Simi Settlers' Amateur Radio Club

Short Circuit

The next **meeting** is at the
Simi Senior Center,
3900 Avenida Simi, Simi Valley.
Thursday January 8, 2026 at 7:00 PM.

The next **Pizza** Night is at
Toppers Pizza, 2408 Erringer Rd, Simi Valley
Thursday January 1 2026 at 6:00 PM

Move the Sunday night net **- YES** to **447.640 UHF repeater - PL is 131.8 Hz**

What are you working on? Send us a picture and a few words.

December 2025

NO meetings in December - I am just going to eat sugar cookies and drink chocolate milk.

Jim and Lea Veronica will be graciously hosting the annual christmas party.

The event will be on Saturday, December 6th, starting at 5:30pm.

Lea requested a small group of us to come over around 11am that same day.

Please coordinate with Lea about things to bring at **fun4all8@earthlink.net**
or 818 389-3453

December 2025

The November meeting was a discussion of digital modes such as packet radio, winlink, APRS, FLDigi, and Vara FM.

Should we continue this in February?

Care to bring your portable / mobile digital box to the meeting?

Did you know that Jim KJ6LXJ proof reads these newsletters and occasionally finds something?
I blame it on the drinking. Mine or his, I ain't saying.

The January meeting will be a SWAP net.

Bring your stuff to the meeting, take somebody else's home.

December 2025

A selection of NETS

Monday	**Condor Connection** (Plays Newsline)	7:00 PM	Frazier Mountain 224.720-1.6 MHz PL156.7
Tuesday	**County ACS** HF net	6:30 PM	Summer 7.242 +/- Winter 3.987 +/-
	ACS Area 1 - Simi Simplex net	6:45 PM	145.510 MHz Simplex
	ACS Area 1 - Simi Repeater net	7:00 PM	Simi Repeater 146.805 -0.6 MHz PL 100.0
	ATN-CA Net	7:30 PM	https://www.atn-tv.com
	LSB Net	8:00 PM	3.908 MHz
Wednesday	**Channel Islands chapter 10-10 International**	10:00 AM 6:00 PM	28.34 MHz
	Mesh VOIP Net* Voice / video / data	8:00 PM	2.4/5.8 GHz Mesh
Thursday	**LSB Net**	8:00 PM	3.908 MHz
Saturday	**SSARC SSB HF Net**	8:30 AM	7.240 (+ or - QRM/N) 40 meter
	CW-QRP	9:00 AM	7.032 MHz
	Quad Squad net	1:00 PM	21.365 MHz
Sunday	**The Newbie net**	7:00 PM	Bozo Repeater 147.885 –0.6 MHz PL 127.3
	LSB Net	8:00 PM	3.908 MHz
	SSARC 2 Meter Net**	8:30 PM	447.640 UHF repeater - PL is 131.8 Hz

Additional listings of **MORE** 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 Sunday night net at 8:30 on 447.640 UHF repeater - PL is 131.8 Hz:

Nov	23	Matt	KN6SEC	/	30	Brian	KM6MIN
Dec	7	Kevin	KD6UTC	/	14	Matt	N3AR
	21	Ron	K6RIN	/	28	Kerwyn	N6YHX
Jan	4	Matt	KN6SEC	/	11	Brian	KM6MIN
	18	Kevin	KD6UTC	/	25	Matt	N3AR

December 2025

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.**

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. **Stop by and say Hi**. You do not have to do anything other than check in to test out your simplex or repeater connection.

The Tuesday **HF net** during summer months is on 7.242 +/- at **6:30 PM.**

During the winter, it is back to 3.987 lower side band.

The Tuesday **simplex net** is on 145.510 at **6:45 PM.**

The Tuesday **repeater ne**t is on the 146.805 (-0.6 MHz, PL 100) repeater at **7:00 PM.**

NOTE: Please be advised that we hold the Tuesday **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** for more updates.

For the Tuesday night nets:

2-Dec-25	Eric	KE6MLF	ORT
9-Dec-25	Bill	AB6BW	
16-Dec-25	Dante	W6JCQ	
23-Dec-25	Lisa	KK6AKR	
30-Dec-25	Frank	KI6OQ	
6-Jan-26	Ron	K6RIN	County
13-Jan-26	Eric	KE6MLF	
20-Jan-26	Bill	AB6BW	
27-Jan-26	Dante	W6JCQ	

Member Updates

Simi North, in the old days by Orv W6BI

I was cleaning out a cabinet in the shack and came across a photo album. In it were various ham radio photos, including these of the Simi North radio site taken in the late '90s.

It's the same cabinet, but shows the original telephone pole (which originally held an antenna for a paging transmitter for Simi Valley Hospital). We added the cross arms a few years after occupying the site. At the top of the pole is the antenna for the 2 meter repeater.

On the cross arms is a very high-gain commercial grade antenna for the 220 repeater. Next to it on the top cross arm is the antenna for the 220 remote. The pole was removed and replaced with the current tower sometime around 2010.

On top of the cabinet was an NMO mount with a 220 whip used for the remote control receiver.

You can see the overhead phone line - it was used not only for autopatch phone calls, but to access the dial-up modem used to program the controller.

The photo of the interior of the cabinet shows from bottom to top, the batteries, and a power supply from an IBM mainframe computer converted to ham radio use (still being used at KB6DYJ's QTH!). To the left and right of the power supply you can see the two meter cavities (six of them, I think), and behind the power supply are the cavities for the 220 repeater.

Above that is the ACC RLC-1 controller, a very capable controller for the day. Above that is a rack of mini-modules, built from scratch by Art WB6CWJ (SK). It contained a 2 meter exciter module, amplifier module, 2 meter receiver module, an interface & monitoring module, and a fuse panel. If you look closely at that rack, you'll see a blank panel on the right with wood grain covering it. That was where the original controller was. It was an 8085-based, wire-wrapped controller, constructed by Rick Nims, whose callsign I don't recall. It was programmed by programming an EPROM. It was a relief to dump it and start using the RLC-1 :-)

Above that but not shown is the 220 repeater, a Spectrum SCR 1000. (I've attached a photo of one). It worked well, but it was a power hog. Art had rigged up a power fail detector circuit and I had written a macro for the RLC-1. In an attempt to preserve battery run-time when the controller detected loss of AC, it unlinked the repeaters, announced "AC Power Fail" and switched the courtesy tone to a CW "B" :-)

Also inside the rack but not shown was a system of remote simplex radios, using modules designed for a Kenwood TM741. I believe we had remotes for 2 meters, 220, and another band. Don't know if we ever put an antenna up for the third remote.

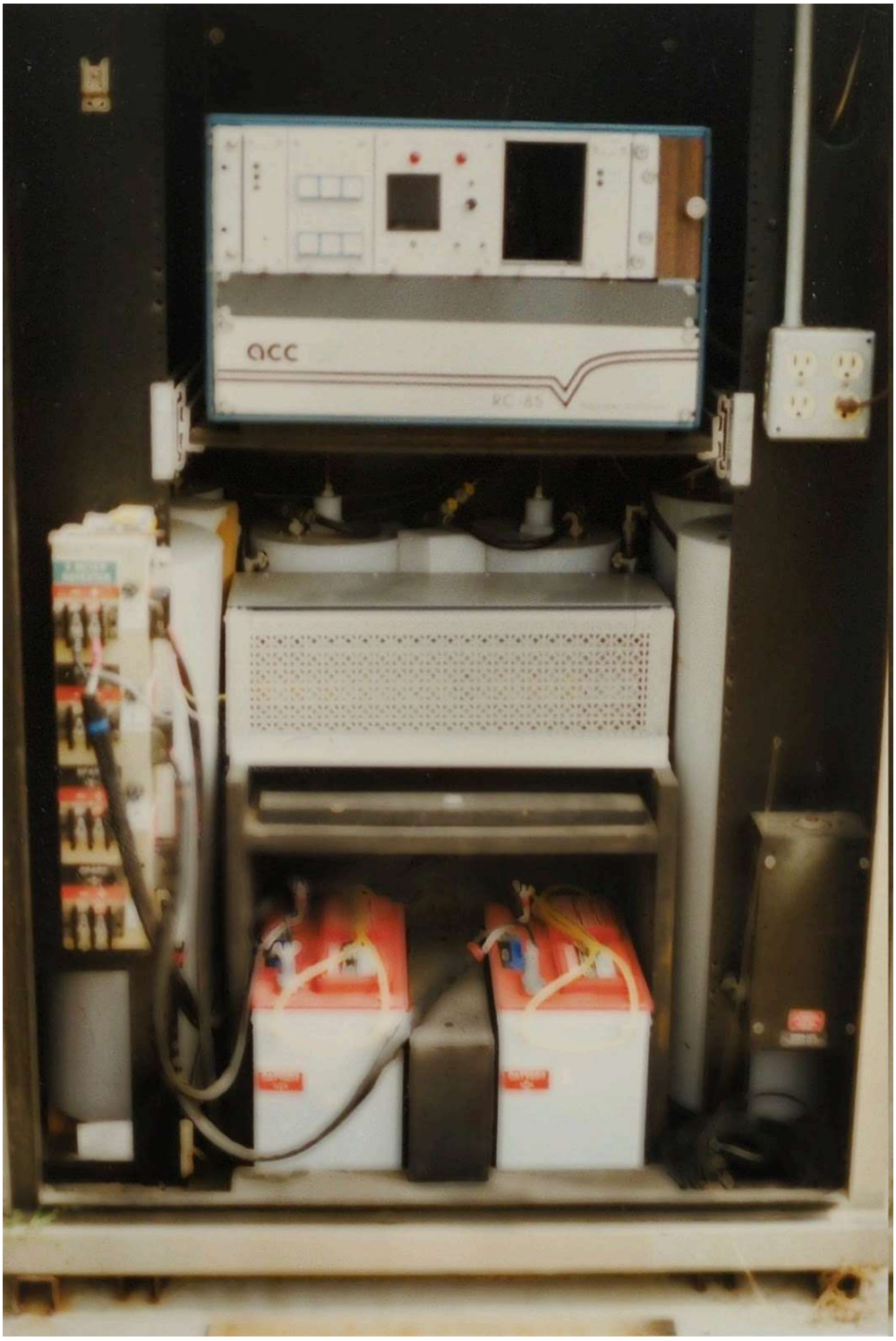
It was a great system - it was not unusual for a mobile station at the intersection of the 405 and the 101 to be solid into the 2 meter repeater. It performed admirably during the '94 Northridge quake.

After being on battery power (and being used a LOT that day) when power was restored in the late afternoon, Art reported that the batteries were probably good for another 12 hours.

Sometime next spring when we've completed a couple of the projects at Simi North, I'll post another photo for comparison.

73,

Orv W6BI



December 2025

December 2025

The NEW Simi North progress - (also) Orv W6BI

Sunday afternoon a work crew went to SimiNorth and poured concrete for the base for the second cabinet. It was a lot of work - they had to mix and pour 31 50-pound bags of concrete! Props to the crew - Donnie KM6FQ, Frank KI6OQ, Kerwyn N6YHX, and Eric KB6DYJ.

We also put the monster battery in the cabinet. It's not connected yet as we have more work to do, but we just needed a place to store it.

And if you happened to notice that the repeaters and AREDN nodes weren't operational this morning, that's because I unplugged the power supplies as we were moving the old batteries around to make room for the new one. And as we locked up the cabinet, I forgot to plug it back in :-/

The tired old batteries ran everything until about 1:30 this morning. We'll get it all powered back up tonight.

Orv W6BI

The rebar for the new cabinet base

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The huge battery and the new cabinet base all poured on the rebar.

December 2025

The NEW Simi North progress - (again also) Orv W6BI

On November 23, Donnie KJ6TTN put in some more work on the new power system for the SimiNorth radio site.

He added a transfer switch between Edison and an external socket for a generator. In case both Edison power and the solar panels are off line for an extended period, a generator could be brought to the site to provide power.

December 2025

The NEW Simi North progress - as of Sunday 11/30!

Donnie and Kerwyn were wiring up the disconnect and chargers. Thanks for braving the day, it was getting cold and blustery. Here they are at the existing cabinet, the new cabinet base is on the right covered with parts and equipment.

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Here is Donnie taking a quick moment to play Pokemon.

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And on other fronts, the new cabinet has a hole and cable feedthrough using a hydraulic hole punch.

Did you know when the slug is fully knocked out, the heavy punch and hydraulic cylinder ejects and lands on your (not waiting) arms?

December 2025

Good news, it missed my head and landed on the top of that un-suspecting trash can.

Here is the fitting bolted in with sealant:

Digital Mode Progress - Eric KE6MLF

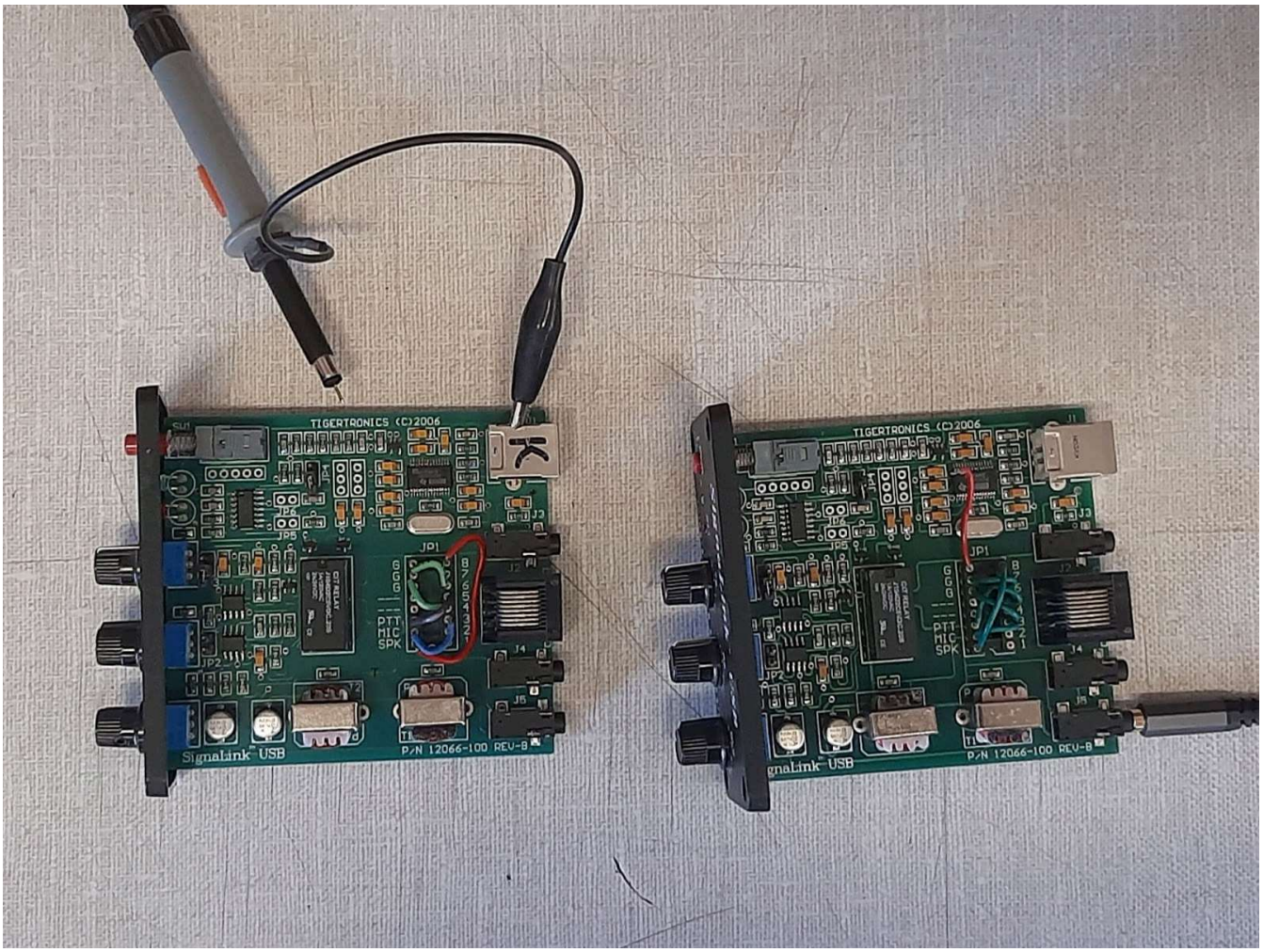
How did everybody like the November meeting, where a few of us actually brought in equipment and got some of the digital modes working?

One of the take-aways was that Kerwyn's Signalink is deaf. I took it home and put it on the bench. Following along with an input signal and oscilloscope to try and find out the issue.

I did call Tigertronics, they do offer repair services. At worst, they will replace the entire PCB at a cost of $70. **Dang**, that is about the cost of a new Digirig (the one with a newer design and NO adjustment knobs).

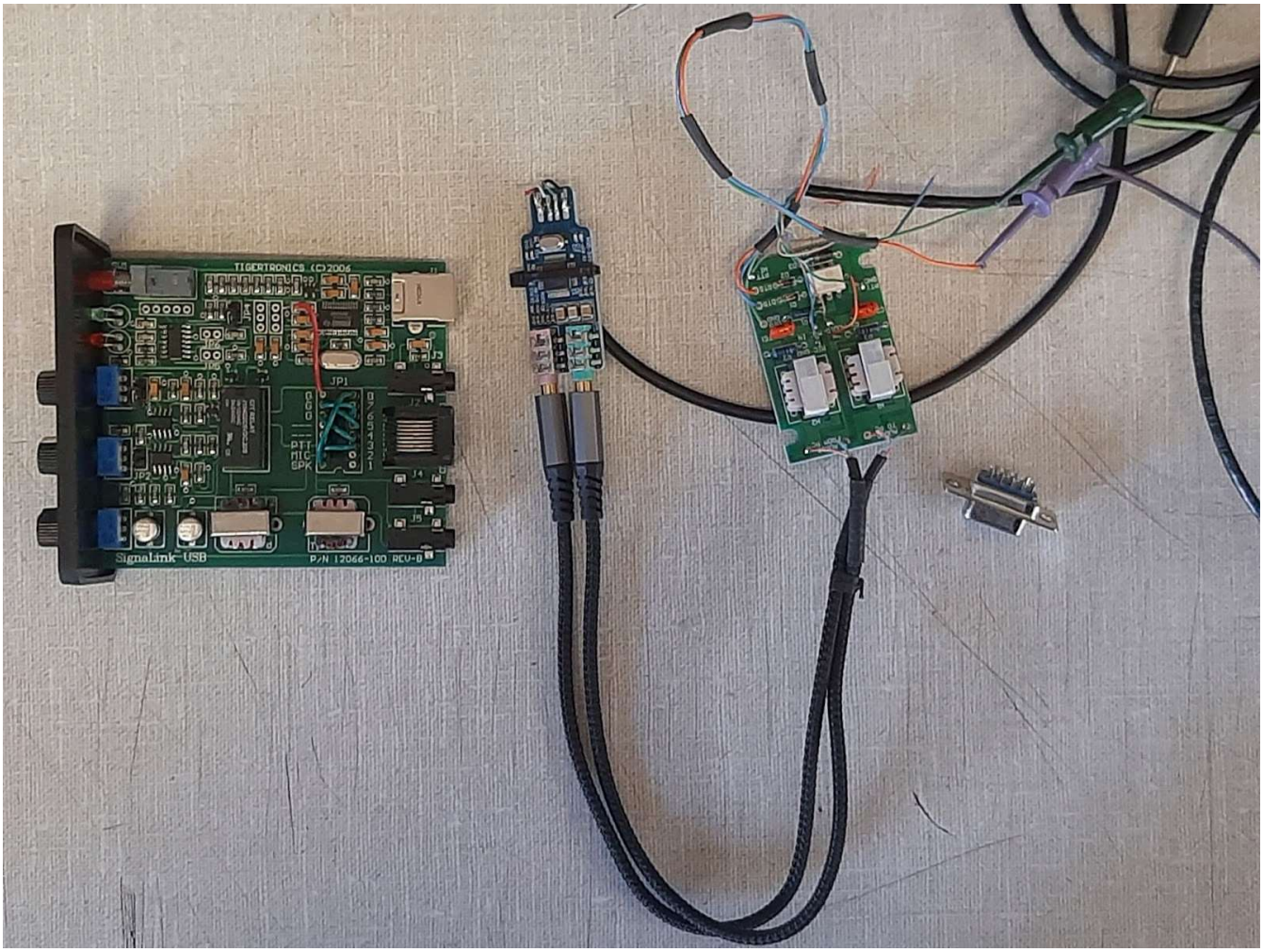
I did see a youtube video about replacing the USB interface and amplifier chips, they are available for not much from places like Digikey and Mouser.

The debugging continues…



December 2025

Meanwhile, I am working on my redneck homebuilt “sound card interface”. It has the same two isolation transformers, a real PTT driver, and probably the USB interface IC.



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Arduino Controlled Solder Re-Flow Oven - Joe W6JWP

There is a rich DIY tradition within the Ham Radio community dating back to the earliest days of our hobby. In the beginning most Hams pretty much had to design and build their own equipment and needed the skill to use a hammer and saw as much as a soldering iron and screwdriver. Not only did they need to build their own radios but the tools and equipment to calibrate and test them.

When equipment eventually became available that could be repurposed for amateur use, it often needed repair or modification before it could be used. Hacking used equipment was and is almost an art form requiring new or expanded skills and tools.

Then came the transistor, IC and printed circuit boards - small components jammed together on a postcard sized piece of copper clad fiberglass. The upside being smaller, lighter equipment that required less power. No more risking electrocution while testing the plate voltage on the transmitter's final output tube. Downside, you needed a steady hand and maybe a magnifying lens. But what do you do when the part you're trying to solder is smaller than the tip of your soldering iron? Welcome to the world of surface mount devices (SMD).

You can solder SMD parts by hand, at least the larger ones, using a fine tip soldering iron, a really steady hand, a magnifying lens and a little luck, but it's a pain in the butt. And why, you

ask, even bother? There are still plenty of thru hole components out there to build with. Well there are at least a couple of reasons.

Just like transistorized equipment is smaller and lighter than vacuum tube equipment and requires less power, SMD equipment is even smaller and lighter and (in a lot of cases) less power hungry. Something that Hams that do SOTA, POTA and other portable pursuits appreciate. And then there's the whole DIY thing.

And then some of us just love a challenge or are gluttons for punishment, your choice. Tell us something is too hard or complicated and it's time to roll up the sleeves and get to work.

So, after an unnecessarily long preamble I present my journey to building an Arduino Controlled Solder Re-Flow Oven.

So you might be wondering why I wanted a Solder Re-Flow Oven. I blame YouTube. For years I've seen videos on how to make your own SRO and I've soldered SMD parts by hand, so I know first hand what a pain it is. With my own SRO, I could expand my electronics assembly skills. I could design and build my own SMD PCBs. And I could expand and exercise some of my existing skill and equipment. But mostly I'm retired and it sounded like fun.

Time to figure out what I needed to build this thing. I had lots of Arduino parts that I had collected over the years so the controller and display and even the thermocouple module was covered. Mostly I needed a quartz heating element toaster oven, a solid state relay, a fan and a 12VDC power supply. I was about to start ordering stuff when I remembered that a couple of those YouTube videos I'd watched suggested finding a used toaster oven to save a couple of bucks.

Sure enough, after checking Craig's List and Facebook Marketplace for about a week, I saw an add for the right kind of toaster oven for $5.00, and it was local, like 5 minutes local. The picture looked good, so I figured it was worth a shot. Long story short, I had my toaster oven. Time to order the rest of the parts.

Turns out the thermocouple I had wasn't rated for the temperature I expected the oven to get to, so I had to add that to the list, but on the positive side I found an old 12VDC 1A wall wart and a 12VDC fan in the junk bin I could use.

While I waited for the parts to arrive I broke out the Arduino parts and started "programming", which in my case is seeing what I could borrow from existing examples and projects to suit my needs. I'm very much a trial and error programmer so after a few false starts I got the Arduino to read the thermocouple and display the temperature on the LCD. When the solid state relay arrived I added it to the circuit and added a light bulb to use as a stand in for the toaster oven. A few more iterations of the program and I had something that resembled a solder Re-Flow profile.

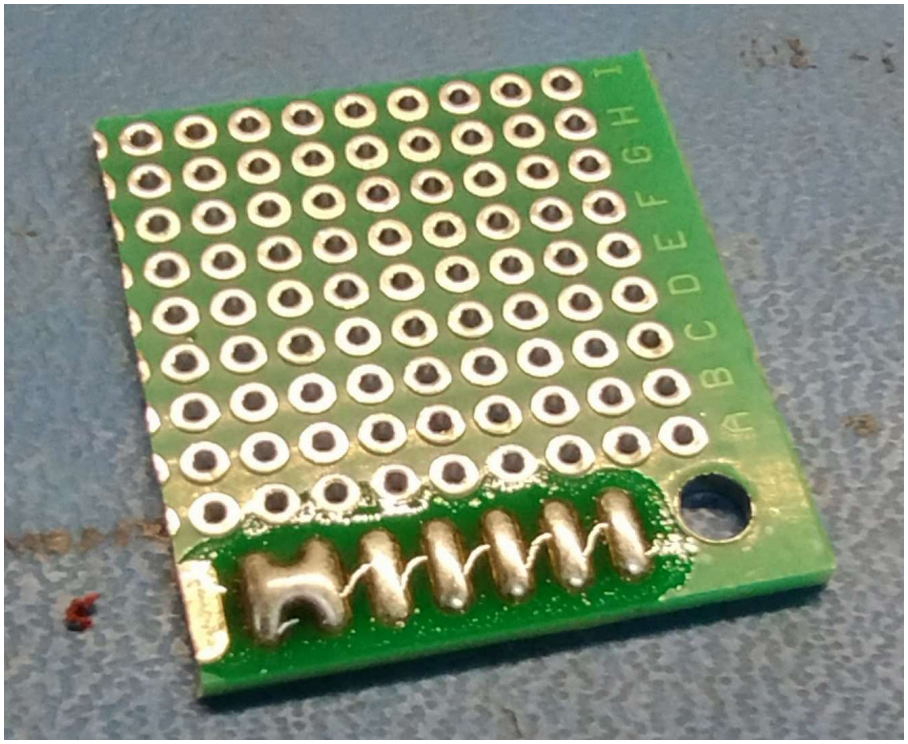
A solder Re-Flow profile, for those of you who are wondering, is a sequence of changes in temperature over time that allow for the proper soldering of the parts on a PCB depending on the solder paste used. You could just put the prepared PCB in to the oven and turn it on while monitoring the temperature and adjust the temperature at the appropriate times and get acceptable results, but if you get distracted you also could end up with a char-broiled PCB. I prefer to remove the human element, besides I have better things to do than watch my PCB cook. Now it was on to hacking the toaster oven.

After gutting all the electronics and making sure the inside of the oven was clean, I connected the solid state relay to the heating elements and AC mains power cord. Before plugging the oven into a power strip for added safety I double checked all my connections and wires.

Eureka, no smoke or sparks! With the display reading “PRESS GO TO START” I pushed the button.

The Arduino cycled through the settings for the temperature changes and everything went as planned. I even managed to record the profile using the Arduino serial monitor and transfer the data to a speadsheet to graph the results. A couple more practice runs and I was ready to melt solder.

I made some test boards from a PCB protoboard and applied the solder paste. Staring through the glass front of the oven I watched the flux liquefy and solder flow, so I guess I did watch my PCB cook. Once the PCB had cooled off I took it out and inspected it. It looked good to me so it was time put everything together.



A couple of the YouTube videos I watched had recommended adding some insulation so I picked up some from Ebay. While I waited I replaced the protoboard with a custom Arduino protoboard shield that I wired up. I also removed the 12VDC power supply board from the wall wart and 3D printed a mount for it. I installed a fuse, a AC mains switch and the 12VDC fan. Then I started to design a control box for the Arduino, LCD and GO button.

After four iterations, I finally had a box I liked. Design hint: Do not trust any models you download from the internet without double checking the dimensions. I downloaded a 3D model of an Arduino Uno to help me design my control box and it did not match the one I was using. Mostly the mounting hole placement was off. I had two Arduion Uno's from different manufacturers and their mounting holes lined up. Meanwhile my insulation arrived and I could finish putting everything together.

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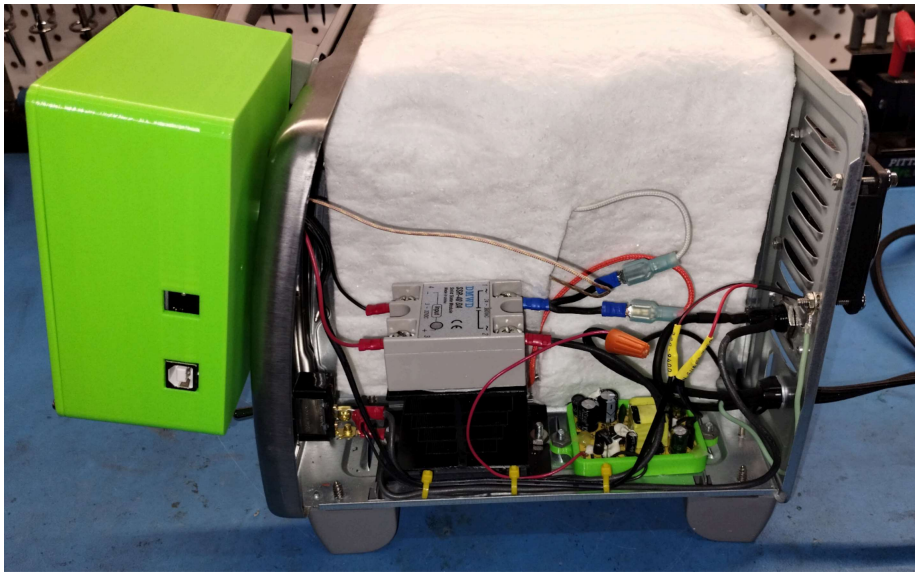
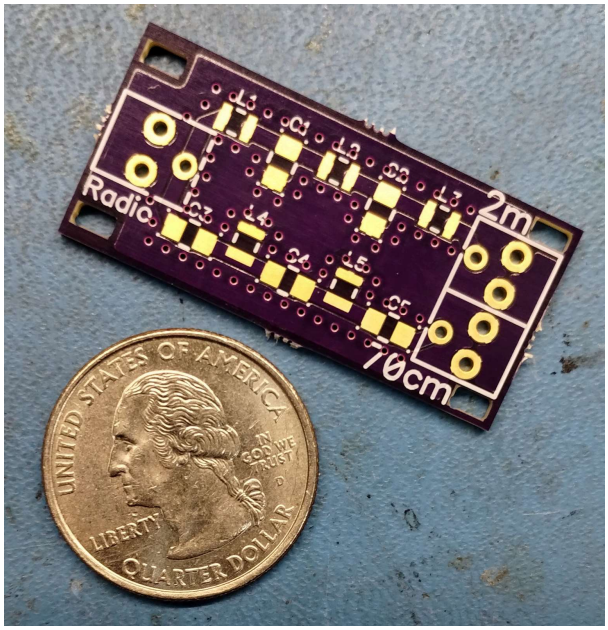


I started by drilling a hole for the thermocouple then filling it and some other holes in the oven with high temperature silicon gasket material. Once that was cured I mounted and wired everything else. After a couple of test runs, I buttoned the oven up and got ready for the final test.

What was I going to use for my final test? Remember when I mentioned that I had soldered a SMD PCB by hand? Well it was a little duplex board for an Arrow style 2 meter/440MHz satellite antenna. Since I had to order the PCB from OSH Park and I had to order a minimum of 3 boards I also ordered enough parts to build 3 assemblies. Lucky me, I had ready made solder Re-Flow test boards.



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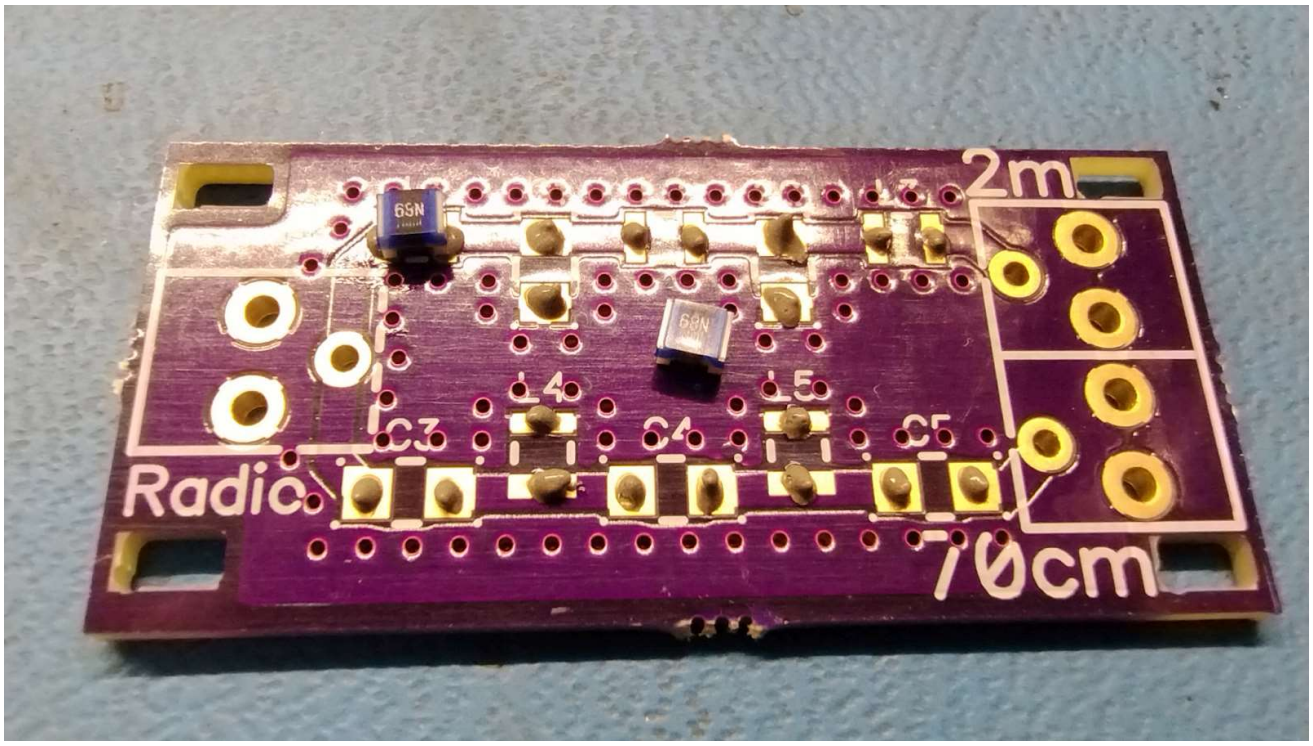
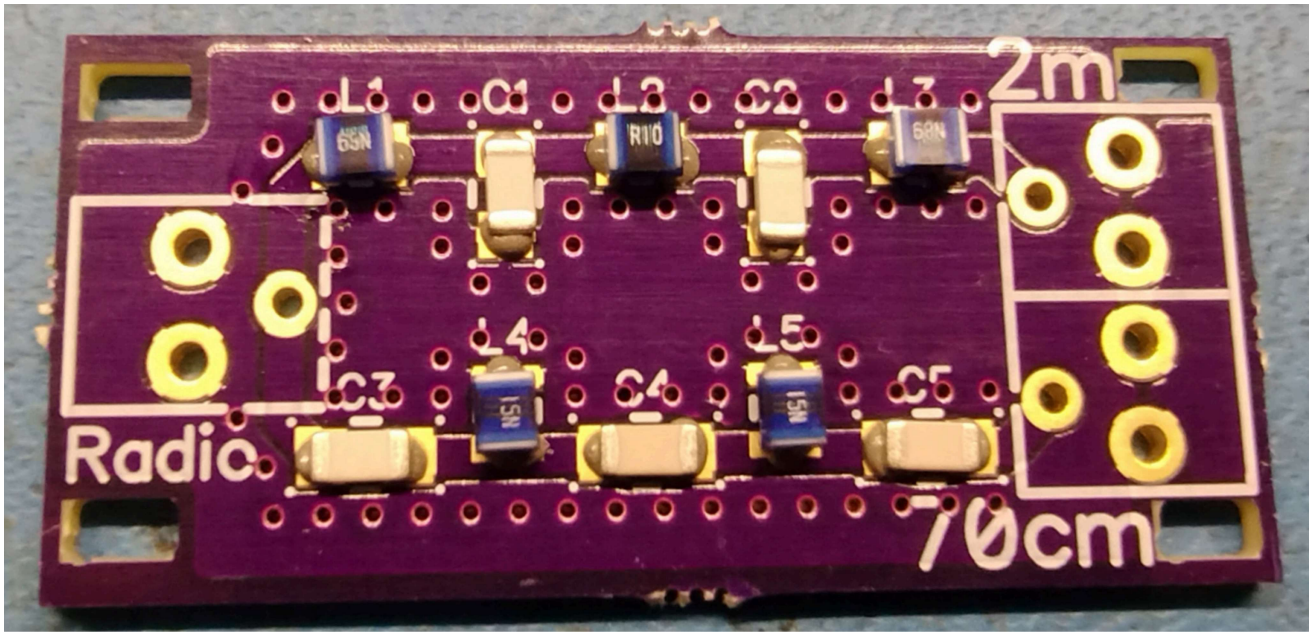
Solder paste and components in place I was ready to go. Ten minutes later I was looking at a PCB with solder re-flowed parts. And with that I am ready for my next project, maybe I'll design a custom Arduino Uno shield to replace the one I hand wired.





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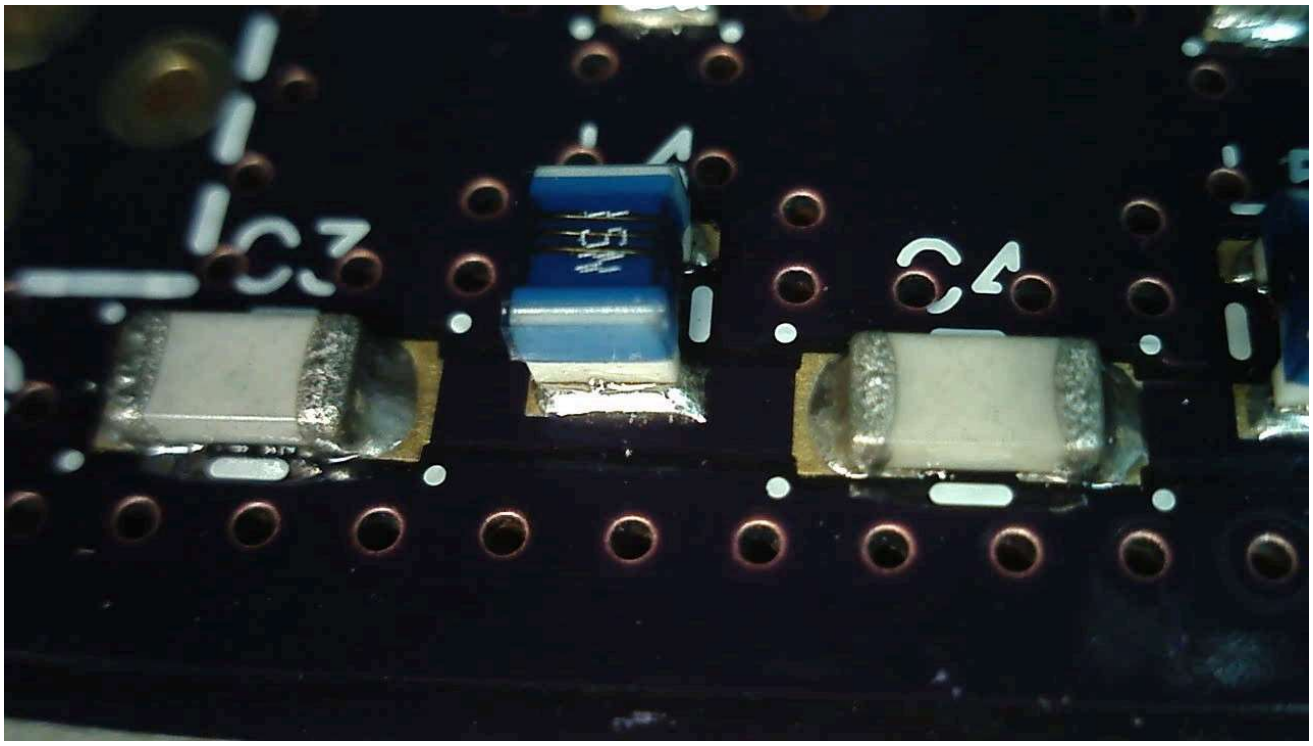

Joe Partlow W6JWP

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Internet Resources

simisettlers.org - us!

cvarc.org - Conejo Valley Amateur Radio Club

k6mep.org - Ventura County Amateur Radio Club

vcars.org - Ventura County Amateur Radio Society

pvarc.club - The home of many of the counties repeaters

arednmesh.org - Amateur Radio Emergency Data Network

vccomm.org - Ventura County ACS / ARES

www.arrl.org - American Radio Relay League

archive.org/details/simi-settlers-arc - Our old newsletters!

qrz.com - forums, for sale, articles - **Create your profile here!**

eham.net - forums, for sale, articles (kind of a zombie site)

www.theborednet.net - a local bulletin board including net schedules and **stuff** for sale!

Under the **groups.io** banner (a free account is required):

groups.io/g/SimiSettlers/messages - A great place to post

groups.io/g/SIMI-VALLEY-HAMMESHNET/messages

vc-acs.groups.io/g/main/messages

vc-acs.groups.io/g/area-1/messages

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.

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LAFAYETTE RADIO MODEL TE-50 TUBE TESTER

This portable tube tester from Lafayette Radio is perfect for testing vacuum tubes from classic radios and television receivers sold back in the day. It has eight tube sockets capable of testing standard Octal, Loctal, 7-pin miniature, 9-pin miniature types as well as well as 9- and 12-pin Compactron tubes and nuvistor tubes that were popular back in the 1950's and 1960's. Tests include leakage, shorts and tube emission (e.g.- gain or μ-measurements). The tester includes a slide-out chart drawer plus supplemental charts for newer-type tubes listing the required selector switch and slide switch settings for each tube under test including a test clip for testing tubes with high-voltage anode top caps such as those used for horizontal sweep circuits of earlier televisions. Similar Lafayette Model TE-50 Tube Testers are listed on E-Bay for $99.99 or more.

Condition: Very Good   Price: $5 or OBO. Contact Mike Tweedy KV6I (805-231-9683)

From Glenn WA6GNB

GrandStream # 1620/1625 telephone for sale. New – still in the original box. Compatible with our MESH system. $30.00 Contact Glen at gnb.2112@yahoo.com

From Joe W6JWP

Anycubic Mega Pro 3D FDM Printer w/Laser Engraving

Upgraded flexible magnetic steel bed.

The power supply and extruder fans make noise when first turned on but it goes away after about 30 seconds.

Includes glass bed, tools, spare extruder and nozzles, laser head and protective glasses.

$75.00 or best offer.

December 2025

Contact joe.w6jwp@gmail.com

December 2025

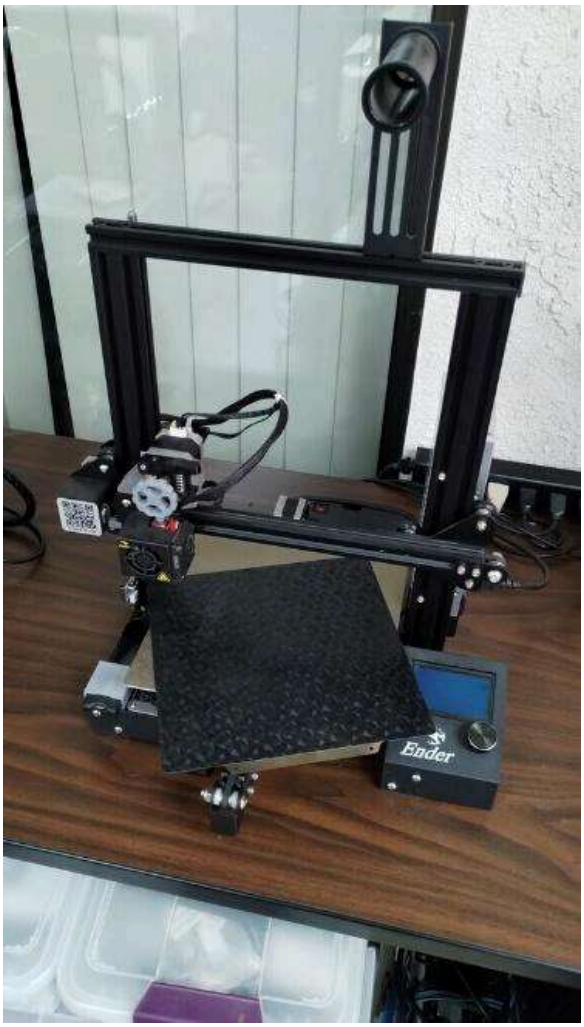
Ender 3 v1 3D FDM Printer

Modified for direct drive.

Upgraded flexible magnetic steel bed. Includes a spare textured steel bed.

Good basic machine

$75.00 or best offer.



Contact joe.w6jwp@gmail.com

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Simi Settlers' Amateur Radio Club Web Page: http://www.simisettlers.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				
President	Brian Hernandez	KM6MIN	(805) 813-7595	km6min_bh@yahoo.com
Vice President	Matt Kaufman	N3AR	(818) 425-0920	matt.d.kaufman@gmail.com
Secretary	Ron Nelson	K6RIN	(805) 797-6315	rnelson759@sbcglobal.net
Treasurer	Matt Griffin	KN6SEC	(661) 361-5955	mgriffi79@yahoo.com
Committee Chairpersons				
Webmaster	Matt Griffin	KN6SEC	(661) 361-5955	mgriffi79@yahoo.com
Newsletter	Eric Oberg	KE6MLF	(805) 791-0745	ericoberg1@gmail.com
Membership	Jim Parker	KJ6LXJ	(805) 368-6745	kj6lxj@gmail.com
PIO	VACANT			
Raffle Prizes	Matt Griffin	KN6SEC	(805) 433-4513	mgriffi79@yahoo.com
Youth Coordinator	VACANT			
Historian	Mike Tweedy	KV6I	(805) 231-9683	mtweedy@roadrunner.com
Net Coordinator	Brian Hernandez	KM6MIN	(805) 813-7595	km6min_bh@yahoo.com
Food Services	VACANT			
Room Coordinator	VACANT			
Elmers and Members at Large				
Past-President	Bill Woods	AB6BW	(818) 694-9019	AB6BW1@gmail.com
Advisor	Bill Everett	KI6KSV		ki6ksv@gmail.com
Advisor Morse Code	John Percival	WI6O		johnspercival1@gmail.com
Advisor Mesh	Orv Beach	W6BI		orv.beach@gmail.com

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:**

New Member ☐ Individual ($25/yr) ☐
Renewal ☐ 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: _____

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