Contest Spreadsheets

Here are three LibreOffice spreadsheets for different contests:

Contest	Date	File	Lasted Updated on
Winter Field Day	1700Z, Jan 28 to 1700Z, Jan 29, 2023	winter_fieldday_v20230128.ods	Jan 28, 2023
ARRL Field Day	1800Z, Jun 24 to 2100Z, Jun 25, 2023	fieldday_v20230128.ods	Jan 28, 2023
RAC Canada Day	0000Z to 2359Z, July 1st, 2023	rac_contests_v20230128.ods	Jan 28, 2023
RAC Winter Contest	0000Z to 2359Z, Dec 30, 2023	rac_contests_v20230128.ods	Jan 28, 2023

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All three spreadsheets are used in very similar ways, but they are different to account for the different rules and ways to calculate the points.

Most of the introduction below uses RAC's contest as an example but the same ideas apply to the other contests.

RAC Canada Day / Winter Contests

Everything you need to know about the RAC Canada Day or Winter Day contest is located on the RAC website. It can be a bit overwhelming to digest for first-time contesters, so here's an overview.

Logs

During the contest, the following information must be logged for each station:

- Frequency in kHz (for example, 14.125 MHz should be entered as 14125)
- Mode (CW or PH)
- Date and Time in UTC (for example 2020-07-01 and 0135)
- Callsign
- Signal Report (for example 59 on phone or 599 on CW)
- Exchange (Two letter province code for Canadian Stations, or the serial number for other stations).

At the end of the contest, logs must be submitted to RAC. They will accept paper logs for submissions with less than 100 entries, but they really prefer electronic logs, which must be submitted in the *Cabrillo* format.

A Cabrillo file is really just plain text file formatted in a very specific way. For example, here's a copy of my Cabrillo file from last summer (with only a few entries as example):

START-OF-LOG: 3.0

CREATED-BY: RAC Contests.ods v2020.07.04 by VA7FI

CALLSIGN: VA7FI LOCATION: BC

CONTEST: RAC CANADA DAY CATEGORY-OPERATOR: SINGLE-OP

CATEGORY-BAND: ALL CATEGORY-MODE: SSB

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CATEGORY-POWER: LOW

CATEGORY-TRANSMITTER: UNLIMITED

CLAIMED-SCORE: 11564

CLUB: Sun Coast Amateur Radio Club Society

NAME: Patrick Truchon ADDRESS: REDACTED

ADDRESS-CITY: Roberts Creek

ADDRESS-STATE-PROVINCE: British Columbia

ADDRESS-POSTALCODE: V0N 2W1 ADDRESS-COUNTRY: Canada EMAIL: va7fi@rbox.me OPERATORS: @VA7FI

SOAPBOX: First Canada Day contest on my own. Lots of fun!

QSO:	14186	PH	2020-07-01	8000	VA7FI	59	BC	VE3PJ	59	ON
QSO:	14198	PH	2020-07-01	0012	VA7FI	59	BC	WB0TEV	59	14
QS0:1	146520	PH	2020-07-01	0112	VA7FI	59	BC	VE7DX	59	BC
QSO:	14211	PH	2020-07-01	0139	VA7FI	59	BC	N800	59	201
QSO:	14152	PH	2020-07-01	0148	VA7FI	59	BC	VE2CJR	59	QC
QSO:	14165	PH	2020-07-01	0159	VA7FI	59	BC	VE6RAC	59	AB
END (AF 1.00									

END-OF-LOG:

The first 21 lines give RAC all the information they need about the operator. The other lines show the contacts made, ending with an END-0F-LOG tag. For more information about the Cabrillo format, see this RAC pdf, or the WWROF website.

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Regular contesters use logging programs which can generate these files while providing features that facilitate the logging process during the contest. Many people have recommended N1MM as being the best one. RAC also has its own Microsoft Windows contest program for its own contests. This is what the spreadsheet looks like:

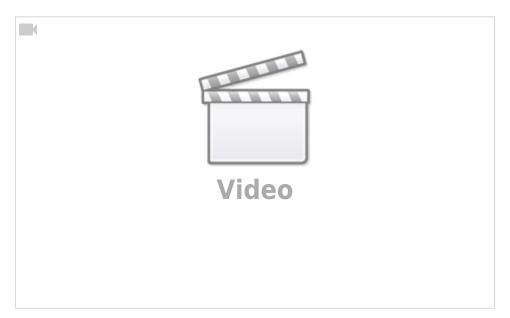


The steps are to:

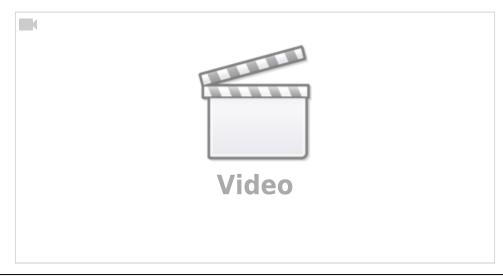
- Fill out the Preamble sheet.
- Log the contacts in the Log sheet.
- Export to Cabrillo using the button on the Preamble sheet.

Here are a few introductory videos I made to explain how to use the spreadsheet, which should also work with the RAC Winter Contest in December.

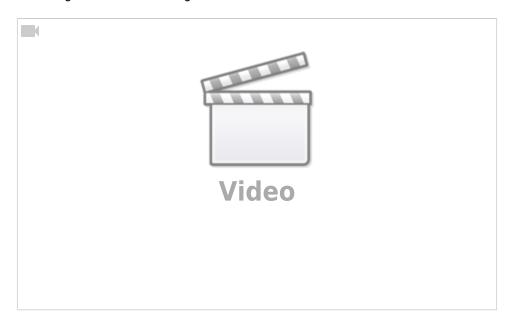
• The first video shows where to download LibreOffice, and how to set the Security settings to allow LibreOffice to run macros: Tools → Options... → LibreOffice → Security → Macro Security → Medium



• The second video shows how to use the spreadsheet during the contest, and how to export the Cabrillo file after.



• The third video shows a bit of the hidden formulas and the script that generates the Cabrillo file. It's like looking under the hood of the car: it's not needed to drive it, and it doesn't really explain how to build a car either. But some might find it interesting.



Here's a copy of the code that generates the Cabrillo file:

```
REM ****
           BASIC ****
sub cabrillo
'Get directory path from spreadsheet location. This will be used to create
./MyCallsign.log
Dim path as String
   GlobalScope.BasicLibraries.loadLibrary("Tools")
   path = Tools.Strings.DirectoryNameoutofPath(ThisComponent.url, "/") & "/"
'Define document and sheets
   dim Doc as object
  Doc = ThisComponent
   Sheet1 = Doc.Sheets.getByName("Preamble")
   Sheet2 = Doc.Sheets.getByName("Log")
'General Note: for getCellByPosition(x,y) (0,0) = A1, (1,0) = B1, (0,1) = A2,
'Create Cabrillo file named "MyCallsign.log"
   MyCallsign = UCase(Sheet1.getCellByPosition(1, 2).String)
                                                                  'Operator's callsign
   if MyCallsign = "" then
                                                                  'File needs a
filename
     MyCallsign = "NoCallsign"
   filename = path & MyCallsign & ".log"
'Open MyCallsign.log and get ready to write to it
```

```
num = FreeFile()
  open filename for output as #num
'Read "Preamble" sheet and create preamble of Cabrillo File
  for i = 0 to 1 ' read first 2 rows as is.
     print #num, Sheet1.getCellByPosition(0, i).String & " " &
Sheet1.getCellByPosition(1, i).String
 ' Row 3 needs to be upper case.
  print #num, Sheet1.getCellByPosition(0, 2).String & " " &
UCase(Sheet1.getCellByPosition(1, 2).String)
  for i = 3 to 19 ' read the the rest up to row 20 as is.
     print #num, Sheet1.getCellByPosition(0, i).String & " " &
Sheet1.getCellByPosition(1, i).String
  ' Row 21 needs "@" before the callsign
  print #num, Sheet1.getCellByPosition(0, 20).String & " @" &
UCase(Sheet1.getCellByPosition(1, 20).String)
  Soapbox = Sheet1.getCellByPosition(1, 21).String
  if Len(Soapbox) > 70 then
     truncated = "y"
     Soapbox = Left(Soapbox, 70)
     Msqbox("SOAPBOX message can have at most 70 characters. It was truncated to:" &
Chr(10) & Chr(10) & "'" & Soapbox & "'", 48)
  endif
  print #num, Sheet1.getCellByPosition(0, 21).String & " " & Soapbox
'Formatting Example. Comment out once finished
    print #num,
print #num,
"1234567890123456789012345678901234567890123456789012345678901234567890"
    print #num, "QSO: 1825 CW 2003-07-01 1044 VA1ABC
                                                        599 ON
                                                                    VE4EAR
599 MB"
    print #num, "QSO: 3510 CW 2003-07-01 1044 VA1AB
                                                       599 ON
                                                                    K4BAI
599 103"
    print #num, "QSO: 7155 PH 2003-07-01 1044 VE3KZ 599 ON
1
                                                                    K5MM
599 005"
   print #num, "QSO: 14205 PH 2003-07-01 1044 VE3KZ
                                                        599 ON
                                                                    K4LTA
599 10"
    print #num, "QSO: 21350 CW 2003-07-01 1044 VE3KZ 599 ON
                                                                    K1EA
   print #num, "QSO: 28375 PH 2003-07-01 1050 VE3KZ
                                                                    VE5SF
                                                         59 ON
59 SK"
1
    print #num, "QSO: 50125 PH 2003-07-01 1055 VE3KZ
                                                         59 ON
                                                                    VE3E.1
59 ON"
    print #num, "OSO:146520 PH 2003-07-01 1055 VE3KZ
                                                         59 ON
                                                                    VE3CZ
```

```
59 ON"
  MyCallsign = MyCallsign \& space(14 - Len(MyCallsign)) 'pad MyCallsign to make it
14 characters long.
  MyProvince = Sheet1.getCellByPosition(1, 3).String
                                                       'my province
  MyProvince = MyProvince & space(7 - Len(MyProvince))
                                                       'pad MyProvince to 7
characters
  ContestDate = Sheet1.getCellByPosition(1, 22).String
                                                     'contest date
'read "Log" Sheet starting at third row.
  i = 2
                                                       'first row is i = 0 so
third row is i = 2
  UTC = "anything"
                                                       'initial non-empty
condition for knowing when to stop loop
  while UTC <> ""
                                                       'while the time emtry is
not empty, process each row
     Freq = Sheet2.getCellByPosition(0, i).String
                                                      'frequency in column A(x =
0)
     Freq = Format(Freq, "0")
                                                       'round to the nearest
integer
     Freq = space(6 - Len(Freq)) \& Freq
                                                      'pad frequency to 6 digits
     UTC = Sheet2.getCellByPosition(1, i).String
                                                     'time in column B (x = 1).
Also used to stop loop.
     Callsign = Sheet2.getCellByPosition(2, i).String
                                                     'callsign in column C (x =
2)
     Callsign = Callsign & space(13 - Len(Callsign))
                                                      'pad Callsign to 13
characters
     column D (x = 3)
     RST = space(3 - Len(RST)) & RST
                                                      'pad RST to 3 digits
     Exch = Sheet2.getCellByPosition(4, i).String
                                                      'received Exchange in
column E(x = 4)
     RSTGiven = Sheet2.getCellByPosition(5, i).String
                                                     'received Signal Report in
column D (x = 3)
     RSTGiven = space(3 - Len(RSTGiven)) & RSTGiven
                                                      'pad RSTGiven to 3 digits
     Mode = Sheet2.getCellByPosition(6, i).String
     'create line to print from "Log" sheet variables. The output should be
something like this:
       'QSO: 1825 CW 2003-07-01 1044 VA1AB
                                                 599 ON
                                                            VE4EAR
                                                                         599 MB
       '0S0: 14165 PH 2003-07-01 1044 VA1ABC
                                                 59 ON
                                                            K7AB
                                                                          59 MB
       '0S0:146520 PH 2003-07-01 1044 VA1ABC
                                                 59 ON
                                                            VE4EA
                                                                          59 MB
```

```
logline = "QSO:"
     logline = logline & Freq & " "
     logline = logline & Mode & " "
     logline = logline & ContestDate & " "
     logline = logline & UTC & " "
     logline = logline & MyCallsign
     logline = logline & RSTGiven & " "
     logline = logline & MyProvince & " "
     logline = logline & Callsign & " "
     logline = logline & RST & " "
     logline = logline & Exch
     print #num, Ucase(logline)
                                                                 'print logline to
text file
                                                         'Next row
     UTC = Sheet2.getCellByPosition(1, i).String
                                                        'Look ahead to next time
entry to see if it's empty or not.
      MsgBox(MyCallsign)
   wend
   print #num, "END-OF-LOG:"
   close #num
   msgbox ("Cabrillo log file has been created here: " & Chr(10) & Chr(10) &
filename)
end sub
sub License
' This spreadsheet and its script by Patrick Truchon <va7fi@rbox.me> is licensed under
' Creative Commons Creative Commons Attribution-Share Alike 4.0 Unported License.
' <https://creativecommons.org/licenses/by-sa/4.0>.
' You are free to:
  * Run them for any purpose.
    * Study and modify them.
    * Copy them to help others.
    * Improve them, and release the improvements to the public, so that
      the whole community benefits.
' Provided that you:
* Attribute the work to me by linking to
<https://scarcs.ca/howto/contestspreadsheets>
* Distribute any derivative work under the same license.
```

end sub

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Winter Field Day Contest

The Logging Spreadsheet was last updated on Jan 28, 2023 for the Winter Field Day on Jan 28-29, 2023.

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Everything you need to know about the Winter Field Day contest is here: https://www.winterfieldday.com

Logs

During the contest, the following information must be logged for each station:

- Date and Time in UTC (for example 2023-01-28 and 1901)
- Frequency in kHz (for example, 14.125 MHz should be entered as 14125)
- Callsign
- Class (ex. 1H: 1 operator at home, 20: 2 operators outside, 3I: 3 operators inside, 4M: 4 operators mobile)
- ARRL Location (ex. BC, AB, SF, ...)
- Mode (CW, DG, or PH)

At the end of the contest, the Cabrillo file must be submitted online at www.winterfieldday.com

7300 Recorded Voice TX

The other thing I learned during the contest is how to record a short message on my IC-7300 and play it back on the air so I could save my voice a bit. The details are on Section 7 of the IC-7300 full manual:

I ended up recording three messages:

- 1. "CQ Canada Day Contest, this is VA7FI" (in phonetics)
- 2. "VA7FI" (in phonetics)
- 3. "Thank you, you are 59, BC"

To call CQ, I used the first message on a 7 second repeat loop. If someone answered, I could either press the button again to stop the loop, or use the PTT to jump in and acknowledge the station.

I used the second message to answer CQ calls during pile ups. All I'd have to do is press the button and hope I'd get an answer. This was great in the early morning when Justine was still in sleeping. With my headphones on, the whole thing was virtually silent.

I used the third message to give my exchange once I received the other station's exchange.

I still had to use the mic a bit depending on the situation, but these pre-recorded messages took care of a lot of the grunt work.

License

Both spreadsheets are licensed under Creative Commons By-Sa so you are free to:

- Run it for any purpose.
- Study and modify it.
- Copy it to help others.
- Improve it, and release the improvements to the public, so that the whole community benefits.

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Provided that you:

- Attribute the work to me by linking to https://scarcs.ca/howto/contestspreadsheets
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