



## **Simi Settlers' Amateur Radio Club**

# **Short Circuit**

<b>1</b>	Timely Information
	Nets of Interest ACS/ARES Corner
<b>3</b>	Member Updates
<b>4</b>	The Market Place
<b>5</b>	Simi Settlers' Leadership
<b>6</b>	Membership Form

The next **meeting** is at the  
**Simi Senior Center**,  
3900 Avenida Simi, Simi Valley.  
**Thursday April 13** at 7:00 PM.

The next Simi Settlers Pizza Night is at  
**Toppers**, 2408 Erringer Road, Simi Valley.  
**Thursday April 6** at 6:00 PM.

April 1 and 2 is the Baker to Vegas Run. Ron has gone K6RIN to lend his support. Lets hope for a report in next months newsletter.

May 6th is the Simi Valley Street Fair. Ron, K6RIN is exploring the possibility of getting the Settlers a booth at the event.

May 21st is the Mountains to Beach Marathon in Ojai / Ventura. Lots of us will be doing support at this event.

**KI6MZ**, also known as **Jim** Hutchinson, has moved into an assisted living facility here in Simi Valley. He has graciously offered his years of puttering “stuff” up to the club. We had a few weekends of pick and choose hosted by Bill, AB6BW. At last, a few members of Conejo Valley ARC arrived to help take a few things away. Plan ahead, don't let your treasures end up in the trash bin!

The following persons walked away with some of Jim's treasures in return for a donation to the club:

Steve WA6EJO

Glen WA6GNB

Orv W6BI

Matt KN6SEC

Brad KI6KSY

John WI6O

Eric KE6MLF

Brian KM6MIN

Robert Miller

“Junk Guy” Jairon

and adding:

Eng W6EN

Chris WB6OLJ

If you got some stuff from Jim's, please bring your donation to the next meeting, we are trying to account for it NOW.

April 2023

## Nets of Interest

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
<b>LSB Net</b> 8pm 3.908 MHz  <b>SSARC 2 Meter Net*</b> 8:30 pm SMRA-ERN Repeater 146.805 -0.6MHz PL100.0 or 445.580 -5.0MHz PL100.0  The Newbie net 7 pm, Bozo Repeater 147.885 ( - 127.3)	<b>Condor Connection</b> 7pm (Plays Newslane) Frazier Mountain 224.720-1.6 MHz PL156.7	<b>LSB Net</b> 8pm 3.908 MHz  <b>ACS Area 1</b> Simi Valley SMRA-ERN 7:05pm Repeater 146.805 -0.6MHz PL100.0 or 445.580 -5.0MHz PL100.0  <b>ATN-CA Net</b> 7:30pm <a href="http://atn-tv.org/netnight.htm">http://atn-tv.org/netnight.htm</a>  <b>ACS Area 1</b> Simplex net, 6:45 PM on 145.510MHz	<b>Channel Islands chapter 10-10 International</b> 28.34 MHz at 10AM and 6PM  <b>Mesh VOIP Net*</b> 8pm 2.4/5.8 GHz Mesh	<b>LSB Net</b> 8pm 3.908 MHz		<b>SSARC SSB HF Net</b> 8:30am <b>7.240</b> (+ or - QRM/N) 40 meter  <b>CW-QRP</b> 9am 7.032 MHz  <b>Quad Squad net</b> 1PM on 21.365 MHz's

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

\* For more information, see <http://www.pvarc.club/mesh/mesh-applications/>

Our repeaters are too quiet!

If you are sitting around evenings or on the weekend, turn on your radio and listen in. Sometimes there is local activity on 146.520, the simplex channel.

Here are our 8:30 PM Sunday night net controllers for the next few months:

Apr 2 Ron K6RIN  
9 Matt KN6SEC  
16 Brian KM6MIN  
23 Kevin KD6UTC

April 2023

## ACS/ARES Corner

Frank Valdez KI6OQ is the Area 1 Emergency Coordinator



**We are always looking for ACS members that would like to become Net Controllers.** You will receive hands-on training at the Simi Valley PD (where we normally conduct the Weekly Net). It is both fun and at times challenging. You will gain valuable experience in running a controlled Net as well as becoming more than just familiar with the equipment in the Radio Room at the PD. If you would like to volunteer for this, just message Frank Valdez at [frankki6oq@gmail.com](mailto:frankki6oq@gmail.com).

Be sure to check [www.vccomm.org](http://www.vccomm.org) for the latest !

If anyone is interested in how to set up your own packet station, RMS Winlink station, or a Mesh Node, contact Frank, he will point you in the right direction.

**Barry K6ZA** wants to remind everybody that they have options to check in with something other than a 2 meter handheld. The **80 meter net is Tuesday nights at 18:30 (6:30 PM) on 3.987 MHz.**

The **Area 1** (Simi Valley) net occurs Tuesdays. Generally it is just a brief check in, but usually some news about upcoming events is passed on.

The simplex net is on 145.510 at **6:45 PM**. The regular net is on the 146.805 (-, PL100) repeater at **7:00 PM. Stop by and say Hi.** You do not have to do anything other than check in to test out your simplex or repeater connection.

**NOTE:** Please be advised that we hold the Tue. **countywide** net at 19:30 (7:30PM) on the Sulphur Mountain WD6EBY repeater 145.200, minus 600 KHz offset, CTCSS of 127.3. Until further notice, this will be our standard frequency for countywide communications.

Visit [vccomm.org](http://vccomm.org) for more updates!

Mountains 2 Beach Marathon is scheduled for **Sunday May 21st**.  
Contact Burt KA6BJA at [bjauerbach@gmail.com](mailto:bjauerbach@gmail.com)

## Member Updates

### From ORV W6BI and archive.org via Hackaday.com

Some (lots) of our amateur radio and electronics publications are getting digitized and put up on the internet. Go visit the Digital Library of Amateur Radio & Communications page at Archive.org

The link is <https://archive.org/details/dlarc>

The Digital Library of Amateur Radio and Communications is a library of materials and collections related to amateur radio and early communications. The DLARC is funded by a significant grant from [Amateur Radio Digital Communications](#), a private foundation, to create a digital library that documents, preserves, and provides open access to the history of this community.

I got a stack of Ham Radio magazines from Jim KI6MZ, but Orv said the guys above had already scanned them in. Could not find them on the site, Orv gave me a hint to search using quotation marks; **"Ham Radio"**. Worked!

April 2023

## Simi Settlers SOTA Activation

### Simi Peak

By

Ron Nelson K6RIN

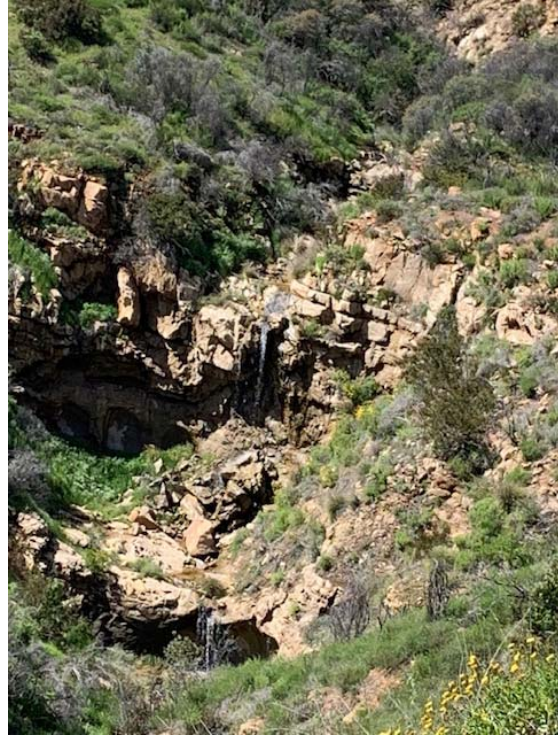
On March 18<sup>th</sup>, a day that was finally free from recent rain storms, three Settlers, Kerwyn Schimke N6YHX, Bill Costello AG6XK, and I set off on a hike to conquer Simi Peak. The Peak, which overlooks Simi Valley from the south, can be approached from several locations, including Simi Valley, Thousand Oaks, and Oak Park. We opted for the Oak Park approach and hiked a total of 5.8 miles up and back, and experienced 1,500' of elevation gain. Because of recent rains, we were treated to green hills, waterfalls, and mud, lots of mud. Once at the top, our eyes were rewarded with views of Simi Valley, Thousand Oaks, Bard Lake, parts of the Oxnard Plains, and the islands off the coast. My favorite part of the trail heads through China Flat where the Boot Hill cemetery scene in the movie "Back to the Future III" was filmed, and where there are several oak trees that offer a nice canopy of shade.

We unpacked the radio gear, which consisted of a Yaesu FT-891, a couple different vertical antenna systems, a 12ah LiFePo battery, and our HT's. Calling CQ on a 2-meter simplex frequency on the HT netted 6 contacts in quick succession, including hams in Torrance, Rancho Cucamonga, and Cerritos. This was followed by HF work on the 891. We ran 100 watts and within 40 minutes, we made 32 QSO's on 10, 15, 20, and 40 meters SSB. Those contacts included VA6FUN in Canada on 20-meters, and F4WBN in France on 10-meters.

As the time progressed, the wind picked up and we packed up our gear and headed back down the hill, making it home in time for lunch.

Here are a few pictures:

April 2023



April 2023

## **A bit more maintenance** by Eric KE6MLF

Had to go to the Mellow Lane site and replace a Ubiquity Rocket. It is in the dish pointed at Simi East for the mesh network link. No big deal, the site is  $\frac{1}{4}$  mile from my house. Trick is, the antenna is on the backside of the brick wall. Easy job with the fancy ladder Jim KI6MZ gave us. Most of the ladder is on the inside of the wall. You can see the bitty part that slides out, just under the gray dish on THIS side of the wall. Thank you Jim!



April 2023

## The AREDN Ham Radio Network and the 2023 Ventura Marathon

by Orv W6BI

For the last few years Dave KM6FQ has deployed an AREDN network station plus camera along various race routes as a test of remote video streaming. I'd attempt to pick up the stream to at least view it and maybe stream it to YouTube. Our efforts have been somewhat mixed, for various reasons.

On the morning of the Ventura Marathon (Feb. 26) Dave positioned his gear along the route of the Ventura Marathon, at Aid Station E in Ojai. In spite of testing the equipment ahead of time, we discovered a network configuration site at Dave's location, but got it rectified in fairly good order. The organizers of the ham radio portion of the Marathon initiated a Zoom session for anyone that wanted to check in during the race. We hoped to stream the video over the mesh network into the Zoom session. Props to Chris W6AH for pointing out to me that OBS (Open Broadcast Software) had a 'Virtual Camera' that let you point video from any source into it. Then the Zoom client sees the Virtual Camera as a video source. I got it working, and we streamed video from the meshcam to the Marathon Zoom session almost the start of the Marathon until the runners finished going past Aid Station E.

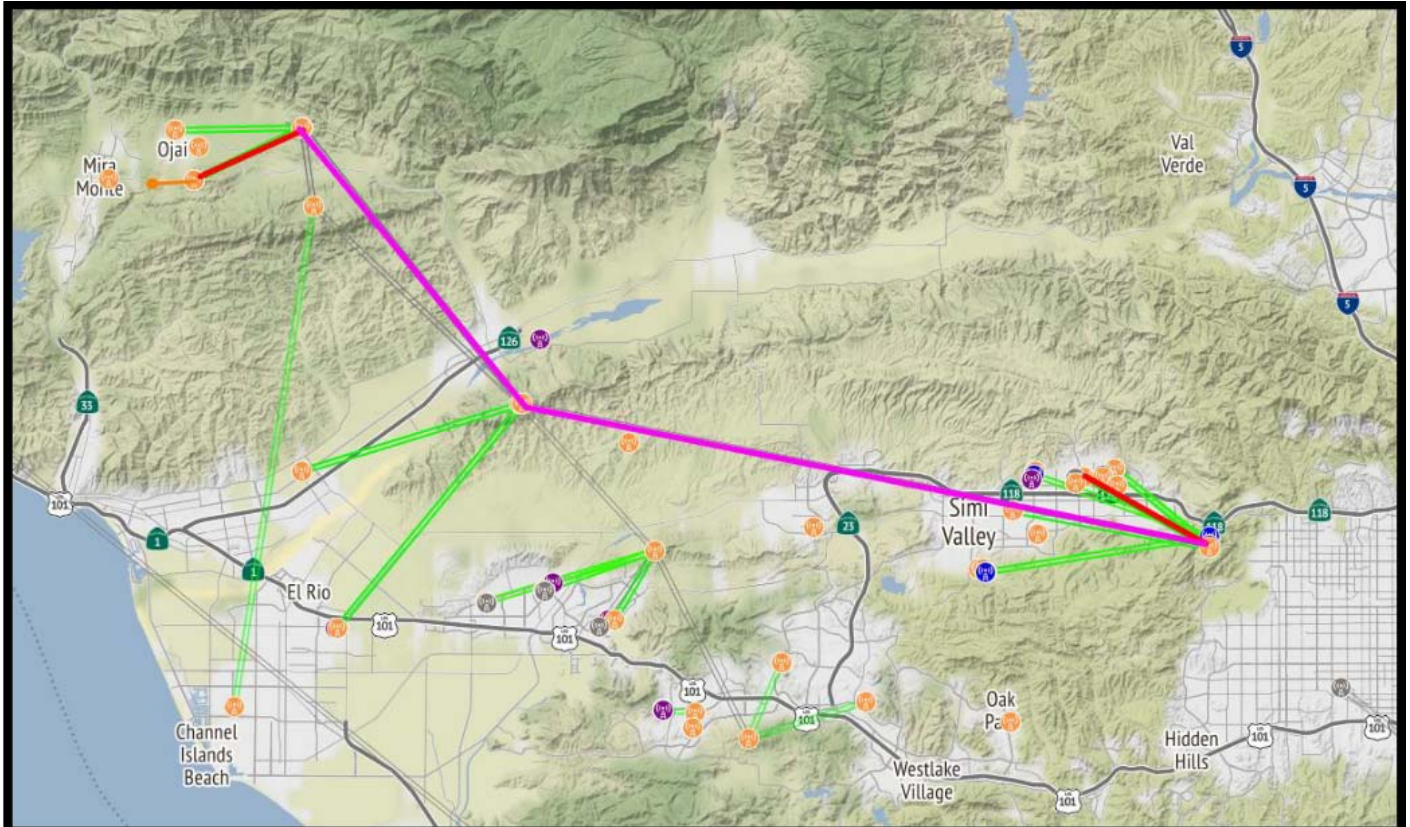


The video stream occasionally froze, and the images were a bit blocky from time to time. The freezing was due to periodic high latency along the network path from source to destination. The blockiness was due to us reducing the camera resolution some and slowing its frame rate down, both in an effort to reduce the video stream's occupied bandwidth.

April 2023

Both Dave's link to the network and mine were very good, with high SNRs and high LQ/NLQs (Link Quality/Neighbor Link Quality) on both links. But the path between us was a bit extended, which contributed to the latency:

KM6FQ@Aid Station E -- Black Mountain/Ojai -- Reeves Road/Ojai -- West South Mountain/Santa Paul -- Chatsworth Peak/Simi Valley -- W6BI@Simi Valley; five network hops, about 45 network miles.



Prior to shutting down, Dave called me from his VOIP Phone via the Network PBX. We had a couple of dropouts but other than that it went OK.

I'll discuss my observations in detail with Dave in an effort to improve our video streaming for next time. And PVARC has plans in place to update/upgrade several of those links over the next couple of years. But this was probably our best effort yet.

April 2023

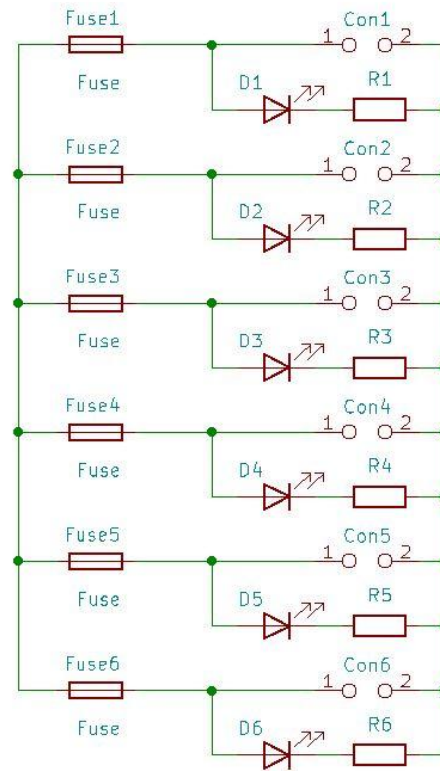
# Next project - Power Pole Distribution Block

by Eric KE6MLF

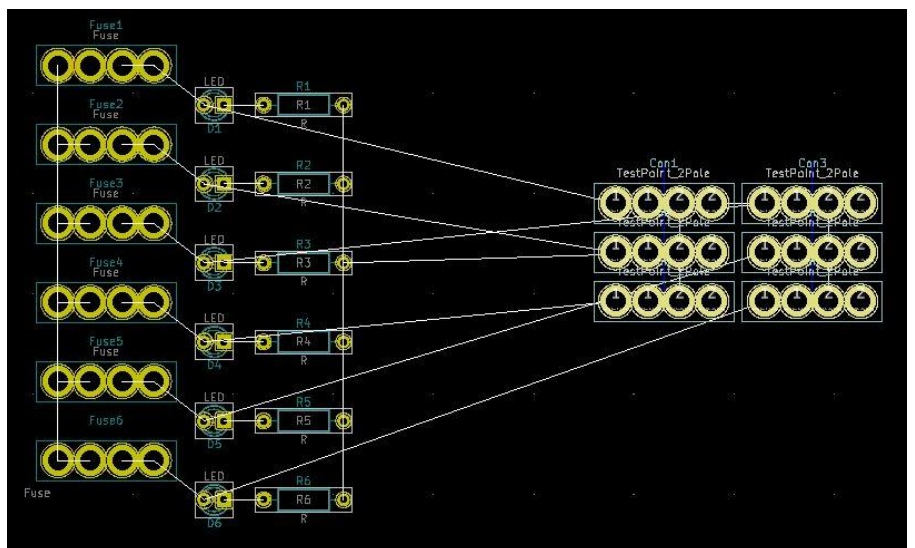
Or “PPDB” with ideas and guidance from Joe W6JWP

The schematic. Looks simple, but the PCB footprints are defined here.

Please remember, I am going to design the PCB, and YOU are going to have to get together and make the PCB and parts purchase.



The PCB layout. The fuse holders are on the left, the LED and resistors are in, but the Anderson Power Pole connectors are not quite right. Just have to get the connector footprints corrected, then route and publish.



April 2023

## **There's a new repeater in town** by Orv W6BI

Besides the two SMRA repeaters at the Mellow Lane site (VHF & UHF), there's also a VHF repeater on 146.940 MHz. It's used by the city's Disaster Service Workers, who are licensed ham radio volunteers, and is known as the "DSW repeater".

Partly because of the topography of Simi Valley and partly because of a big honkin' water tank in the way, the southeast quadrant of the valley isn't covered by the current DSW repeater. That would be a real problem for the DSW workers in case of a genuine disaster.

Working in concert with Simi Valley's Emergency Services and Communications Managers, PVARC has placed a VHF repeater at the city's "Stow Site" (the water tank site above McDonald's on Yosemite. This will provide excellent coverage of The Knolls, etc.

Here are some photos of the installation:



April 2023

While two repeaters on different VHF pairs, linked with a UHF channel would have been the best solution, a simpler, less expensive, but still effective solution was decided upon.

Both repeaters are on the same pair, but utilize different input PLs. In that way workers can just shift channels and work the 'other' part of the valley.



April 2023

Here's the info on the repeaters, existing and new:

<b>Name</b>	<b>Location</b>	<b>Call</b>	<b>Input Freq.</b>	<b>Output Freq.</b>	<b>Input PL</b>
DSW West	Mellow Lane	W6GRG	146.34	146.94	127.3
DSW East	Stow Site	K6PVR	146.34	146.94	100

While these are intended to be used by city Emergency Services, they're open repeaters, free to use for any ham.

Enjoy!

Did you know Orv W6BI is kinda famous? OK, really he just got cornered by the guys at QSO Today.

Go to <https://www.qsotoday.com/podcasts/w6bi>

Maybe there are other good things to listen to from this site?



## Mesh Antenna Insides by Eric / KE6MLF

Orv makes me go up the tower, change the antenna, and repeat as required. What is in these things anyway?

Here is a 2 Gig dish antenna PCB. On the right side is a tiny Yagi. The longer elements are driven, the two shorter elements are not connected to anything and are actually in front - closer to the reflector dish.



Here is the 2 GHz on the left, and on the right hand side a Ubiquity sector antenna. 9 volt battery for scale.



Top to bottom - the undriven director (2 patches), the driven 2 patches, and on the bottom, the PCB. The driving circuitry is inside the silver shield on the green PCB. The silver panel on the right hand side mounts between the two antenna elements and the PCB. The blue pencil points to the contacts attaching to the driven elements.



## How about we create a Library? by Eric / KE6MLF

To start with, the following books are available for loan:

Hints & Kinks for the Radio Amateur 15th Edition

The ARRL RFI Book 1st Edition

The ARRL Antenna Book 16th Edition. Fat, 2 inches thick...

W1FB's Design Notebook

And from Jim, The ARRL Antenna Compendium Volumes 2,3,5,6, and 7

## A tool lending library by Eric / KE6MLF

Again in keeping with the Jim KI6MZ school of thought - build some stuff and try things out! Here are tools for **LOAN**. Rules are if you break it, you replace it. I will loan them out for a month or three, then back to me, no passing around.

Forstner drill bit set - for making flat bottom holes in wood.

Electrical conduit punches - 1/2, 3/4, 1, 1-1/4". These are for electrical boxes, a bit heavier build.

Deep throat hole punch (like Whitney), for thin sheet metal.

MFJ frequency counter

I am throwing my own round chassis punches in to the fray, inch sizes 1/2, 5/8, 3/4, 7/8, 15/16, 1-1/16, 1-1/8, 1-1/4, 1-5/32, 1-1/2, and 2, all for thin sheet metal. I also have a 1" square punch.

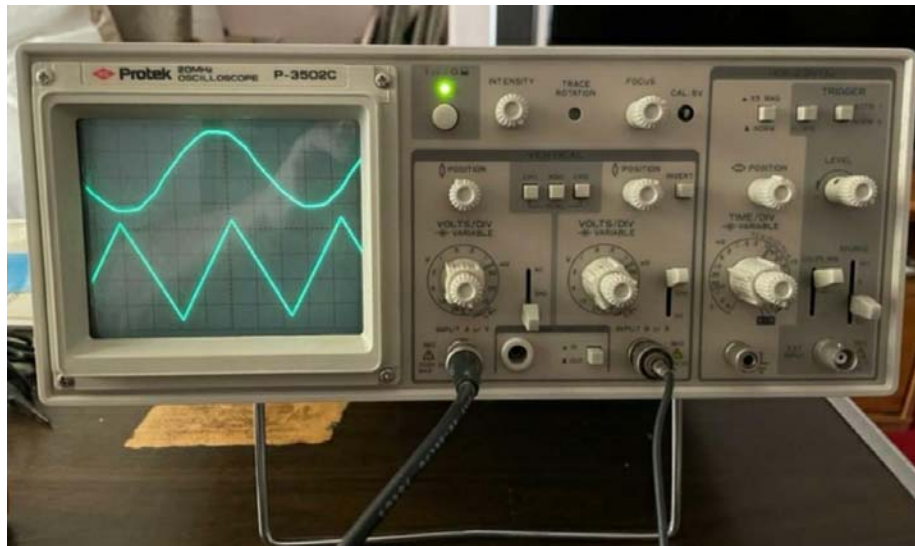
April 2023

## SSARC Marketplace

This section of the newsletter is for Simi Settler club members to post various used or previously owned items for sale that they may no longer have a need or use of. Please submit a brief description of the sale items (along with a photo if possible) and suggested price to Eric Oberg KE6MLF, the newsletter editor, at least two days before newsletter publication. It is suggested that a portion of each sale be donated to the SSARC treasury to help support the club's several activities. The term "OBO" means "Or Best Offer" and serves only as a starting point in negotiating a fair price.

.....

### PROTEK 3502C OSCILLOSCOPE



This dual channel oscilloscope ranges from DC to 20 MHz. Input impedance is 1 M $\Omega$  shunted with 20 pF. Vertical deflection ranges from 5 mV to 20 V/Div over 12 ranges. Time base ranges from 0.2  $\mu$ sec to 0.5 sec/DIV on 20 ranges. Channel inputs can be selected for either Channel A or Channel B separately, Channel A and B displayed together, or a display of Channel A signal summed with Channel B. X-Y operation can be selected as well to display various lissajous patterns as desired. Two scope probes are provided with the unit. Perfect for testing applications and/or general experimental use.

Condition: Excellent   Price: \$50 or OBO.   Contact Mike Tweedy KV6I (805-231-9683)

## EICO 390 FUNCTION GENERATOR



This function generator can provide sine wave, triangular wave or square wave outputs with a frequency range of 0.2 Hz to 200 KHz selectable over 4 ranges. Output waveforms can be selected to perform a wide variety for testing of electronic equipment. Output up to 10 v p-p is provided which may be attenuated from 0 to -50 dB. This unit also provides a sweep generator which can provide linear or logarithmic sweep modes of up to 1000:1 sweep range with a choice of three different sweep speeds.

Condition: Excellent Price: \$25 or OBO. Contact Mike Tweedy KV6I (805-231-9683)

April 2023

## PROTEK B-813 SIGNAL GENERATOR



This signal generator provides an RF sine wave signal from 100 kHz to 150 MHz over 6 different frequency ranges. The output level can be adjusted from 30 mV to 250 mV RMS Max via the attenuator control. The unit also allows a 1 MHz to 15 MHz external crystal to be used for operation on a fixed frequency in lieu of VFO operation. Output is modulated at a 1 kHz signal at a 1V RMS level.

Condition: Excellent   Price: \$25 or OBO.   Contact Mike Tweedy KV6I (805-231-9683)

April 2023

### RADIO SHACK 3-1/2 DIGIT DMM w/ PC INTERFACE



Radio Shack's Model 22-168A DMM is a top-of-the-line portable test instrument ideally suited for use in the field, lab, shop and home. It is a multi-function instrument that covers 38 total ranges covering full scale measurements of voltage (200mV-1000 V), current (200  $\mu$ A - 20 A), resistance (200 ohms – 2000 M $\Omega$ ), capacitance (200 pF – 200  $\mu$ F), frequency (2 kHz – 20 MHz), transistor gain (hFE) and diode polarity check. It also features a dual measurement mode where, for example, both the AC RMS voltage and frequency can be shown simultaneously on the meter LCD display. The unit also features auto-ranging capability and overload protection including an auto-shutoff feature to preserve battery life.

This unit can also double as portable data acquisition device incorporating a RS-232 serial interface that allows your computer to directly capture data through a standard computer COM port using the interface cable and software provided.

Condition: Excellent Price: \$15 or OBO. Contact Mike Tweedy KV6I (805-231-9683)

## MOBILE HAMSTICK ANTENNAS



I have five MFJ 1/4 wave hamstick-type antennas for sale, ranging from 75m, 40m, 20m, 15m and 10m plus a 5/8 wave Hustler CG-144 for operation on 2m. All of them feature a standard 3/8-24 threaded mount with a Hustler QD-2 quick disconnect adapter installed for quick R&R when operating on different bands. Typically the MFJ hamsticks sell for around \$30 new, the Hustler 2m antenna currently lists for \$73 while the Hustler QD-2 quick disconnect adapters sell for \$35 per set.

Condition: Excellent   Price: \$80 for all or OBO.   Contact Mike Tweedy KV6I (805-231-9683)

April 2023

### PORTABLE TRIPOD ANTENNA TEST STAND



This tripod test stand features a 3/8-24 female threaded mount to allow installation of such antennas as a hamstick or any other antennas for testing or operational purposes. The bottom of the tripod has a SO-239-type female UHF connector to allow connecting a standard RG-8U or similar coax feedline. The three tripod legs can act as a small counterpoise for antennas under test and the entire unit can be installed on top of a motorhome or other vehicle for temporary use or actual operational use. Note: the sale is for the tripod stand only and does not include the hamstick and coax cable that are shown for demonstration purposes only.

Condition: Very Good Price: \$5 OBO. Please contact Mike Tweedy KV6I (805-231-9683)

April 2023

Variable capacitors. Cost is a tiny donation to the club.

Eric / ke6mlf



Magnet wire. If interested, I can measure the diameter with enamel and bare copper. A tiny donation to the club.

Eric / ke6mlf



Field strength meter. I think this was a September 2011 club project. We have the schematic and calibration instructions. I found 3 of these. I will keep one, and the other two are available. Donation to the club.

Eric / ke6mlf



A PILE of integrated circuits. All DIP packages. Lots of And, OR, and other Schmitt low level things. I think Jim was using them to create counters, ring oscillators, and frequency generators. If interested, I can bring them to a meeting for picking over. Tiny donation to the club.

Eric / ke6mlf



April 2023

Heat shrink tubing. Heat shrink tubing, lots of colors. Ask for a baggie of assorted bits. I for instance, put Yellow for "Yeastu" on my long whip antenna.

Eric / ke6mlf



Tripod - this had Jim's MONSTER view camera mounted on it. (Not a commercial product, but a custom wood box with bellows, lens and film plane plates.) Good wheels, rack, and leg slide. Donation to the club.

Eric / ke6mlf



April 2023

Simi Settlers' Amateur Radio Club Web Page: <http://www.simisetters.org/index.htm>  
 Simi Settlers' ARC Yahoo Group: <http://groups.yahoo.com/group/SimiSettlersARC>  
 Mail: P.O. Box 2125 Simi Valley, CA 93062-2125

Simi Settlers' Leadership				
<b>President</b>	Brian Hernandez	KM6MIN	(805) 813-7595 cell	km6min_bh@yahoo.com
<b>Vice President</b>	VACANT			
<b>Secretary</b>	Ron Nelson	K6RIN		rnelson759@sbcglobal.net
<b>Treasurer</b>	Matt Griffin	KN6SEC		mgriffi79@yahoo.com
Committee Chairpersons				
<b>Webmaster</b>	Matt Griffin	KN6SEC	(661) 361-5955 cell	mgriffi79@yahoo.com
<b>Newsletter</b>	Eric Oberg	KE6MLF	(805) 791-0745 cell	ericoberg1@gmail.com
<b>Membership</b>	Jim Parker	KJ6LXJ	(805) 368-6745 cell	kj6lxj@gmail.com
<b>PIO</b>	Linda Parker		(805) 558-1731 cell	kj6lxj@gmail.com
<b>Raffle Prizes</b>	Matt Griffin	KN6SEC	(805) 433-4513 cell	mgriffi79@yahoo.com
<b>Youth Coordinator</b>	VACANT			
<b>Historian</b>	Mike Tweedy	KV6I	(805) 231-9683 cell	mtweedy@roadrunner.com
<b>Net Coordinator</b>	Brian Hernandez	KM6MIN	(805) 813-7595 cell	km6min_bh@yahoo.com
<b>Food Services</b>	Bill Everett	KI6KSV		ki6ksv@gmail.com
<b>Room Coordinator</b>	Linda Parker		(805) 558-1731 cell	kj6lxj@gmail.com
Elmers and Members at Large				
<b>Past-President</b>	Bill Woods	AB6BW	(818) 694-9019 cell	AB6BW1@gmail.com
<b>Advisor</b>	Bill Everett	KI6KSV		ki6ksv@gmail.com
<b>Advisor</b>				

April 2023

## Simi Settlers Amateur Radio Club

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

### Membership Application



Type of Application:  
Membership:

Type of

New Member  
Renewal

Individual (\$25/yr)  
Family (\$30/yr)

Name: \_\_\_\_\_ Day & Month of Birth: \_\_\_\_\_  
(Omit year)

Call: \_\_\_\_\_ Class: \_\_\_\_\_ ARRL: Yes No

Address: \_\_\_\_\_ City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone: (\_\_\_\_) \_\_\_\_\_ Alt. Phone: (\_\_\_\_) \_\_\_\_\_

E-Mail Address: \_\_\_\_\_

Additional Family Members:

Name: \_\_\_\_\_ Day & Month of Birth: \_\_\_\_\_  
(Omit year)

Call: \_\_\_\_\_ Class: \_\_\_\_\_ ARRL: Yes No

Name: \_\_\_\_\_ Day & Month of Birth: \_\_\_\_\_  
(Omit year)

Call: \_\_\_\_\_ Class: \_\_\_\_\_ ARRL: Yes No

Name: \_\_\_\_\_ Day & Month of Birth: \_\_\_\_\_  
(Omit year)

Call: \_\_\_\_\_ Class: \_\_\_\_\_ ARRL: Yes No

Badges requested: Yes No How many? \_\_\_\_\_ X \$18.00 = \$ \_\_\_\_\_

Name (s) Call(s): \_\_\_\_\_

Shirt Printing: Yes No How many? \_\_\_\_\_ X \$25.00 = \$ \_\_\_\_\_

Name (s) Call(s): \_\_\_\_\_ (Self Supplied Polo Shirt, no emblem or pocket)

Hats Requested: Yes No How many? \_\_\_\_\_ X \$20.00 = \$ \_\_\_\_\_

Name (s) Call(s): \_\_\_\_\_

#### OFFICE USE ONLY

Application type: New Renewal Membership type: Individual Family

Date Received: \_\_\_\_\_ Amount Received: \_\_\_\_\_ Database completed: \_\_\_\_\_

Badges and Shirts ordered: \_\_\_\_\_

April 2023