

# **MARC BEACON**

Volume 4, Issue 05 The Morongo Basin Amateur Radio Club Newsletter

May 2015

### President's Message

Hello one and all. Hopefully this newsletter finds all you fellow hams all well. As you well know, our next meeting will be held on May 21st. This meeting is shaping up to be quite an event. There is lots of field day information to be presented. Field Day will be held on 27-28 June at the Yucca Valley Improvement Association Community Center.

There will also be a fund raising auction for the club at the May 21st club meeting. All are invited to donate any gently used (or new?) ham equipment to this fund raiser. Bring \$\$CASH\$\$ and see what new addition to your ham shack is there to be found.

Just a couple of days after the regular meeting will be Grubstake Days Parade. There will be a club booth at the Yucca Valley Community Center after the parade. Stop by and say hello.

Last, for the board members: There will be a board meeting at 6:00 PM on 21 May, just before the regular meeting. Hope you all have a great month.

73s, Jeffrey Hardy, KJ6BOI

## Armed Forces Day Crossband Communications Test

Armed Forces Day is 16 May and the annual Armed Forces Day Crossband Communications Test is set for Sat and Sun, May 9-10 offering Amateur Radio operators a chance to try their hand at using more modern military communications modes, such as MIL-STD Serial PSK. Also new this year is the inclusion of a crossband Automatic Link Establishment (ALE) test. The joint military/Amateur Radio event marks the 90th anniversary of the Military Auxiliary Radio System (MARS). This event is a unique opportunity to test two-way communication between Amateur Radio and military stations featuring the traditional military-to-amateur crossband SSB voice, CW, MT63, and AMTOR FEC, plus the new MIL-STD Serial PSK and ALE.

This annual event gives Amateur Radio operators and shortwave listeners (SWLs) an opportunity to demonstrate their technical skills, and to receive recognition from the appropriate military radio station. QSL cards will be provided to all stations that make contact with the military stations.

For more information, visit the following website: http://www.arrl.org/news/armed-forces-day-2015crossband-communications-test-to-offer-new-modes

# **Repeaters and Duplexers**

In February we covered some of the basic operation of a repeater. This month we'll take a look at how the repeater can receive and transmit on one antenna at the same time. Anyone wanting detailed information can always "google" repeater duplexers.

A repeater consists of a transceiver, controller, duplexers, and an antenna. When we key up the repeater by sending a signal on the repeater receive frequency, it simultaneously repeats your signal out on its transmit frequency. A repeater can be set up with two antennas, but they would have to be separated quite a distance to avoid desensitizing the receiver, which happens when a transmitted signal is too close. That is why we use a duplexer so one antenna can be used. This is called duplex operation. Our two-meter typical duplexers consist of four tall metal cylinders with connectors and adjustment knobs on the top. Two-meter duplexers are quite large, while duplexers for UHF and higher frequencies are much smaller. The duplexers isolate the received and transmitted signals from each other. The coax from the antenna is connected to a common point at the duplexers, and then is splits off into the transmit and receive sides of the duplexers, which in turn are connected to the receive and transmit coax connectors on the rear of the repeater transceiver. In simple terms, the receive side of the duplexer is tuned to reject the transmit frequency, and the transmit side of the duplexer is tuned to reject the receive frequency.

73 Glenn N6GIW

#### **Linked Repeaters**

**Yucca Valley, W6BA** 146.790 MHz (- shift = 146.190 MHz) 136.5 Hz PL/CTCSS

**Twentynine Palms, W6IF** 147.060 MHz (+ shift = 147.660 MHz) 136.5 Hz PL/CTCSS

**Landers, WB6CDF** 447.580 MHz (- shift = 442.580 MHz) 173.8 Hz PL/CTCSS

#### Social Media

Club web page: http://www.w6ba.net

Facebook:

https://www.facebook.com/MorongoBasinAmateurRadioClub

W6BA Live Feed:

http://www.broadcastify.com/listen/feed/10199/web

#### **My HAM Station**

Hopefully this is the first of many HAM station show and tells. Please send me pictures of your HAM station and a written explanation of the equipment you use to get on the air

I like to keep it simple, portable, and inexpensive. My HAM station consist of a 4-watt Baofeng UV-5RE plus hand held radio, with a Baofeng Speaker MIC, powered by a 120 VAC - 12 VDC power supply connected to a 12 - 7.4 VDC car battery adapter. A 75 foot RG8X coaxial cable runs from the radio to a homemade 19.25 inch ground plane antenna made out of ½ inch copper tubing on top of a 30 foot flagpole. The radio monitors the W6BA Yucca Valley repeater 24 hours a day, 7 days a week. During power outages the radio can be powered by its own rechargeable battery or plugged into any 12 VDC supply like a car battery or solar panel.



Rob, KK6JHI

### **Club Meeting**

Every 3rd Thursday of the month at 7 PM. St. Christopher of the Desert Catholic Church 61261 Sunburst Dr., Joshua Tree, CA

<u>Directions</u>: Traveling on highway 62, turn south on Sunnyhill Road in Joshua Tree. Go ½ mile and turn east (left) on Sunburst Drive. The Church is located at the end of the block.

#### Nets

Amateur Radio Emergency Service (ARES), Monday @ 1915 Morongo Basin Amateur Radio Club (MARC), Tuesday @

#### **Some Club History**

About this time of the year in 1991, the club was working on an interference problem caused by a new repeater near Temecula on the same frequency as our 146.790 repeater. We had been using the frequency for a long time, and some new guys came along and put up a repeater. While we were working on diplomatic solutions to the problem, our Repeater Chairman, Stan Spaeth WB6OFE, wrote a letter to the club members. Until this time, the repeater had not been used in Private Line (PL) mode. No tone was necessary to access the repeater. Stan tried putting the repeater in "PL", and it solved the interference problem. Since "PL" was becoming more and more necessary because of a crowded two-meter spectrum, Stan asked that all club members without "PL" mode on their radio contact him and let him know the make and model of their radio. Eventually, Stan ordered the necessary components and our club members upgraded their radios to provide transmitted "PL" tone and our repeater has been used in this mode ever since.

Glenn N6GIW

## What is Grubstake Days?

Grubstake are supplies or funds provided for a mining prospector on the condition that the donor has a stake in any finds or discoveries. Saturday 23 May 2015 will be Yucca Valley's 65th Annual Grubstake Days celebration, a long-standing tradition embracing the rich mining heritage that our community is proud of.



# May 2015

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
26	27	28	29	30	1	2
	ARES Net 7:15pm	MARC Net 7:00 pm			May Day	
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3	4 ^DEQ.N. (	5	6	4550	7	9
	ARES Net 7:15pm	MARC Net 7:00 pm		ARES Meeting 7:00 pm  Good Shepherd Lutheran Church Yucca Valley		
10	11	12	13	14	15	16
Happy Mother's Day	ARES Net 7:15pm	MARC Net 7:00 pm				ARMED FORCES DAY
17	18	19	20	21	22	23
	ARES Net 7:15pm	MARC Net 7:00 pm		MARC Meeting 7:00 pm  St. Christopher's Catholic Church Joshua Tree		Grubstake Days Parade
24/31	25	26	27	28	29	30
	ARES Net 7:15pm  **** MEMORIAL * DAY *	MARC Net 7:00 pm				