

WK5 Winlink Workshop: VARA HF/VHF Presentation CHAT 08-20-20

- 18:42:53 From Chaves - Zona 4: Jose Chaves - WP4NUF connected.
- 18:44:23 From Jose: HELLO
- 18:44:41 From Dan K7REX Idaho: Hello Jose
- 18:45:16 From Gene K4ZLK Tennessee: Hello Oscar from one of the ARC crowd
- 18:46:07 From Steve K4CJX TN: Good evening all
- 18:46:26 From Gescio Alpuro: Aloha!
- 18:51:59 From Jose: Aloha
- 18:52:10 From Loretta AJ6HO: HI AJ6HO am I in the right meeting?
- 18:52:25 From Ray KB1LRL WMA SM: Zoom should provide subtitles hi-hi
- 18:52:42 From Loretta AJ6HO: Oki doki
- 18:53:07 From Gene K4ZLK Tennessee: I think Oscar is providing the subtitles
- 18:53:43 From George WH6DBA Hawaii: Aloha
- 18:56:09 From Gene K4ZLK Tennessee: is Andy Anderson here?
- 18:57:51 From Mel N7GCO Washington: Really appreciate Jose's work on VARA.
- 18:58:09 From Loretta AJ6HO: Will we be discussing VARA HF? I am still having issues with it.
- 18:59:23 From George WH6DBA Hawaii: FYI folks currently 144 participants... Please change your display name to Your FirstName, Call Sign and Location, e.g. Dan K7REX Idaho
- 19:00:04 From Loretta AJ6HO: I thought I did that.
- 19:00:15 From Dale Durham: Hello Everyone, a special hello to my fellow WTX folks!
- 19:02:23 From Jerry N5RV Texas: Hey Dale
- 19:03:50 From Ray KB1LRL WMA SM: Greetings
- 19:04:34 From Jenny T: Hola Jose Alberto.
- 19:08:00 From Barry Porter, KB1PA, SFL SM: Binary is truly a universal language
- 19:08:53 From Lee-KK4SXX: there are 10 type of people, those who understand binary and those who don't
- 19:09:27 From George WH6DBA Hawaii: Emergency Communications
- 19:12:32 From George WH6DBA Hawaii: Critical communications/messaging during times of Limited or compromised infrastructions (internet/cell phones, etc down or temporarily unavailable (disaster, power outages, etc.)
- 19:14:26 From Jesse/WH6AV - Maui, Hawaii: @Lee-kk4sxx Yes...There's 00010000 types.
- 19:14:53 From Craig KH6CP: Turbo coding
- 19:16:20 From Fred K9VV VI: OFDM = Orthogonal Frequency Division Multiplex?
- 19:16:26 From KM6KAQ, Mike Altadena: yes
- 19:16:42 From Doug, Lynch, W4DBL, Port Orange, FL: Just great information. Amazing design work

19:18:35 From Jerry N5RV Texas: Yes, amazing!

19:18:59 From KM6KAQ, Mike Altadena: multiple chars per symbol..

19:19:26 From Brian Daly WB7OML: similar to the way cellular telephony uses OFDM to get higher data rates

19:19:36 From KM6KAQ, Mike Altadena: exactly.

19:20:12 From Jerry N5RV Texas: processing limits

19:20:14 From Fred K9VV VI: Yes, just like the original CDMA in PCS. The orthogonal properties maximize isolation.

19:20:40 From Craig KH6CP: It's the same as the old dial-up modem that could go up to 56 kbps.

19:20:41 From Jerry N5RV Texas: ah, power, understood

19:20:50 From George WH6DBA Hawaii: thanks for that explanation and questions

19:21:16 From KM6KAQ, Mike Altadena: yes. the nulls of two adjacent chars are on the Cf of the char in between.

19:21:16 From George KG5KUQ Texas: If you need a skill, keep me in mind.

19:21:26 From KM6KAQ, Mike Altadena: so maximum isolation.

19:21:31 From KM6KAQ, Mike Altadena: in minimum bandwidth

19:22:27 From Craig KH6CP: Ft8 is just FSK and the tone selected represents 4 bits, if I recall correctly.

19:22:45 From KM6KAQ, Mike Altadena: they get higher s/n by going very very slowly.

19:22:47 From Barry Porter, KB1PA, SFL SM: What inspired Jose to come up with this solution?

19:25:29 From Craig KH6CP: In other words the tones aren't harmonically related.

19:29:56 From George KG5KUQ Texas: Easy with the "old School". Reed-Solomon isn't as old as I am...

19:30:00 From Thomas KF7RSF WDT: Viva le revolución!

19:30:39 From George KG5KUQ Texas: Oh, wait, it is slightly older than I am. OK.

19:31:07 From George WH6DBA Hawaii: incredible efficiency

19:31:12 From Rebecca Mercuri K3RPM: I was using Reed-Solomon in the early 1980's.

19:31:53 From Ralph AA8RK: Amazing stuff.

19:32:19 From Brian Daly WB7OML: turbo codes have been replaced with low density parity check and polar codes in 5G

19:40:41 From George WH6DBA Hawaii: picture's worth 1,000 words!

19:41:20 From Brian Daly WB7OML: Exactly George - hard to visualize without a picture!

19:42:22 From George WH6DBA Hawaii: Great example of a simple program (Paint) in the hands of someone that knows what they're talking about...

19:48:43 From Scott Currie, NS7C: But on Vara FM, Wide gateways will switch to Narrow if the client connects that way.

19:48:49 From Loretta AJ6HO: Is it recommended to check the gateway compatibility? I have it checked off.

19:49:22 From Elizabeth-K4KTG-TN: nietoros@hotmail.com

19:49:29 From George WH6DBA Hawaii: nietoros@hotmail.com Jose Alberto Nieto EA5HVK

19:49:56 From George WH6DBA Hawaii: nietoros@hotmail.com

19:51:46 From Loretta AJ6HO: NOT check it? Not even for Winlink?

19:52:23 From Jim WA4VGZ TN: I do not have all those setup options on v4.0.4, only CW ID and Compatibility

19:53:20 From WA6DNT Bruce San Diego, Calif: There are very few Internet gateways for Vara FM. Can Vara be passed thru a voice repeater that requires a PL tone? What setup is needed to have a repeater pass Vara? What thru-put speed is possible?

19:55:38 From Tad NH7YS: The setup options are on the latest version of Vara HF.

19:56:02 From Mel N7GCO Washington: Where will Jose post information about the AH-4 enhancement.

19:57:47 From Dale W5WI WTX: Repeater latency would be hard to match and most repeater trustees object to digital on the repeaters!

19:58:13 From Scott Currie, NS7C: The answer is yes, it will work. Performance depends on how good the audio passing through the repeater is. You won't get full speed, but much better than packet.

19:58:37 From Jim W2JC NNJ: Some users of W2NPT/R have been passing Winlink traffic through the FM repeater successfully recently.

19:59:49 From Dale W5WI WTX: Agreed, but as a rule it is very hard to match...

20:00:52 From Bart K0GYO Tennessee USA: Was that K6OLI

20:00:59 From Michael Maeda: Will we ever see Vara for the Mac or Linux?

20:01:19 From BrianB N6CVO California: K6OLI is correct

20:01:20 From Scott Currie, NS7C: Ideally, set the repeater to carrier squelch, no voice ID, no courtesy tones. Clients radios should use open squelch.

20:03:51 From BrianB N6CVO California: Very important

20:06:20 From David K9LMR AZ: Que tiempo es en Espana ahorra?

20:06:41 From Jim, KI5GTJ, Texas: kow much is the software

20:07:42 From W9DSR - Robert: ARES discount and Linux version?

20:09:02 From Ray KB1LRL WMA SM: if a section has an ARES group with it's own callsign, can they buy a license under that callsign to be used by any member during an event?

20:09:43 From Bart K0GYO Tennessee USA: According to the "Upgrade" menu on the VARA software the cost is \$69 US.

20:11:01 From Loretta AJ6HO: It is worth it.

20:11:14 From Dale W5WI WTX: Agreed!

20:12:06 From Scott Currie, NS7C: Yes, he will register club calls.

20:12:22 From Jerry N5RV Texas: Yes, worth it, worth more actually

20:12:52 From Scott Currie, NS7C: You can do a group buy, 10+ call signs for \$50/ea.

20:13:40 From Jim W2JC NNJ: are cables that work for WSJT-X etc suitable for this application?

20:14:17 From Scott Currie, NS7C: Yes

20:14:23 From Jim W2JC NNJ: tu

20:14:32 From Mike K3TEE Maryland: Our club just did a group buy and Jose required \$55 each

20:14:37 From George KG5KUQ Texas: License is per call sign, right? Can operate from different computers?

20:15:05 From Scott Currie, NS7C: Yes, you are registering the call sign, not the computer.

20:16:30 From Mike K3TEE Maryland: You can use call sign with up to 15 suffixes

20:17:39 From Scott Currie, NS7C: SSID. 16 actually, 0-15.

20:21:47 From Dale W5WI WTX: I think folks should not try to get around buying a license by using one license copy of a lot of different computers belonging to several different people. Support the guy and his invention. Don't cheat!

20:22:58 From Loretta AJ6HO: I agree

20:23:04 From Scott Currie, NS7C: Absolutely! But if you have an EOC using a club call, multiple operators can operate the station without changing the call sign.

20:23:21 From Dale W5WI WTX: Agreed

20:25:02 From Craig KH6CP: He means "black transformers"

20:26:08 From Loretta AJ6HO: Does anyone know if the Yaesu SCU-17 should have the attenuation turned on?

20:26:58 From Steven, KC3DSO MDC ASEC: I have the SCU-17 on a FTDX1200. No attenuation

20:27:03 From Steven, KC3DSO MDC ASEC: on my system

20:27:45 From Loretta AJ6HO: Good, I have not opened it up to do anything with it. I too have the FTDX1200.

20:28:24 From Loretta AJ6HO: So far though, I have had a little bit of trouble with VARA HF. Hit and miss sending msgs.

20:29:44 From Jerry N5RV Texas: understood

20:30:44 From Scott Currie, NS7C: Yes, small blocks will not get to the fastest level.

20:31:15 From Scott Currie, NS7C: The transfer completes before Vara shifts up.

20:31:43 From Jerry N5RV Texas: winlink changes

20:31:46 From Jerry N5RV Texas: the freq

20:33:28 From Scott Currie, NS7C: Very few FM rigs support CAT.

20:33:49 From Scott Currie, NS7C: So WDT has not added this to Winlink Express.

20:34:24 From dan wI7coo SJV CA: "The transfer completes before Vara shifts up".

20:35:14 From dan wI7coo SJV CA: Scott is correct & his explanation just explained why I've been so confused about that for about a year :)

20:35:15 From Jay KM4EP NC: VARA has been added to Winlink Express.

20:35:32 From Jerry N5RV Texas: Yes, winlink supports VARA

20:35:52 From Steve ZL2UCX, Christchurch ZL: That is equiv to about 19,143bps, very impressive

20:39:28 From Elizabeth-K4KTG-TN: Is it fair to say that each square should maintain the shape towards the center of each square when having a clear signal?

20:40:03 From Scott Currie, NS7C: Yes, for the best S/N ratio. The tighter the pattern the better.

20:40:56 From Elizabeth-K4KTG-TN : The tighter the grouping, the better. Thanks Scott!

20:41:07 From Jerry N5RV Texas: Great explanation

20:43:14 From BrianB N6CVO California: Thank you Jose and Oscar

20:43:25 From Steve ZL2UCX, Christchurch ZL: The constellation "pattern" is different for different modulation types right? X for 4BPSK but different for others?

20:43:31 From Loretta AJ6HO: Thank you guys so much 73 everyone.

20:43:44 From Jerry N5RV Texas: Spanish Supoer Hero

20:44:09 From Jerry N5RV Texas: majic wand

20:44:41 From Scott Currie, NS7C: Your drive is too high.

20:45:06 From Steven, KC3DSO MDC ASEC: Thanks Jerry!

20:45:53 From Elizabeth-K4KTG-TN: Funny, in Greek VARA means a unit of linear measure, equal to 33" (84cm) - or - a long spiked lance used by a picador. :o)

20:49:48 From Lor W3QA NC: multipath interference likely

20:50:29 From Jerry N5RV Texas: 20dB S/N, not drive

20:52:06 From Tom - WB2ALJ SNJ SEC: Jose and Oscar Thank you very much, very informative.

20:52:24 From Scott Currie, NS7C: Thanks guys!

20:52:26 From Jerry N5RV Texas: Fantastic presentation

20:53:19 From Bekah KJ7APV: Muchas gracias, Senores

20:53:21 From Elizabeth-K4KTG-TN: <https://www.tigertronics.com/slusbmain.htm>

20:53:33 From Richard KK6RJR, California: Muchas Gracias Jose y Oscar!

20:53:35 From Scott Currie, NS7C: DRAWS does not support Vara.

20:53:41 From Jay KM4EP NC: nino TNC is not a sound card interface - won't work with VARA.

20:54:05 From Joe W2JEJ NJ: Excellent!! Presentation link?

20:55:10 From Jay KM4EP NC: nino also works with Raspberry Pi.

20:55:27 From Elizabeth-K4KTG-TN: As a new Ham, I highly recommend starting with more established hardware. There are more resources available for training, and more individuals with exposure to those products.

20:55:42 From Scott Currie, NS7C: And they are also much cheaper.

20:55:45 From Kenneth KG5KS AR: Thank you Jose and Oscar.. Maybe a new user setup Zoom meeting sometime for those that are new to VARA. Appreciate it 73 Enjoyed it..

20:59:57 From Greg KC2OVM NJ: Jose, muchaimas gracias para su presentation. Oscar gracias para su translationes. buenas noches. -73 "Jose thank you for your presentation. Oscar that you for the translations, good night."

21:01:22 From Jay KM4EP NC: Gracias, Jose!

21:01:27 From Mike K3TEE Maryland: Excellent presentation, thank you Jose and Oscar

21:01:27 From Clem KH7HO, HI: Thank you Jose for this great presentation. And Oscar for interpreting.

21:01:31 From Barry Porter, KB1PA, SFL SM: We had a max of 175 here tonight :):)

21:01:34 From Dennis W6DQ Lisa KF6QNG DM15: Jose, Oscar and Dan ... thank you so much for a great presentation! I have been using VARA HF with a Flex-6700 running SmartSDR and it works extremely well. Easy to setup and great performance. 73 and thank you again!

21:01:44 From dan wl7coo SJV CA: Thank you Jose - VARA FM is awesome. Thanks Oscar for overcoming the language barrier. Cheers, ...dan wl7coo

21:02:16 From Elizabeth-K4KTG-TN: Great technical presentation. Thank you for collaborating together Oscar and Jose!

21:02:49 From Karl WH6GIY Hawaii: Continuing the TNC questions, how about the Mobilinkd?

21:03:28 From Chaves - Zona 4: Excelente presentacion.

21:03:36 From Scott Currie, NS7C: No, TNC's will not work with Vara.

21:03:53 From Karl WH6GIY Hawaii: Thx

21:04:00 From Brent Lowensohn (Encino): thANKS FOR A GRET MEETING