

CORA

May 2000

CORA OFFICERS and BOARD:

President:

N7QKR, Phil Hodap

Vice President:

Vacant

Secretary:

Vacant

Treasurer:

KC7LUD, Mark Rhodes

Member-at-Large:

W7VEE, Terry Thorne

Member-at-Large:

KB7W, Mike Bond

Newsletter Editor:

K7PEK, Wayne Linschied
923-0160

Meetings:

Weekly: CORA NET

When: Sundays, 2015 Hrs.

Where: 146.940 Mhz repeater

Monthly: CORA "eyeball QSO"

When: Last Thursday of each month
except November and December

(monitor the net and newsletter for
changes and updates), 1900 Hrs.

Where: Bend Senior Center

1 Block North of Greenwood on 5th St.
NE, Bend

Monthly: CORA BOARD

When: 2nd Tuesday of each month

Where: Announced on CORA NET

CORA Happenings

What's going on?

Glad you asked!

May:

13, Non-Field Day Field Day

20, Pole-Peddle-Paddle

25, CORA Club Meeting

June:

3, Sisters Ham Breakfast

2-4, SEAPAC, Seaside

13, CORA Board Meeting

18, Fathers Day

24, Field-Day

29 CORA Club Meeting

Any others? To get your favorite activity listed, call Wayne at 923-0160 (Weekends) or 0900-1300 Weekdays.



WAKE-UP
Times-A-Wasting

Fundraiser

"SoapBox Up"

Due to a lack of workers, it has been decided to not staff a fundraising activity at the Ogden Wayside (High Bridge, Crooked River Gorge) North of Terrebonne.

This would have been an excellent opportunity to put some cash into the CORA coffers.

How much is in the treasury?
Come to the meeting and ask the trea-

sure! Start a discussion with the other members about how much \$\$ is available and what is going to be done with it. The CORA Board members will welcome input regarding the annual budget.

There are limited ways to add \$\$ to the treasury. Increasing the Annual Dues, or staffing fundraising activities such as this.

Remember, CORA is a non-profit organization - any donations are tax deductible.

"SoapBox Down"

Editor

Notes on the Board Meeting

Present: Phil Hodap, Mark Rhodes, Mike Bond, Neil McKie, John Ogden

The 147.060 Repeater re-installation will be rescheduled, the snow-cat broke-down on the last attempt. The old machine has been rebuilt, Controller software updated, and a new Gel-Cell battery purchased (as required by the location owner).

Field Day trial run discussed with John Ogden, W9CZ. The Non-Field-Day Field-Day will be held at the old Deschutes County fairgrounds in Redmond.

Neil McKie, WA6KLA, offered to do a Mobile Radio Check Clinic later this summer.

It was decided to cancel the Memorial Day Fundraiser due to a lack of people and other logistics.

The May meeting will feature Antenna Tuners, their design , operation and effect on antennas.

From the President

This months Meeting Program:

ANTENNA TUNERS

Why have an antenna tuner? What can I gain?

Come to the meeting (25 May) to discuss a wide range of Antenna Tuners, Different designs, and effects.

Different designs of Antenna Tuners will be on display.

Later this Summer:

Mobile Radio Check-up Clinic. Open to all Amateurs, Pass the word around. Participate on the CORA Net and watch the newsletter for updated time/place.

The Ogden Wayside fundraiser for Memorial Day has been put on hold due to logistics. Labor Day may still be a possibility.

Many, Many, Thanks Marty

In the past year, Marty Moore, W7FCG, has provided CORA with much assistance. As Secretary , Newsletter Editor, and the short notice Christmas party. Always cheerful and willing to help.

It will take several people to do the work Marty did for CORA. We wish Marty and Bill all the best through the Summer and beyond.

For Sale

Complete HF station \$600
Yaesu 101E
MFJ 949E Tuner
Hy-Gain Tailtwister Rotator
25' tower
Tri band beam
all band dipole
coax, wire and manuals

Complete 2M all mode \$600
IC251A
Mirage 160 w amp
TV rotator 30 ' tower
baby boomer beam
4-6v golf cart batteries
coax, wire and manuals

Ten-Tec century 22 with
Astron power supply and manual \$150
scope \$25

Vibroplex Paddle \$100

Vibroplex Bug \$100

Alinco HT \$75

Alinco 2m Mobile \$100

MFJ 259 SWR Analyzer \$100

Sterling N7ZTH 541 382-1842 N7ZTH@empnet.com
P O Box 1130
Bend, Or 97709

SO WHAT'S ALL THIS ANTENNA TUNER STUFF ANYHOW?

Now that the F.C.C. has changed the licensing structure and many hams have upgraded, there are more hams getting on the lower frequency bands. Many are worrying about whether or not they need an "antenna tuner" to go with their new antenna. On 2 meters all you needed was a commercial antenna and a hunk of coax. When you connected the coax to the transceiver it all worked fine. Will this also be true on the lower bands?? everybody keeps talking about "antenna tuners" and "getting the S.W.R. down", so what gives??.

Well, back in the "good ol' days" (good??) you bought a receiver, built a simple transmitter on a hunk of wood, and strung a wire out the attic window and worked "DX" (in most cases it was some guy about 100 miles away). The text books said that for maximum power to be transferred to the antenna, its impedance had to equal that of the transmitter. It also said the antenna should be resonant in order to radiate efficiently. The problem was solved by an "antenna tuner". This usually consisted of a couple of coils and capacitors which canceled out the reactance of the antenna and transformed its impedance to that of the transmitter.

Well, when it was realized that running the ham station at the radiating end of an antenna was not such a good idea -- i.e. R.F. all over the shack-- we got smart and spent some money to put the antenna outside between two trees or a telephone pole and the house or some such arrangement, and connect a feed line between the antenna and the rig. Yippee--no more R.F. burns from the key or mike (some of the guys had a kind of miniature checkerboard scar on their upper lip where the metal screen on a D-104 mike implanted a nice R.F. burn) . But, now there had to be some kind of device to match the antenna to the line, and the line to the transmitter if we were to efficiently transfer power and make waves.

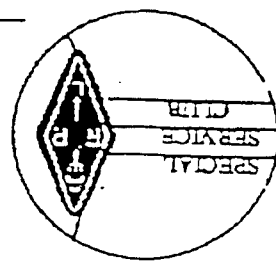
The place where the antenna was fed determined the necessary impedance of the feed line. The black box that matched the feed line to the transmitter inherited the name "antenna tuner" from its predecessor, but it really was NOT an antenna tuner--i.e., it did not change the resonant frequency of the antenna directly. If the antenna was not quite resonant, it transferred some reactance into the feed line which in turn presented some transformed equivalent reactance to the matching network at the transmitter. By canceling out this reactance, the network (black box) fooled the transmitter into thinking that it was looking at a resonant (purely resistive) load of the proper value. The antenna under these conditions was less efficient at translating the power into radio waves than if it had been resonant and properly matched to the feed line. But, hey, it got you on the air didn't it? and with less RF in the shack!

Yes, you will probably need some kind of matching device to fool your transmitter--most solid state amplifiers do not tolerate mismatches very well and S.W.R. values as great as 2 might cause the amplifier to shut down (or blow something). At our next CORA meeting we plan to talk a little about various kinds of "tuners" and what kind you might need or not need. So come to the meeting and bring your questions -- we'll do our best to answer them or find someone who can.

Well, CU! on 80 or 40 CW--73s John Ogden W9CZ

97756-0521

Meeting
Bend Senior Center



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pp://www.dxcr.com

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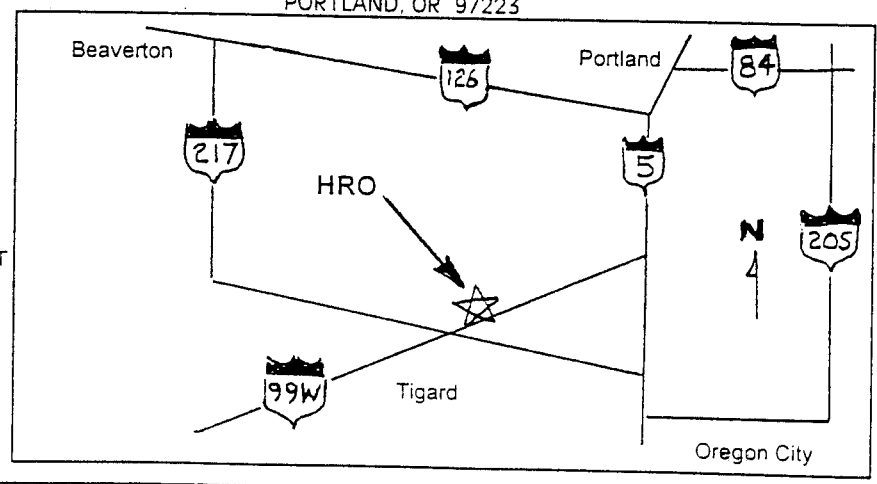
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