Here are **instructions for using Hyperterminal** to check if you are receiving GPS and T/H/P data into PFP, collect samples without a pilot display, to reset samples, and/or communicate with a PFP for other reasons.

**Packing list**:

\* USB stick with Hyperterminal files

Alternatively, you may download the needed hypertrm files from this ftp site: ftp://aftp.cmdl.noaa.gov/user/sonja/Hyperterminal

\* XLR to serial cable

\* Serial to USB cable

\* These instructions

**1) Plug USB to Serial adapter into your Windows 7 computer** (some of the following details may vary a little. Definitely works with Windows 10, probably also with Windows 8).

You may need to install a driver for this but hopefully not.

If yes, go to cablestogo.com - Resources - Drivers and Manuals

New page opens up. Click on Drivers - 26886

Download file 26886-Win7(v1210).zip

Then you'll have to install the driver.

**2) In c:\Program Files (or anywhere you want to put this), make New Folder & name it Hyperterminal**

**3) Copy hypertrm.exe and hypertrm.dll into Hyperterminal folder**

**4) Double click on hypertrm.exe**

**5) Default Telnet Program?** This is up to you.... either Yes or No

**6) Hyperterminal will open up.**

**7) "Connection Description" window**

Name: PFP

[OK]

**8) "Connect To" window:**

Connect using: COM# (whichever # comes up)

Remember to use same USB port each time or be prepared to set up the following again for a new COM port

[OK]

**9) "COM# Properties" window:**

Bits per second: 9600

Data bits: 8

Parity: None

Stop bits: 1

Flow control: None

Flow control: None

[OK]

**10) If not already done, connect Serial to XLR cable**

**11) Set up your PFP, PCP, GPS, and T/H probe as if preparing for a flight**. No need to connect pilot display or ozone at this time.

**12) Turn on PCP power.**

**13) Plug computer's XLR cable into PFP**

**14) In Hyperterminal window:**

 Press [Enter] - You should get an AS> prompt

**General Hyper Terminal info:**

At any > prompt, you can press [Enter] to get a list of options in that menu.

Typing the (L)etter within parentheses and then [Enter] will take you

to another menu or carry out a command.

To back out of menus, type (Q)uit and [Enter] as often as needed.

**15) To test temp/humidity/pressure communications:**

 AS>t [Enter]

 TEST>t [Enter]

 You should see temp, humidity and pressure displayed.

**16) To test GPS:**

AS>g [Enter]

You should see lat/lon/alt displayed along w/ number of satellites

Make sure this makes sense. It can initially take from several to ten minutes or so before the GPS is registering its location correctly. Just keep checking.

**17) To collect samples without a pilot display**

AS>m[Enter]

MANUAL>s[Enter]

Sample (1-12): enter the appropriate flask number here[Enter]

Do you wish to proceed with Sampling? (Y/N): \_

 \*\* If you enter a flask number that has already been sampled, you will see

WARNING! This sample already taken!

Do you wish to proceed with sampling? (Y/N): \_

**18) To reset samples:**

AS> s[Enter]

SETUP>s[Enter]

SAMPLE PLAN>a[Enter]

1-12> 1[Enter]

Plan altitude> 25000[Enter] (or whatever your first altitude is)

Plan lat> [Enter]

Plan lon> [Enter]

Plan year> [Enter]

SAMPLE PLAN>

Repeat for as many samples as you need to “add” or reset.

At the end:

SAMPLE PLAN>L[Enter]

This will display the sample plan, so you can verify your data entry

**Important!** Q[Enter] all the way back out to the AS> when you are done or the flask package will not be in sampling mode. Confusion will ensue. The prompt may also say AS>SEMIAUTO or AS>AUTO.

**19) To fix a “memory fault” error on the pilot display:**

AS>**f** [Enter]

FIX MEMORY>**f** [Enter]

!WARNING This operation will update all checksums!

Go for it? (Y/N) **y**

When done, (**Q**)uit back to AS> prompt

**20)** **When you are done**, you can **close Hyperterminal**. It'll ask you if you want to save the "PFP" setup. It could be useful for future use, so I recommend doing that. The default file name will be PFP.ht and it’s helpful if you save it in your Hyperterminal folder so you can easily find it again.