100.3) ... Adult KOPA (100.7) .. Rock KHEP (101.5)...Classical KNIX (102.5),...,Country KZZP (104.7)...Rock KWAO (108.3) Big band KSTM (107.1) .. Album rock KORLE (107.9) .. Gospei

EASTERN DX ROUNDUP

Bob Lazar 11011 Becontree Lake Drive, #410 Reston VA 22090

- ELECTIFICATE (ELECTICALE)

Deadlines: Saturdays

Of Special Interest

880 WMDB TN Nashville, 10/16 1829-1838 w/ B/SOL format, requests for ads, so must be brand new. (KVJ-GA)
1040 WSKE PA Everett, hrd here 10/10 from 1800 til 1830, tuned away briefly

and was gone when I got back. S/off noted at 1830 10/12. (CMS-ON)

1200 KFNW ND West Fargo, 10/15 s/off at 1945 w/ ments of Northwestern College, various FM stns, no SSB. New state for me. (RCW-OH) 10/16 1944 finally hrd well enuf for a rpt -- w/ rlgs mx, wx for "Red River Valley" and s/off ment part of NW ern College radio ministries and gives long list of FM xmtr's in that

network. (KVJ-GA) 1440 WSLE GA Bremen, 10/13 ex-WWCC noted 0856 w/ new call and CHR format; new format as well, as is ex-C&W. (KVJ-GA)

1600 WCKZ GA Austell, 10/12 semi-local noted w/ new calls (ex-WACX) & ID's as "KZ-16" w/ C&W mx. (KVJ-GA)

580 WGAC GA Augusta, 10/20 1903 spot for local transit co. Fair. (WPT-DC) 640 KFI CA Ios Angeles, 10/13 0641-0710 awesome local-like signal, w/

CHR, KFI nx, PSA's, f DJ. (KJ-GA)

730 WFMC NC Goldsboro, 10/20 1835 ment of Kingston by m. Good. (WPT-DC)

790 WNWS FL S. Miami, 10/19 2113 talk by m. Fair-good o/u WTAR. (WPT-DC)

880 WRFD OH Columbus, 10/16 w/ Christian format, mixing w/ WMDB at 1854.

(KVJ-GA) 980 WKOR MS Starkeville, 10/13 1916 s/off, ment "KOR-FM 92". Loud sig.

(KVJ-GA) 1000 WXTN MS Lexington, 10/14 1925 rel. pgm, followed by s/off w/ SSB. Good signal w/ WCFI nulled. (RCW-OH)
1010 WPMH VA Portsmouth, 10/20 1830 s/off w/ ment of Christian pgming.

Fair. (WPT-DC)

1210 KGYN OK Guymon, 10/13 2005 running neck-to-neck w/ WCAU w/ local nx, ad for furniture sotre and C&W mx. (KVJ-GA)
1260 KGBX MO Springfield, 10/17 2002 ID & "Springfield's favorite mx".

(KVJ-GA)

1290 WWSA GA Savannah, 10/14 1854 wx forecast by f, spots. Fair. (WPT-DC) 1490 WABJ MI Adrian, 10/17 amazingly solid signal 0315 w/ auto C&W format, dual WABJ-WQTE (FW) ID's and slogan "playing your kind of country mx " (KVJ-GA)

1580 WLIM NY Patchogue, 10/16 s/on at 0700 way atop channel, SSB and

"Welcome to Long Island Mx". (RCW-OH)

1590 KVGB KS Great Bend, 10/16 popped in briefly w/ ID, f DJ & T40

2000 o/ WCCL before fading back out. (KVJ-GA)

Eastern DXers

KVJ - Karl V. Jeter, 2115 Scarbrough Rd., Stone Mountain, GA

CMS - C.M. Stanbury II, RR #1, Ridgeway, ON LOS 1NO WPT - Bill Townshend, 4500 Connecticut Ave. NW, #901, Washington, DC 20008 RCW - Bob Walker, 16 Wythe Ct. #10, Fairfield, OH 45014





CENTRAL DX ROUNDUP

Robert Kramer 6416 N. Richmond Chicago, IL 60645

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SPECIAL, UnIDED, CHANGES, et. al.

1210 WDGR GA DAHIONECA, 10/22 1935 fair w/wx, ID & C&W mx. Was blasting in later all evening w/"The New 1210" IDs. Does this one have night authorization ? I
                         only have them listed as D1 10000, 2500 ch. RK-IL
                         VIRGINA BEACH, 10/20 0007 good on ET w/ID & OC. NRC Log sez this one is
1550 WVAB VA
                          silent. Are they back on ? RK-IL
                                                                            All da Rest
                         SAN FRANCISCO, 0757 10/17 ID, promo o/u KFEQ. FM-IA
680
          KNBR CA
                         TEXAS CITY, 0101 10/1 Beatle mx & ID way u/KYFR. FM-IA
920
          KYST
                   ТX
                          DURANCO, 0824 10/17 ID, wx, poor. FM-IA
930
          KIUP CO
                          OGALLATA, 0829 10/17 ID, spot, Paul Harvey. FM-IA
HARTFORD, 0145 9/30 phone #, ID, spot, fair u/kRLD. FM-IA
          KOGA NE
1080 WTIC
                   CT
                          NORTHFIELD, 0750 9/28 fade in KRLD null, ID, weak. FM-IA
          KYMN MN
                          DESOTO, 10/22 1930 fair W/S/Off. RK-IL
1190 KHAD MO
                          WEST FARCO, 1545 9/22 rel. mx, Red Valley wx. FM-IA
LEAVENWORTH, 10/19 1922 C&W mx, good. RF-IL
CLEVELAND, 2029 10/13 ID, tlk pgm, faded u/KTOE. FM-IA
1200 KFNW ND
1410 KCLO
                  KS
 1420
          WHK
                   OH
                          BERRY HILL, 0232 10/5 ID, many psas, soul mx in kWSL mull. FM-IA CLEVELAND, 10/22 0246 good briefly W/C&W mx & AM-FM ID (not //). WOPA completely off till 0400. RK-IL
 1470 WVOL TN
 1490 WCLD MS
                          HASTINGS, 1859 10/8 S/Off after MoR mx. FM-IA
 1550 KICS
                   NE
                          TOVELAND, 10/19 1950 ment. of KLOV-FM, fair. RF-IL MARYSYILLE, 10/19 1945 S/Off o/u KVRA, fair. RF-IL VERMILLION, 10/19 1945 S/Off good. RF-IL TABER, 10/17 0012 fair w/sports. All alone. RK-IL OETILIA 1958 10/0 EA
 1570 KLOV
                   CO
           KNDY KS
           KVRA SD
                          IADEM, 10/1/ VOIZ 121F M/SPORTS. ALL BLODE. RM-IL
ORILLIA, 1958 10/9 PSA, promo, sports. FM-IA
COLORADO SPRINGS, 10/19 1959 soft rck mx, good. RF-IL
ALBUQUERQUE, 2053 9/21 "Colden Age of Radio" pgm, spots, ID, NBC nx. FM-IA
(Fritz, are you sure about the time on this one? They sign off in October
           CKTA
                    AB
           CFOR ON
 1580 KPIK CO
           KZIA NM
                           at 2030, ed.)
 We'll be right back after this word from our sponser: RF.... Ron Fenton 1119 S. Curtis A-12 Kankakee, IL (ICOM IC-R70, ICF-7600A, indoor ant)
  RK.... To be announced
  (R-1000, HQ-140X, HQ-129X, Radio West Loop, Kowalski Loop, spiral loop)
  FM... Fritz Mezlberg 1505 Central Hawarden, IA 51023 (ICOM R-70, Wedge, 100' LW)
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FREE RADIO DIRECTORY Third Edition, December 1983 @1983, John T. Arthur

These are Known mailing addresses of recently active North American MW Free Radio stations, accurate to 15 Nov 1983.

* - station inactive

Box 245, Moorhead, MN 56560 WDX-1620, KMJC

Box 747, Exeter, NH 03433 KPRC-1616

Box 982, Battle Creek, MI 49016 WPOT-1610*

Box 5074, Hilo, HI 96720 (formerly Box 4948, Arcata, CA 95521) KFAT-1560, KMTL-750

Box 40554, Washington, DC 20016 Pirate Radio New England-1616

When contacting a Free Radio station:

- (i) Use the address announced on the air. If none is announced, try the one listed. [NOTE: many stations can be reached through other addresses than these; some stations that no longer operate can be reached through the Battle Creek address]
- (2) Enclose adequate postage for forwarding and reply; three 20-cent stamps will cover everything. Do not expect a maildrop to pay for your QSL!

Remember that announcing a maildrop is NOT quaranteeing anything; there are other reasons to want audience contact. And don't blame the maildrop if you never get a QSL. We are not QSL Managers, we simply forward mail; the Operators are supposed to live up to the '100% QSL' promises they make.

Stations are requested to confirm address information and active status prior to 1 May 84 for inclusion in the Fourth Edition, to be published in June 1984. Reader additions and corrections are also solicited. Send all input to: Box 5074, Hilo, HI 96720.

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Nancy Hardy 2301 Pacific Avenue Aberdeen, WA 98520

WESTERN DX ROUNDUP

All times are Eastern Local

```
Phone for hot WDXR tips: (206)532-6827 till 10pm(PLT)
DEADLINES: Tues. Nov. 8, Tues. Nov. 15, Mon. Nov. 21, Tues. Nov. 29
REPORTERS FOR THIS ISSUE:
           Alan Davidson-8121 E. Balfour Dr.-Tucson, AZ 85710
(AD)
           Ross-Supreme portable w/built-in antenna
Jim Hilliker-1502 E. Hedgewood Ave.-Anaheim, CA 92805
(JH)
           Kenwood R-1000, Radio West loop
Roy H. Millar-7420-57th Dr. N.E.-Marysville, WA 98270
(RM)
           FRG-7, SM-2; DAK-3, 40" unamplified loop
Dale Park-2253 Kanealii Avenue-Honolulu, HI 96813
(DP)
                      Realistic Minisette VII radio recorder
                       (DP-HI5) DX'ing in Pali Lanes parking lot in Kailua, O'ahu
(DP-HI6) DX'ing in parking lot of Zippy's fast food restaurant
         in Kaneoke
Bruce Portzer-6546 19th NE-Seattle, WA 98115
(bp)
                      HQ-180A, 4 loop
           Robert Wien-1309 Dentwood Dr.-San Jose, CA 95118
GE Superadio, GE long-range portable, SM-2
OF SPECIAL INTEREST:
                     AP, Calgary per call to stn, an engineer who works there says they are currently just "doing some wiring," are not on the air yet, and don't anticipate hitting the air until "at
  660 CFFR
                      Least January." Phone is 403-291-0660. (RW-CA)

TX, Ft. Worth 10/13 0500 fair w/ID in EE & SS, into SS mx.

Call change, ex-KFJZ. (AD-AZ)

BC, Elkford 10/17 0540 poor in jumble w/C&W mx // CJOC-1220.
           KSSA
1340
           CJEV
                       (bp-wA)
560 KSFO CA, San Francisco 10/17 0602 Mutual nx // KMVI-550, then state nx & sports; into "Larry King Show West Coast" w/
                      Jim Bohannan and John Houseman. Poor w/white noise QRM.(DP-HI6)
         KLAC CA, Los Angeles 10/22 1750 noted today and all last week, ID'ing every stop set as "AM 57, K-L-A-C." (JH-CA)

KFRC CA, San Francisco 10/17 0701 Seger mx; YL w/Tc and ID ment.

AM stereo; Eagles tune. Fair, KSSK-590 QRM. (DP-HI6)

(KFRC)+10/11 0426-0504 w/OC & totally off at times, very rare week-
 570 KLAC
  610
                      day SP. (RW-CA)

WA, Kennewick-Richland-Pasco 10/11 0500 nice ID o/KYJC in

KRKE null w/KFRC off. ID ing using all 3 cities, into Ai nx.

Never thought I would hear this as they used to have midnight
                      s/off, but per verie rcvd today, they've been AN since 1/1/82. (RW-CA)
  620 *KGW* OR, Portland 10/17 0400 w/TT. (RW-CA) 630 (KIDD) CA, Monterey 10/11 0417 w/OC, back on RS at 0500. (RW-CA)
                            Nashville 10/16 0110 southern-accented OM, briefly hrd
  650 ?WSM?
                      o/KFI-640 splatter. WSM rare here. (AD-AZ)

ID, Boise 10/17 0658 Kinks tune, 5am TC, NEC nx. KKUA-690
  670 KECI
                      QRM. New. (DP-HI6)
                      KS. Coffeyville 10/20 0600-0640 very poor u/much KFI-640 slop. Man giving wx, then ID, gone. In & out weakly (around 0630 hrd Cuba here), then much stronger 0635-0640 sports, & woman doing spot for First National Bank of Coffeyville.
  690 KGGF
         Called stn to confirm, they were glad I called New. (JH-CA) (XETRA) BCN, Tijuana 10/20 0550 noted off at least till 0700, but
                     occasionally popped on w/OC, so may have been testing. (JH) OH, Cincinnati 10/16 0010 hrd ID in brief fade-up o/XETRA-690 splatter. Noted again at 0103 w/local nx, local-like signal. New, State #21. (AD-AZ)

WA, Seattle 10/17 0657 "Talknet" (presumed on tape) w/Sally
  700
          WLW
  710
           KIRO
                      Jessie Raphael. Very poor, KKUA-690 QRM. (DP-HI6)

CA, Los Angeles 10/17 0626 "Talkradio 79" blip; ads for
Union Plaza Hotel in Vegas, Laurel Canyon Gourmet Shop, U.S.
Air Force. KGU-760 had "Talkradio Timeout" instead. Poor w/
  790
           KABC
                      white noise static. (DP-HI5)
 830 ?KABN? AK, Big Lake-Long Island 10/12 0445 tent. w/jazz-style vocals, great cx to AK this AM. In WCCO null. Completely gone by 0500 as was every other AK in! Weird! (RW-CA)
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AK, Nome 10/12 0521 very strong in KOA null w/rr. (RW-CA)
 850
             KICY
                             AZ, Phoenix 10/17 0325 fair o/u unID (XEMO or CBC) non-EE mx. W/ranchera mx, SS DJ, "Radio Viva" ID. (bp-WA) OR, Brookings 9/25 0940 dominant w/C&W mx, "Kury Country"
 860
             KVVA
                             ON, Brookings 9/2) 0970 dominant who wanted, now need only TDs, ad for place in Gold Beach. Much wanted, now need only KBCH-1400 for 100% Oregon hrd. (bp-WA) (Bruce, you will get a "Penguin Pat on the Head" when you hear KECH!--NH) UT. Salt Lake City 10/12 2320 tremendous signal in KNEW
              KALL
                              null w/NBC Talknet, they must've forgotten to turn their night DA on. Never hrd at night. It didn't fade for 15
                              minutes! (RW-CA)
                              CA, Apple Valley 10/22 1755 today, also last week, stn IDing as KAVR every break, and sometimes as "Radio 9-60, K-A-V-R," and "Music 96, K-A-V-R." Also on hour "from the beautiful Apple Valley Inn, KAVR, Apple Valley." So, this updates what SMM reported back in issue #652 5/28/83, that they ID only
 960
              KAVR
                              970 KYTE
                               twice within 15 minutes. Also, hrd Larry King under, possibly
                               KBEE. Fair. New. (JH-CA)
MB, Winnipeg MM 10/17 0600 complete s/on & ID, 0 Canada, into
  990 CBW
                               CBC nx. Good. (JH-CA)
1000 *KRHS* AZ, Bullhead City 9/2 approx. 0630 on w/TTs, ID ment. "250 watts from Bullhead City, testing with 1000 cycle tone, our transmitter output at 250 watts of power. We're now leaving
                               the air, we will return at 6:15 this morning with our regular power of 1000 watts, with our regular programming on channel 100." Called stn on 10/21, CE says he was doing a
                               test w/KMLO to check for interference w/KMLO, if KRHS ever broadcasts at night, so apparently not a regular f/c. Fair, but voice was under-modulated. (JH-CA)

CO. Hayden 10/18 0930-0950 fair to good in KOMO null. Many
                KRDZ
                                local spots, Hayden Lumber Store, local nx (accident on highway near Hayden, talk on Craig City Council, Steamboat
                                nignway near mayden, talk on traig try council, Steamboat Springs, etc.), sports, ment. local highschool football games, "K-Z-100 news" ID. Wx, etc. Used AF "Sportsline" show. Ad for Steamboat Rental. New. (JH-CA) WY, has apparently switched format at least at night from C&W to contemp. hit radio. Still off MM's, though. (RW-CA) OR, Eugene-Springfield-10/17-0625 OM DJ talking about Miss OR, Eugene in the Miss America Pageant. 50's mx. Pair. KHEI-11:
 1030 KTWO
 1120
                 KPNW
                                 Oregon in the Miss America Pageant; 50's mx. Fair, KHEI-1110
                                 QRM, ripply white noise static. (DP-HI5)
                                 UT, Salt Lake City 10/17 0622 EZL/light mx & standards w/OM
 1160
                 KSL
                                 host. Fair, white noise QRN. (DP-HI5)
OR, Portland 10/17 0617 net ads for Porcelana & Writers'
                 KEX
  1190
                                  Institute; "Larry King Show West Coast" w/Jim Bohannan and
                                 Institute; "Larry King Show West Coast" w/Jim Bohannan and John Houseman. Poor, white noise static. (DP-HI5) TX, San Antonio 10/17 s/on 0559. (bp-WA) AZ, Kingman 10/18 1010 faded up in KGFJ null, local and AZ nx, wx, ID, ad for western store, "12 past 7, time for Arizona state news, this report being bought to you by Uptown Drugs in Kingman." Fair. New. (JH-CA) CA, San Francisco 10/13 0402 good w/RKC nx, clear ID 0404, into jazz mx. New. (AD-AZ) CA, Sacramento 10/17 0556 end of KABC-790 Ray Briem Show (not // KGU which had local nx), long prome for Newstalk
  1200
                 WOAI
                 KAAA
  1230
  1260
                  KYA
   1320
                  KGNR
                                  (not // KGU which had local nx); long promo for Newstalk 1320, "Sacramento's First Choice" FM 96; unknown net nx. Poor, o/u cochannel unID. (DP-HI5)
                                  UT, Salt Lake City 10/10 0258 weak u/CHQM w/oldie rock & ID.
                   KBUG
                                   (bp-WA)
                                  CA, Bakersfield has apparently dropped their MYL, is rr
                   KERN
   1410
              again. (RW-CA)

UT, Ogden 10/18 0725 fair to good w/wx, into oldies mx. ID
as "Unforgettable KLO." No sign of KARM. New. (AD-AZ)
as "Unforgettable KLO." No sign of KARM. New. (AD-AZ)

(RAVA? CA, Burney 10/11 0105 susp. w/SSB way down in the mess, loop
NE. No other logical stns s/off at 0100. NRC Log lists 0300
s/off, but has 0100 s/off per tip from Doug Nyholm. Tent.
report sent. Is my most-wanted Calif. stn. (RW-CA)

(**KMBL**?TX, Junction 10/13 0638 TT's noted way u/KFLT, stopped at
0640, looped E/W. No ID hrd, but '83 F/C List has only KMBL
listed for this time. (AD-AZ)
                                   again. (RW-CA)
   1430 KLO
   1450 ?KAVA?
```

listed for this time. (AD-AZ)

1480 KYOS CA, Merced 10/17 0614 promo for broadcast of Merced JC-Sacramento Cily Coll. football game; DJ played "It Must Be Love" by Madness. Very poor, KUMU-1500 QRM, moderate static. New. (DP-HI5)

WA, Lacey 10/19 1700 w/ID, and taped for 10 minute report. 1500 KTOL Very difficult here, even w/CKAY nulled, as heavy KKNW-1510 splatter. DAK-3 only rig on which I could develop a readable

signal. (RM-WA) TX, Stephenville 10/17 0730 s/on fair to poor, then lost in 1510 KSTV

jumble. (bp-WA) WA, Spokane 10/17 0700 began ET w/audio from KDRK-FM (C&W *KGA*

mx). Gone by 0720. (bp-WA)
OK, Oklahoma City 10/17 0638 OM w/CDT TC "in Koma Kountry," 1520 KOMA cute sounding YL w/ad, area wx. Very poor w/white noise static. (DP-HI5)

MM, Albuquerque 9/28 0848 briefly atop w/clear ID; assume had 1580 KZIA just signed on at 0845, but didn't hear same. Nov. s/on s/b 0845, an hour later than Sept. (RM-WA)

1590 (KLIV) CA, San Jose 10/17 0220-0240 w/OC, poss. due to tech. problems. Tried tuning slightly off freq. and found KBBQ which is nothing special, but I found an unID rr coming in from the north. Thought it might be KJET or KTIL, but only a KHTT image! How this image got on 1590 I can't figure out! (RW-CA)

Oct. f/c's heard: 3rd MM 0110-0115 KEDD-1550 KS (RW-CA)

Oct. f/c's tent. heard: 2rd TH 0315-0320 KNEB--960 NE (RW-CA)

Oct. f/c's not heard:

0600-0610 KTUI-1560 MO (RW-CA) 2nd WE KICA--980 NM (Is this defunct?) (RW-CA) 0200-0210 3rd TH (RW-CA) 0210-0220 KOJM--610 MT

KBMN-1230 MT (RW-CA) 0220-0230 0100-0110 KCTO-1050 OK (RW-CA)
0240-0250 KRDD-1320 NM (RW-CA)
0245-0300 KXPO-1340 ND (RW-CA) 3rd MM

UNIDs:

10/22 0430 fair, looping N w/Larry King. Probably KFAR. (RW-CA)
10/17 0252 TT weak in KABC null w/KWIL, KGHL not noted, maybe they
moved their f/c to the 3rd MM? It's defunct on the 1st MM. (RW-CA)
10/17 0700 unID w/CJOC/CKDA in a real CY-like mess, added up briefly 660 790

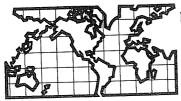
1220 w/nx, several ments of MO. Could be KZYM, KRMC, KOFO. Faded out immediately. CJOC completely took o/after the fadeout. (RW-CA) 10/3 0759 two unIDs, one w/ID sounding like "KMSV Muriel, Minnesota"

1510 (probably KMSD, Milbank, SD, which is sorta close) o/unID s/on, possibly KI?? Call given, w/studios & xmtr in same location, then blown away by KGA s/on. (bp-WA)

Sort of a short WDXR this week. Everyone must be trying for those (for a Penguin Pat on the Head), hi. rare eastern stations



via Steve Mittman



DX WORLDWIDE - WEST

Pat Martin - Editor

P.O. Box 843, Seaside, Oregon 97138

(503) 861-3195- deadline Tuesday

Received a note from BP this past week, moving his Deadline up a day, so I will go back to the Tuesday Deadline, instead of Monday. In other news, KSWB-Seaside received info this past week on their allowed power after SS, from the FCC (KSWB is a Daytimer). They will be allowed about 248 watts. They are 1 KW days. On the otherhand KSWB's sister station KOHI-1600 KHZ-1KW-St. Helens, Or. will only be allowed 13 watts! If this is an example of what the powers will be after SS, there may be only slight QRM, especially on Foreign Splits. We will have to see. On with reports:

TRANS-ATLANTIC DX ROUNDUP

- UNID, Switzerland?? on 9/25 at 0452, faint mx, OM singing, Classical, almost Opera style. (DM-Ab) 531
- HOLLAND, Flevoland, fair on 9/24 at 0501, 0M in Dutch, Splatter from 747 750. (DM-Ab)
- EAST GERMANY, Dresden, faint on 9/25 at 0424, singing by YL, slow (DM-Ab) 1044 t
- UNID, poor at 0458 on 9/25, vy faint audio, just enough to know something 1188 was there, vy strong het. (DM-Ab)
- $\frac{\text{UNID}}{300}$, faint on 9/23 at 0155,YL/OM talk not SS or EE,poss. GG since a $\frac{1}{300}$ KW station is listed here. My 1st TA of the Fall Season. 1044 1197 which is the usual East German also had audio at this time. 1197 still with faint audio at 0216 after I hastily strung out another 1500 foot beverage facing NE in jopes of getting a better signal. NO LUCK! (DM-Ab) (Don: WRTH lists VOA-1197 in EE at 0155, then into RR at 0200. I hrd. and Verified them a couple years ago. PM) UNID, at 0506 on 9.24, poor, faint EZL mx, didn't stay long. (DM-Ab)
- 1206 UNID, Romania? poor at 0504 on 9/24, faint EZL mx. No other clues, as 1053 the signal faded quite fast. (DM-Ab)

PAN-AMERICAN DX ROUNDUP

- COLOMBIA, Medillin, at 0208 on 10/3, HJMX, under WHB ment. of "Super" at 0208. Romantic ballads, ads, and OM DJ.Too poor for certain ID, may 710 t have been a Mexican? (FM-Ia)
- COLOMBIA, Barraquilla-0100 on 10/3. Ranchera mx with "Em. Unidas" ID 720 loud and clear on mt dusty Emerson antique radio in the basement at SS.faded into WGN. Later hrd upstairs on R70 and loop in good fadeins. OM with TCs inbetween each sellection. This was a fun catch from my workshop. (FM-Ia)
- MEXICO, Mexcico DF. XEX at 0358 on 9/25 "Radio Eco" Sounded like that several times. Plus "La Voz de Noticias" Nx followed, "XEX Radio Fes-730 tival with QTH at 0403. (Could this be data from 2 stations? (FM-Ia) NICARAGUA, Managua-YNX, R. Sandino SS on 9/25 at 0454, ID at 0600 (DM-Ab
- 750 COLOMBIA, Bogota, RCN at 0436 on 10/6, in KOB null, RCN IDs, many Bogota datelines in nx. Banco Capital, Banco Republica and Banco Bogota ads 770 (Banco Bogota only for sure). Another funny thing was what sounded like a "Radio Sutatenza ID with RCN at 0501, and Radio Progresso RCN at 0501 with fanfare. At 0502 "RCN Radio de Colombia" Prob. net nx, with other
- stations, No specific station ID. (FM-Ia) MEXICO, Tijuana-XEMO on 9/22 at 0811,SS,quite weak,fades,QRM from 860 other UNID stations. Hrd "R. Ochenta Seis" ID, although phonetically it did sound more like "R. Sinca Seis" Close enough? (CBC-Wa) (Chris: That is fine. Welcome to DX Worldwide-West. I hope you report
- often. PM) GUATEMALA, Guatemala City-TGJ at 0345 on 9/28, Ranchera mx and IDs at 880 0350 "Esta es Guatemala...Nueva Mundo..etc. Long drawn out ID and
- promo. In Flutter, poor to fair. (FM-Ia) HONDURAS, R. Honduras-HRGLL at 0354 on 9/28,ID in brief listen (FM-Ia) 890 MEXICO, Mexicali-XED, on 10/2 at 1226 SS station in CKAL null, fair to weak, "La Grand D" ID 1st time hrd here. CBC-Wa) 1050
- MEXICO, Mexicali-XEK? New call for XED, sounded like this to me eve. of 10/20, while setting up on this freq. for AM Reception. (RM-Wa)
- UNID, at 1229, on 10/18, SS and Ranchera mx u/o KUUX. KPHX? (FM-Ia) 1480

- 1555 t CAYMAN ISLANDS, at Olll, rr mx, Lite Beer Spot, mumbly EE voice, whenever they were giving ID. Have tryed for this several times, no luck. Usually there tho. (FM-Ia) (Fritz: I never diff. hrd an ID either, but I sent them a taped report of spots, etc. and back came a QSL letter. 1206 KHZ seems to be better here, tho. Bother freqs. have been hrd here. PM)
- MEXICO, Hermosillo-XEDM on 9/21 at 0515-0608,hrd rather weakly,but over KDAY most of the time. ID "Radio Grande de Sonora" Quite read-1580 able at times. I could pick out various words and times in SS. First time hrd. (CBC-Wa)

TRANS-PACIFIC DX ROUNDUP

- UNID PHILIPPINES, on 10/22 at 1515, vy weak YL in Tagalog, with U.S. style rr mx, lost by 1520. (PM-Or) 666
- 648 JAPAN, Okinawa-FEN, hrd at 1502 on 10/23 w/UPI nx in EE, at 1458, hrd
- SSB (Star Spangelled Banner). (DW-Or) (Dave: This does sound like FEN as the WRTH lists them as playing SSB near 1500 daily (0000 JST), so this is quite likely. PM)
- 702 AUSTRALIA, Sydney-2BL at 1400 on 10/2 w/Time Pips, then s/off. 1st new Aust. since 1976. (RM-Wa)
- AUSTRALIA, Sydney-2BLin EE on 9/23 at 1135, hrd Anne Murray song (DM-Ab)
 PHILIPPINES, Cagayan de Oro-DXCC, hrd with what sounded like Election 828 Returns, at times // with 837 at 1240 on 10/22, then some U.S. Pop mx at 1318. (DW-Or) +Also noted on 10/24 with U.S. Pop mx, and OM ancr in Tagalog, at 1510, Fade out by 1525. (PM-Or)
- PHILIPPINES, Iloilo-DYFM, hrd. // to 828 with Election Returns? on 837 10/22, at 1241, OM in Filipino, nx at 1300, spots for World Banks, or of that nature, in EE and Filipino. (DW-Or) +Also noted on 10/24 w/OM in Filipino, and lots of spots in EE and Filipino, at 1510.(PM-Or)
- 1575 THAILAND, VOA, in Thai at 1239 on 9/23, faint, at 1330 US ancr. "This is the Voice of America". New country for me. (DM-Ab) (Good going Don. PM)

VERIFICATIONS:

- JAPAN, Tokyo-JOAB, NHK sent reg. package, with QSL card, NHK pgm. 693 guide, etc. in 1 month with nrp. (PM-Or)
- JAPAN, Nagoya-JOCB, sent report to NHK-Nagoya, but they must have sent report on the NHK-Tokyo, sent reg. package, but call letters 909 were typed on card this time, in 1 month with ms in Nagoya. Japan QSL #62. (PM-Or)
- AUSTRALIA, Exmouth-6XM-Perth sent reg. Blue vq in one month for 1188 taped report, ms. inc. WA. QSL #5. (PM-Or)

THANKS TO THESE REPORTERS:

- CBC-Wa Chris Campbell-4037 SE 11th Street-Renton, Wa. Sanyo M9926 AM/FM Cassette Radio
- FM-Ia Fritz Mellberg-1505 Central-Hawarden, Iowa 51023
- Icom R-70, Wedge, Longwire
- RM-Wa
- Roy H. Millar-7420 57th Drive. N.E.-Marysville,Wa. 98270 DAK3, Grundig 5077,Unamp. 40" loop, SM-1 Don Moman-6815-12 Avenue-Edmonton, Alberta, Canada T6K 336 DM-Ab Kenwood TS 430s, Antennas: 1500' East, 1200'West, 1200'S.W., 1000' NE, 1000' North Beverages. 150' random wire. DX at 7 mile flats Site,
- 175 miles West of Edmonton, foothills of Rocky Mountains.
- Dave Williams-Highway 101-Box 615-Astoria, Or. 97103 DW-Or
- SPR-4, Longwire.
- PM-Or Yer Editor
 - SP-600JX, 200 foot NE LW (Terminated), 1500 'E Beverage, Ground sys.



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