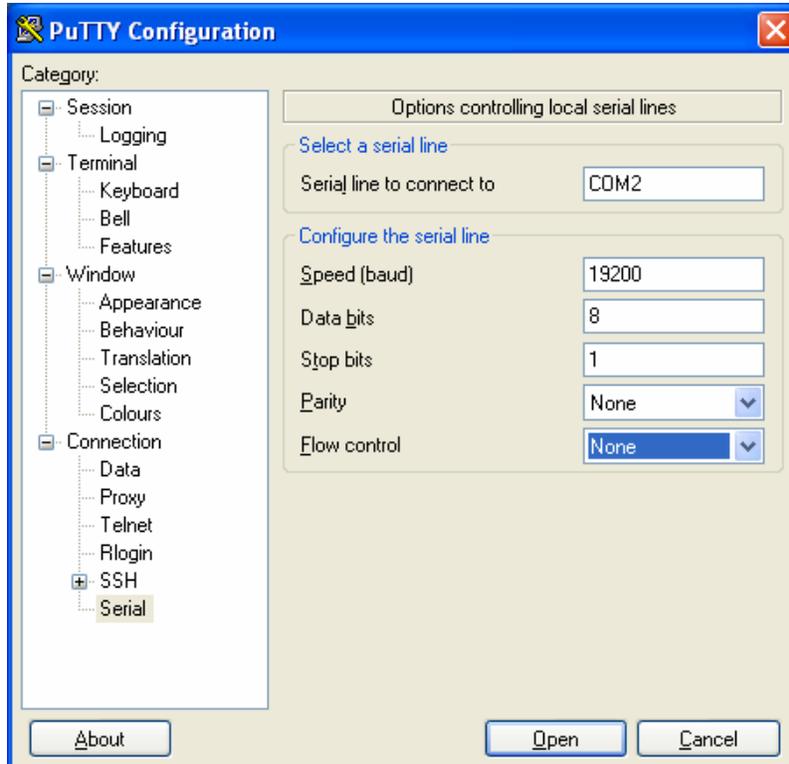


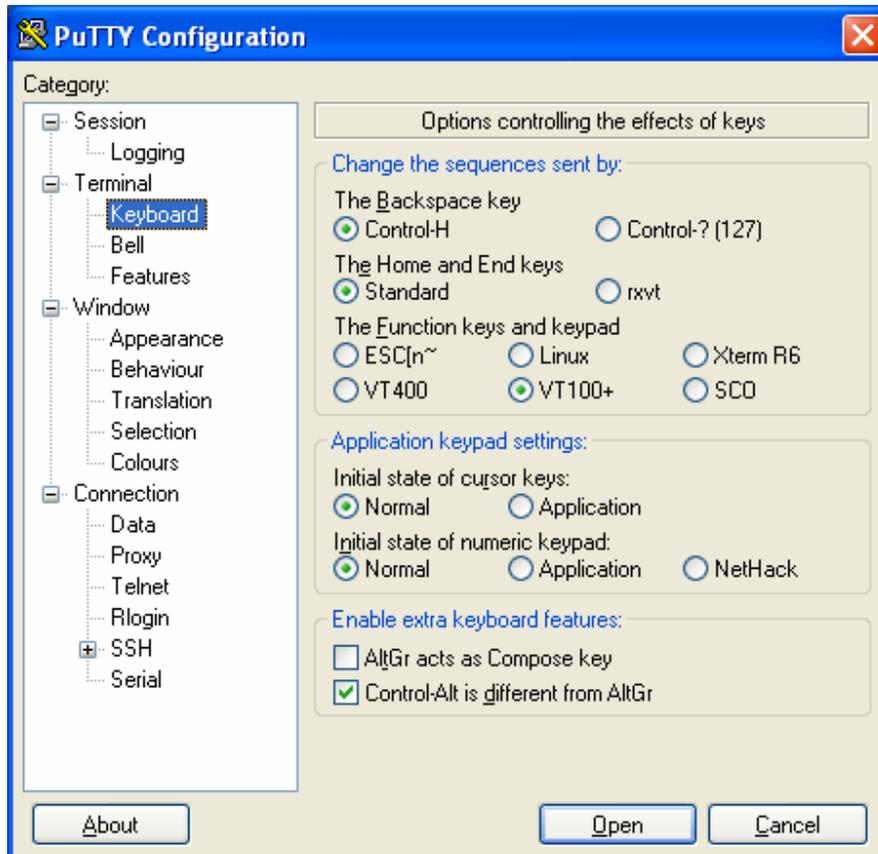
Using PuTTY with the Eggtimer

One of the most popular free terminal emulators is PuTTY, it's been around for a long time and works very well. To use it with the Eggtimer, you'll need to change some configuration settings so that it knows about your serial port.

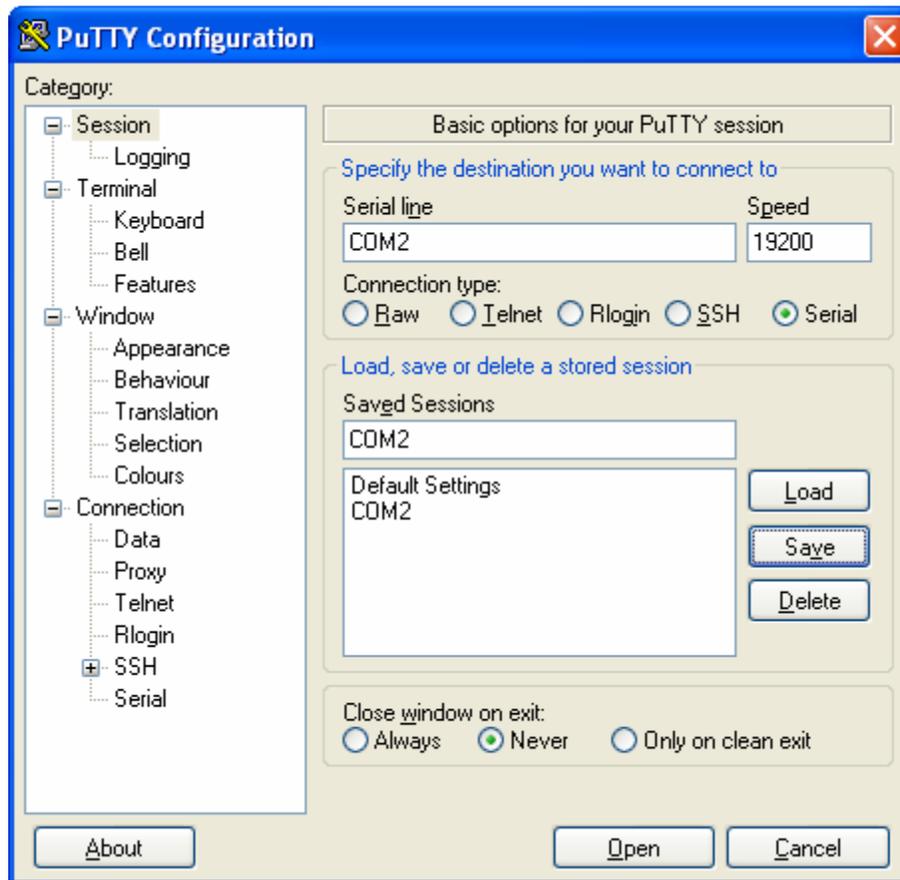
First, launch PuTTY. Go to the Connection/Serial settings, and set it up for your USB cable's serial port. In this case, we're setting it for COM2, at the default baud rate of 19200 baud



Next, you need to change a few settings so that the keys work properly. Go to Terminal/Keyboard, and change the Backspace key to send a CTRL-H, and change the Function keys to VT100.



Next, we need to specify that we're going to use the COM port that we set up earlier, and save the settings for later. Go to Sessions, and check the Serial radio button. Enter the COM port in the dialogue box, and select the proper baud rate (normally 19200). Enter the name of the COM port into the "Saved Sessions" dialogue box and click on Save. The next time you bring up PuTTY, you only need to go to Session, click on the COM2 Saved Session, then Load it.



Connect the cable to the Eggtimer per the instructions, then click on the Open button in PuTTY. You will see a blank text window, power up the Eggtimer and you should see the menu...

```
COM2 - PuTTY
Eggtimer Build_1.49          Flight Settings
T:30.50
P:97178.00
A:1151.78
Main:0
CHB:0
Batt:3.92

A 200 LDA <50-500 by 50>
B 20  Ascent Samples/sec <4,5,8,10,15,20,25,33>
  50  Interval(ms)
C 2   Descent Samples/sec <1,2,4,5,10>
  500 Interval(ms)
D 0   Main Mode <0-Off,1-Igniter,2-Servo CCW,3-Servo CW>
E 250 Main Altitude <100-2000 by 50, 0 @ Apogee>
F 2   Main ON-Time <1-9,0-Cont.>
G 6   CHB Mode <0-Off,1-Igniter,2-Servo CCW,3-Servo CW
      4-Airstart,5-Airstart w/o BW,6-Delay>
H 2   CHB ON-Time <1-9,0-Cont.>
I 1800 Burn Timer <100-20000 ms by 100>
J 20  Airstart/Delay <0-200>
K 0   Airstart Min Velocity (0-700 by 50)
L 0   Telemetry

O      Comments:          8/3/13 BT55 E20-7 Timer@20s

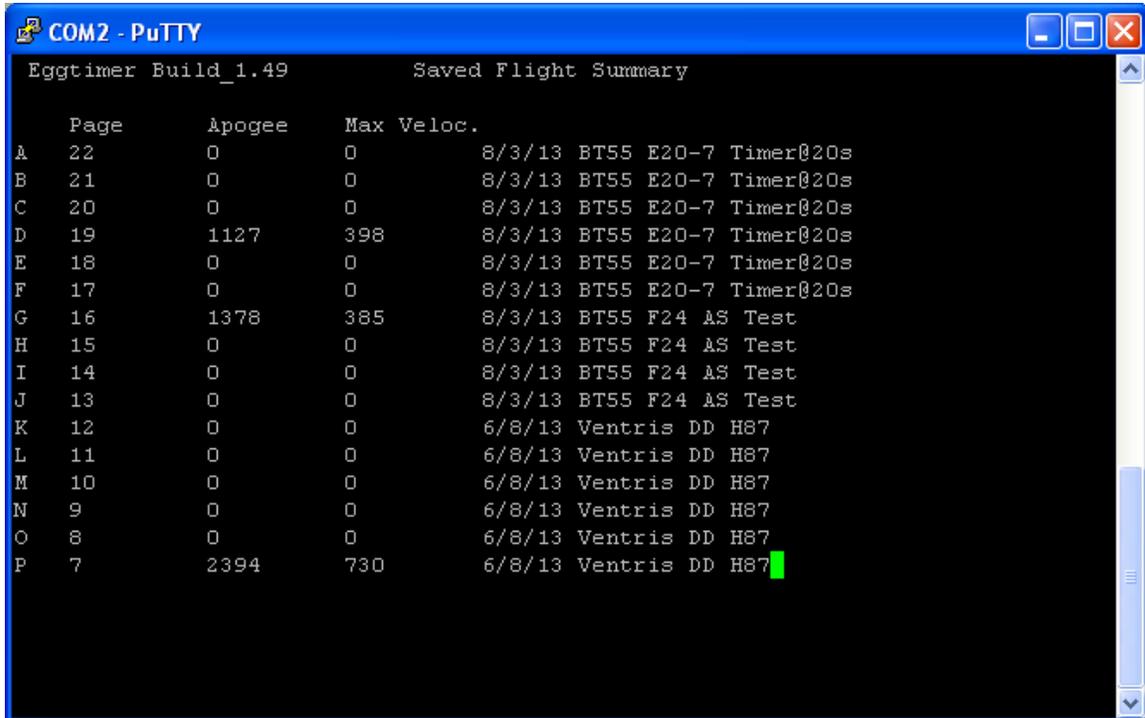
Options:Esc,A-O,?
```

At this point, you are connected to your Eggtimer, you can proceed with programming and downloading as detailed in the Eggtimer Users Guide. When you're done with PuTTY, simply close the window.

Downloading Flights with PuTTY

Downloading flight summary/detail with PuTTY is actually very easy, they just hide the details a little bit.

Connect to the Eggtimer using PuTTY. From the Flight Settings screen, hit the “?” key, you will see the saved flights:

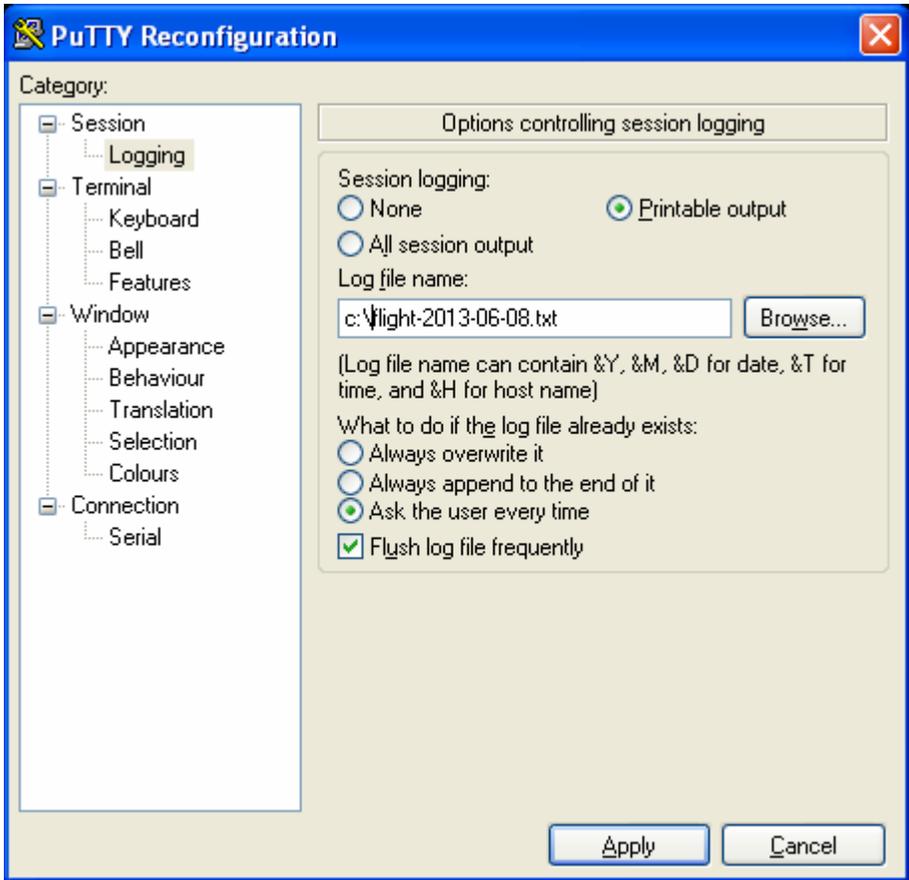


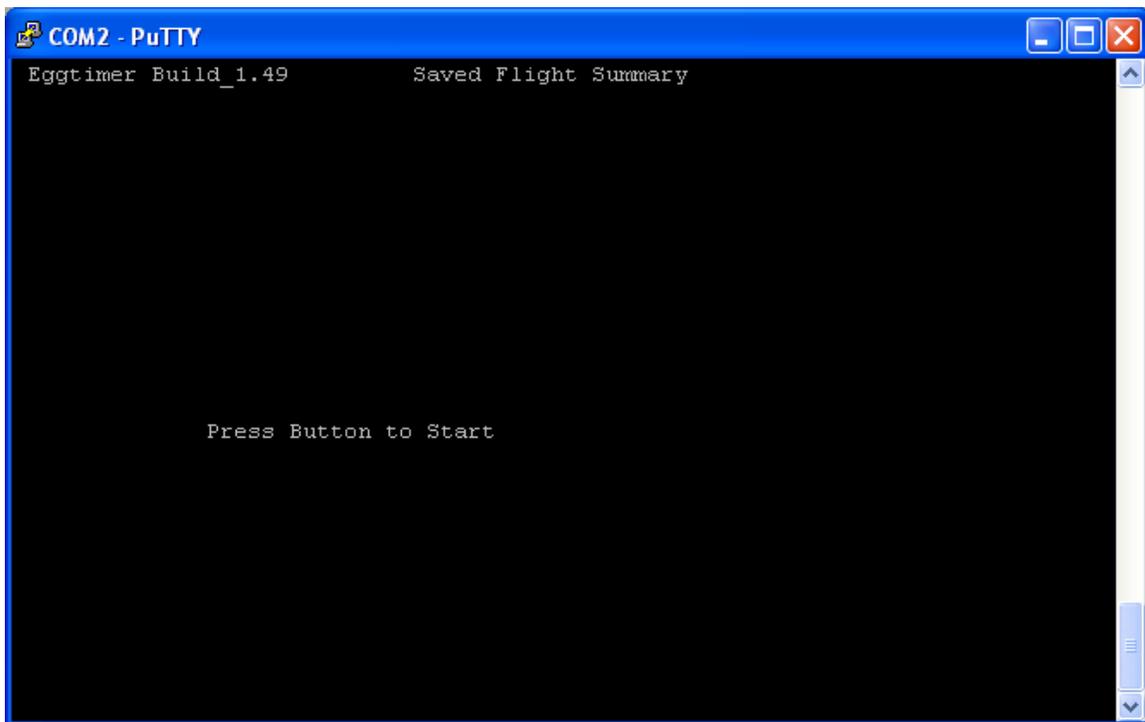
```
COM2 - PuTTY
Eggtimer Build_1.49          Saved Flight Summary

Page      Apogee    Max Veloc.
A 22       0         0          8/3/13 BT55 E20-7 Timer@20s
B 21       0         0          8/3/13 BT55 E20-7 Timer@20s
C 20       0         0          8/3/13 BT55 E20-7 Timer@20s
D 19       1127     398        8/3/13 BT55 E20-7 Timer@20s
E 18       0         0          8/3/13 BT55 E20-7 Timer@20s
F 17       0         0          8/3/13 BT55 E20-7 Timer@20s
G 16       1378     385        8/3/13 BT55 F24 AS Test
H 15       0         0          8/3/13 BT55 F24 AS Test
I 14       0         0          8/3/13 BT55 F24 AS Test
J 13       0         0          8/3/13 BT55 F24 AS Test
K 12       0         0          6/8/13 Ventris DD H87
L 11       0         0          6/8/13 Ventris DD H87
M 10       0         0          6/8/13 Ventris DD H87
N 9        0         0          6/8/13 Ventris DD H87
O 8        0         0          6/8/13 Ventris DD H87
P 7        2394     730        6/8/13 Ventris DD H87
```

Hit the key (A-P) corresponding to the flight you want to download. If it's on the next page, hit the “+” or “-“ key to switch pages. We're going to download flight “P” in this case, so we hit the P key...

Now, RIGHT CLICK on the banner in the window, you will see a pull-down menu. Click on Change Settings, then click on Log. Click on the Printable Text radio box, then enter the name of the flight log that you want to save, using a “.txt” extension, for example “C:\Flight-2013-06-08.txt”, then click on Apply.





Now, press the Button on the Eggtimer. The flight summary data will be downloaded, it only takes about a second.

At the end of the Flight Summary download, the Eggtimer will pause. If you wish, you can close the log and re-open a new log by right-clicking on the bar, and going back to the Logging section and clicking on the None radio box then clicking on Apply. This will close the log. You would then go back and open a new log with a ".csv" extension for the Flight Detail download. Alternatively, you can simply press the button and the flight detail will be appended to your flight summary data. You would simply copy the flight detail from the file, and paste it into a new text file with a .csv extension.

When you're done downloading, both LEDs will flash on the Eggtimer, indicating that it is halted. Power it down, then you can view the Flight Summary .txt file, and import the Flight Detail .csv file into your graphing program. See the Eggtimer web site for information on how to do this (www.eggtimerrocketry.com). An Excel graph will look something like this:

