RACES – Mountain District – Mile High Radio Club
PO Box 1204
Idyllwild, CA 92549-1204
E-mail: mhrc@arrl.net
www.milehighradioclub.org
Repeater Station WA6SSS 146.895 (-) pl 118.8

MOUNTAIN FLASHES – NEWSLETTER

MARCH - 2012

In this Issue:

Presidents Message / February Club Minutes

County wide Monthly Roll Call

First Monday of the Month

Will be on March 5th, Roll call normally starts around 1845 and ends when a stand-down order is issued.

All Mountain Roll Calls are conducted on the Idyllwild Repeater 146.895 (-) 118.8

March - Wednesday Roll Call

is held at 1900 Hours

This month's callers are;

7th : Chris N1OUT
14th: Rick KG6TIL
21st: Chris K6IDY
28th: Paul KG6TIL

March Meeting @ Idyllwild Fire Department – Training Room Mark Your Calendars!

MHRC / RACES: Thursday March 8th

General Meeting at 6:30 PM

Everyone is welcome to attend any of the above meetings or call in on the nets.

Presidents Message

March 2012 report

The Board has provided the support to work a new meeting format for the remainder of the year. Following the spirit of the clubs constitution and by laws, we will work towards providing programs and radio training again. The by laws state we must hold a board meeting once a quarter, and in keeping our board meetings open to all, we will host them on the regularly scheduled days and times as our general meetings.

The by laws have us obligated to specific tasks through out the year and will basically determine when we hold our board meetings. Right now those months are planned to be; January, April, July and October or November.

What this will provide for are seven free meetings or gatherings if you will on the non Board meeting nights, to host informative programs and meet the general training requirements of RACES and the use of your radios. Now, during some of the free meetings

we may have to open the evening for a very brief meeting to take care of a Secretary's, Treasures report or approve some form of expenditure and bring up new business from the club. The goal would be to limit any business during the seven free meetings to fifteen minutes.

So if you are on a sub committee or looking to be on one. Count on performing your tasks throughout the month before; be in communication with one another and back to me so that our focus at the fire house is on point.

My hopes are that this proposal evolves and continues on as more of you become involved with the club.

Have fun and see all of you in April, as I'm scheduled to travel the week of March 5th.

Billl Tell
KD6KTV

RACES NEWSLETTER

Well here we are heading into the end of the first quarter of 2012.
Activities have been very low but I hope to see a change getting the Mountain District rolling again.

We'll keep an eye on the weather for possible outdoor events but as we all know there is little hope of a planned activity changing nature. Sooooo, let's plan on getting familiar with setting frequencies and practicing message handling.

There are so many transceiver models with different sequences for programming them that one common "cheat sheet" will not work. HOWEVER, if everyone will work up a quick guide for their radio with useful setting features and bring the document to meetings we should be able to get practice time at some meetings and in the field – with good weather.

Setting suggestions: Frequency, Tone, Offset (shift +,-, none), Simplex and duplex operation.

There are several other useful settings for field use but it is more important to get a handle on putting in and using some basic features in the field than to have a grand array of less used features. Study you manual and learn the basics.

Bill KN6JV

EC Mountain District (Looking for someone to take over the Mountain District RACES EC Position – General or Extra Class)

MHRC History

provided by Vi K6VBH

A TRIBUTE TO GEORGE COVINGTON, KD6OI

George Covington and his wife Lil had a small cabin in Idyllwild which they enjoyed very much so when George retired in 1980 they built a house and moved here. George had a life long interest in radio communications starting perhaps when he was a Radio Man 3rd Class in the Navy . He soon joined a group of ham radio operators here and when they organized a Club became the Club's first president. Under George's guidance, the Mile High Radio Club built a repeater which was necessary and vital for emergency communications. George knew the town of Idyllwild needed a good emergency communication system and was responsible for collecting money and building the system we now know as WNKI (which is a FCC assigned call sign) which broadcasts messages on the AM band during emergencies
When the MHRC decided a new call sign was needed for our repeater the first one that came to mind was KD6OI, George Covington's old call sign. George passed away in 2002, ten years ago this year. Having our repeaters call sign

now, KD6OI, honors him for his guidance and devotion to radio communications. Soon, we will hear KD6OI instead of WA6SSS coming over the airwaves.

Editors Notes

Ok, sorry for the delays, been an interesting and busy past 2 weeks. Attached you will find some of the rest of the newsletter since the software didn't want to politely add the PDF files.

Attached files will be the MHRC Minutes, Message from the MHRC President, and a article on our own DanielleKI6DDR.

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Here is a link provided by Wayne - KJ6HYC that will print out a certificate of your Ham license for framing on your shack.

http://radioqth.net/certificate/default.aspx

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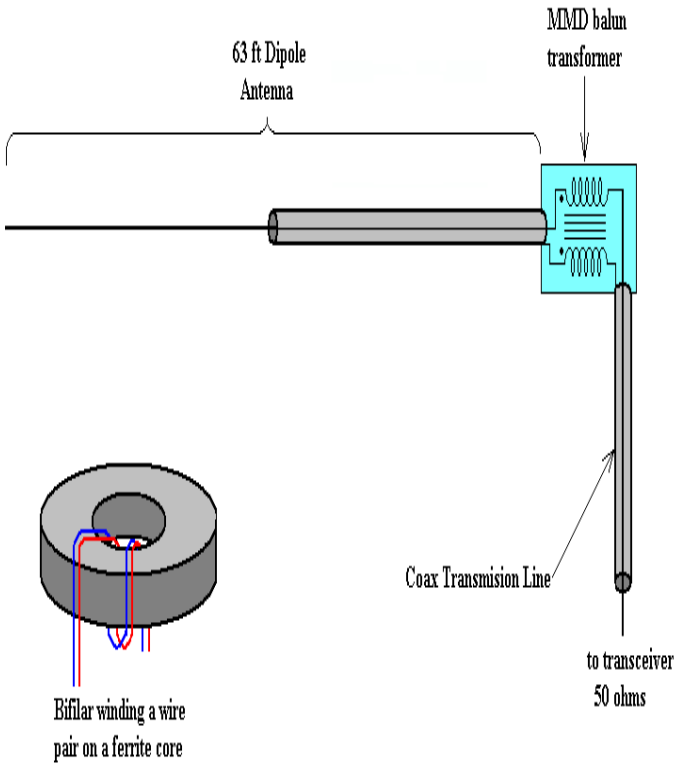
Report on the Multi-Mode Dipole Antenna (MMD) by Tom Pierce K8EBR



A new kind of HF dipole antenna has now appeared on the ham radio market and is manufactured by Miracle Antenna, Montreal, Quebec, Canada. It is a wire antenna and is being advertised as the multi-mode dipole antenna and comes in 80 meter, 40 meter, 20 meter, and 10 meter versions. The most interesting feature of the MMD antenna is that, while it claims to be a traditional center fed dipole it is actually end-fed driven. Okay then, my property extends in one direction to the West of my house so if this antenna performs as advertised it is may be exactly what I need. No need for a long transmission line running to the dipole center-point, this one connects to the end. My interest is primarily in 40 meters (7 MHz) so I ordered that model which is turned out to be a 64-ft long wire with small plastic black box on one end. A 16-ft transmission line is included and the

manual claims that it may be extended. The transmission line connector is a BNC type.
My new antenna arrived a few days ago and, because my passion happens to be antennas, I set about figuring out how this novel antenna actually works. After making a series of measurements, I have in characterizing it and have decided it is indeed a very clever design.
Antenna The antenna itself consists of two parts; a 32-ft wire and a 32-ft coaxial cable joined in the antenna center. The coax end terminates into a black box. The box contains a ferrite toroid transformer wound with a wire pair. This is a bifilar wound toroid. This is the clever part; the transformer is almost transparent to RF current appearing on the transmission line so the RF power from a transmitter continues on to the coax-half of the antenna as if it had not arrived to the antenna yet. The RF appears at the dipole center and the antenna is made up of a wire on one half and the coax braid for the other half of the dipole. The RF current emanating from the dipole center sees an open circuit when it reaches the MMD balun transformer. The difference between the transmission RF transmission line drive current and antenna outer-braid current is phase. The drive current is differential-mode and the antenna braid current is common-mode with respect to coax center conductor. The phase reversal is due to the half-dipole being exactly one-quarter wavelength long.
Balun The transformer ferrite core is wound with a wire pair so that a balanced differential RF current cancels each other. This happens because they are of opposite phase and do not magnetically energize the ferrite core. In effect, the balun inductive reactance is close that of an air core. However, when the RF appears as common-mode the core takes on a whole new personality. The two conductors now carry current that are in phase and both wires magnetize the ferrite core in a mutually supportive fashion. The inductive reactance is now increased by hundreds of times and the dipole braid end is, in effect, terminated in an RF open circuit.
Conclusion: As advertised, the multi-mode dipole is not only a traditional center-fed dipole but employs an ingenious balun that allows the coax end of the dipole to operate as both a quarter-wave transmission line and as a half-dipole. The ferrite balun provides both an impedance match for the transmission line as well as to isolate the antenna end from the transmission line.
http://miracleantenna.com/video
http://miracleantenna.com/images/stories/files/MMD.pdf
By next issue, my SDR digital transceiver shall have arrived and I will report on the effectiveness of the Miracle MMD antenna. I intend to report performance for both horizontal and vertical orientations (vertical needs no radials). If it all works out as expected I will submit a short project article that describes the fabrication of a multi-mode dipole for any HF band.
Tom Pierce K8EBR
http://www.eham.net/ enter K8EBR in search window