Instructions for Changing Sutron Transmitter Configuration Using a PC

Short summary of what needs to be done:

Option a) Replacing configuration file (*if we sent you a *.sls file, use this option*)

Install Satlink software on laptop, connect to transmitter, OPEN new configuration file (provided by NASA via e-mail), SEND the new configuration to the transmitter.

Or

Option b) Modifying configuration file

Install Satlink software on laptop, connect to transmitter, GET current configuration from the transmitter, CHANGE desired parameter (*Satellite ID, sensor ID, etc.*), SEND the new configuration back to the transmitter.

The details:

You will need **1)** a laptop PC with a RS-232; DB9 (standard serial port) and
2) a normal serial cable (*DB-9 Male-Female cable with straight pin-out configuration*). (Fig1- all figures are also in the manual). A USB-RS232 cable may also be used for laptops that lack a built-in serial port.

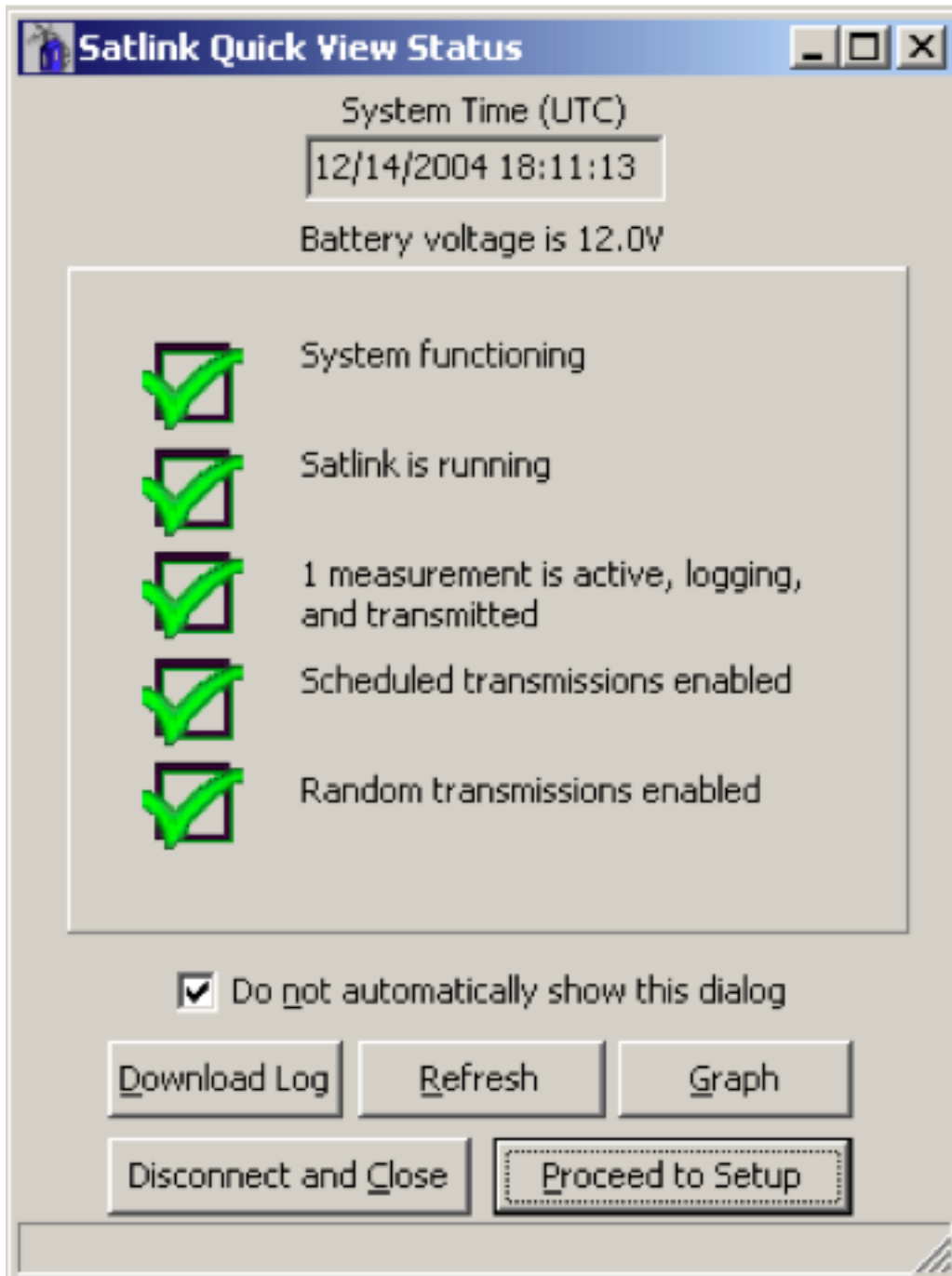1) Download Satlink2 software and install it (only necessary the first time, of course).

http://www.sutron.com/downloads/DownloadsUpdates/SatlinkInstall.exe

There is also a manual here:

http://aeronet.gsfc.nasa.gov/new_web/Documents/satlink_2_user_manual.pdf

2) Disconnect the standard data cable (which connects the Satlink2 to the sunphotometer control box)-- don't forget to reconnect the sunphotometer when finished.

3) Connect PC to Satlink2 transmitter with the serial cable using this port.

4) Start 'Satlink Communicator' program on PC. Choose 'Connect to Satlink Directly' and hit OK. (Fig 2)

It will try to search each Comm port until it finds the one with the transmitter on it. Sometimes this can be a difficult part of the process if it doesn't find the port, but hopefully it will find the satlink port automatically.   If you get the screen of Fig 3, you are in good shape.

Satlink Quick View Status

System Time (UTC)

12/14/2004 18:11:13

Battery voltage is 12.0V

☑ System functioning

☑ Satlink is running

☑ 1 measurement is active, logging, and transmitted

☑ Scheduled transmissions enabled

☑ Random transmissions enabled

☑ Do not automatically show this dialog

[Download Log] [Refresh] [Graph]

[Disconnect and Close] [Proceed to Setup]

Click on 'Proceed to Setup'

5) You should see the standard configuration window, with the 'Main' screen selected. (Fig 4).
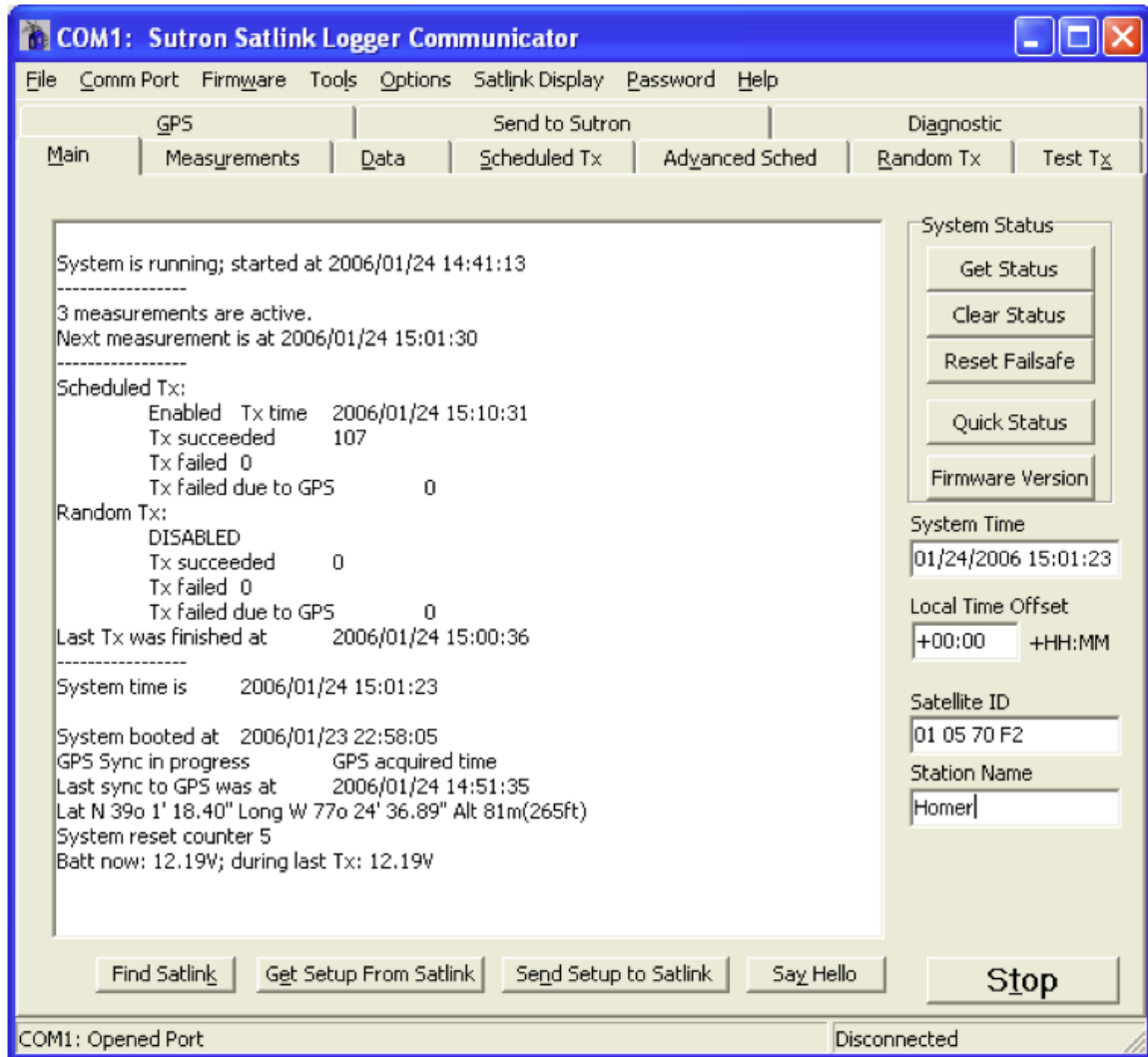
6)
  Option a) **Replacing** the existing configuration with a (*.sls) file from NASA

   Select File---> Open, and navigate to the location of the *.sls file we sent to you. Load this file.

or

   Option b) **Modifying** the existing configuration.

   At the bottom of this screen, select "Get Setup from Satlink"**.   We want to load the current transmitter settings onto the PC.

   Select the windows tab appropriate for the parameter to be changed.

For example:

The Satellite ID can be changed on the MAIN screen (right side)
Other Satellite parameters (channel etc.) are changed on the Scheduled Tx page.
Auxilliary flux sensors are changed on the Measurements page.
Flux data can be downloaded on the Data page.

**Caution:

    For option 6b-- Modifying an existing configuration file always **be sure to 'GET'
the setup** from the transmitter before changing any parameters. This loads all the
current settings into the transmitter software on your PC. This way all the other
current settings on the transmitter will be correct in addition to the ones you modify.
If you 'SEND' the setup to the transmitter before getting the current setup, all the
other settings will be incorrect.

7) At the bottom of the screen, select "Send Setup to Satlink". We want to send the new
(or modified) configuration file back to the Satlink. Choose the option to '**Stop the
system, send the setup, then start the system**'.   (Fig 5) We want the transmitter to
continue operating after the change.
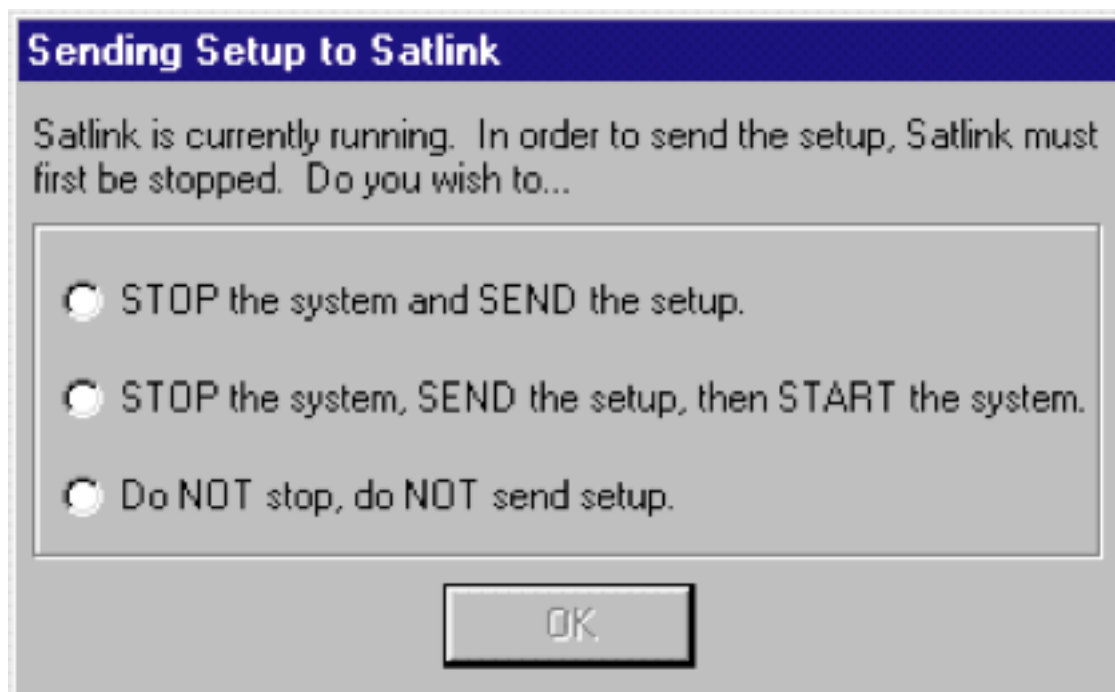
8) On main window, select 'File', then 'Save As' and save the new configuration to your
PC. Send this file to your NASA contact this file later so it can be verified. Keep this
file so you will always have a copy that you can use in case you need to restore the
settings to the Satlink.

9) To finish the session, just click the red 'X' at the top right of the window. **DON'T** press STOP to the end the program. This will stop the transmitter, which we DON'T want.

After clicking the red 'X', you will see the screen of Fig 3 again. Select 'Disconnect and Close'

10) !**RECONNECT** the data cable between the sunphotometer and the Satlink2 transmitter! If this is not done, none of the sunphotometer data will be transmitted.

That's it!