

## Simi Settlers' Amateur Radio Club

# **Short Circuit**

## September 2016

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General Meeting Time: 7:00pm Location: Simi Valley Senior Center 3900 Avenida Simi Simi Valley, CA 93063 September 8, 2016

## **September Program**

#### What's new in Mesh Networking?

Digital Mesh networking is one of the newest modes of operation in amateur radio. With it, hams utilize wireless access points manufactured by Ubiquiti and TP-Link. Custom software is installed allowing them to operate in the ham bands. In this way an "amateur radio Internet" can be created by linking the "nodes" together. This network can then support web pages, webcams, VOIP (Voice over IP services), and pretty much any other kind of service the Internet provides.



Orv Beach W6BI will update us on the latest developments in mesh networking with emphasis on the local scene, and provide an overview of planned future expansions of the "Hamnet".

Dinner with the Speaker Where? TGIFriday's When? 5:15pm

Join your club board members and Orv Beach W6BI, for dinner before the meeting.

## **Static & Sparks**

By President Frank Valdez KI6OQ

Thank you to Joe Partlow W6JWP for a wonderful presentation on Digital Modes in Amateur Radio.

In our September meeting, Orv W6BI will present an update on another of the digital modes, Mesh Networks.

I want to thank all ham operators who participated in the Simi Valley Half Marathon and the Wings of Camarillo. I encourage new and old operators to participate in these events as a way to promote Amateur Radio to the public at large.

I received an email from John Hitchcock, a teacher from Monte Vista Independent School, for help to establish a Ham Radio class at the school. John had his license lapse and is need of getting his license and as well as the students. I met with John for a tour of the school where he has a room for a HF and VHF & UHF base station.

The equipment at the school is as follows; Kenwood TS-430S and Alpha Delta 80-10 meter wire antenna, Kenwood TS-281 2-meter radio, Diamond  $5/8\lambda$  2-meter antenna and MFJ Mighty Mite 25A Power supply. I will present this to the membership as a Club Project.

73,

Frank KI6OQ

#### **Nets of Interest**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
LSB Net	Condor	ACS Area 1	Channel	LSB Net		SSARC SSB
8pm 3.908 MHz	Connection	Simi Valley	Islands chapter	8pm 3.908 MHz		HF Net
	7pm	SMRA-ERN	10-10			8:30am
SSARC 2 Meter	(Plays	7:05pm Repeater	International			7.245 **(+ or -
Net*	Newsline)	146.805 -0.6MHz	28.34 MHz			QRM/N) 40
8:30 pm	Thousand Oaks	PL100.0 or	at 10AM and			meter
SMRA-ERN	223.940-1.6	445.580 -5.0MHz	6PM			
Repeater	MHz PL156.7	PL100.0				CW-QRP
146.805 -	Frazier					9am 7.032 MHz
0.6MHz	Mountain	ATN-CA Net				
PL100.0 or	224.720-1.6	7:30pm				Quad Squad
445.580 -	MHz PL156.7	http://atn-				net
5.0MHz		tv.org/netnight.htm				1PM on 21.365
PL100.0						MHz.
		LSB Net				
		8pm 3.908 MHz				

Additional information on local nets can be found on the CVARC web site at: http://www.cvarc.org

#### **ACS/ARES Corner**

- 1. Saturday & Sunday 10 & 11 September 2016 Ventura Bike Ride and Marathon. Saturday is the Bike Ride and Sunday is the Marathon. This will take many volunteers to man up the stations each day. If you can help out, contact Stewart Stone at kg6bov@arrl.net.
- 2. Monday September 19, 2016 ACS-ARES Meeting This month we will meet in the newly renovated secure Ventura County EOC. ACS or ARES members, and anyone interested in supporting our community are welcome to attend. This may be a chance to put a face to the voices you hear during our nets. We will tour the facility led by VCSD OES, see our EOC communications workspace and equipment, and discuss our role in an activation. We will also talk about our recent events, including the Camarillo Airshow, and the Ventura Marathon, and upcoming involvement



opportunities. We will have updates from area and team leaders from our special projects. If time permits, we can take a look at the ACS trailer, The meeting starts at 7:30, but please arrive a bit early to access the facility. I will be there at 6:30. Arriving early gives everyone a chance to chat before the meeting. If you are an ACS member, wearing the county issued shirt is appropriate. If you never received one, I can issue one to you at the meeting. If you are an ARES only member, you can wear any of the other yellow shirts. If you are new to the group, don't worry about what shirt you wear. Please park in Lot D, or if it is full, lot C. Walk to the areas indicated in the images below, and follow the EOC signs down the stairs. We are using the secret back entrance, rather than the elevator in the lobby. If you have issues with stairs, we can accommodate you on the elevator. Just call me when you arrive. You can call me at 805-901-0147. Please use the Area 7 repeater (146.3850 Positive offset, PL 127.3) for talk-in if you have questions while on your way. I hope to see you there. Be aware that things could change at the last minute if the EOC is activated. - Rob W6RH

- Steve King KE6WEZ (ke6wez@gmail.com)

<sup>\*</sup>Thanks to our fine Net Control Operators: Steve, KE6WEZ; Rick, W6DQE; Ray, KI6LKD; Jay, AG6JF and Dante, KK6JCQ.

<sup>\*\*</sup>We're trying a new frequency for at least a couple of weeks.

#### **Events**

#### Thursday, September 1, 2016, 6:00pm SSARC Pizza Night

Round Table Pizza, 2345 Erringer Road, Ste. 100, Simi Valley

#### Thursday, September 8, 2016, 7:00pm SSARC General Meeting

Simi Valley Senior Center, 3900 Avenida Simi, Simi Valley, CA 93063

#### Thursday, September 22, 2016, 7:00pm SSARC Board Meeting

At the home of Diane Rehaut, 2805 El Paso Av, Simi Valley, CA 93063

#### Saturday, September 27, 2016, 7:00am W6TRW Swap Meet

(7am) and Exam Session (10am) Redondo Beach, CA <a href="http://w6trw.com/swapmeet/swapmeet.htm">http://w6trw.com/swapmeet/swapmeet.htm</a>

#### Sunday, October 9, 2016, 8:30am Ham Radio License Exam Session

Ventura County Sheriff's E County Station 2101 E Olsen Rd (Between 23 Hwy & Reagan Library); Community Room, Thousand Oaks, CA 91360 Walk-ins-Allowed.

**Contact:** Jeffrey M Reinhardt (818) 706-3853 See: http://www.cvarc.org/ for more information

#### October SSARC Picnic!

#### Go Team Trent!

All -

A good friend of mine's family, and some of you as well, is supporting the cure for leukemia.

One of their daughters had leukemia when she was just 8 years old.

Through the donations of others during that time period, she was cured and is a healthy young lady now.

For us Amateur radio folks, Lisa - KK6AKR is one of us.

I think it would be especially great if we could all dig deep and contribute to them.

#### All donations go directly to the Leukemia and Lymphoma Society.

Not one dime, penny, nickel, dollar, etc. is used by the Trent family.

Lisa and Chris pay their own way.

The below video gives you a feel of how passionate Lisa and Chris are in supporting this great cause.

#### https://youtu.be/FyAffLbEzUw

Please give generously.

Many many thanks.

- Steve KE6WEZ

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### ARRL Encourages Comprehensive Noise Floor Study

In anticipation of an FCC Technological Advisory Council (TAC) investigation into changes and trends to the radio spectrum noise floor to determine if there is an increasing noise problem, ARRL asserted that such a study is long overdue. The FCC Office of Engineering and Technology (OET) announced plans for the TAC study in mid-June and invited comments and answers to questions that the TAC posed concerning the methodologies for such a study. The League's comments also praised the TAC - an advisory group to the FCC - for tackling the issue and expressed the hope that the noise study might, for the first time, provide a useful, objective basis for spectrum overlays and other future allocation decisions. ARRL allowed that while a noise floor problem exists, "The magnitude of this problem and the extent of it in the 21st century is virtually unknown."

"The TAC and the leadership in this study initiative are to be congratulated for finally undertaking what has been universally determined to be necessary for well more than 2 decades," the ARRL said. "The Commission should not have made spectrum management decisions without this noise information, and it is unfortunate that the initiative has been delayed this long."

The ARRL said that its members can be of use in gathering data for the TAC noise study, but advised that any urgency in initiating the study "be tempered by the prerequisite need to develop a standardized and valid methodology for conducting the study," in order to "obtain quantitative data regarding the noise floor in various environments and trends over time," ARRL said.

ARRL said the focus of the TAC noise "study should be an accurate determination of what noise levels exist in as wide a range of indoor and outdoor environments as possible. It should, to the extent possible, determine what types of noise are being found: Broadband, non-specific noise; broad noise spectral peaks; broadband digital noise; and noise occurring on discrete frequencies."

"We also hope that these comments will serve as a stimulus for the Commission to re-evaluate its 'hands-off' policy with respect to the most recalcitrant and unhelpful operators of incidental and unintentional radiators which are causing long-term interference problems, such as electric utilities," ARRL concluded. "The unwillingness of the Commission to issue meaningful sanctions has led to the virtual absence of any incentive to comply with the Commission's Part 15 non-interference obligations."

ARRL pointed out that the FCC had requested that the TAC study the noise floor in 1999 and propose new approaches to spectrum management based on emerging and future technologies. "The TAC concluded that it would be impossible for the Commission to engage in effective spectrum management until it 'develop[s] a more complete understanding of the current state of the radio noise environment," ARRL recounted, noting that TAC urged the Commission to immediately undertake a multi-part noise floor study and cautioned it against implementing new spectrum management techniques or initiatives without first concluding extensive studies.

"Yet, 16 years later, no such study has been conducted," ARRL said. "Now, and for the past several decades, new noise sources are being developed and have been developed and the proliferation of electronic devices continues as fast as the technology and the regulatory processes will allow." While many individual sources of RF noise may be consistent with FCC rules, in some cases they may negatively impact the overall electromagnetic noise environment, ARRL said.

"Because the Commission's resources are woefully inadequate to address RF noise through widespread enforcement of Part 15 and Part 18 rules governing RF emitters after the devices are deployed, the only reasonable means of dealing with them is to enact and enforce, ex ante, appropriate rules for RF emitters that are based on actual knowledge of the noise floor and trends over time," ARRL said. "The growing number of interference complaints indicates that any increase in noise levels will result in harmful interference, so these rules may need to require a decrease in the permitted limits for emission to balance the aggregate noise potential of a growing number of noise emitting devices."

The League's comments include a bibliography, "Articles Relating to the Description, Impact and Study of Man-Made Noise," compiled by ARRL Lab Manager Ed Hare, W1RFI.

#### Simi Settlers Amateur Radio Club General Membership Meeting, August 11, 2016

<u>Call to Order</u>: Standing in for President, Frank Valdez, KI6OQ, Secretary John Percival, WI6O, called the

meeting to order at 7:10pm. John welcomed everyone to the meeting, held at the Simi Valley Senior Center. There was a recitation of The Pledge of Allegiance. 9 Officers and Board

Members/Advisors were present. The total attendance was 29, with 6 visitors.

Introductions: A brief round of introductions was made. Guests included: Dave Bennett, N6OOR, Lawrence

Hoppis, Ron Nelson, Randy Phillips, W6OKK, Bob Yonce, N6FFU, and Jason Valencia, W6JRV.

Announcements: Secretary John said the Club had received a letter from Paul Strauss, WD6EBY, requesting

funding assistance to buy a set of batteries to provide backup power for the 2M and 440 repeaters and the MESH node at Chatsworth Peak. John said that the Board voted to ask the membership for approval to make a \$100 donation from the Simi Settlers and suggest that members may make individual donations to this cause. Paul needs a total of \$400 for the set of batteries. A motion was made from the floor, seconded and then approved by a unanimous vote to approve the \$100 donation from our Club treasury. Treasurer Glenn Daly, WA6GNB, said he will collect any

additional donations that members wish to make.

<u>Program</u>: John introduced our Newsletter Editor Joe Partlow, W6JWP, who made a presentation called

"Digital Modes 101". The focus was on digital modes used on our H.F. bands. Joe described a dozen of the most common modes, going through them in historical sequence, beginning with RTTY that evolved from land line telegraphy. The other modes he covered were: Hellschreiber (a facsimile mode), AMTOR (amateur teleprinting over radio), and PACTOR (an FSK mode that combines Packet and Amtor). With each of the modes that Joe described, he played a short audio sample of how they sound on the air. He continued with WinLink (used to link with the internet for email transfer), CLOVER (a PSK mode that can operate duplex), THROB (a hardware based mode that uses up to 9 audio tones), MFSK (uses 16 frequencies with up to 42 words per minutes and provides error reduction). MT63 (a new DSP based mode with 64 tones and up to 100 WPM). PSK31 (featuring a bandwidth of only 31 Hz, and is better than CW in poor band conditions). Joe described two modes originated by Joe Taylor, K1JT. The first, "JT-65", (uses timed transmitting, very low power, and can be used for "Moon bounce") and WSPR (weak signal position reporting). Joe also mentioned Slow Scan TV (SSTV) that was originated in 1957 but now uses software methods. The many digital modes are used with a computer-to-radio interface hardware that can be commercial or home-brewed. Joe showed example schematics. USB sound card adapters are now very low cost. He also mentioned software programs used for digital mode operating. He gave a demo of Fldigi decoding audio that was recorded off the air. After the presentation ended

appreciation from the Simi Settlers.

<u>Break</u>: Following the program a 15-minute break was taken with refreshments provided by Bill Everett,

KI6KSV.

Member Drawing: The winning name in the progressive Membership drawing was Diane Wainwood, KJ6JEJ, who

was not present to win the \$20 prize. Therefore, the amount will be increased to \$30 for our next regular meeting on September 8, 2016. Members must be present to win, and the prize grows by

with a question and answer session. John thanked Joe and presented him with a certificate of

\$10 each month it is unclaimed.

Prize Raffle: (Secretary's note: Details of the "Grand Prize" at this month's raffle were not recorded this month,

this can be reported in a future issue).

Adjournment: The meeting was adjourned at 8:48pm.

Submitted by: Secretary, John Percival, WI6O

Simi Settlers' Leadership							
President	Frank Valdez	KI6OQ	(805) 404-0394	frankki6oq@gmail.com			
Vice President	VACANT						
Secretary	John Percival	WI6O		percivaljohns@cs.com			
Treasurer	Glenn Daly	WA6GNB		gw.daly@yahoo.com			
Committee Chairpersons							
Webmaster	Jim Parker	KJ6LXJ	(805) 368-6745 cell	kj6lxj@gmail.com			
Newsletter	Joe Partlow	W6JWP	(805) 428-7907 cell	joe.w6jwp@gmail.com			
Membership	Jim Parker	KJ6LXJ	(805) 368-6745 cell	KJ6LXJ@gmail.com			
PIO	VACANT						
Field Day	What will <u>you</u> do?						
Youth Coordinator	Dante Smith	KK6JCQ		danterusso1999@gmail.com			
Historian	Mike Tweedy	KV6I		mtweedy@roadrunner.com			
Net Coordinator	Ray Campbell	KI6LKD	(805) 404-3246	ki6lkd@yahoo.com			
<b>Net Coordinator</b>	Steve King	KE6WEZ		ke6wez@gmail.com			
Food Services	Bill Everett	KI6KSV		ki6ksv@gmail.com			
Room Coordinator	Linda Parker			kj6lxj@gmail.com			
Elmers and Members at Large							
Past-President	Rick Galbraith	W6DQE	(805) 433-4513 cell	Rick@keymaterial.com			
Past-Treasurer	Norbert Rehaut	W9YPM(SK)					
Elmer	VACANT						
Advisor	Bill Everett	KI6KSV		wildpoky45@earthlink.net			
Advisor	Jim Hutchinson	KI6MZ		jhutch17@adelphia.net			
Advisor	Brad Rife	KI6KSY		speedy@earthlink.net			
Advisor	Spencer Smith	N6IWY	(805) 583-1127	n6iwy@sbcglobal.net			

Simi Settlers' Amateur Radio Club Web Page: <a href="http://www.simisettlers.org/index.htm">http://www.simisettlers.org/index.htm</a> Simi Settlers' ARC Yahoo Group: <a href="http://groups.yahoo.com/group/SimiSettlersARC">http://groups.yahoo.com/group/SimiSettlersARC</a>

Mail: P.O. Box 2125 Simi Valley, CA 93062-2125

#### **Letter From The Editor**

Who would have thought that you could get a 25 watt 144/220/440MHz tri-band radio that fits in one hand and costs \$130.00? The Btech mini UV-2501+220 is another Chinese-made ham radio that seems to have a lot of bang for the buck. Now I've only had it for a week but so far I've found it to be relatively easy to program manually. There's nice examples for both simplex and repeater programming, so long as you can do the math for the offsets. One thing it doesn't mention is that the default power level is "Low" so you have to change it to "High" before you save the frequency to memory. CHIRP also works just fine if you have the programming cable.

The radio will monitor two channels using TDR (Transmit Dual Receive) and works fine in the 144MHz and 440MHz bands and monitoring a channel in each works fine, but when one of the channels is in the 220MHz band there is, what sounds like, relay chatter. It goes away when I turn off the TDR function. I will have to look into that a little more.

I used the radio last Sunday to check into both the CVARC newbie net and the SSARC Sunday net and received good reports on the transmit audio. The receive audio suffers mainly from trying to drive a tiny speaker. The audio was greatly improved once I plugged in an external speaker.

That's about it for now, I'll try to remember to bring it along to the next meeting for everyone to have a look.

- 73 - Joe W6JWP

## **Simi Settlers Amateur Radio Club**

P.O. Box 2125 Simi Valley, Ca 93062-2125 --- (www.simisettlers.org)

Membership Application

Type of Application:	Type of Membership:	Simi Valley, Ca.
New Member □ Renewal □	Individual (\$18/yr) □ Family (\$20/yr) □	W6SVS W6SVS Radio
Name:		
Call:	Class:	(Omit year) ARRL: Yes □ No □
Address:	City:	State: Zip:
Phone: ()	Alt. Phone: ()	
E-Mail Address:		
Additional Family Member		
Name:		
Call:	Class:	(Omit year) ARRL: Yes □ No □
Name:		Day & Month of Birth:
Call:	Class:	(Omit year) ARRL: Yes □ No □
Name:		
Call:	Class:	(Omit year) ARRL: Yes □ No □
Badges requested: Yes	□ No □ How many?	X \$18.00 = \$
Name (s) Call(s):		
Shirts requested: Yes □	No □ How many?	X \$35.00 = \$
Name (s) Call(s) Size(s) (	Sm, Med, L, XL, etc):	
Jackets Requested: Yes	□ No □ How many?	X \$88.00 = \$
Name (s) Call(s) Size(s) (	Sm, Med, L, XL, etc):	
	OFFICE USE ONLY	
Application type: New $\Box$	Renewal   Membership type	: Individual □ Family □
Date Received:	Amount Received:	_ Database completed:
Radges and Shirts ordere	q.	