



W6TRW

CROSSTALK

Monthly news bulletin of the W6TRW Amateur Radio Club
November 2023

Winter Hiking, March 2023

Timber Mountain, near Mt Baldy



Mark KD7DTS — 03/19/2023 4:54 PM

“Hike was appropriately epic. 30 degrees, 35-50 mph winds, snowing the whole time.”

What's Inside

- General Club Meeting
- News & Announcements
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Monthly General Club Meeting

This meeting is the Annual Awards Banquet
The Banquet replaces the monthly November Zoom meeting
(RSVPs are closed at this time)

W6TRW 55th Annual Awards Meeting 2023

Saturday, Nov. 11th, 2023

5:00-8:00 pm

The Depot Restaurant - Kimono Room

1250 Cabrillo Ave., Torrance, CA

Speaker Topic for This Month:

“Surprises in Ham Radio”

Diana Feinberg, AI6DF

Diana Feinberg, AI6DF, will be presenting Surprises in Ham Radio. While there are some “technical” surprises in ham radio, many ham surprises are part of everyday life that reflect who we are.

Diana is the Speaker for the W6TRW 55th Annual Awards Banquet



Diana Feinberg, AI6DF, has served as ARRL Los Angeles Section Manager since 2016 and in numerous other ham radio capacities since 2006. She has been most closely associated with the Palos Verdes Amateur Radio Club at the club level and for emergency communication with the Los Angeles County Disaster Communication Service's Lomita/South Los Angeles/Marina del Rey districts. Despite living in an antenna-restricted HOA she has worked 95 countries on the HF bands using simple indoor wire dipole antennas with 100 watts or less.

Article – Portable HF Operations, Part 1

My Thoughts on Portable Operation

Bill Shanney, W6QR

Portable operating is a very popular and growing segment of amateur radio. There are many reasons for this:

- Antenna restrictions due to HOA rules or Spousal desires
- Local noise
- Cost of a home station
- Love of the outdoors
- Travel
- My favorite – It's Fun!

I've been operating portable since around 1990. My main reason was to be able to operate while on our numerous family camping vacations and when I took my son to the big surfing spots along the coast. I mostly operated CW from my van using a 100W transceiver and Ham Stick antennas. During the QRP kit building boom in the 1990s I started operating with homemade QRP rigs and random length wires from local parks. I also participated in HF Pack using an FT-817 and Super Antenna MP-1 on my bicycle starting in 2001.

I got busy doing other things, mostly photography, that satisfied my desire to be out in nature. Fast forward to my retirement in 2007. I had more time for radio and spent more time on the road. By this time, I had no need for a big van and downsized to a mid-size station wagon with little room for a radio. In 2011 our daughter had a problem pregnancy and was hospitalized for several months. My wife and I tag-team baby sat our 2 year old granddaughter at her condo in San Diego. I bought a TS-590s and a Buddipole which I raised on a lighting stand to about 18' when I operated. I was back in portable operation.

The introduction of the Elecraft KX3 (2011) and KX2 (2016) reignited my interest in low power portable. The built in ATUs matched almost any length of wire and the high performance, full featured receivers were a pleasure to use. I was back in the field with these rigs.



KX3 Transceiver – Elecraft



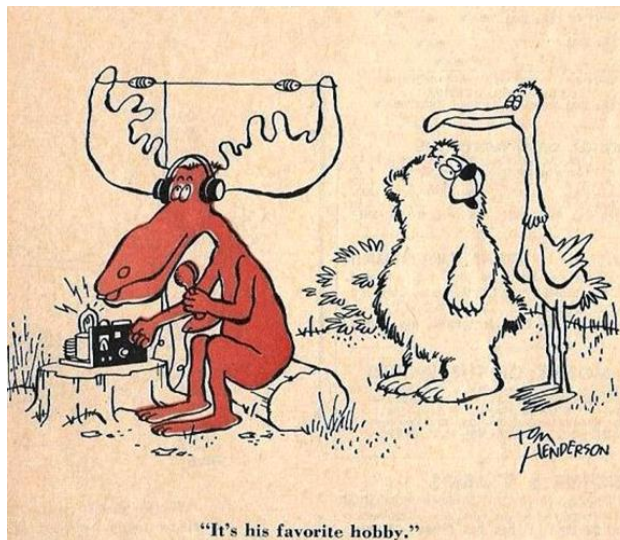
KX2 Transceiver – Elecraft

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I started experimenting with different antennas:

- Small loops
- EFHW
- BuddiStick
- Offset fed dipoles
- Random wires

My side yard became an antenna test site where my friend Phil, W7OX (SK), and I tried to understand the various designs that were being published at the time. We also made many trips to Wilson Park in Torrance to compare antennas. Most of our operating was pretty standard QSOs plus asking other OPs for reports as we swapped antennas.



Today things are more complex in terms of operating activities and much better in terms of radios and antennas. I suggest anyone new to portable operating find an experienced ham and go on some outings with them. You may find you really don't like it, or you might become hooked. The following are my opinions, please question them and form your own. This is how ham radio became such a great hobby.

I prefer old fashioned rag chews where I get to know the other operator. Due to the wide variety of competing on the air modes and activities these days this form of operating has declined. If I can't find a rag chew I look for other activities like POTA and SOTA. Parks On The Air or POTA is a well organized activity that gives points to both park activators and hunters who work them. The parks that can be activated are mostly state and federal entities. More details can be found on the excellent POTA website: <https://parksontheair.com>. Most activity is SSB. Activators typically operate from their car or a picnic table in the park. To get credit for an activation at least 10 contacts must be made. There is an extensive awards program described on the website.

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Summits On The Air or SOTA requires the activator to operate from one of many designated mountain peaks. Due to the requirement to pack light for hiking most operations are low power CW. There are different rules and operating awards for this activity. SOTA also has an excellent website with all the information: <https://www.sota.org.uk>. There is worldwide participation in both programs.

These operating activities can be confusing to newcomers. Each has its own goals and rules. Log submissions can be confusing at first but are not difficult. Find a friend or club member who has done it before to guide you through the process the first time. I don't suggest asking basic questions on the various internet sites. Some are beginner friendly; others are not. I find I get too much useless chatter from these sites and have cancelled my subscriptions to most. The W6TRW Discord site is a good resource.

West coast operators have some unique issues. Since most portable operations are low power (i.e.: <100W) local contacts are easier to make. The Western USA has fewer hams than the East. 40M is a good local band but horizontal antennas are large and short verticals are less efficient. Daytime local contacts are possible but there is little activity. 40M is busy early in the mornings and in the evening. Most POTA/SOTA activity is on 20M and occurs in the Eastern part of the USA where the ham population is greater. This makes it more challenging for activators and hunters in our area. Efficient verticals provide low angle radiation for more distant contacts and more power gets your signal above the noise. Since POTA activations are spotted online an activator will usually make contacts on other bands as well.



I've found operating from one of the local state beaches with 100W CW and a vertical provides plenty of contacts. It is normal for there to be several European stations in my log. My friend N6TT and I have compared many antennas and find a vertical EFHW to be the best antenna, closely followed by a quarter wave vertical with 2 elevated radials. A 20M EFHW requires a 33' telescoping pole and a large tripod. Operation from a car with a mag mounted Hamstick is another good option especially for time limited operation. You don't have to be a formal participant in any program to operate and have fun. I simply enjoy operating and experimenting and don't chase awards. I often stop at local parks just to operate. Everyone can participate no matter what their interests and abilities.

In the next installment, Part 2, I'll talk about equipment and resources.

Article – Summits on the Air, Catalina Island

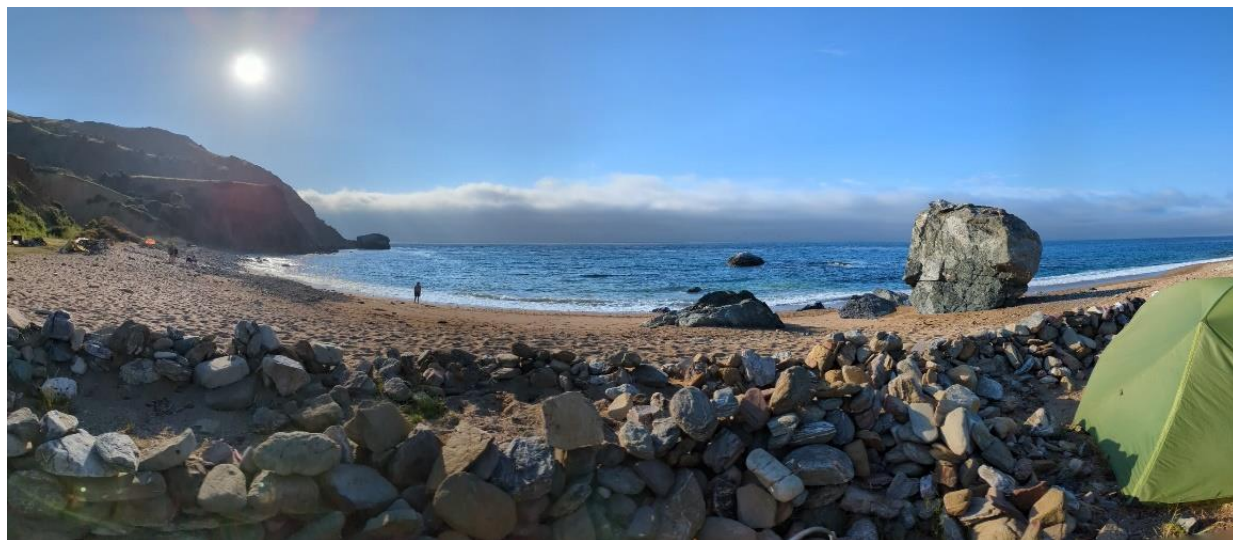
The “Catalina Complete”

Mark Knight, KD7DTS

November 2, 2023

Santa Catalina, one of California’s Channel Islands, lies southwest of Los Angeles with a line-of-sight distance of approximately 40 miles. Surrounded by a stunning coastline, the rugged backbone of the island boasts four 1-point SOTA summits: East Peak Benchmark (W6/SC-329), Mount Orizaba (W6/CC-066), 1236 (W6/CT-281), and Silver Peak (W6/CC-068).

Collectively, these peaks have called my name ever since I discovered Summits on the Air. They combine scenic island hiking with mountains, and easy VHF contacts to a region rich in skilled shack sloths. A ‘SOTA Complete’ is when an operator has both Activated and Chased a summit. Early in 2023 I set my sights on what I call the “Catalina Complete”: earning a SOTA Complete on all Catalina Island summits.



I started with activating. From May 18-22, 2023 I partnered up with a few friends to hike Catalina Island. Beginning from the ferry landing at Avalon, and finishing at Two Harbors, the full hike spanned 61 miles and 10,300 ft of elevation. Along the way I activated all four peaks using my Yaesu FT5DR and a 5/8 wave whip antenna for 2m VHF FM, and a homebuilt QCX Mini paired with a QRPGuys DS1 miniature resonant vertical for 20m CW. Spotting with APRS2SOTA was very helpful since peak arrival times were unpredictable, and even the most dedicated chasers occasionally step away from the radio. A few folks were also hunting from peaks, leading to summit-to-summit contacts with K3FBI/6, N6AN, W6LOR, K6STR, N6XZN, KN6JWK, KF6FLJ, and WA9STI!

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Chasing turned out to be substantially more challenging, because chasing requires waiting – not a strength of mine. Finally, the opportunity to hunt appeared! Joe, WO6JO, scheduled activations on all of Catalina’s peaks from October 29 – November 2, 2023.

On Saturday, October 29th I hiked up Flint Peak (W6/CT-225) with Devin KN6PHZ, and waited for Joe. And waited. The cool morning air turned to a blistering day in the sun. Finally, the hoped-for CQ CQ whispered out of my HT, which was hooked to an Arrow 3-element Yagi pointed directly at Catalina. Joe and I easily exchanged signal reports from summit-to-summit, marking my first Complete on Catalina Island.



The subsequent three peaks were substantially more challenging. For those of us not on the trail, it was a busy week at work. I came up with a strategy: use HamAlert to monitor for any hint of Joe on the air, and keep a ‘go bag’ in my office packed with a quick-deployable kit for both 2m and the likely HF bands. For HF this was a Xiegu X6100, SotaBeams Carbon-6 mast, and a QRPGuys 40m-10m Mini UnUnTenna.

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[Amateur Radio Equipment for Sale](#)

K4KIO HEX Beam, 6 bands, very good condition. \$300

CONTACT: Bill Shanney W6QR, w6qr@arrl.net

For VHF, I packed my trusty Yaesu FT5DR and a pre-assembled Arrow Yagi. All this fit easily into a running backpack. Whenever Joe's HamAlert popped up, I sprinted from my office to a local park 2 blocks away, and deployed my kit. Total time from alert to on-air and hunting was less than 10 minutes. This strategy kept me on my toes all week, but worked! I managed to make contact with Joe on all three remaining peaks.



To my knowledge, this is the first time anyone has done the 'Catalina Complete'. I'd recommend it for operators looking for a bit of a challenge, and a lot of fun!



W6TRW Discord Channel

Did you know W6TRW has an active online discussion of ham radio adventures, build projects, and event planning? This is an excellent way to keep up with hot topics in the club. If you haven't already, please join your fellow club members on Discord. You can sign up here: <https://discord.gg/9JMY9SydV3>

Recent posts on the W6TRW Discord:

Mark KD7DTS — 11/03/2023 8:12 PM

Had a QSO with new ham KO6BTM tonight, on her own radio! Happy that Di has both the license and the gear to start her own ham journey!

Bill W6QR — 10/25/2023 8:00 AM

The club should sponsor some New Ham events in local parks to get them on the air. 10M has been hot lately.



Check out our Discord New Hams channel - advice and help for new members!!

Dylon N6MX — 11/04/2023 12:01 PM

Emery KE8ZEG is on Channel Islands and monitoring 146.580

Ham AlertBOT — 11/04/2023 5:18 PM

SPOT: KD7DTS seen by WA7AI on 21063.4 KHz at 0018Z

[5:20 PM]SPOT: KD7DTS seen by NG7M on 18094.0 KHz at 0020Z

[5:24 PM]SPOT: KD7DTS seen by KO7SS on 14065.5 KHz at 0024Z



We added an automated Ham Alert spotting channel to our Discord

Mark KD7DTS — 10/29/2023 4:16 PM

We got a surprise visit from superstar SOTA activator N6AN!



Flint Peak SOTA
Activation



Devin's
10 GHz
handie-
talkie

News and Announcements



Membership

The W6TRW 2023 Membership Form is on our [Membership](#) page. Be sure to renew for the 2023 club year! **Our annual participation fee for the W6TRW club is still \$5, as it always has been! You can now send the participation fee ELECTRONICALLY to Dylan N6MX – see the note in the new 2023 W6TRW Membership Form! And you can scan your signed ink signature pages and send to Dylan's email address on the form. We're going electronic!**

Our durable, high-tech magnetic club badges are now \$30, the real cost of making them. The badge, with your call sign, name & W6TRW logo, will last for many years!

Each year, when you renew or join the W6TRW Amateur Radio Club, we will send out a physical membership card via regular mail, as confirmation that you are a member for the year.

W6TRW Swap Meet – Last Saturday of Every Month !

Our club puts on the largest monthly amateur radio swap meet in the Los Angeles area. The W6TRW Swap Meet has been held monthly for almost 40 years. The W6TRW Swap Meet is well known throughout the western US and even the world! It is always held the last Saturday of every month, rain or shine, holiday or not, from 7:00 AM until 11:30 AM, in the R2 parking lot near the southeast corner of Aviation Blvd. and Marine Ave. where the cities of Redondo Beach, Manhattan Beach, and Hawthorne meet. Talk-in on 145.320 -600 PL 114.8.

If you wish to sell at the swap meet, please visit our swap meet sellers' webpage for all the necessary information.

Our Swap Meet Manager, Wendell KE6ASC, is always on the lookout for volunteers to help at the Swap Meet. If you'd like to get up early and help the club put on this important traditional activity, email Wendell at w6trwswapmeet@gmail.com to get more information.

The next swap meet is the last Saturday of the month, from 7:00 am to 11:30 AM. See you there!

W6TRW Club Members SHOW 'N TELL

W6TRW Club Members SHOW 'N TELL / DIY / Maker / Activity Talks

At past and recent club meetings, we've had members of our club describe and/or demonstrate projects they have created or been involved in. We'd like to continue that tradition! We're all excited to hear what you've been doing. All you need to do is put together a few slides!

If you've been building something interesting, or engaged in recent ham radio adventures or volunteering, please send a reply to newsletter@w6trw.com, and we'll get you on the agenda in 2023!

Please REPLY if interested!

News and Announcements

Massive Amateur Radio Estate – Don Davis AD6PB, SK

Don Davis, AD6PB, became a Silent Key last year. He's left a huge estate of unique, well-cared vintage radio equipment, surely of interest to collectors, and a great DX station with tower and antennas. Please see the collection at <https://w6trw.com/classified-ads/>

To obtain any of this incredible vintage gear, contact Linda Davis at (310) 871-9773, or email lcpdavis@gmail.com



News and Announcements

Silent Key Estate – Bruce Clark KOYW

Large list of vintage, well-maintained, unique amateur radio equipment and components, including some museum-quality radios

CONTACT:

Terri Clark

Ignacio, Colorado

916-397-6695

Terri Clark <clarkgalvinclan@gmail.com>



10 meter EME dish

TS 2000 with IR filter 092 (2.1khz ssb filter), VS-3 voice module | TS 590S | Astron RS-20M | SB220 modified for 6 meters | Homebrew 6 meter amp and power supply 1.5kw | Drake L4 amp and PS | Henry 4K | Atron RS 35A | HP 5316A counter | Yaesu SP8 speaker | K7NV Green Heron prop pitch controller and prop pitch | Tentec 425 Amp and power supply | Astatic D04 | Jetstream JTPS 45 | Texas.rf RF6M remote antenna switch QTY 2 | Bird Wattmeter 4210A100 and coupler | Astron Ss-30M | Icom IC3220H dual band mobile | Heil MH-10-XD microphone | HP 226519-501 2500W server 50 power supply | Bird 43 wattmeter | Samlex 3-5A RPS 1203 12v PS | Bird 8201 dummy load | National Company HRO-5TA with coil set JE, JD, JA, JB, JC Very nice condition | Astron RS 7A | Electrovoice 664 microphone | Bird 7422 switch | Turner 44D HIZ microphone | Dayton 4M070A blower QTY 3 | Heathkit RS-1 resistance substitution box | Fluke 87 true RMS meter | Large prop pitch | General Radio Type 804-CS1 | 833 tubes QTY 5 | 450-TH tubes QTY 10 | 2c39/7289 tube | 3-500Z | 807W QTY 4 | 811A | Tic Ring Controllers Qty 6 | DX engineering Switch control box QTY 3 | Gates HFL 1000 amp and power supply | Astron 35M rack mount | Aims Pure Sine wave inverter 1200W continuous | Hallicrafters S-40B Very nice condition | R4A, RV4, T4X T4 all new in boxes | T4XC and power supply | Ms-4 | M4-2000 | Collins R390A receiver very nice condition | Zenith Trans Oceanic | HP 432A | HP 435B | HP 3400A | HP 410C | T4X new in box | RCA antique receiver | US Navy Receiver Type SE 143 | IC233A mobile | Gonset Communicator Z | Drake MLA2500B 2 meter transceiver | CSC Electrolytics 21uf 600V Qty LOTS | CDE 90uf 310V electrolytics QTY LOTS | Antique Wire recorder and box of recording wire (like reel to reel but records on wire) | Tandberg reel to reel and several new reels of tape | Sony TC 200 reel to reel | Medium size prop pitch | AEA Cablemate TDR 5011-5000 brand new in box | CIA-HF Antenna Analyzer with loads, open, shorts, etc | Heathkit HD-10 monitor scope. Clean front panel. Some scratches on side | Simpson 270 | R4-C | | These next 4 radios are, I think, museum quality condition | Hammarlund HQ-140X | Collins 75A-4 (serial number 5843) | Atwater Kent (serial number 237210) | Radio MFG Eng Inc receiver and external VFO | Tokyo Hi Power HL-1 K/A uses 2 4CX250 tubes. 500W out. Very compact amp | 4CX1500B marked new | 5CX150 qty 2 still in can | 4CX1500B Marked "very good" | Several Bird slugs | Bird 43 | Bird model 74 6 position switch | GE Wattmeter. | HP355C 1/2W step attenuator 12dB in 1 dB steps | Frigidaire antique temp probe | HP 415E SWR meter | 141T, 8554L, 8445B, 8552A, 8444A system (8445B is preselector, 8444A is tracking generator) | Eaton 7514 noise figure meter | 8484A power sensor | 8481A power sensor | National Radio SW-5. In very good shape (very early receiver) | HP 410A vacuum tube voltmeter | These next few items and brand new. Still in original boxes and still in original shipping boxes from Drake to a distributor in Ill | T4-X s/n 12878G | R-4A s/n 6049R | MS-4 | AC-4

Amateur Radio Estate

Vintage radio equipment for sale or donation:

- King KU-193 3-crystal Aviation Base Station (? Unicom radio at uncontrolled field)
Crystals for 123.12, 123.15, 123.4 MHz
- Swan ADF-100 Automatic Direction Finder
- Midland 13-895 CB radio
- Dynaco Stereo 400 vacuum tube pre-amp

CONTACT: John Cross WM2I, slimeagle@aol.com, 714-600-9492

News and Announcements

W6TRW Repeaters Now Playing Newsline & ARRL News

We're putting a regularly scheduled rebroadcast of [Amateur Radio Newsline](#) ham radio news and the [ARRL weekly news](#) on the W6TRW repeaters on Wednesdays and Sundays at 9:00pm Pacific time! Newsline is a free service that produces a weekly report of important goings-on in the ham radio community and is a great way to stay in the loop on current ham radio topics.

Take a listen and let us know what you think!

-- Shackmaster, Dylon N6MX

[AMSAT - Amateur Radio in Space](#)

The number of active amateur radio satellites keeps increasing. Here is the current satellite status, making it easy to find satellites you may be able to hear: <https://www.amsat.org/status/>. For many satellites, the telemetry downlink or Morse code beacon is easy to receive with a simple dual-band VHF-UHF magmount antenna.

If you have a VHF/UHF SDR (software defined radio) connected to your computer, you can see the Doppler shift of the signal as the satellite passes over.

To find out when a satellite will fly over your location, go to <https://www.amsat.org/track/index.php>. Just put in your grid square or approximate latitude-longitude. One of the most reliable and easy downlinks is the ISS (International Space Station) on 145.800 MHz.

The next step is transmitting – making amateur contacts through the satellites. AMSAT satellites for amateur communications: <https://www.amsat.org/two-way-satellites/>.

[Amateur Radio Contests - Calendar](#)

There are many amateur radio contests during the year, for the full range of different radio interest areas. Click [here \(WA7BNM's Contest Calendar\)](#) for a listing of all the amateur radio contests.

Just listening to contests is a great way to hear a lot of stations from all over the US and even all over the world – better than just randomly tuning on any given day, hoping to hear something.

One popular contest is the [ARRL January VHF Contest](#) and the [ARRL June VHF Contest](#). The VHF contests are easy and fun – just find your grid square at [Amateur Radio Ham Radio Maidenhead Grid Square Locator](#) and then key up your VHF/UHF FM radio on the calling frequencies – 146.52 MHz and 446.000 MHz. The calling frequencies 146.52, 146.55, and 146.58 are busy during the contest and you can make many contacts just by answering contest calls. It's a great way to check out your VHF/UHF radios!

W6TRW Repeaters and Nets

W6TRW Repeaters

VHF 2 Meters • 145.320 MHz, Offset: -600 kHz, PL: 114.8 Hz; Located in Redondo Beach, CA • All-Star node 505680
UHF 440 MHz • 447.000 MHz, Offset: -5 MHz, PL: 100.0 Hz; Located in Redondo Beach, CA • All-Star node 505681
(Our VHF 145.320 MHz and UHF 447.000 MHz repeaters are linked – but may be disconnected for certain nets listed below)
UHF MotoTRBO DMR • 446.050 MHz, Offset: -5 MHz, Color Code: 2; Located in Redondo Beach, CA

Monday K6MBC Manhattan Beach MBCERT Net

Weekly; Monday nights at 6 PM *except* first Monday of the month, on the W6TRW 447.000 MHz repeater

Monday Lomita and South Los Angeles DCS Net: Weekly

Monday nights at 7:30 PM, on the W6TRW 145.320 MHz repeater

Tuesday Absolute Tech Net: Weekly

We retransmit the weekly [Absolute Tech Net](#) on Tuesday afternoons at 4 PM Pacific time. This is a great group of knowledgeable people who are enthusiastic to share their knowledge with others. Please see the [Absolute Tech Net web page](#) for the many topics they have discussed, and upcoming topics.

Wednesday W6TRW Emergency Communications Team (ECT) Net: Weekly

The ECT net is held weekly Wednesdays starting between 12:00-12:15pm on our 145.320 MHz and 447.000 MHz repeaters. The whole net only takes about 10-15 minutes.

The purpose of the net is to promote club participation and to increase the general awareness of hams to emergency communications resources. The net is open to all W6TRW members as well as any non-member visitors!

Check-ins reply with their name and callsign, general location, and their radio communication capabilities at the time.

During an actual emergency, the W6TRW 145.320 MHz repeater will be dedicated to DCS, and won't be available for open use, but it will be very useful to monitor! The W6TRW 447.000 MHz repeater should be available and open for use during an actual emergency, so please save a memory in your radio for our 447.000MHz repeater!

Wednesday Northrop Grumman HF Family Net

Also at noon Pacific Time on Wednesday is a long-running Northrop Grumman net on 14.270 MHz. Northrop Grumman and TRW employees / retirees are welcome to check in and represent the West Coast!

Thursday Space Net

Our W6TRW 145.320 MHz and 447.000 MHz repeaters host the long-running Space and Information Net every Thursday evening at 7:00 PM. Ronnie N6SHI (Space Hams International) is the net controller, taking check-ins and providing the best of the weekly space news, launches, and visual flyovers. Tune in and check in!!

Newsline & ARRL Weekly News – Wednesday and Sunday

9:00 PM & 9:30 PM

News released every Friday

About Us – W6TRW

The W6TRW Amateur Radio Club is a non-profit organization that started in the early 1960s.

The W6TRW Amateur Radio Club started as the TRW ARC and held the club call sign WB6WPO. The club became an ARRL Affiliated Club in 1971, and the club call sign was changed to W6TRW in 1974. The club was formed at the TRW facilities in Redondo Beach California comprised of employees of the aerospace company.

Our club station is located in Building S and includes 2 Yaesu FT-1000's, Alpha 87a amplifier, and two towers with multiple HF antennas in Redondo Beach, California. We also have all-mode capability on 6m, 2m, 440, and 1.2 GHz. We have ATV, and satellite and packet stations.

W6TRW sponsors open repeaters on 2 meters and 440 MHz that serve the Los Angeles basin. We also have a Motorola MOTOTRBO Digital Repeater in Redondo Beach. IRLP node 7067 is connected to our open 440 repeater and typically is connected to the Western Amateur Linking Association LAX Reflector 9350. Please visit our repeater page for more information!

The Amateur Radio Club (W6TRW) offers a full range of radio related activities, including contest operating events, community public service events, picnics and classes for those wishing to obtain their first license. Stop by the Amateur Radio Swap Meet on the last Saturday of the month in the R2 parking lot from 7:00-11:30am – you'll be surprised by what you will find.