

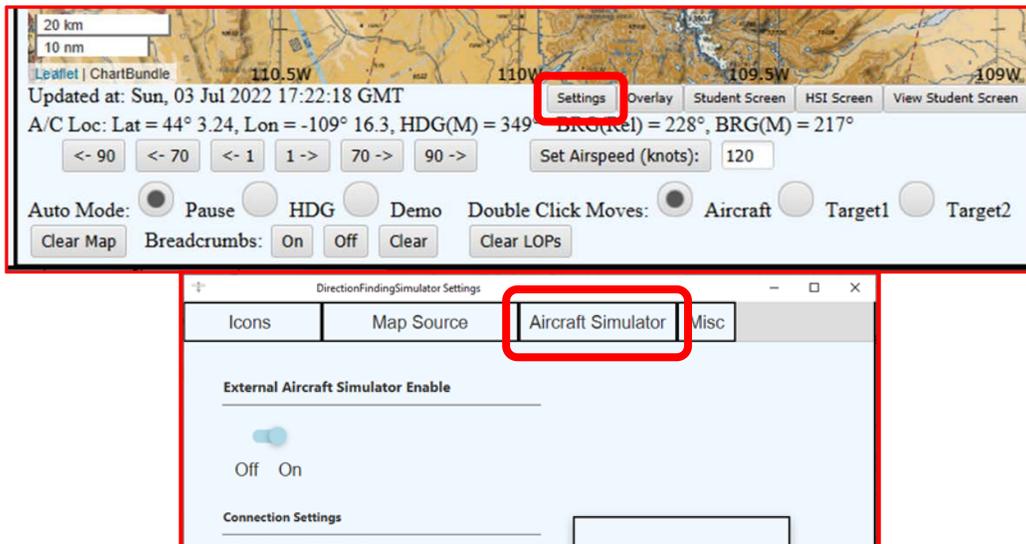
RT600 Mission Simulator User Guide

External Simulator Supplement

The RT600 Mission Simulator has the option to run using a feed from an external flight simulation program. There are two external simulators supported by the RT600 Mission Simulator: 1) X-Plane version 10.11 or newer and 2) Redbird with Corvus from Redbird Flight Simulation Inc.. Although this external flight simulation functionality has been tested to function as described in this document, this functionality only is offered on an “as is” basis and is not guaranteed to work with all versions of the supported flight simulators.

The RT600 Mission Simulator computer and the external simulation computer communicate over wired or WiFi internet protocol thru a DHCP router, must be discoverable and on the same network domain. Please be advised that the router DHCP function may change IP addresses of your computers each time they restart. Care must be taken to ensure the RT600 Mission Simulator and/or the external flight simulator have the correct IP addresses to find each other after each RT600 Mission Simulator startup. The typical setup is as follows:

- 1) Set up your external flight simulator to support external devices per the manufacturer’s instructions. For Redbird simulators, the Corvus software package must be purchased from Redbird and installed on your Redbird computer.
- 2) For the initial setup of the RT600 Mission Simulator, please click the “Settings” tab on the Instructor’s screen, then select the “Aircraft Simulator” tab. Turn on the External Simulator enable switch.

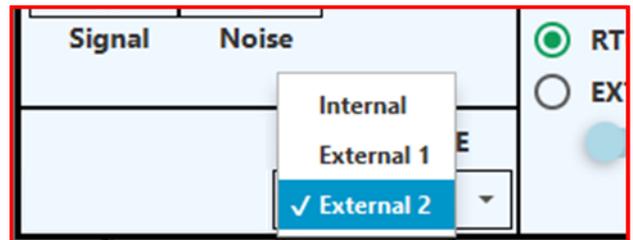
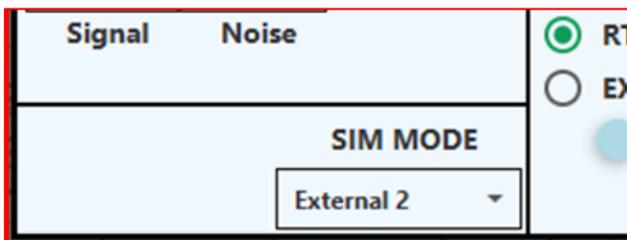


- 3) On the Instructor screen, a “Sim Mode” drop down box will appear in the lower left corner. Select your desired simulation mode:

Internal: Use the RT600 internal aircraft simulator and manual controls on the Instructor’s screen.

External 1: X-Plane external simulation

External 2: Redbird external simulation



- 4) On the Aircraft Simulator tab enter the Connection Settings appropriate for your external simulator:



XPlane (i.e. External 1) settings should be:

- IP address or Hostname of the machine where XPLANE is running.
- Port that XPlane is accepting connections on, usually: 49009

Redbird WITH CORVUS (i.e. External 2) settings should be:

- IP address or Hostname of the machine where the RT600 MISSION SIMULATOR is running.
(See the Instructor Screen Title Bar for recommended initial IP address)
- Port that Redbird is sending to, usually: 4000

IP Address: 192.168.1.12 Firmware Version: 4 COM3

- 5) Recommended procedures for External Simulator ops:

- A. If the Connection Settings aren't pre-populated correctly, enter settings per the above step 4 instructions and click the "Reset Sim Connection" button. On the Instructor screen, check the "Ext Sim RX" light is green. If not, see instructions to determine correct IP address to use. Select the "Reset Sim Connection" button anytime the Connection Settings are changed.
- B. After entering the above settings for the first time, exit the RT600 Mission Simulator program and select "Save and Exit" to save all the external simulator settings.
- C. Thereafter, ALWAYS start RT600 Mission Simulator using "Saved" preferences to ensure the External Simulator mode starts up correctly.

Once connected, the aircraft simulator will drive the RT600 Mission Simulator aircraft location, heading and speed. In this mode, all aircraft location, speed and steering controls in the RT600 Instructor Screen are disabled.

If the optional external LCD Lat/Lon display is being used: on the "Misc" Settings tab ensure the LCD display enable switch is turned ON. If the LCD switch was off, turn it ON, click SAVE, then follow steps B and C in the above External Simulator ops procedure & restart the RT600 Mission Simulator program.

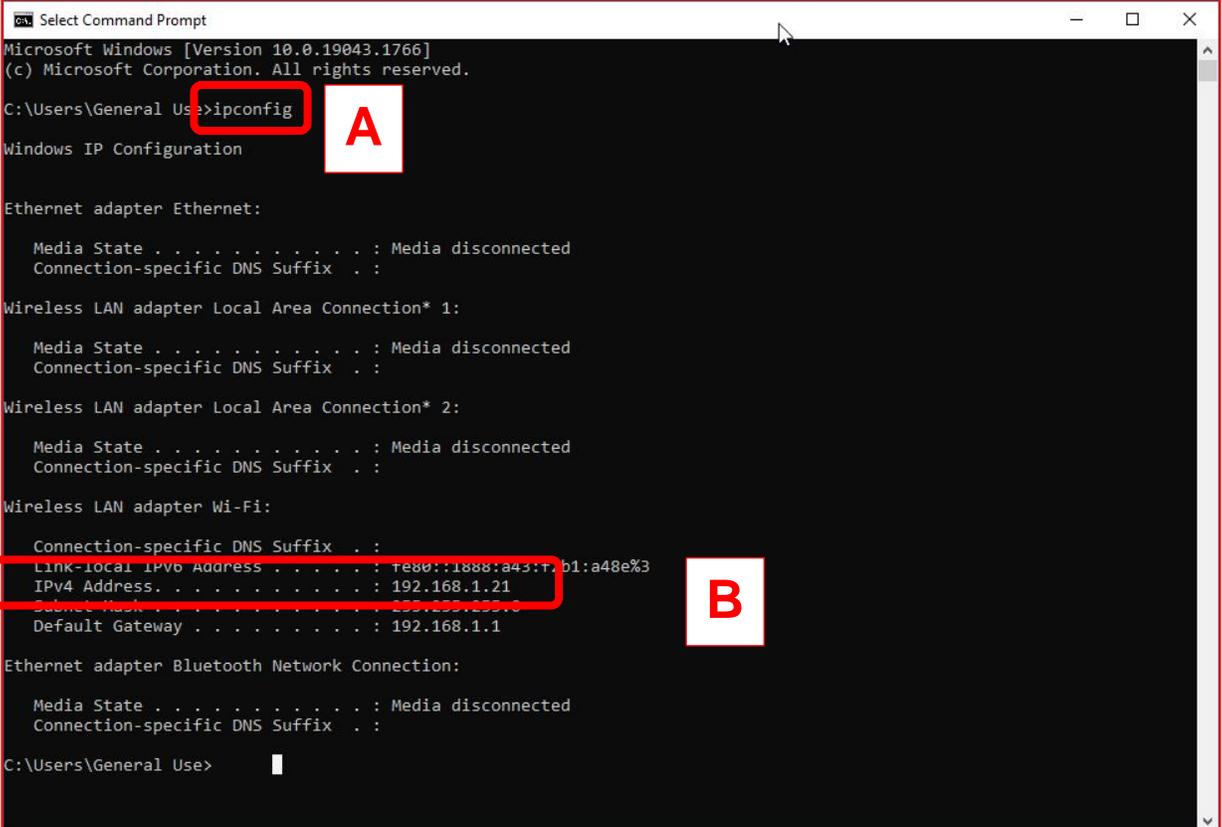
Push button is equivalent to pressing the ESC Key



Lat Lon of aircraft when ESC key was pressed

Notes:

- 1) Redbird setup (External 2): The RT600 Mission Simulator computer will make a best guess as to its own IP. In some cases, this IP could be incorrect (e.g. if you had multiple internet connections). To determine the correct IP of the RT600 Mission Simulator computer, open a command prompt window on the RT600 Mission Simulator computer. **Step A:** Type in ipconfig & enter. **Step B:** Read down and find the IPv4 address of the internet connection type you are using to connect to the Redbird (e.g. Ethernet or wireless). Enter that IPv4 address in the Aircraft Simulator tab.



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Select Command Prompt
Microsoft Windows [Version 10.0.19043.1766]
(c) Microsoft Corporation. All rights reserved.

C:\Users\General Use>ipconfig

Windows IP Configuration

Ethernet adapter Ethernet:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

Wireless LAN adapter Local Area Connection* 1:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

Wireless LAN adapter Local Area Connection* 2:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

Wireless LAN adapter Wi-Fi:

    Connection-specific DNS Suffix  . :
    Link-local IPv6 Address . . . . . : fe80::1888:a43:7b1:a48e%3
    IPv4 Address. . . . . : 192.168.1.21
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.1.1

Ethernet adapter Bluetooth Network Connection:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

C:\Users\General Use>
  
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- 2) X-Plane setup (External 1): To determine the IP address of the computer running your X-Plane simulation, go to that computer and open a command prompt window. Type in ipconfig & enter. Read down and find the IPv4 address of the internet connection type you are using to connect to the RT600 Mission Simulator computer (e.g. Ethernet or wireless). Enter that IPv4 address in the Aircraft Simulator tab.