

A74-2-4

the national public apathy in the '84 election when only 51% of the voters voted? Hey folks, this is YOUR club and it was founded on the sole purpose of the club members being able to have a say on what goes on in their own organization. Write or call your various BoD members and let them know your views and where you stand.

Richard Wood, in 21 December DXM noted your logging of KINS 980 Eureka. I'm a little puzzled, however. Eureka Adult School and the town of Arcata, correct, but KINS is an MoR station, granted however, many country artists have crossed over to the pop side - your reference to a C&W song. In the 3-plus years I lived there I made frequent references to Humboldt County. No Gresham County in California. Not one Gresham even in the phone directory, hi. Otherwise, good catch - hope they verify. KINS is not noted for quick verifications.

Sacramento Bee reported KAH1 950 Auburn now fulltime with 1.5 kw at night. Sure 'nough they're there and louder at night than with their 5 kw day signal. Can be nulled quite well to bring in a very strong XEGM. Swell. Never did see this in Broadcasting Info, unless I missed it which with all the changes in the last couple years is quite possible.

Finally fished out KQTL 1210 on 30 December at SRS. Also caught an UNID with time check (MST) with a sports report, gave calls which sounded like KPOD (impossible, of course), maybe KRSV (?), but will keep after that one.

NRC Logbook lists KRAK 1140 as a U3 operation. Don't believe so anymore, possibly due to fulltime at KCMJ, although I would think KCMJ would have to concede to KRAK and fully protect them, but, twice now I've heard a two-second off air at 4:45 PM PST last week of December, which is power down time, indicating that KRAK now has maybe a different night pattern. CE at KRAK is impossible to reach, or has been to my previous calls.

For those writing me commenting on the "new look" of WDXF, please be patient. I think the kinks have been worked out. The 21 December issue looked OK, but as you can see I've played around with the printer so that the full page is now used and will keep ribbon up to snuff so you can read the bloomin' thing, hi. Ya guys have just plain been used to one typewriter for the last seven years is all. Previous typewriter was same print size as this dot-matrix printer. If maybe in another month popular consensus favors it, I'll go back to the old style. Quite frankly, the Atari is faster, everything is kept on file, and your column is being maintained in a much improved manner.

Have done a little dial spinning, nothing really serious, but have been following SSS and SRS, logging KMTI 1590 Manti, Utah by total surprise, well after their sunrise and atop the channel (with KLIV nulled, of course). But, who is the SS with ranchera music on 1590? Did KOGO go SS or is that McFarland? Another mystery: Who's REL on 1550? Sounded like a live program (not church service) on 21 December at 0747 PLT. And I must have missed the boat on this one, living formerly so close to Medford and all, but noted KBOY 730 at sunset s/off; when did they go back to KBOY and to rock? Talk about bare bones s/off, just the legal stuff, folks, with mention of 24-hour FM, then cut carrier shortly after start of next song, two minutes early I might add.

Is it KNBS or KWSD with 49'ers play-by-play, or both? Heard a wrap-up on 22 December, break into local spots (couldn't pull 'em good enough to figure out locations on spots and KGW was doing a number to the frequency). Had it been KWSD they committed a no-no, as program continued past 1645 PLT December s/off. If KNBS, a little strange they would be carrying 49'ers so deep into Rams & Raiders turf.

Speaking of sports, NorCal stations have been carrying Raiders football, locally it's KNGR 1320. Also, KFBK 1530 carries (for what it's worth, hi), Sacramento Kings basketball (KDVR TV with telecast).

Browsed through latest (which isn't all that recent an edition) Vane Jones, and noted a ton of mistakes. Was really disappointed with the FM section - no listings for power, antenna height, etc. Now I realize it's extremely easy to become confused and make mistakes with the mania to fill the Clears, but I mean obvious mistakes. And speaking of the mania with new stations, has anyone noticed the large scale trend for stations to return to their original call letters? I guess it stems from the "new" station not making it and returning to calls more familiar to the audience (read ratings).

That about wraps it up from the capital city. On a weather note it was pointed out (on local news media), that Anchorage, Alaska was four degrees warmer than Sacramento the other day. We're into our third week of tule fog. I leave the rain of Humboldt for this? -hi. See y'all in 7 and best of DX in '86 de Rth.



## the irca technical column

Editor: Nick Hall-Patch  
1538 Amphion St.  
Victoria, B.C. V8R 4Z6  
Canada

### Active Short-wire Phasing System Using Modified Hagan Amp by Mark Connelly

A modified version of Jim Hagan's 2-FET loop amplifier has been found to be useful in phasing very short antennas (e.g. car whips or the whip sections of a "TV Rabbit Ears" type antenna).

The amplifier card including phase-reversing transformer can be assembled on a 1.9" x 1.4" vectorboard for a very compact installation. The design eliminates the need for a balun transformer; resistive summing of the "Line 1" and "Line 2" outputs is done instead (with about a 6 dB reduction in achievable output level into 50 ohms.) If the loss is a problem, use of a BBA-1 broadband amplifier module (March 2, 1984 DX Monitor) may be used between the phaser's output and the receiver's input.

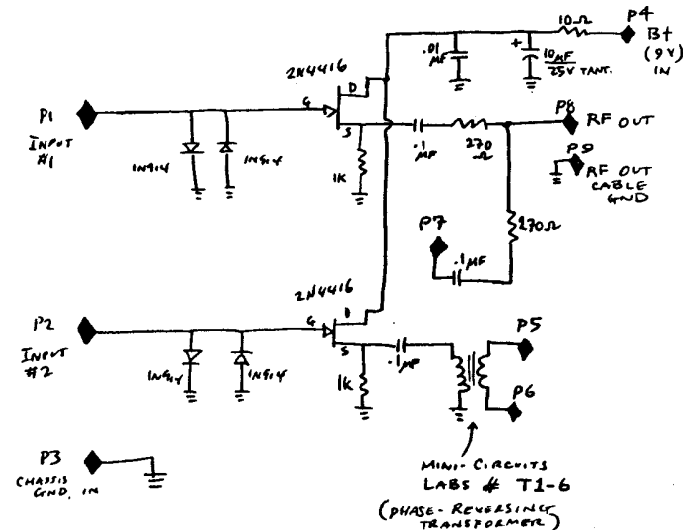
Figure 1 shows the schematic of the modified Hagan amplifier card.

Figure 2 shows the overall short-wire phaser schematic.

Figure 3 shows module hook-up to receiver and aerials.

Customary phasing procedures (peak each line at maximum tank Q, equalise levels, decide null mode to use, tweak controls for null) are employed.

FIGURE 1 - MODIFIED HAGAN LOOP AMP CARD



Cases of 2N4416's are connected to chassis's GND.

A74-2-2

FIGURE 2 OVERALL SCHEMATIC OF SHORTWIRE PHASER

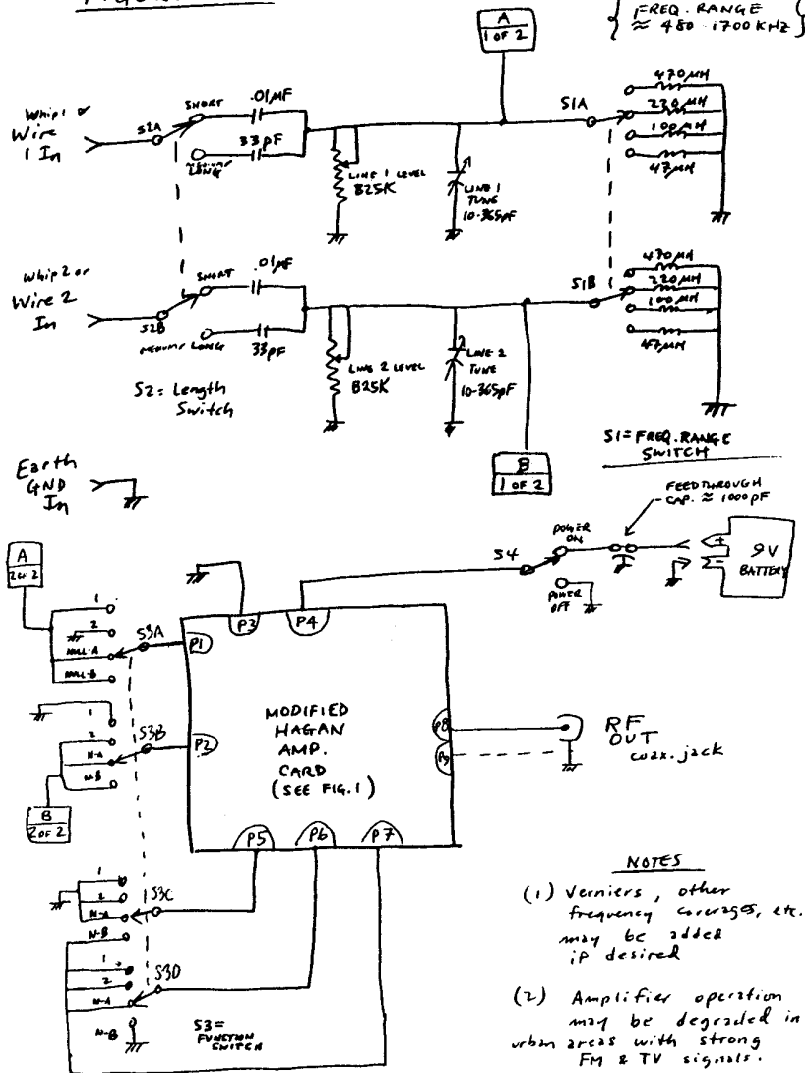
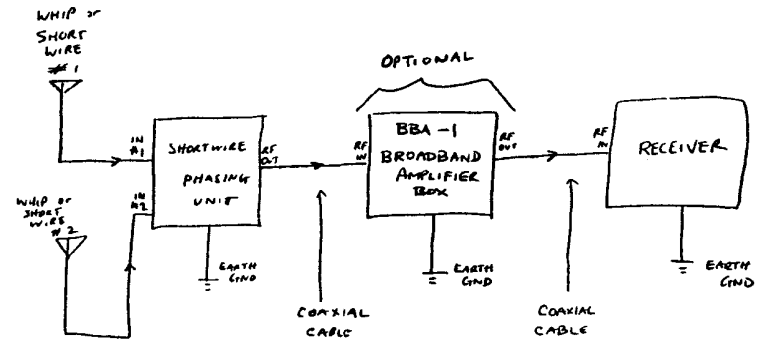


FIGURE 3

MODULE INTERCONNECTIONS



EARTH GROUNDS NOTED ABOVE MAY BE OMITTED IF RECEIVER CHASSIS IS GROUNDED TO MAINS GROUND (CENTRE PIN OF 3-PIN PLUG) AND IF TOTAL LENGTH OF COAXIAL INTERCONNECTING CABLES IS LESS THAN 6-M/20-FT

\* \* \* \*

Derek Claridge, 815 9th St., Nelson, B.C. V1L 3C1 has acquired a number of circuit boards which contain four small relays and associated diodes and resistors. They are new material and each relay is single pole, normally open, operates at 12v, 3 mA and releases at 8v, 1.8 mA, with a coil resistance of 4300 ohms. They are available for \$1 for a card of four; write Derek if you're interested. Derek also notes that Morning Distributors is sold out of the 365 pF capacitors mentioned awhile back in these pages.

\* \* \* \*

Karl Zuk has received a couple of circulars from Kahn Communications concerning a modification to the SONY car radio, model XR-A33. Does anyone have any details about this one? Obviously, it's a radio capable of decoding Kahn AM stereo, but beyond that?? The circular that Karl received concerns killing the mute circuit of this radio

\* \* \* \*

Best wishes for 1986 to all, especially to Mark Connelly, Laurens Engel, Jim Herkimer, Jim Hill, Dennis Kibbe, Don Moman, Ben Peters and Karl Zuk, who helped make the tech column possible in 1985. Also, thanks to those who have been sending their completed technical articles directly to Seattle; I've greatly enjoyed them.

NOTES

- (1) Verniers, other frequency covers, etc. may be added if desired
- (2) Amplifier operation may be degraded in urban areas with strong FM & TV signals.