Southwest Missouri Linked Repeater System (SMLRS)

User Information

SMLRS is a *permanently* linked repeater network operated by the Nixa Amateur Radio Club (NARC), the Southwest Amateur Radio Group (SWARG), the Missouri Highway Patrol Amateur Radio Club (KM0HP), and the Greene County EMA to serve emergency communications needs of Southwest Missouri and adjacent states. It has 7 repeaters with extensive overlapping coverage: a 2-meter repeater centered near Joplin, two 2-meter repeaters centered in Springfield, a 2-meter repeater centered near Nevada, a 2-meter repeater centered in Branson, and two UHF hub repeaters at Crane and Stockton Lake linking the 2-meter repeaters. Together, these repeaters cover all of the Region D ARES territory in Southwest Missouri.

The repeaters are described below:

Repeater Location	Granby	Branson	Crane	Springfield West	Springfield East	Stockton Lake	Nevada
Repeater Output	145.390	146.655	442.150	147.225	147.015	444.975	145.450
Repeater Input	144.790	146.055	447.150	147.825	147.615	449.975	144.850
PL Tone	91.5	162.2	162.2	162.2	162.2	162.2	91.5

Because the repeaters are permanently linked, a transmission on any of the seven repeaters is *re-broadcast on all seven repeaters*. In practical terms, transmissions within the network area will be heard from Coffeeville, KS to Mountain Grove, MO, and from Clinton, MO to Rogers, AR.

While the vital purpose of **SMLRS** is emergency service for weather monitors and responders, the network can also be used to support wide-area events, such as MS-150 bicycle ride. It is also available to all amateur radio operators for normal QSO use.

In an emergency, a net control station will use a code to place **SMLRS** in *emergency status*. The link is always operating; emergency status changes the tones, network ID's and internet links to emergency service agencies. See the box below:

When SMLRS is in Emergency Status:

- A *system announcement* is made when the status begins
- The *courtesy tone* changes to a Morse Code "W"
- The *Network Call-Sign ID* changes to Morse Code characters only
- The Network links to the IRLP *internet reflector* channel 9333.
  Service agencies can, in turn, connect to the reflector to monitor traffic
- Traffic on SMLRS can be streamed and monitored via www.radioreference.com

If you hear the network in Emergency Status, please LISTEN to Net Control and only transmit when requested to do so.

When emergency status ends, a system announcement is made, tones/ID's return to normal status, and internet links cease.

Outside of emergency status, amateur operators are encouraged to use the network for normal communications. Using the network will help all of us gain familiarity with its use, capabilities and range of coverage. The Nixa ARC operates its Thursday 7:30 p.m. network meeting on **SMLRS**, and Region D ARES operates a Friday net at 7:30 p.m. to provide a weekly means of checking the status of network components.

The network has robust power back-up systems. Each repeater has a battery system to hold the network on the air if normal power sources are interrupted. The battery system will operate until the on-site generators (one at each repeater site) provide power. Also, if the Crane link fails, a code will substitute the 442.425 repeater in Springfield as the UHF link to link all network repeaters together

This is a computer modeled map of the linked repeater coverage: