

will be ZYOFMN, ZYOFCA, ZYOFKL, ZYOFRT, and ZYOFDM. All QSL cards will be handled direct only, to Karl Mesquita Leite, Caixa Postal-385, 59001 Natal - RN, Brazil, South America.

CQ WW DX CONTEST

Here's a reminder to all CDXA members....the 1987 CQ World Wide DX contests are coming, and they will be here sooner than you think! Now is the time to plan your operating strategy, and to reserve the weekends of October 24-25 (SSB) and November 28-29 (CW) for contest purposes. The CDXA club score for last year's contest was better than the prior year, and we would like to continue our upward momentum.

N4ZC is making quite a few improvements at his contest station, with the help of WABMAZ (who has returned to our area). Roger and Don will be joined by a crew which will make a major multi-single effort during the SSB weekend. In order to fully optimize this operation, it would really help if anyone with an extra TS-930 or TS-940 could loan it to the contest effort. The same goes for an Alpha amplifier or two. Also, loggers and people to watch two-meters are always welcome, and people willing to watch and learn intensive contest techniques should get in touch with Roger at least a month before the contest.

- - - CDXA BARBECUE - - -

DON'T FORGET AUGUST 29 AT AA4R'S LAKE NORMAN HOME FOR THE ANNUAL GALA BARBECUE, PICNIC, AND 807 DISPOSAL EVENT. A detailed map (supplied by AA4R) is on page 3, and if you bring it he will autograph it for you. Cost of this event will be \$15.00 per couple, and includes meat (the famous K4PIG), beans, cole slaw, drinks, paper plates, and desert. If anyone would like to bring something else, feel free, but it's not required. Activities begin at 4:00 (if you want to swim in the lake, bring your own suit and towel), and

Dinner will be served around 6:30, depending on KU4V's progress with K4PIG. We also trust that last year's thunderstorm will not be repeated! It is also suggested that you bring a lawn chair or two. PLEASE CONTACT SKIP, WA4UUP, OR ANY CDXA OFFICER, AND LET US KNOW IF YOU WILL ATTEND, SO AN ACCURATE COUNT CAN BE MADE PRIOR TO PURCHASING ALL THE GOODIES. HOPE TO SEE EVERYONE THERE!

BALUNS, BALUNS, BALUNS

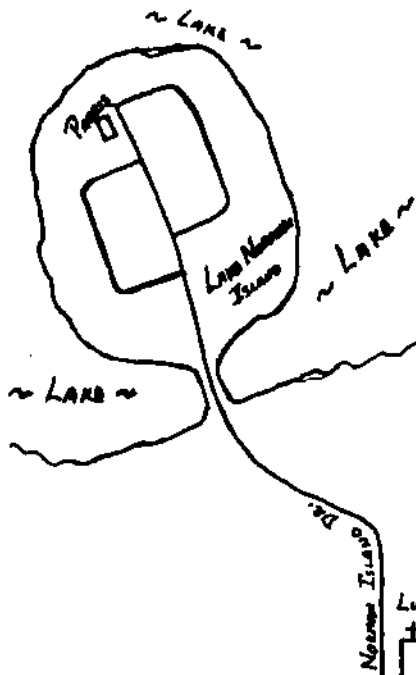
By Dick Weber, K5IU
(from the North Texas Contest Club)

Some number of years ago, I had a Hy-Gain 10-meter Long John which had 1.5 to 1 as its lowest VSWR. One day I decided to improve this by "tweaking" on the Beta rods and the driven element. The lowest VSWR I could obtain was 1.5.

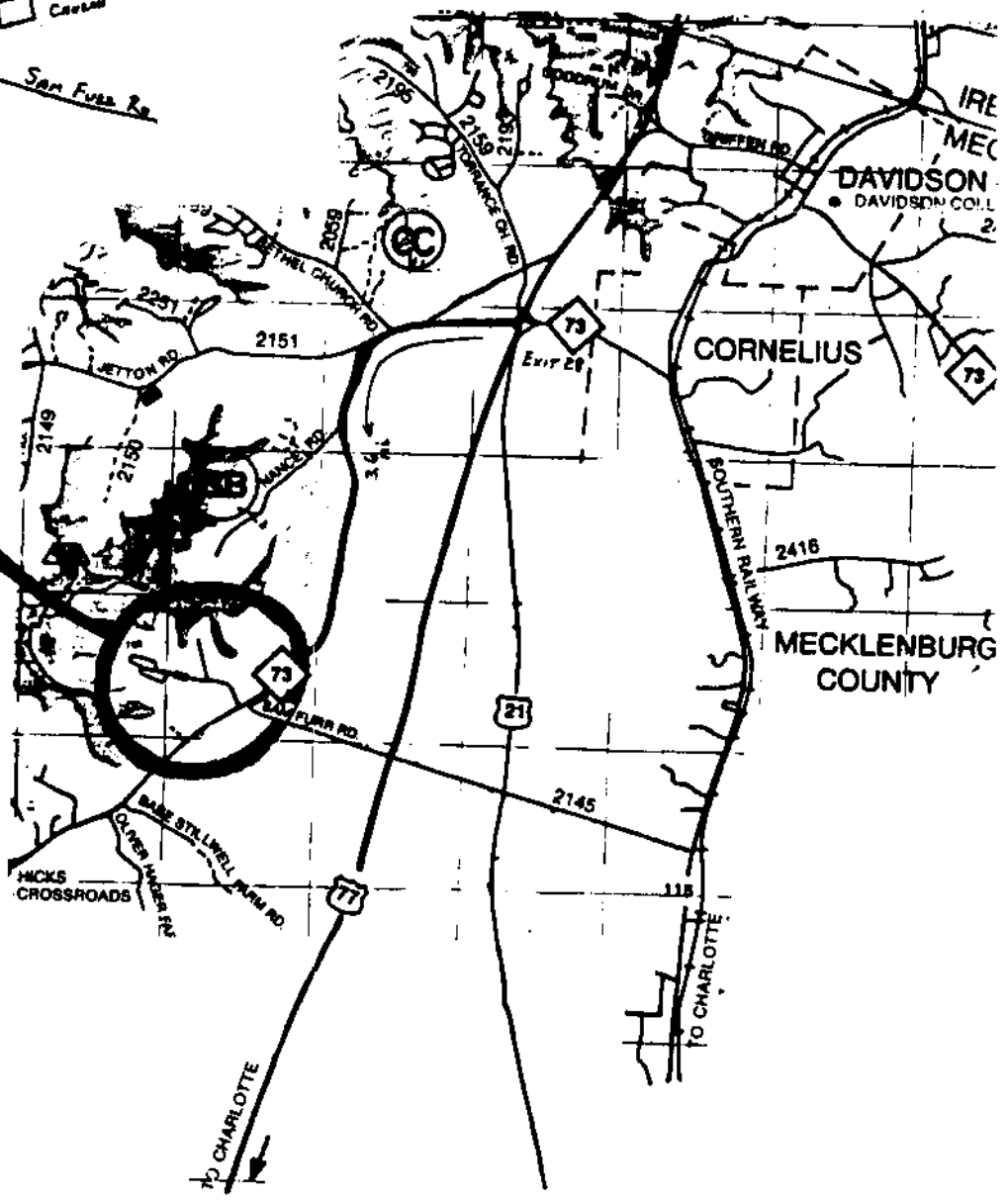
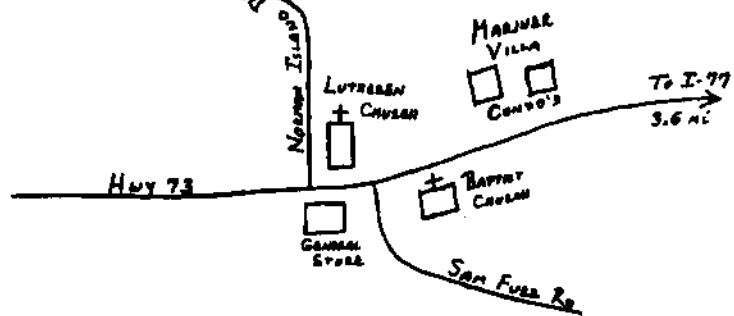
The Beta match was fed through a Hy-Gain BN-86 balun, and I became suspicious of it, so I decided to take it off the antenna and test it. With a 50 ohm non-inductive load resistor across the balanced terminals, I measured the VSWR to be 1.5 to 1 at 28 MHz using a Bird wattmeter.

I then decided to feed the beam with a coiled line choke. Using an HP4815A RF Vector Impedance meter, my choke exhibits about 1000 ohms reactance to shield currents at 28 MHz. After installation on the ten meter beam, the VSWR was 1.15 to 1 with no pattern change that I could detect.

Over the holidays, I was going through my "junk box" and noticed all the baluns that I had acquired over the years. In view of my prior experience, I began to wonder about their performance and decided to test them as I did with the BN-86. Again, I used the HP RF Vector Impedance meter to measure the impedance at the unbalanced port of the balun with a 51.8 ohm non-inductive resistor across the balanced port. (Cont. on page 4).



FOLLOW NORMAN ISLAND DR.
UNTIL IT ENDS - WE ARE
THE LAST HOUSE ON LEFT.
PLENTY OF FREE PARKING
IN VACANT LOT NEXT
TO HOUSE



- I-77 NORTH TO EXIT 28
- NC 73 WEST 3.6 MILES
- TURN NORTH (RIGHT) ONTO
NORMAN ISLAND DRIVE

• EMERGENCY TELEPHONE
892-4081

MONITOR 147.015 MHz

The chart below shows the measured impedance of the various baluns at frequencies of interest:

Balun	frequency					
	160	80	40	20	15	10
Bencher (hi freq)	25	38	50	60	70	84
Ultra-Bal 2000	50	52	55	63	78	96
Unadilla (W2AU)	50	52	55	60	70	70
Cushcraft (ATB-4)	40	48	52	58	63	67
Hy-Gain BN-86	46	50	54	60	70	78

However, the chart shows no difference between the two on 15 meters.

One point is clear: 1:1 baluns are not necessarily 1:1 over their advertised frequency range.....

LAST MINUTE NEWS

If anyone doubts that we have started a new sunspot cycle, the recent conditions on 20 and 15 should convince them.....quite a few days this month the solar flux has been above 100, and propagation has been quite good from time to time. Stay tuned to WWV at 18 minutes past the hour for more good news.....

Congratulations to N4CQ, who's Little League baseball team won a State Championship recently - now we know where Dave has been keeping himself.

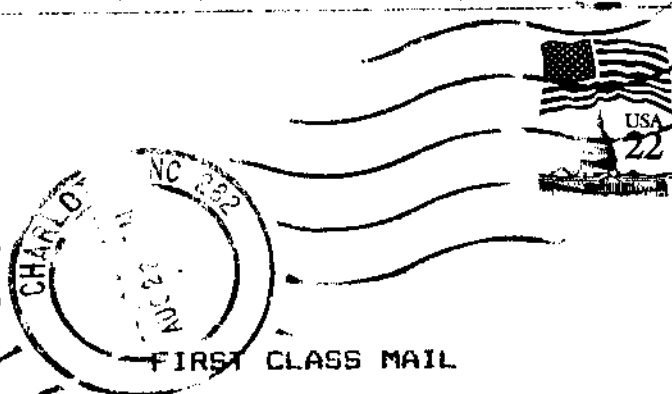
It's now official, N4ZC placed number 5 last fall in the CQWW SSB contest Multi-Single category (See Sept. 'CQ for all the gory details.....

The test condition I used was a non-reactive load, which is often not what is seen in the real world over the bandwidth of the antenna. Recently AABC replaced a Bencher (800) balun on his TH7 at 90 MHz with a BN-86, which greatly improved the VSWR on 21 MHz.

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