Contest Spreadsheets

Here are some 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

All 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
```

```
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 0008 VA7FI          59 BC      VE3PJ          59 ON
QSO: 14198 PH 2020-07-01 0012 VA7FI          59 BC      WB0TEV         59 14
QSO:146520 PH 2020-07-01 0112 VA7FI          59 BC      VE7DX          59 BC
QSO: 14211 PH 2020-07-01 0139 VA7FI          59 BC      N8OO           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-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-OF-LOG` tag. For more information about the Cabrillo format, see this RAC pdf, or the WWROF website.

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:

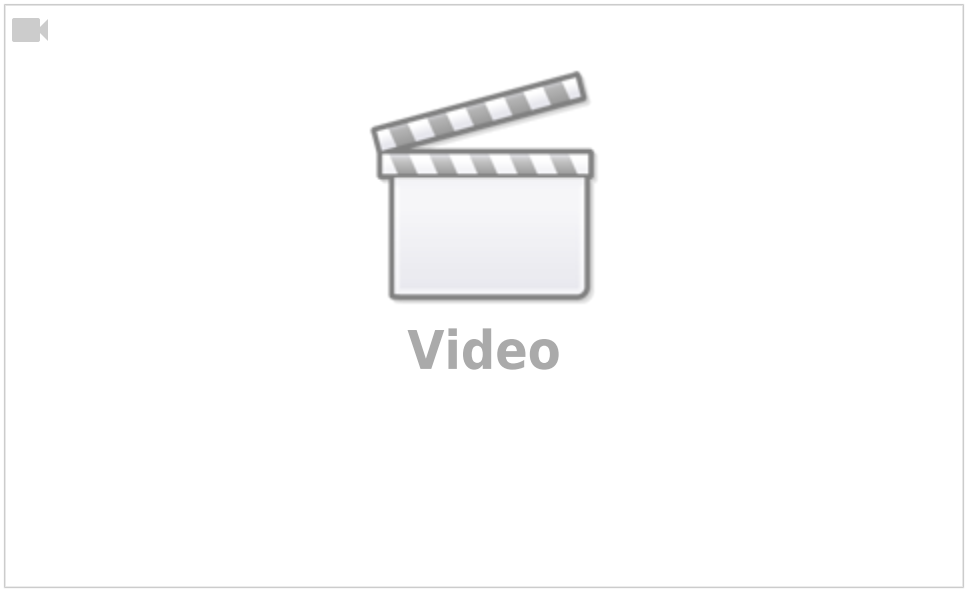
	A	B	C	D	E	F	G	H	I	J	K	L
1	**# of Contacts:**	**94**	**Total Score:**	**11564**	**Multiplier:**	**14**		Warnings:	none			
2	**Freq [kHz]**	**Time**	**Callsign**	**RST**	**Exch**	**RST Given**	**Mode**	**# Bands**	**Band**	**Dupe time**	**Points**	**Multiplied Points**
3	14185.5	0008	VE3PJ	59	ON	59	PH	1	20m		10	140
4	14198.25	0012	WB0TEV	59	14	59	PH	2	20m		2	28
5	14133.5	0013	VE5CPU	59	SK	59	PH	1	20m		10	140
6	14154.25	0016	VE7DX	59	BC	59	PH	2	20m		10	140
7	14153.25	0028	VE5FX	59	SK	59	PH	1	20m		10	140
8	14161	0030	VE3WG	59	ON	59	PH	1	20m		10	140
9	14191	0040	VA2CZ	59	QC	59	PH	1	20m		10	140
10	14195	0043	PY5QW	59	4	59	PH	1	20m		2	28

The steps are to:

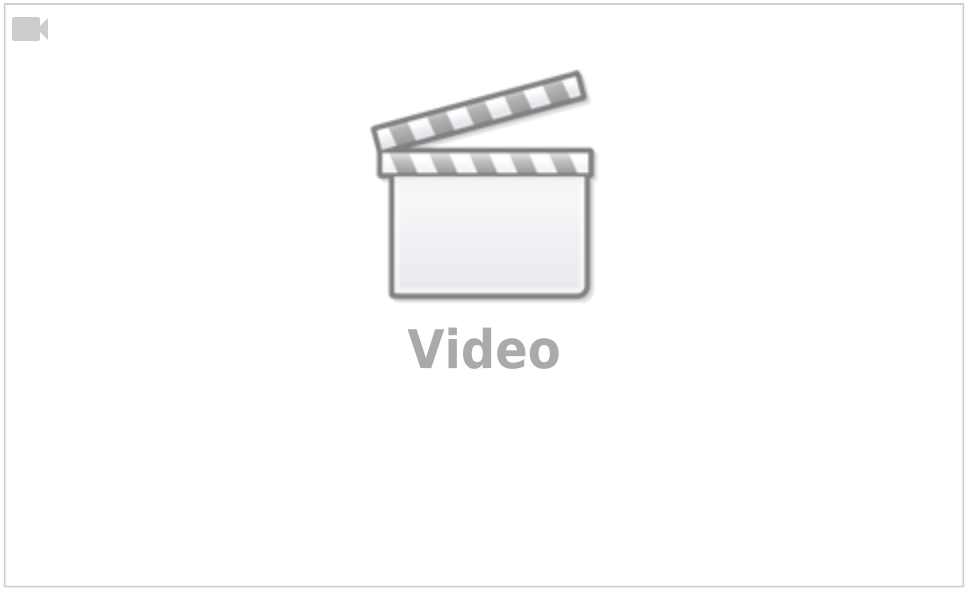
- Fill out the `Preamble` sheet.
- Log the contacts in the `Log` sheet.
- Export to Cabrillo using the button on the `Preamble` sheet.

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.

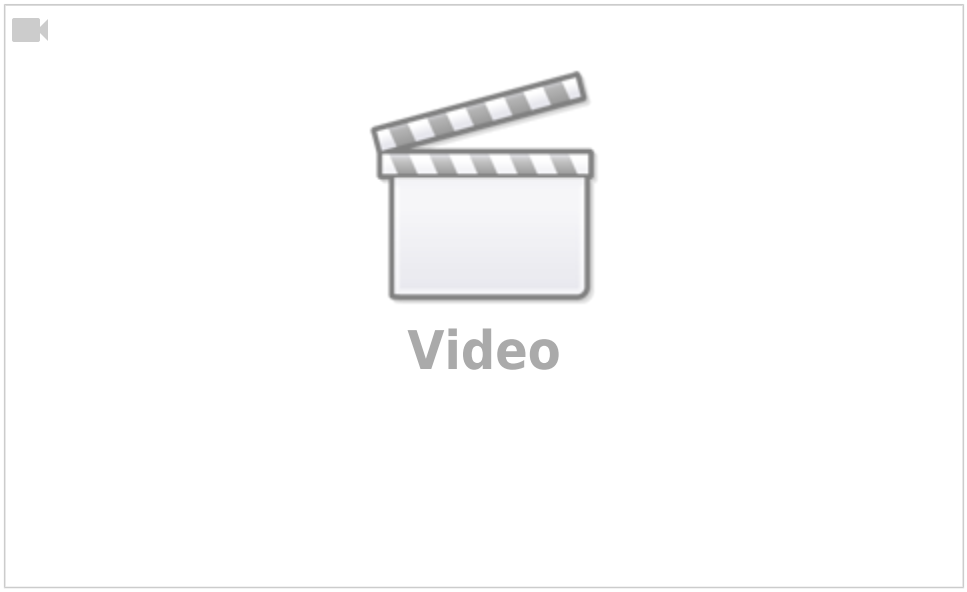
- The first video shows where to download LibreOffice, and how to set the Security settings to allow LibreOffice to run macros: `Tools` → `Options...` → `LibreOffice` → `Security` → `Macro Security` → `Medium`



- 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"
   endif
   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
   next

  ' 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
   next

   ' 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)
      Msgbox("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,
"0000000001111111111222222222233333333334444444445555555555666666666677777777778"
```

```
'    print #num,
"12345678901234567890123456789012345678901234567890123456789012345678901234567890"
'    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      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
599 55"
'    print #num, "QSO: 28375 PH 2003-07-01 1050 VE3KZ          59 ON      VE5SF
59 SK"
'    print #num, "QSO: 50125 PH 2003-07-01 1055 VE3KZ          59 ON      VE3EJ
59 ON"
'    print #num, "QSO: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

      RST = Sheet2.getCellByPosition(3, i).String          'received Signal Report in
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
        'QSO: 14165 PH 2003-07-01 1044 VA1ABC         59 ON      K7AB           59 MB
        'QSO: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

      i = i + 1                                                 '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
a
' Creative Commons Creative Commons Attribution-Share Alike 4.0 Unported License.
' <https://creativecommons.org/licenses/by-sa/4.0>.
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' Provided that you:
'   * Attribute the work to me by linking to
<https://scarcs.ca/howto/contestspreadsheets>
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end sub
```

Winter Field Day Contest

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

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, 2O: 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.

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