

## How to use Chirp to program VHF/UHF radios to participate in the Groton Road Race

This document assumes you have three things:

1. A programming cable that connects your specific radio model to a USB port on a computer. Such a cable may have been included with your radio purchase, you may have obtained one along with programming software from, for example, RT Systems (rtsystemsinc.com), or you may be able to borrow one from an NVARC club member.
2. The file named "Groton Road Race 2018 - Chirp radio programming file (v1.3, origin 1).csv" or something similar to that. The ".csv" file extension refers to the simple text contents in Comma Separated Value format. It is a common data interchange format.
3. Chirp software installed on your computer equipped with with a USB port.

CHIRP is a free, open-source tool for programming channel frequency and other information into your amateur radio. It supports a large number of manufacturers and models, as well as provides a way to interface with multiple data sources and formats.

Full Chirp information and free downloads for Windows, Linux, and Mac are available here:  
(Also at this URL is an extensive list of radios supported by Chirp!)

<https://chirp.danplanet.com/projects/chirp/wiki/Home>

### How to use the ".csv" file

1. Launch the Chirp application. Plug the USB end of your cable into the computer. Leave the other end disconnected for the moment.
2. On the Chirp menu bar, click "Radio" | "Download From Radio"...
3. A Radio dialog will open with selection options for Port, Vendor, and Model.
  - a) First, click Vendor and select the manufacturer of your radio (e.g., Baofeng, iCom, etc.)
  - b) Next, click Model and select the particular model number of your radio (e.g., UV-5R, T70, etc.)
  - c) Last, click Port and choose the name of the Com port assigned to your programming cable (e.g., COM5, COM6). If you aren't sure which COM port corresponds to your cable, choose one and click OK.
  - d) A dialog will appear that instructs you to connect your cable to the radio and power up your radio. Follow these instructions!
  - e) A dialog may appear that warns you that the driver for your radio is experimental, etc., etc., particularly for the Baofeng radios. I have always clicked OK on these dialogs to proceed and never had a problem.
  - f) If you didn't select the correct COM port in step (c), you'll get an error message whereupon you should try the other COM port(s) until you see a "Clone Progress" dialog and a green progress bar indicating your radio's memory locations are being read into a Chirp tab. (In this context, Chirp uses the term "cloning" simply to refer to reading memory contents from the radio-- no radio programming

is yet taking place.)

4. On the Chirp menu bar, click "File" | "Import"...
5. A file folder navigation dialog will open and you should locate the "Groton Road Race... .csv" file you downloaded from the NVARC web site. Select the file and click Open.
6. An "Import From File" dialog will open-- don't make any changes, just click OK.
  - a) At this point you should see the five channels (F1 GRR)..(F5 GRR) designated for the Groton Road Race.
  - b) No changes should be necessary, but if you determine through later testing that they are, make them now.
7. On the Chirp menu bar, click "Radio" | "Upload To Radio". On the Radio dialog that opens, click OK.
  - a) On the Clone Progress dialog that opens you'll see "Cloning to Radio..." and a progress bar.
  - b) When the dialog closes, your radio has been programmed.
  - c) Turn off the radio, disconnect the cable, and test your radio's operation. You may want to have a friend ready to monitor the repeater and verify your transmissions are received on channels F2 and F5. You should be able to contact them directly (without the repeater) on simplex channels F1, F3, and F4.

PLEASE NOTE: These instructions are intended as an aid to programming your radio completely and correctly, but YOU are ultimately responsible for making sure the radio is working properly when you arrive at your post. Please contact one of the several club members listed as support providers if you aren't sure your radio is working properly-- as far in advance as possible before the race begins!

--Jim AB1WQ 4/28/2018

REFERENCE from Ralph KD1SM's Radio Briefing:

- There will be three NETs run during the event:
- Organizational net on F1 147.500 Mhz simplex
- Course safety net on F2 147.345 MHz, + offset, PL 100 (N1MNX, Pepperell)
- Parking net on F3 145.550 MHz simplex
- Course fallback on F4 147.345 MHz simplex, PL 100
- Course safety net backup on F5 442.900 MHz, + offset, PL 100 (N1MNX, Pepperell)