

May 30th 2026 EMROG/ARES Simulated Emergency Test Recap

Date: 6/5/2026

Listed below are the goals for the SET:

- Demonstrate capabilities and identify deficiencies in Emergency Communications at the FBC HS/EM.
- Participate in a VHF FM voice net on frequency 145.49 MHz (123.0 Hz, -600 KHz)
- If your able also try to reach out on Echolink node KD5YOU-R.
- Use simplex on 146.580 MHz to contact FBC HS/EM.
- Home stations may participate by checking into the voice net and sending digital traffic (RF preferred).
- Address the digital radio message (Winlink over RF preferred) to: KD5HAL
- Attach the ICS-213 form. The digital messages can be sent at any time during the drill.
- Voice net check in shall consist of callsign, grid square or location, antenna height and power.
- The areas circled on the map have been identified as potential flooding areas where inbound and outbound egress may be hampered by high water. Communication into these area by Amateur Radio may be the only mode available. These areas are: Kitty Hollow, Simonton, Mission Bend, Kendleton and Woodrow.



Check-ins

Repeater Checkins

	<u>Callsign</u>	<u>Antenna Height</u>	<u>Power</u>		<u>To Horizon</u>	<u>Coverage</u>	<u>Comments</u>
	K5BBC	24	5	34.8	6.8	13.6	
1	KD5CDM	7	50	10.15	3.7	7.3	Mobile
2	KF5PPG	30	50/100	43.5	7.6	15.2	
3	KJ5BFF	12	5	17.4	4.8	9.6	
4	KI5IOJ	35	40	50.75	8.2	16.4	
5	KT5EM	20	50	29	6.2	12.4	
6	KD5YOU	40	50	58	8.8	17.5	Simonton Portable
7	KD5CDM	7	50	10.15	3.7	7.3	Portable 4 Corners
8	KF5HSH			0	0.0	0.0	ECHO Link
9	KA9IKK			0	0.0	0.0	ECHO Link
10	KD5HAL	80	45	116	12.4	24.8	Repeater
11	KD5HAL	50	50	72.5	9.8	19.6	EOC
12	KE5RRI	4	7	5.8	2.8	5.5	At EOC HT

Simplex Checkins

1	KD5CDM	
2	KF5PPG	
3	KT5EM	
4	KD5YOU	S 7 signal
5	KD5CDM	
6	KF5PPG	
7	KI5IOJ	S 5 signal
8	KE5RRI	At EOC HT

Peer To Peer

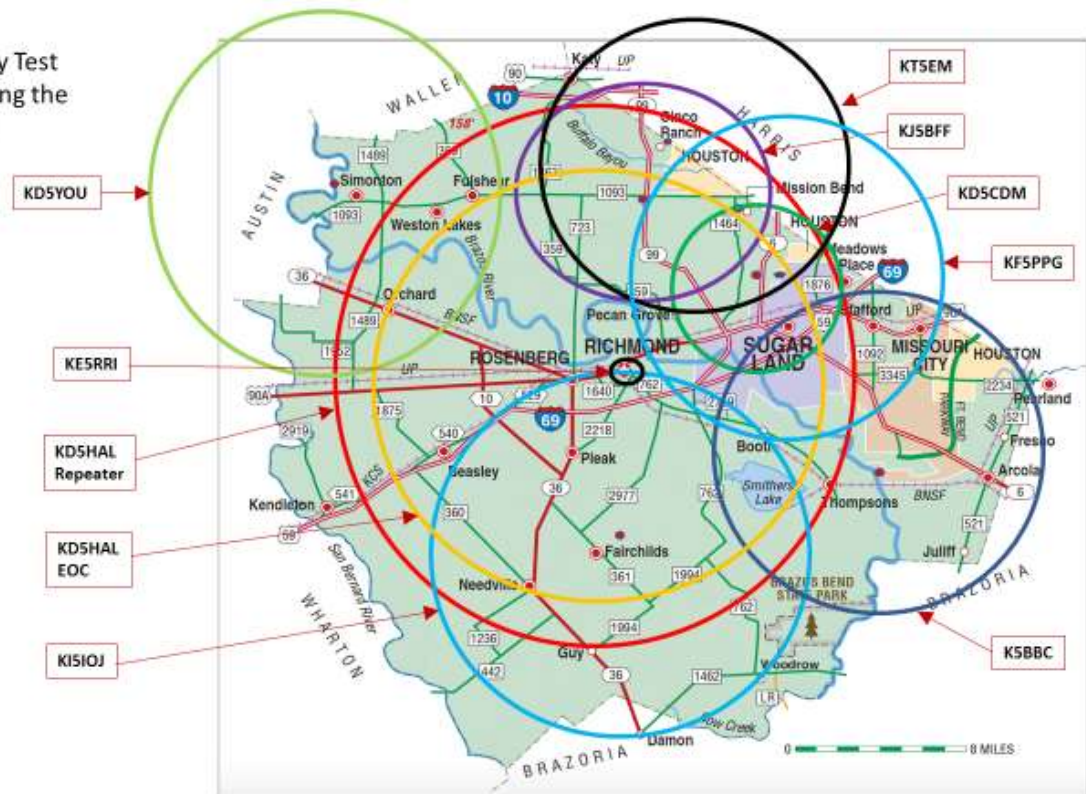
	<u>From</u>	<u>To</u>	<u>Comments</u>
1	KD5HAL	KD5YOU	Message sent
2	KD5YOU	KD5HAL	Message received
			Message received Via
3	KT5EM	KD5HAL	go kit
4	K5BBC	KD5HAL	Message received Via BIGBOY
5	KD5YOU	KD5HAL	Message received
6	KT5EM	KD5HAL	Message received Via KD5YOU-12 Winlink

The map below indicates the RF footprint of each station and shows the County wide coverage

May 30, 2026

Simulated Emergency Test
Coverage map showing the
RF footprint of each
station.

K5BBC 13.6 Miles
KD5CDM 7.3 Miles
KF5PPG 15.2 Miles
KJ5BFF 9.6 Miles
KI5IOJ 16.4 Miles
KT5EM 12.4 Miles
KD5YOU 17.5 Miles
KE5RRI 3.1 Miles
KD5HAL Rep. 24.8 Miles
KD5HAL EOC 19.6 Miles



The RF range rings were calculated from the information gathered during check-in. This map shows fairly good coverage of the County by the repeater and simplex from the EOC.

Conclusion

The outcome of the SET was good, most of the goals were met and it was a good learning experience for the participants. All of the modes were used as listed. Although, it was not listed, we tried a 40 Meter SSB contact between the EOC and KD5YOU in Simonton. We could hear John in Simonton but he couldn't hear the EOC.

We didn't have anyone located near Kendleton and this highlights a problem with member coverage in the far West and Southwest parts of the County.

Action Items

- Recruit more members from the areas of the County that do not have operators.
- Add VARA at the EOC for faster Winlink speed and the existing VARA Gateways can be set up as Digipeaters without adding standalone equipment.
- Add a 145.05 MHz Digipeater to increase Winlink Packet coverage.
- Reconfigure the HF antenna at the EOC for more reliable coverage.

John Denison KD5YOU emailed this after the SET and contains useful info on setting up Winlink

I remember some stations had trouble connecting to KD5HAL during Saturday's SET, and while I was

monitoring 145.050, I noticed that the audio levels varied from one station to another. There was one station that had very loud packet audio and was probably overdriving their radio. The audio was too loud to be received at least on my end and nothing appeared in the sound modem display. I wasn't even sure if that station was participating in the SET or was just a non-participating station or gateway beaconing. All of this reminded me of a post one of the Winlink Development Team members posted not too long ago while assisting a SYSOP with a new gateway in Texas City:

Scott Currie <scott.d.currie@gmail.com>: May 28 08:42AM -0700

Just to emphasize this (and I am not implying this is the case here), people who think you can just plug a TNC into a radio and you are good to go are likely to be plagued with poor performance. In addition to the normal antenna system considerations, one must carefully check and adjust the transmit audio, receive audio, and transmit delay if you expect to have good performance on the air. Radio settings also come into play in many cases, especially with the default settings on some of the Chinese radios.

In rare cases there may even be impedance mismatches between the TNC and radio that will create distortion and twist in the audio tones. There is also the possibility of RF feedback into the audio lines and/or serial and USB connections (usually caused by an antenna system fault). Sysops who are serious about creating a good performing gateway that will operate with high performance for many years will take the time to do a proper installation. This is NOT plug-n-play. Just listen to the different and bad sounding packets you hear on 144.390. They should all sound pretty much exactly the same since they are all using the same air interface, but that is not what you will hear! If you are offering gateway service, especially in the EMCOMM world, please take the time to check your station out fully. And this is of course true for all modes, not just packet.

-Scott, NS7C

I was watching a video that coincidentally was presented by the same WDT member, and he referenced a program called Soundcard Oscilloscope, and he used it to measure the deviation of a transmitted packet test tone and demonstrated how a signal looks while being too low and being too loud. Any deviation higher than 3kHz was too high and would cause distortion in the signal. I noticed even in my own transmissions that there were lots of resends, so it would be worth looking at to see if something on my installation needs to be adjusted. I was using UZ7HO sound modem with a Digi rig sound card device, and I think that the audio levels I typically use for VARA are not correct for packet.

The link to the video can be found here <https://www.youtube.com/watch?v=9gGQrJ5NY9Q> . It is about an hour and fifty-one minutes, but it is very informative and useful for anyone wanting to set up packet and/or VARA on their Winlink Express installation.

73

John Denison

KD5YOU