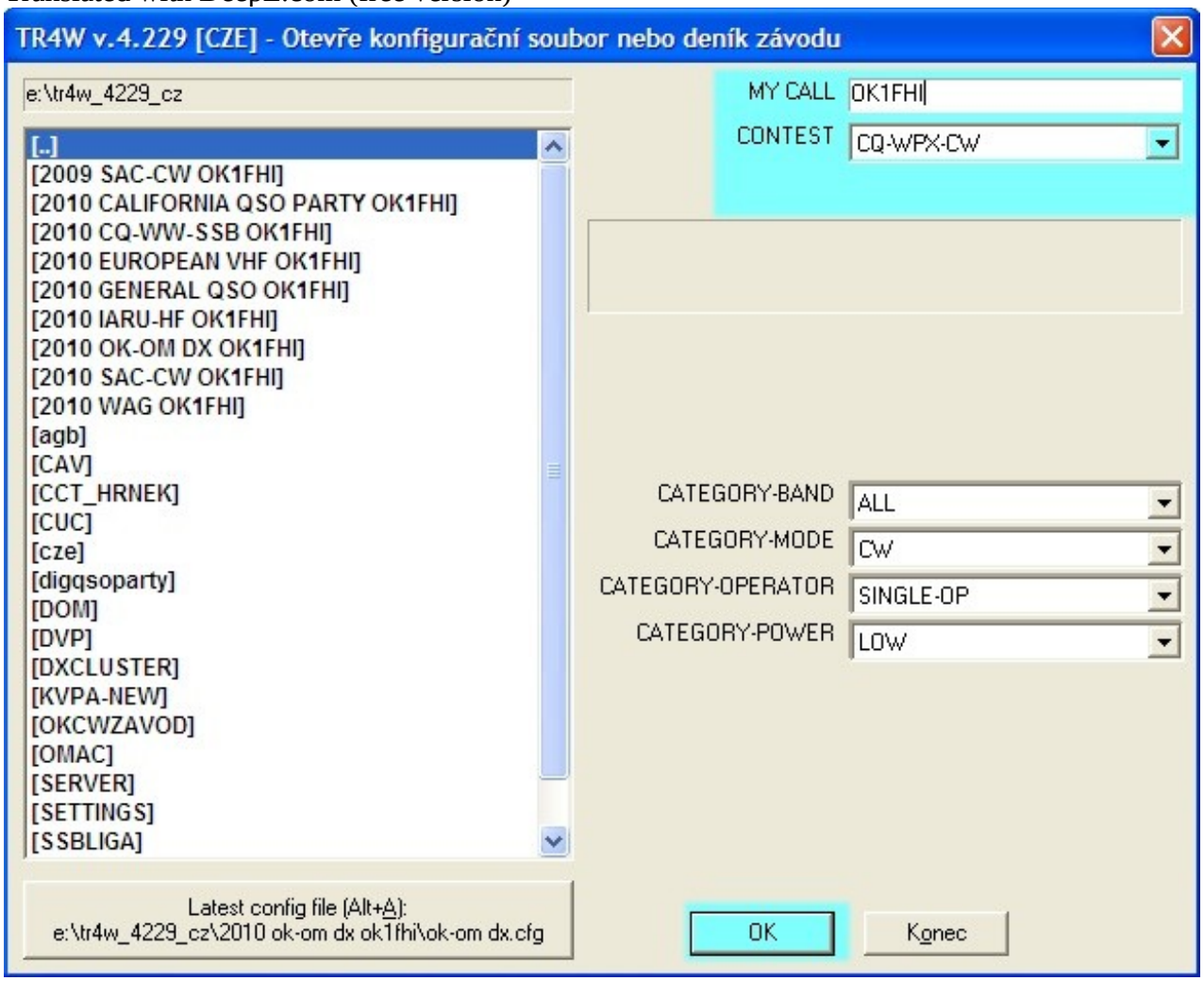
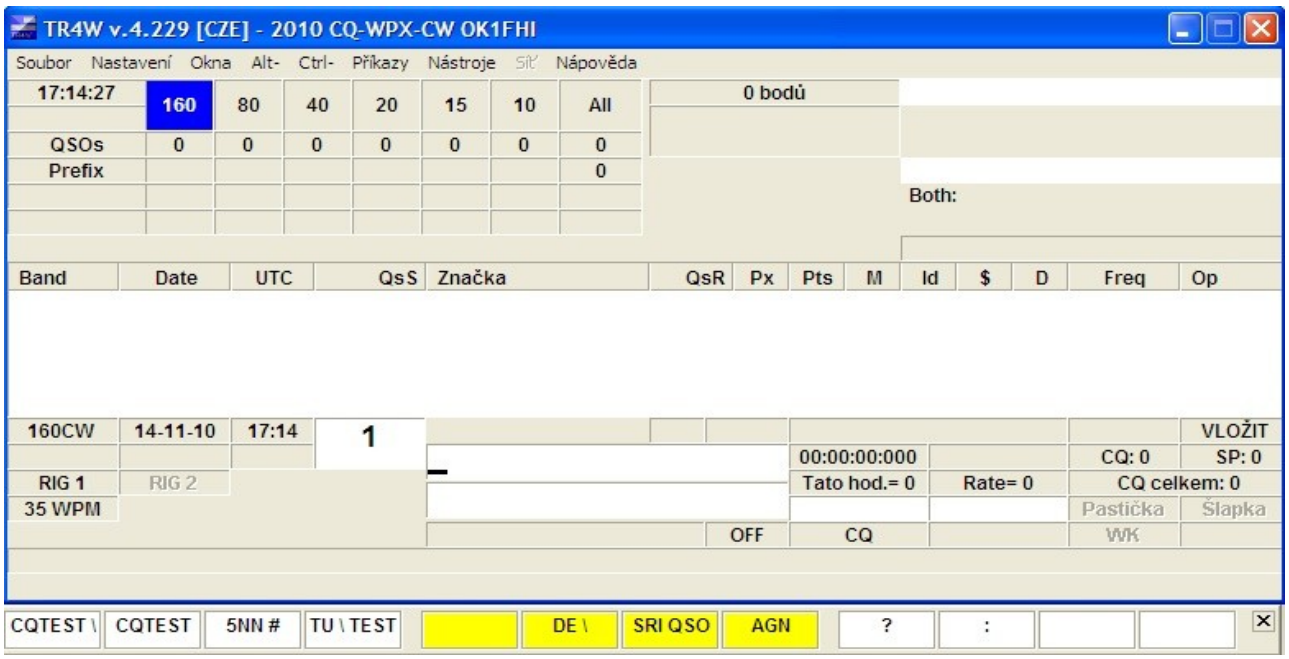
TR4W and the Sunday Race (NZ)

This brief guide is written for version **4.229[CZE].** The race rules and the NZ website can be found at: https://nedtest.cz. Download the installation file **tr4w_setup_4_229_cze.zip** from http://tr4w.net/ and extract it on your computer. Run the exe file and let it install. Launch the program by double-clicking the shortcut icon on the desktop. The following window will appear:

Translated with DeepL.com (free version)



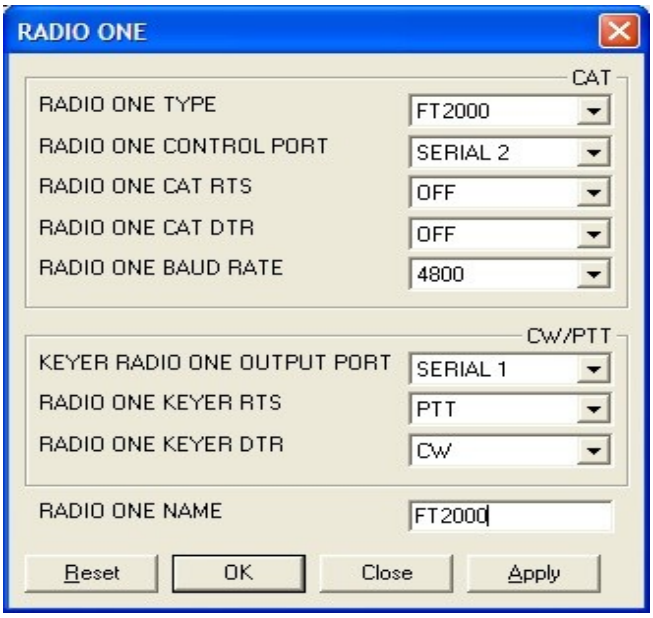
To quickly join the contest, enter **MY CALL** and select **CQ-WPX-CW** from the drop-down menu. Click **OK**, and the main program window will appear:



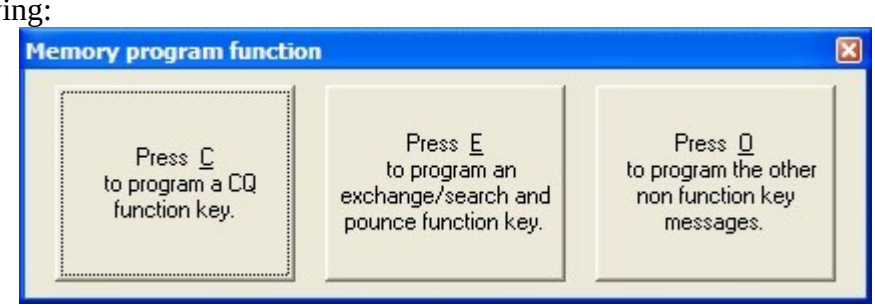
To start, I recommend setting the size of the main program window, the number of visible connection lines, and the gridlines using the command: Settings/Appearance. In the ROW COUNT field, click to enter the number of connection rows you want to see; changing the **SHOW GRIDLINES** setting to **TRUE** will display a faint grid, and the WINDOWS SIZE command lets

you adjust the program **WINDOWS SIZE**—this depends on your monitor size and personal preference. Personally, I use a value of 9 on my 19-inch monitor. This size will take effect after restarting the program. The other windows can be resized using the mouse as usual.

Next, configure the PC ports for CW transmission and any TCVR connection via a CAT cable: **Settings/RIG, CAT, and CW Port Settings/RIG1:** Please enter values according to your specific setup!!



Next, configure the CW memories under the F1 through F12 function keys. Pressing ALT+P will display the following:



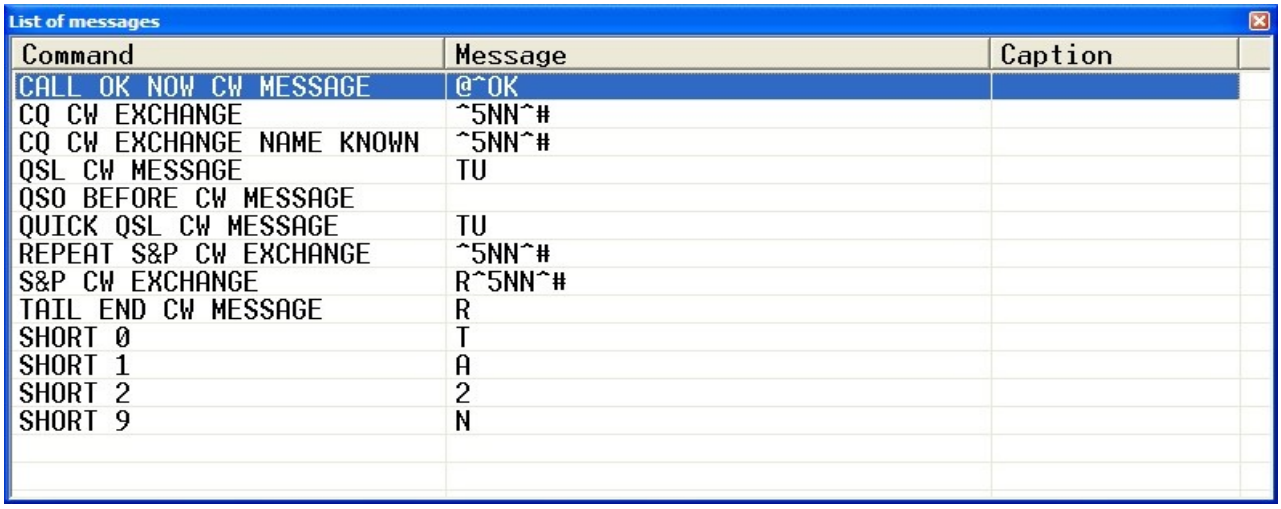
The **TR4W** program operates in two main modes:

CQ – we operate on a call

S&P – search and pounce – we search for or “pounce on” signals

You can switch between modes using the **TAB** key (in **S&P** mode, the window for the received code is green) and return to **CQ** mode using the **ESC** key.

We start by programming **O – others non-function key message:**



Command:

CALL OK NOW CW MESSAGE - to set the message that will be sent after establishing a connection during which the callsign was corrected. The @ character sends exactly what is in the callsign field. The ^ character inserts a half-space between characters.

Note: You must first enable this in the Configuration Commands via CTRL+J – change CALLSIGN UPDATE ENABLE to TRUE.

CQ CW EXCHANGE – the content will be sent as a code to the station calling your CQ; the other station's call sign is sent automatically beforehand. The # character is a variable for the connection number

CQ CW EXCHANGE NAME KNOW – same as above, but sent only if the operator's name is known from the trmaster.dta database.

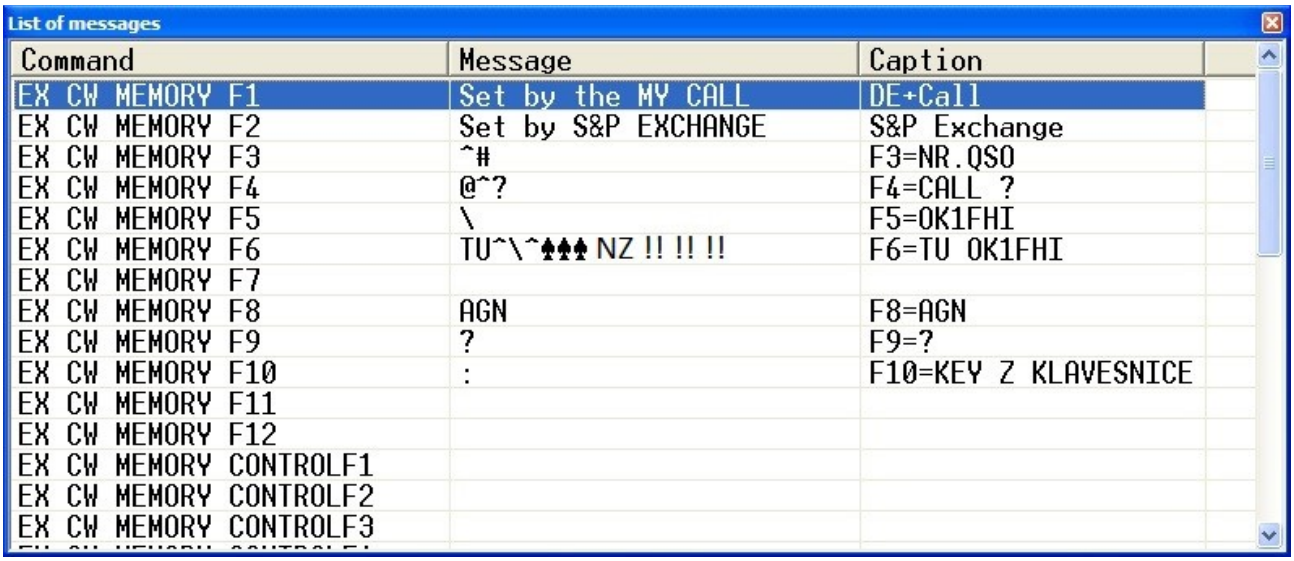
QSL CW MESSAGE – the content of the message sent after the end of a QSO in CQ mode
QSO BEFORE CW MESSAGE – the content of the message sent during a duplicate QSO
Note: If you want to ensure a duplicate QSO is established and avoid wasting time explaining whether or not it was a duplicate QSO, set the AUTO DUPE ENABLE CQ command to FALSE using CTRL+J.
QUICK QSL CW MESSAGE – a message sent to confirm the connection after pressing a key, which must be defined via CTRL+J using the QUICK QSL KEY command
REPEAT S&P CW EXCHANGE – this content is sent when repeating the code transmission in S&P mode
S&P CW EXCHANGE – this content is sent only the first time when transmitting the code in S&P mode
Note: As you can see in the image, the first time (F2 key) the code R^5NN^# is transmitted, i.e., R for roger, followed by the report 5NN and the contact number.

You can find explanations of other commands in the **TRLog** manual or on the **TR4W** website.

Basic (global) commands are written to the **TR4W.INI** file, which can be found in the **SETTINGS** directory; commands specific to a given race are stored in ***.CFG** files.

Programming the F function keys for **S&P** mode using the **E** key:

Command:

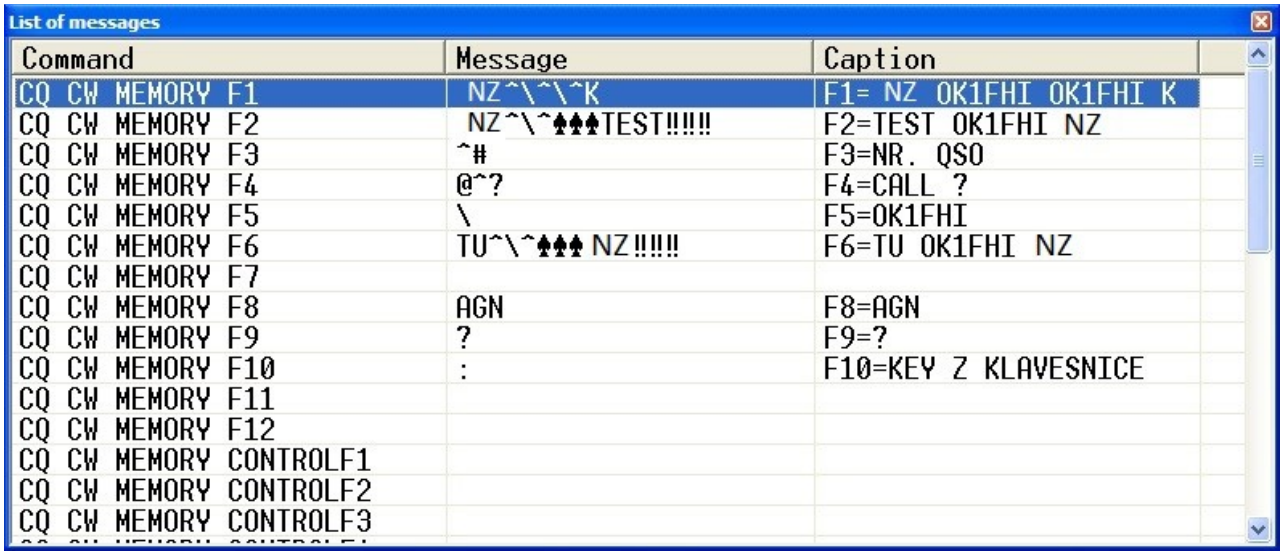


První dvě paměti pod klávesami **F1** a **F2** jsou pevně dány a nejdou měnit.
F1 : DE+Call - je vysláno DE a Vaše značka. Pokud chcete aby se vyslala při volání protistanice pouze značka změňte příkaz DE ENABLE na FALSE. To DE se jinak vyšle pouze při prvním volání.
F2: S&P Exchange – transmits the contents of the S&P CW EXCHANGE memory, or REPEAT S&P CW EXCHANGE

F3 through F12 can be configured as you wish. If it seems like there aren't enough memory slots, you can set up additional ones by pressing **CTRL+F1** through F12 and then **ALT+F1 through F12**; I think that should be enough for everyone

The : key (semicolon – under F10) is used for switching and keying directly from the keyboard; if you're good at typing on a PC and don't have a keyer connected in parallel, this is a way to telegraph online.

Programming the F-keys for CQ mode using the C key:



Command:

F1 – This memory is used to program a call sign for a contest. The contents of this memory are also transmitted when you press the ENTER key if you are in CQ mode and the call sign field is empty.

F2 / F12, CTRL+F1 / F12, and ALT+F1 / F12 can be programmed as desired.

We've finished the basic configuration, so let's see what it can do:

We'll launch the program and try transmitting using the F key. And lo and behold, not only does it activate the TRX and transmit the desired characters, but the same signal is also coming from the built-in speaker. For some people (probably most), this is a distracting element, so we'll turn it off by changing the **CW TONE command to 0.** The default tone is set to **700 Hz**; by changing it to **0** and confirming, we won't be bothered by it anymore. If the TRX is connected to the PC via CAT, there's no need to worry about changing the band or operating mode. However, if we need to change the band, we can use **ALT+B** to increase the band and **ALT+V** to decrease it. Each additional double-tap moves us up or down one band, so we eventually end up where we started. Mode switching is done via **ALT+M**. Additional functions using the **ALT** or **CTRL** keys are described in the manual or in the top row of the program.

Let's try entering a few contacts in both modes (CQ and S&P) as a test run, and make any changes to the memory settings as we see fit.

The contest rules specify that the QSO number must be transmitted using three characters. Now let's think about it and choose the method that works best for us. By default, the program transmits the number as **TT1.** If you want to change this to **001, OO1,** or **MM1,** you can do so using the **LEADING ZERO CHARACTER** command. Double-clicking the command opens a window where you can enter your own value: **0, O,** or **M.** It's entirely up to you; some find zero too long and T too short. The command directly below it, **LEADING ZEROS,** sets the number of digits to

be transmitted; for example, 1 sends only a single-digit number and not 001. The default is correctly set to three digits.

Before making your first contact, switch to the desired CQ or S&P mode. This is important for transmitting the correct codes.

In this NZ contest, there are two main changes compared to the CQ WPX contest:

1) The **SPRINT QSY** rule, meaning that after establishing a contact, the calling station must tune away and leave the frequency to the other station. To avoid having to manually switch between CQ and S&P modes using the TAB and ESC keys, the TR4W program includes the **SPRINT QSY RULE** command. The default is set to FALSE; we'll change it to **TRUE**, confirm, and look what happens: after logging a contact in S&P mode, it automatically switches to CQ mode, and we can immediately log the station that calls us. However, to switch modes again, you must use the TAB key to change the mode. Personally, I like this feature; it speeds up operation, and I don't have to worry about switching modes or pressing an extra key.

2) Two 15-minute stages. The first stage is over, and now we face the dilemma of how to force the program to clear the list of stations we've already worked. If we continued without changes, the program wouldn't let us call a station already worked in the first stage in S&P mode, let alone work it; a duplicate would appear and the call sign would be automatically deleted. There are several ways to trick or force TR4W to do this. Switch to a different band using ALT+B, but if your equipment is connected to the transceiver, a problem arises—you have to disconnect from the CAT. But why do that when you can set it up in TR4W using the command **MINITOUR DURATION=15?** This command was originally added to the program for the one-hour MINITEST contest, organized by our colleagues from Ukraine and held every Wednesday evening. There, the stages are 10 minutes long, and the best participants can achieve up to 150 QSO. So why not use this command in the NZ contest as well? The problem here is that you cannot change this command using CTRL+J; it is grayed out. Therefore, the only solution is to directly edit the .cfg file. Close the program and locate the desired file in File Explorer or Total Commander—in this case, CQ-WPX-CW.CFG—which is located in the folder (directory) **2010 CQ-WPX-CW OK1XYZ.** This file can be edited using Notepad or by pressing the F4 key in Total Commander. The opened file contains, among other things, something like this:

;Created by TR4W v.4.229 [CZE]

MY CALL=OK5NZ

CATEGORY-BAND=ALL

CATEGORY-MODE=CW

CATEGORY-OPERATOR=SINGLE-OP

CATEGORY-POWER=LOW

CONTEST=CQ-WPX-CW

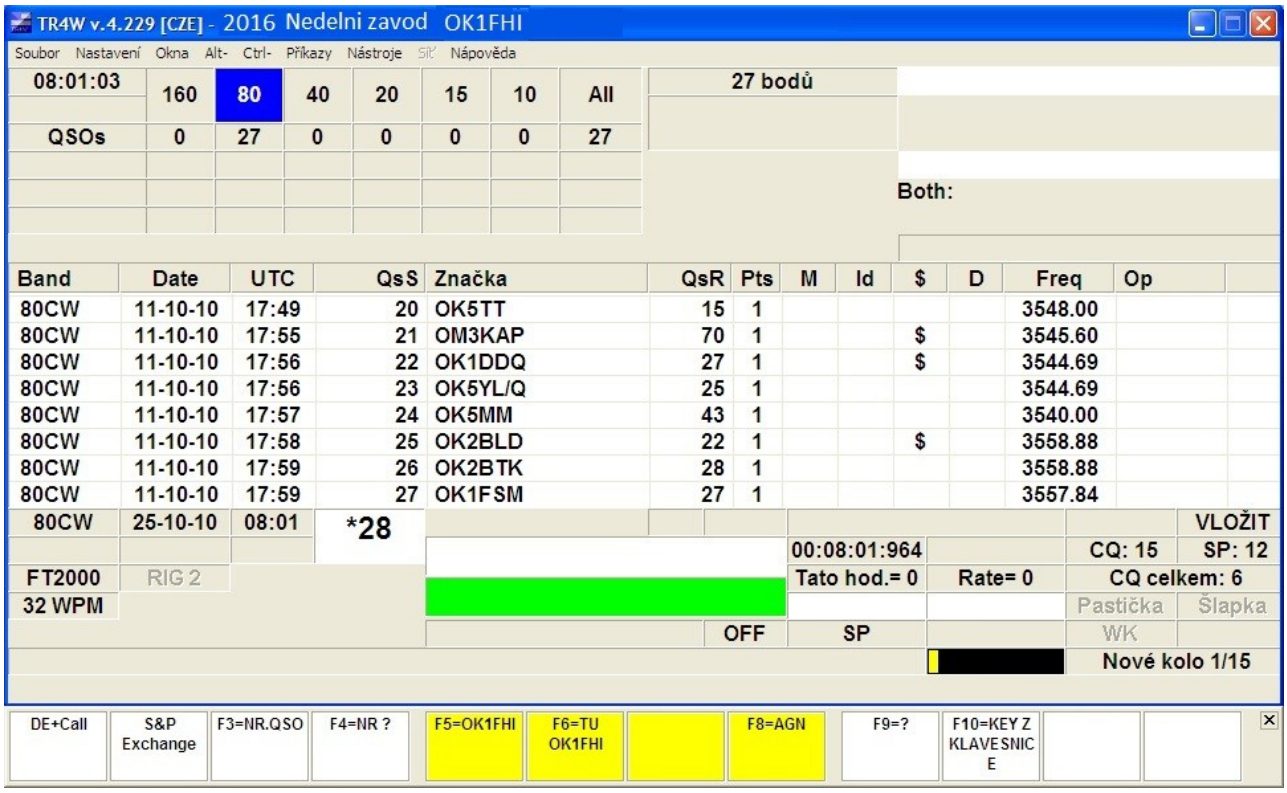
The memory values, etc., will also already be entered there.

On a new line, enter:

MINITOUR DURATION=15, meaning the stage will last 15 minutes.

Please note that every command must include =; otherwise, it will not work. Close the file and restart TR4W. What will change?

A black-and-yellow box will appear in the lower-right corner, displaying a graphical countdown for that stage, and next to it

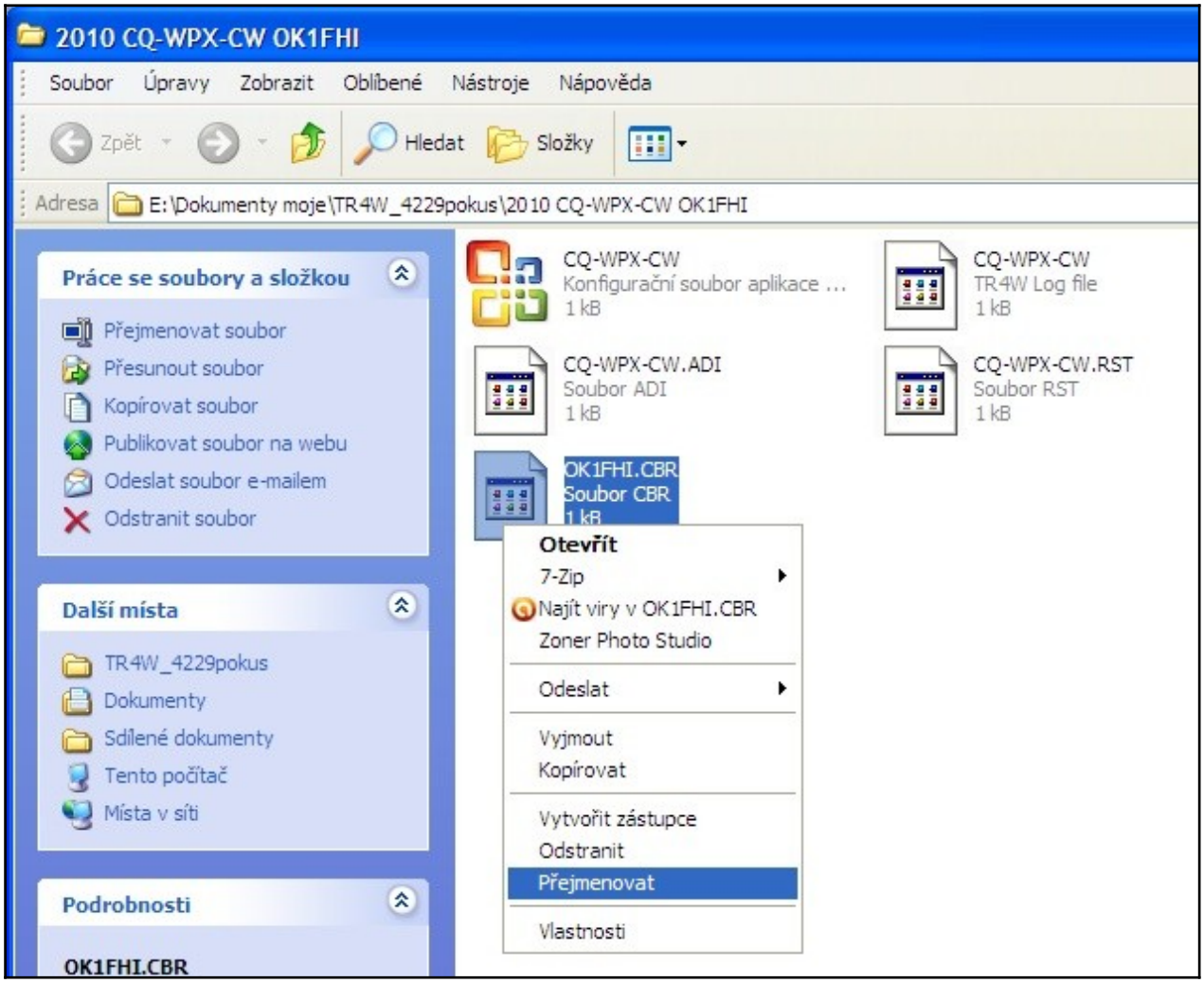


numerically as well. Now we can transmit on the same band throughout the entire race without any concerns. The program automatically clears the “duplicate list” at the end of each stage. You just need to set the clock on your PC to the exact second, either manually or via the program using the Tools/Synchronize PC Time command; in this case, however, you must be connected to the internet, at least during the synchronization process.

During the contest, a situation may arise where, after logging a contact by pressing Enter, the other station asks for your contact number again. If you now press the F key (in this case, F3) with a programmed number, you’ll run into a minor snag. TR4W will already send the next higher number —what now? If you have a handheld transceiver handy, you can operate manually; if not, there’s a problem. This is where the **AUTO QSO NUMBER DECREMENT** command comes in, which we’ll set to **TRUE.** You can tell this command is active by the * in the serial number window (in the top image, it’s ***28).** If the call sign window is empty, press F3 to transmit the call sign of the last logged contact. Try it in a completely empty log—the number 000 will be transmitted .

After the contest ends, you will need to export and send your contest log. You can find the export function under **File/Export,** where you can choose from the following formats: **ADIF** (suitable for importing into your main station log), **Cabrillo, EDI** (this is for VHF contests; although TR4W supports VHF contests, the EDI output isn’t exactly ideal—give it a try…), or the format used by the old **TR Log** with the .dat extension. We’re not concerned with the **Initial Exchanges** list at this

point. **Select Cabrillo**, enter the data, and click Create to open the desired log. You can find this log on your PC using File Explorer or TC, or by going to **File/Open Log Directory:**



Rename the **OK1XYZ.CBR** file to **OK1XYZ_NZXX.CBR,** where **XX** is the number of the race round, and send it via email to https://nedtest.cz. Before the next round, it's a good idea to clear the directory of everything except the .**CFG** file—that is, delete files with extensions such as .**TRW, .RST,** etc., as they are not needed.

Useful links:

http://tr4w.net/ - TR4W program homepage

http://www.trlog.com/manual.shtml - Manual for the DOS version of TR Log by N6TR

http://home.tiscali.cz/ok1ayy/text.htm / - N6TR tutorial on Jarda's website, OK1AYY

http://599.cz/view.php?cisloclanku=2009031601 – configuration for A160 on Jarda's website, OK1HDU

Finally, here is an excerpt from my configuration file for the NZ race:

```
MY CALL=OK5NZ
CONTEST=CQ-WPX-CW
```

```
CONTEST NAME=SUNDAY RACE
QSO POINT METHOD=ONE POINT PER QSO

CALLSIGN UPDATE ENABLE=TRUE
DE ENABLE=FALSE
PREFIX MULTIPLIER=NONE
MINITOUR DURATION=15
DUPE SHEET AUTO RESET=TRUE

[Commands]
SPRINT QSY RULE=TRUE
LEADING ZEROS=3
BAND=80

[Messages]
CALL OK NOW CW MESSAGE=@^OK
CQ CW EXCHANGE=^5NN^#
CQ CW EXCHANGE NAME KNOWN=^5NN^#
QSO BEFORE CW MESSAGE=
QSL CW MESSAGE=TU
S&P CW EXCHANGE=R^5NN^#
REPEAT S&P CW EXCHANGE=^5NN^#
CQ CW MEMORY F1=NZ^\^\^K
CQ CW MEMORY F1 CAPTION=F1=NZ OK5NZ OK5NZ K
CQ CW MEMORY F2=NZ^\^<06><06><06>TEST<13><13><13>
CQ CW MEMORY F2 CAPTION=F2=TEST OK5NZ NZ
CQ CW MEMORY F3=^#
CQ CW MEMORY F3 CAPTION=F3=NR. QSO
CQ CW MEMORY F4=NR^?
CQ CW MEMORY F4 CAPTION=F4=NR ?
CQ CW MEMORY F5=\
CQ CW MEMORY F5 CAPTION=F5=OK1FHI
CQ CW MEMORY F6=TU^\^<06><06><06>NZ<13><13><13>
CQ CW MEMORY F6 CAPTION=F6=TU OK5NZ NZ
CQ CW MEMORY F7=77
CQ CW MEMORY F7 CAPTION=
CQ CW MEMORY F8=AGN
CQ CW MEMORY F8 CAPTION=F8=AGN
CQ CW MEMORY F9=?
CQ CW MEMORY F9 CAPTION=F9=?
CQ CW MEMORY F10=:
CQ CW MEMORY F10 CAPTION=F10=KEY ON THE KEYBOARD
EX CW MEMORY F3=^#
EX CW MEMORY F3 CAPTION=F3=NR.QSO
EX CW MEMORY F4=NR^?
EX CW MEMORY F4 CAPTION=F4=NR ?
EX CW MEMORY F5=\
EX CW MEMORY F5 CAPTION=F5=OK5NZ
EX CW MEMORY F6=TU^\^<06><06><06>NZ<13><13><13>
EX CW MEMORY F6 CAPTION=F6=TU OK5NZ
EX CW MEMORY F7=77
EX CW MEMORY F7 CAPTION=
EX CW MEMORY F8=AGN
EX CW MEMORY F8 CAPTION=F8=AGN
EX CW MEMORY F9=?
EX CW MEMORY F9 CAPTION=F9=?
EX CW MEMORY F10=:
EX CW MEMORY F10 CAPTION=F10=KEY ON THE KEYBOARD
```

If this guide was helpful to you, I'd be happy to answer any questions you may have—you can find my contact information at qrz.com. Lubos OK1FGD or OK5NZ