

CLE258 COORDINATOR'S COMMENTS:

Hello all

Last weekend's Coordinated Listening Event was a bit strange. Back in 2001, for CLE009 we were listening for NDBs that could be heard with our receivers set to just one selected frequency. This time we each chose **five frequencies** so that several NDBs could hopefully be heard from each of them, mostly by using wide filters.

Our unusual CLEs usually attract extra comments in the listeners' logs and this one was no exception. Below, I've selected a few words that seem to sum up the listeners' thoughts on this Event (logs from the English-speaking listeners).

Welcome to two first-time CLE listeners - **Jorge from Cantabria** in Spain and **John from Wylie** in Texas. We hope to see lots more CLE logs from them - this was a very non-typical listening event, so Jorge and John can expect something quite different next time!

Europe / Rest of the World differences As always, there were differences between us due to the 'density' of NDBs, levels of QRN, etc., in our various parts of the World. Europe's relatively generous scattering of still-active NDBs helped their listeners to find frequencies with more activity around them. The average number of NDBs logged from each of their chosen frequencies was 7 but it was a little under 4 for those away from Europe.

Technical Aspects My special thanks to Joachim who has looked carefully through all the logs and summarised the use of equipment with these three categories:

1. Use of a Standard Receiver

Using their wide or widest filter, these listeners chose between AM, USB/LSB and CW modes - sometimes all of those.

Also used by some were Passband Shift (PBS), Notch filtering and memories to store their 5 chosen frequencies.

Some said they learned a lot more about their receiver during this event.

2. Ultralight and Homebrew Receivers.

Two reporters used Tecsun portables and a third listened with his 1-MOSFET regenerative receiver, carefully tuned to his selected frequencies using an external signal generator and digital frequency counter.

3. Use of Perseus or other SDRs.

Mostly using AM or USB/LSB, the waterfall was always made invisible in various ways.

Various filter settings were used up to 12 kHz, and some of us used recordings for time shifting.

You can read Joachim's more detailed analysis at the end of this email.

Coming CLEs:

(The dates are provisional at present)

CLE259 Fri. Aug 28th - Mon. Aug 31st ('Normal')

CLE260 Fri. Sept 25th - Mon. Sept 28th

Good listening, take care.

73

Brian

(CLE Coordinator)

Extracts from the Listener's Comments:

I found it to be an enjoyable listen, and was pleased with the loggings.

Lots of TS noise and low propagation. ... a challenging event!

Friday/Saturday night was a lost cause due to very heavy static and general band noise.

The following night was peaceful and most pleasant listening.

Less than optimal conditions, but still fun.

... locals OKS/PMV/OIN/AHQ/LB were very annoying (after the strong storm L-crashes) and made listening for weaker signals more trying.

Strange CLE in which I learned a lot more about my AOR AR7030 receiver.

Normally I wouldn't listen at all with such static, so this was quite a challenge. 17 heard.

Disappointingly I failed to prepare properly for this event.

.....There's always next time!

Although I spent some time beforehand to carefully select my frequencies .. around 404,5 kHz only 3 beacons could be heard.

It feels good to get back in the game, hearing NDBs from the home location .. Not big results, but I am happy with what I ended up with.

Pretty tough sledding overall ... Definitely an interesting learning experience.

Using these wide filters, it struck me how much is gained by using narrow filters. On the other hand, after awhile I got the hang of it and I was able to log 15 stations on each channel.

Very noisy both nights. Live listened only on AM mode and 8khz filter. Ohhh my ringing ears!!

Daytime was what I expected, but the two nights that I listened added very little to the log.

Regenerative receiver ... I tuned to the 'selected' frequencies using an external signal generator (EICO 335) and digital frequency counter.

These were turned off while listening.

Conditions were about the same each night except last night the crackles and pops seemed louder.

Although I spent some time beforehand to carefully select my frequencies .. around 404,5 kHz only 3 beacons could be heard.

It was fun to do things in a completely different way from my usual methods for listening.

I also learned a little bit more about the R75 that I got last year and have not really used much.

CWL and BUR took over 420kcs most of the time

Thank you for the fun event.

I executed the function "RANDBETWEEN(190,430)" in Excel 5 times in adjacent cells until I was happy with the following set of pseudo-randomly chosen numbers.

... it was very quick; maybe spent only 2 hours total. . . . very creative and fun CLE.

I was really amazed to be able to listen to 22 NDB as I must confess that I didn't imagine to achieve these with just 5 fxs to check.

I am very glad for it and enjoyed very much of this first CLE.

A most interesting CLE for me .. . brought me back to my early days in 1992 when all I had was a Drake R8 receiver with wide filters.

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TECHNICAL ASPECTS - Joachim's more detailed analysis:

I have tried to come up with some sort of summary for the technical aspects.

I went through each and every reporting-email and found the following three categories

Category 1:

Use of standard receiver in either AM, USB/LSB or CW mode.

Receiver set to wide / widest possible filter.

Use of “Passband Shift”, “Notch Filtering”.

Some used memories to store the pre-defined frequencies.

Some said, they learned a lot about their Rx.

*Extensive use of PBT has permitted to discover in deep the characteristic of my R8.

*Receiver: ICOM R-75 - Widest AM filter used,

*Receiver(s):TenTec RX340 5 mem 327,361,380,396,420.lock on tune. CW. Filter 10.4kcs. +- Bfo

*ICOM R75 RX with ALA100 antenna. Widest a.m. filter used

*Receiver: ICOM R-75 - wide filter

*Icom R-75 with all filters set to the widest possible settings. Set 5 memories with 233 - 329 - 344 - 400 - 412.

*Most stations were heard "AM" selected, giving the widest front-end range. Various selection methods were used at this fixed frequency, including passband width and shift and notching on the FT-1000MP. USB and LSB were also used, the widest filter on the NRD 535 is 6kHz, Only the RF and AF gain and tone control were used during all live listening.

*Live listened only on AM mode and 8khz filter. Afedri SDR, didn't use the waterfall

*Receiver(s): JRC NRD-535

Category 2:

Use of ultralight or homebrew-receivers

*1-MOSFET regenerative receiver using a parallel L-C tuner, tuned to the ‘selected’ frequencies using external signal generator and digital frequency counter. Receiver selectivity is varied by adjusting level of regeneration.

***Receiver(s): Tecsun380**

***Receiver(s): Tecsun PL-880**

Category 3:

Use of SDR.

Use of recordings for the purpose of time-shifting

Hidden waterfall display.

Use of various filter width setting but max. 12 kHz.

Use of different bandwidth values for quasi “passband tuning”.

Use of mostly AM or USB/LSB mode.

***Used Perseus. took recordings. switched from waterfall mode to spectrum mode. set RBW to 1,6 kHz in order to not display the spectrum for one of the pre-selected frequencies. restricted myself to using the 12 kHz filter setting. only used passband tuning. no audio filtering.**

***Used Perseus, switched on spectrum display, moved that over the top of the screen, all I had on display was frequency bandwidth and S meter, used 3 khz and 4 khz bandwidth**

***Used PERSEUS SDR, decided to use the 12 kHz filter only, USED LSB or USB mode with a bandwidth of 7 kHz; strong local NDB's not too far off channel act as 'beat frequency oscillators', which made it possible to copy stations 6 kHz off with a beat note below 1000 Hz.**

***An SDR and I/Q recordings for the purpose of time-shifting. I set SDR Console to the chosen frequencies and only used the screen to change modes and filters**

- Joachim