

The Sin City Repeater Group

Built by operators. Run by people who show up.



September 2026 Newsletter of The Sin City Repeater Group

Club Leadership

Founding President

Bill Freeman N4NJJ
n4njj@lasvegashamradio.com

Vice President - Social & Educational Outreach

Chris Ortega KI7VLP
ki7vlp@lasvegashamradio.com

Vice President - RF Operations

Dan Nezgoda W7IVK
w7ivk@lasvegashamradio.com

Treasurer

Rey Faustino AK7RF
ak7rf@lasvegashamradio.com

Secretary

Gio Falcone K7GIO
k7gio@lasvegashamradio.com

60 SCRG members
as of 09/10/2026

Technician	11 (18%)
General	25 (42%)
Advanced	1 (2%)
Extra	23 (38%)

Saint Maximilian Kolbe Special Event Station K7F

K7F
IS OFFICIALLY
IN THE BOOKS
SAINT MAXIMILIAN KOLBE
— SPECIAL EVENT STATION —
SIN CITY REPEATER GROUP, INC.

★ RESULTS AT A GLANCE ★

 1,525 QSOs	 1,260 unique callsigns	 31 DXCC entities	 49 of 50 U.S. states	 All six inhabited continents	 Furthest contact: ZS1BHJ in South Africa, approximately 9,800 miles from Las Vegas
--------------------------	---	-----------------------------------	---------------------------------------	--	--

★ WE MISSED WORKED ALL STATES BY JUST ONE STATE: VERMONT. ★

Special event station K7F is in the books, and the results are outstanding! From August 9th through August 17th, the Sin City Repeater Group's Saint Maximilian Kolbe Special Event station logged 1,525 contacts (1,260 unique call signs) spanning 31 DXCC entities and 49 of the 50 U.S. states!

Continued on page 3

September 2026 Newsletter of The Sin City Repeater Group

Welcome To The SCRG Newsletter

Another piece of the puzzle has come together with the formalization of the Sin City Repeater Group, and that is the establishment of a recurring newsletter to capture club activities and associated information.

The plan is start off with a bi-monthly cadence and, if necessary based on the volume of content, we will move to a monthly publishing schedule. This newsletter is intended to be as much about the club as it is its individual members. Everyone is encouraged to forward along any summaries, significant events, items for sale, tips, tricks, or anything else amateur radio related to share with the larger audience through this newsletter. Send all material to Mike KC8OWL, Newsletter Editor, at kc8owl@gmail.com.

With a club as busy as the SCRG, I'm sure it won't be long before we end up with a monthly cadence!

Help Wanted



SCRG is growing, which means a few jobs need someone willing to take ownership. None of these positions should become a second job. Most require only a small amount of time each month, but each one can make a meaningful difference in the club.

Contest Coordinator

SCRG is one of only two ARRL-recognized contest clubs in Nevada and the only one in Southern Nevada.

A Word From The President



A lot is happening within the Sin City Repeater Group right now, and this first newsletter shows how quickly the organization is growing.

Over the past several months, we have continued expanding our repeater network, launched the K7F Saint Maximilian Kolbe Special Event Station, introduced operators to new modes and equipment, participated in community outreach, and created more opportunities for members to actually get on the air and do something together.

That last point matters.

SCRG was never intended to be a club where we measure success by how many meetings we hold. Amateur radio is supposed to be active. We want members experimenting, operating, learning, building, teaching, serving the community, and occasionally trying something that does not work the first time.

We also recognize that people have careers, families, businesses, and other responsibilities. Not being able to attend every meeting or event should not prevent someone from being an active member of an amateur radio organization. Our job as a club is to create enough different opportunities that members can find ways to participate that fit their interests and their lives.

Creating this newsletter is part of that effort. It gives us another way to share what members are doing, pass along technical knowledge, recognize accomplishments, advertise upcoming opportunities, and keep everyone connected.

I especially want to thank Mike KC8OWL for volunteering to serve as our Newsletter Editor and, more importantly, for stepping forward and taking ownership of the project. Organizations grow when members see something that needs to be done and are willing to raise their hand and help make it

Continued on page 4

Continued on page 3

September 2026 Newsletter of The Sin City Repeater Group

Continued from page 2

happen.

Mike did exactly that. You will see more opportunities like this as SCRG continues to grow. Some will involve operating. Some will involve technical projects, education, community outreach, communications, or simply helping another amateur learn something new.

If there is something you want to see SCRG do, tell us. If you can help lead something, even better. Check out the "Help Wanted" page in the newsletter to learn about some roles that we've identified as necessary. Maybe you can take one on for an hour or so a month.

We are building much more than a collection of repeaters. We are building an active amateur radio community, and there is a place in it for anyone willing to participate, contribute, learn, and help others do the same.

73, Bill N4NJJ

Introducing 55 Civil Air Patrol Cadets To Amateur Radio



Fifty-five Civil Air Patrol cadets. 55 opportunities to get on the air.

The Sin City Repeater Group, Inc. spent Tuesday evening on August 25th with the Henderson Hawks, 65th Air Rescue Squadron of the Civil Air Patrol, giving 55 cadets a hands-on introduction to amateur radio.

Continued on page 6

Continued from page 1

We missed Worked All States by just one state, Vermont! Our furthest contact was ZS1BJH in South Africa, approximately 9,800 miles from Las Vegas.

Members gained hands-on experience with antennas, particularly magnetic loops, FT8 and driver configuration, and basic HF operating etiquette. More importantly, we spent time together learning, experimenting, and sharing amateur radio with others.

More important than the numbers, though, is what a Special Event Station allows us to do as a club.

Not every member lives in Las Vegas. Not everyone can meet at the same place or operate at the same time. Most of us also have jobs, families, side hustles, and other responsibilities competing for our time.

That is one reason Special Event Stations work so well for SCRG. They give all of us a common goal we can contribute toward when and where our schedules allow. An hour from home on a Tuesday night can matter just as much as spending an entire Saturday at an event.

We want to build a club where participation fits into real life, not one where your value is measured by how many meetings you can attend.

That fits exactly with what the Sin City Repeater Group is trying to build: activity, action, inclusion, learning, and a community that builds amateur radio operators up rather than tearing people down.



Continued on page 4

September 2026 Newsletter of The Sin City Repeater Group

Continued from page 3



Thank you to everyone who joined us for the K7F Saint Maximilian Kolbe Special Event Station at St. Anthony of Padua: JD K17EUF, Chris K17VLP, Dan W7IVK, Shane KM7CIP, Aaron KB7VGK, and Jim K7JSX.

Continued from page 2

We want to use that recognition more and give interested members another way to participate in SCRG.

The Contest Coordinator will serve as the point person for SCRG members interested in amateur radio contesting. Responsibilities include maintaining our list of eligible contest-club participants, collecting the necessary callsign and location information from members, sharing information about upcoming contests, and helping compile member results for club submissions.

You do not need to be an elite tester. You need to be organized, interested in contesting, and willing to help other members participate.

Estimated commitment: Some initial setup will be required to establish the program and participant list. After that, generally less than 30 minutes per month, with some additional work following major contests to collect and compile members' ADIF logs.

Membership Chair

Every growing organization needs someone paying attention to the people joining it.

The Membership Chair will help maintain SCRG's membership roster, welcome new members, make sure we have accurate contact and callsign information, and help new members understand how they can get involved. The Membership Chair can also help identify members we haven't heard from in a while and make sure people don't simply disappear into a spreadsheet after joining.

This is a good role for someone who enjoys meeting people and helping them find their place in amateur radio.

Estimated commitment: Approximately 1 to 2 hours per month.

Continued on page 5

September 2026 Newsletter of The Sin City Repeater Group

Continued from page 4

Net Director

Does Southern Nevada actually need another amateur radio net?

There are already plenty of nets on local repeaters, and SCRG has no interest in creating another weekly roll call simply because clubs are "supposed" to have one.

The Net Director's first job will be to help us research whether a recurring SCRG net would be useful, sustainable, and different enough to justify asking people for their time. What could we offer that existing nets do not? How do we create actual conversation rather than a Sunday-night health-and-welfare check? Could a net feature technical discussions, demonstrations, rotating topics, guest operators, problem-solving, or other formats that encourage people to actually talk to one another?

If we develop a concept worth putting on the air, the Net Director would then help establish the format, schedule, Net Control team, and operating procedures needed to make it sustainable.

We do not need someone to inherit a net. We need someone willing to help us figure out whether we can build one worth listening to.

Estimated commitment: Initially a short-term research and development project. Ongoing time commitment would depend on what we ultimately decide to build.

New Ham Navigator

Getting your license is exciting. Then somebody hands you a radio with 200 menu options and tells you to "just program the repeater."

Who else initially struggled with the PL tone? Be honest. The New Ham Navigator will help bridge the gap between getting licensed and actually becoming comfortable participating in amateur radio. That person will help coordinate occasional Google Meet or Zoom sessions where newer operators can ask the

questions that are often difficult to answer from a license manual.

Topics might include programming a first radio, understanding repeaters and tones, basic operating etiquette, choosing equipment, making that intimidating first contact, handling unfamiliar situations on the air, and figuring out what areas of amateur radio might be worth exploring next.

This is intentionally not a New Ham Net. A net assumes someone already owns a radio, knows how to program it, can reach the repeater, and feels comfortable enough to transmit. We want to help people get to that point first.

The New Ham Navigator does not need to know everything. Nobody does. The job is to create a welcoming place for questions, find answers when necessary, and help newer operators get over the initial hurdles that can turn an exciting new license into a radio sitting unused on a shelf.

Estimated commitment: Approximately 1 to 2 hours per month after initial setup.

Interested?

You do not need to know everything before volunteering. If one of these jobs sounds interesting, raise your hand. We would rather help someone grow into a role than leave good ideas sitting on a list because nobody considered themselves an "expert."

Contact Bill N4NJJ or any SCRG officer to learn more.



September 2026 Newsletter of The Sin City Repeater Group

Continued from page 3

This was not a sage on the stage presentation. Every cadet had an opportunity to use a radio and experience two-way communications firsthand.

One of the standout moments came during the HF demonstration on 20m. As cadets listened to stations on the Maritime Mobile Service Net, faces around the room lit up. Amateur radio suddenly became real: real operators, real distances, real-time communications.

The success of the evening started before anyone turned on a radio. On Monday night, participating SCRG members held a focused 30-minute planning meeting to assign responsibilities, coordinate equipment and demonstrations, discuss strategies for working with youth, and review youth protection expectations. That preparation showed Tuesday night.

A special thank you goes to Troy KK7NWE, whose involvement with the Henderson Hawks made this opportunity possible and who invited SCRG to participate. SCRG also thanks Kirk NO7BS, Mike W7MTV, Bill N4NJJ, Chris KI7VLP, Ian K6IBX, and Dan W7IVK for representing the club in person.

Jason WV3V, JD KI7EUF, Bob KK7VGQ, and Shane KM7CIP also played an important role from elsewhere, making themselves available on the repeaters so that when cadets keyed a microphone, somebody answered.

This is what growing amateur radio in Las Vegas, Henderson, and Southern Nevada looks like: plan well, show up, create opportunities, and put radios into people's hands.

If you're looking for a Las Vegas-area amateur radio club that is operating, experimenting, serving the community, developing new operators, and actually doing things together, this is your invitation.

Come build with us.



The Sin City Repeater Group, Inc.

September 2026 Newsletter of The Sin City Repeater Group

160-Meter Operation From KXNT Site

KXNT went silent. The SCRG didn't.

On September 6th, 2026, a transmitter site that spent decades putting radio across Southern Nevada came alive again, just in a very different way. Members of the Sin City Repeater Group, Inc. operated from the former KXNT AM transmitter site in North Las Vegas, putting stations on 160, 80, 40, and 20 meters and making contacts across North America and into Europe.



Some members came with years of HF experience. Others were sitting down at an HF station for the first time. Everyone walked away having learned something, and some learned a ton. The best part of the night was watching JD K17EUF and Shane KM7CIP make their first-ever HF contacts. Jim K7JSX, Dan W7IVK, and Kirk NO7BS brought radios and equipment so other members could get on the air, ask questions, try things out, and learn by doing.

Steven KD7LVX joined remotely from Idaho, Ryan N7RMK participated from Reno, and Efrain KJ6OLY joined from Ontario, California, extending the operation well beyond Southern Nevada.

A special thank-you goes to the site owner for trusting the Sin City Repeater Group with access to such a rare piece of Las Vegas radio history. Opportunities like this do not happen every weekend, and we do not take that trust lightly.



Our operating model is intentionally different from the traditional ham club model.

Continued on page 8

September 2026 Newsletter of The Sin City Repeater Group

Continued from page 7

We have meetings, officers, bylaws, and the administrative structure any responsible organization needs, but those things exist to support amateur radio. They are not supposed to become amateur radio.

We want microphones, keyers, radios, and antennas in members' hands. We want new hams sitting beside experienced operators. We want someone who has never made an HF contact to leave with a contact in the log and enough confidence to do it again. If somebody wants to learn HF, digital modes, portable operating, repeaters, antennas, AllStar, DX, or something completely new, we meet them where they are and try to connect them with somebody who can help.

For amateur radio operators looking for an active ham radio club in Las Vegas, North Las Vegas, Henderson, or anywhere in Southern Nevada, this is what the Sin City Repeater Group means when we say we actually do radio. We are building a club around operating, learning, mentoring, experimenting, and creating opportunities, not adding more nets simply to have more nets, creating "advisory" committees in search of something to advise, or running a hobby organization from a Fortune 500 operating manual that probably should have been retired sometime around 1987.

We would rather hand someone a microphone than another agenda.

Create memories, not more meeting minutes. Participating members included Kirk NO7BS, Shane KM7CIP, JD KI7EUF, Justin KG7FKJ, Ian K6IBX, Dan W7IVK, Jim K7JSX, Steven KD7LVX, Michael W7MTV, Bill N4NJJ, Troy KK7NWE, Efrain KJ6OLY, Jason WV3V, Aaron KB7VGK, Robert KK7VGQ, Tim KA8VIR, Christopher KI7VLP, and Ryan N7RMK.

And this was not our last event. There will be more radios, more unusual places, more first contacts, and more opportunities to do things most hams never get the chance to do.



For more information and to apply for membership, see: <https://SinCityRepeaters.com>.

Membership in Sin City Repeater Group, Inc. is by invitation only and subject to review under the SCRG Constitution and Bylaws, adopted policies, FCC Part 97, and the authority of SCRG leadership, repeater trustees, and control operators.

Membership is limited to individuals 18 years of age or older. Dues support the nonprofit's mission and operations. Membership does not guarantee access or privileges as a repeater.

We don't measure success by how many meetings we hold, we measure it by the number of experiences our members take home.

If you're looking for a ham radio club that is actually active, uses radios on a repeater network that is busy for hours on end every day by a community of engaged operators, then the Sin City Repeater Group is where you want to be.



September 2026 Newsletter of The Sin City Repeater Group

LoRa APRS On 433MHz

I will be honest right up front - for the longest time I never understood what all the excitement was about the Long Range (LoRa) radios, meshtastic, and all of the related things. All those devices looked, in my eyes, to be toys that were not yet ready for prime time. Then, a local (to me in AZ) ham gave me a Heltec V3 LoRa board in the 70cm amateur band (433MHz) with a tuned external antenna to experiment with as an APRS digipeater and iGate. Since it was a \$0 investment, what did I have to lose, right? And since APRS is one of my favorite modes, it would serve as a great opportunity to test. But I was skeptical at what 100mW can do at 433MHz.

The original incarnation of APRS uses Audio Frequency Shift Keying (AFSK) to convert the message into all of the 1s and 0s that make up the packets that further make up the message payload. APRS uses two distinct audible frequencies to represent the 1s and 0s; 1,200 Hz is the "Mark" and represents a 1, and 2,200 Hz is the "Space" which represents the 0. The audio tones is how your message is converted to the digital string of packets you hear when you try to listen to APRS. This has worked for a long, long time and will continue to work for a long, long time in the amateur radio service.

In the most simple sense, LoRa replaces the AFSK information sent and received on 144.390 MHz (United States) in wide-band FM format with a different type of audio to represent those same 1s and 0s of your APRS message and sends it out over a frequency in the 70cm. But the really big difference is how LoRa works behind the scenes to code and decode the data.

Instead of transmitting data on a fixed carrier frequency, LoRa alters the frequency of the radio signal over time in a pattern known as a "chirp". This sweeping frequency makes the signal highly resistant to noise, multi-path fading, and interference. LoRa's signal processing is so sensitive that it can successfully receive data that is technically buried in the background "noise" of the environment.

The main components used for traditional APRS infrastructure are still needed for LoRa APRS; they are just smaller, cheaper, use less power, and rival or beat the old infrastructure in performance.

Let's start with what I am using for a digipeater. The Internet is loaded with LoRa hardware configured for Meshtastic in the 915 MHz Industrial, Scientific, and Medical (ISM) license free band. **THIS IS NOT WHAT YOU WANT OR NEED!** What we are interested in is the same hardware, but built to support operations on the 70cm amateur band at 433 MHz. This hardware is available, but not as common in the United States as it was originally intended for the EU. My digipeater is based on the Heltec WiFi LoRa 32 V3 ESP32S3 SX1262 LoRa Node. These can be sourced from Heltec, Ali Express, Amazon, Ebay, etc.



To make the Heltec V3 do what we need it to do as a digipeater and iGate, it needs to be flashed with the proper firmware. This has been made very easy through the work of Ricardo Guzman, CA2RXU. Ricardo has a website where you can specify your device, the type of firmware you want, and then flash it directly to the device. The process is well documented on the website.



Continued on page 10

September 2026 Newsletter of The Sin City Repeater Group

Continued from page 9

You now need another piece of hardware to facilitate all of the user-facing capabilities that APRS offers such as position, telemetry, and object reporting as well as 2-way text messaging locally or through the APRS-IS network. In my own use case, I wanted an easily portable, GPS enabled device that gave me full APRS capability and easy messaging WITHOUT needing to use my phone and an app for ANY of it. Anyone old enough to remember the BlackBerry will recognize the form factor of this device immediately, the Liligo T-Deck Plus. This was the device that met all of criteria so I ordered the 433 MHz version and it arrived in under 2 weeks.

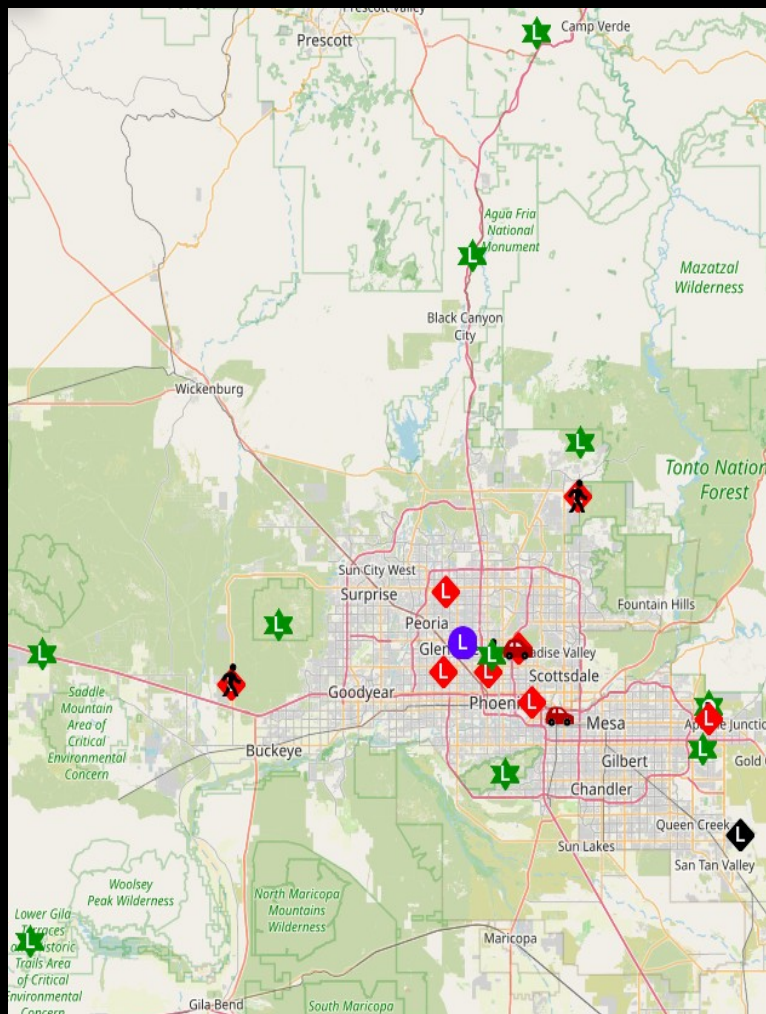


My T-Deck is flashed with firmware developed by F4MLV and is shown in the preceeding image.

This firmware has a very user friendly touch-screen

interface that is intuitive to use.

I have mentioned flashing these devices several times throughout this document. I want to be transparent about my experiences flashing these devices; sometimes it works on the first try and sometimes you have to try it a few times to get it to work.



The image above shows just part of the Phoenix area's 70cm LoRa APRS network - it expands further to the west to Yuma and further to the south to Tucson.

I was skeptical, but then the performance I observed first hand changed my mind very quickly. My 100mW digipeater easily exchanges data with other digipeaters in the system 40 or more miles away all day, every day. 73 Mike KC8OWL.

Questions, comments or suggestions regarding this newsletter can be directed to Mike DiTurno KC8OWL, Newsletter Editor for the Sin City Repeater Group, at kc8owl@lasvegashamradio.com

September 2026 Newsletter of The Sin City Repeater Group

SCRG Regional AllStar Linking



Where to connect to the Sin City Repeater Group regions via AllStar Link.

National Feed - 43320

Connect to the Buffalo Amateur Radio Repeater Association.

High Desert Feed - 47366

Connect here if you are, as W6OBB/4F1AB would say, 'West of the Rockies.'

SCRG Soap Box - 422314

Rag chew, test, experiment, and have some fun!



State	City / Location	Call Sign	Repeater Output	Repeater Input	Repeater Tone In	Repeater Tone Out	P25 NAC	AllStar Node
AZ	Kingman	N4NJJ	448.375	443.375	107.2	107.2	-	47366
CA	Barstow	W6GLW	449.680	444.680	91.5	91.5	-	-
CO	C. Springs	AD0TP	447.775	442.775	156.7	156.7	-	-
CO	Lamar	KA0WUC	447.475	442.475	179.9	179.9	-	-
NV	Angel Pk.	N4NJJ	448.325	443.325	107.2	107.2	702	43630
NV	Arden Pk.	N4NJJ	420.850	425.825	107.2	107.2	702	-
NV	Arden Pk.	W7IVK	927.1125	902.1125	100.0	100.0	-	-
NV	Blue Dia.	W7IVK	447.975	442.975	Redacted	Redacted	-	-
NV	Cent. Hills	N4NJJ	147.210	147.810	107.2	107.2	702	43750
NV	Cent. Hills	N4NJJ	445.375	440.375	107.2	107.2	-	42632
NV	Cent. Hills	N4NJJ	445.975	440.975	107.2	107.2	702	42632
NV	Cent. Hills	N4NJJ	927.5625	902.5625	107.2	107.2	702	42628
NV	DT. Hend.	W7IVK	145.390	144.790	100.0	CSQ	-	56474
NV	DT. Hend	K7RSW	448.875	443.875	114.8	114.8	293	-
NV	Henderson	K7GIO	445.800	440.800	107.2	107.2	293	-
NV	Fernley	N7RMK	446.875	441.875	114.8	114.8	-	-
NV	Lone Mntn.	N4NJJ	445.400	440.400	107.2	107.2	-	413941
NV	Low Potosi	N4NJJ	449.700	444.700	107.2	107.2	702	42631
NV	Sunset Prk	KI7VLP	446.875	441.875	114.8	CSQ	-	506601
NV	SW Vegas	N4NJJ	446.825	441.825	107.2	107.2	-	41394
NY	Buffalo	N4NJJ	442.675	447.675	107.2	107.2	-	-