



# **G1000** Student Simulator

## **General Setup and Recommendations Guide**

*for Standard and Pro Versions*

# **G1000** General Setup and Recommendations Guide **Student Simulator**

Thank you for choosing the Flight1 Aviation Technologies G1000 Student Simulator. This General Setup and Recommendations Guide is provided to help you choose the PC and accessories that we recommend to get the best out of your new training software. Whether you've chosen to use the G1000 Student Simulator with a single PC and single monitor with a joystick, or if you've purchased an F1 Tech 1000 Integrated Training Panel with the G1000 Student Pro version and want a turn-key setup with dual PCs, we've got you covered.

## **SETUP RECOMMENDATIONS**

There are a number of different setup options available depending on what version of the G1000 Student you're using (Standard or Pro), how realistic and immersive you want your training environment to be, and of course, your budget. In this section, we'll detail some more common setups. For more detail about these setups, including specific recommendations in list format, please refer to pages 2 through 5.

**Basic Setup** - G1000 Student Simulator Standard version with a single PC, single monitor and joystick.

**Intermediate Setup** - G1000 Student Simulator Standard version with single or dual PCs, dual monitors and joystick or control yoke. A set of rudder pedals and a throttle quadrant can be added to this setup for increased immersion and added realism.

**Advanced Setup** - F1 Tech 1000 Integrated Training Panel with G1000 Student Simulator Pro, dual PCs, single monitor, MIMO touchscreen portable monitor or tablet, control yoke, rudder pedals and throttle quadrant.

## **PC RECOMMENDATIONS**

Although most PC brands will work well as long as the specifications meet or exceed our recommendations in the Detailed Recommendations Section, we recommend using Jetline PC's. Jetline PC's use high-quality components, are built to your specifications and are optimized out of the box to run Lockheed Martin® Prepar3D™ and Microsoft® Flight Simulator X. For more information, visit [www.jetlinesystems.com](http://www.jetlinesystems.com).



JETLINE  
SYSTEMS



## **MONITOR RECOMMENDATIONS**

For the best experience, we recommend using 27" or larger wide screen LCD or LED monitors. These types of monitors can be mounted on a table or desk, or can be mounted on a dual monitor desk stand to suit your specific setup. Using a larger monitor will make the training experience more immersive and allow you greater flexibility, especially when using only a single monitor. If you're not using the F1 Tech 1000 Integrated Training Panel, touchscreen monitors can be used for greater realism, by allowing you to control the G1000 Student Simulator gauges by touch instead of using a mouse. If you are using the F1 Tech 1000 Integrated Training Panel, a 7" MIMO touchscreen portable monitor or a tablet can be used to view electronic charts and more.



## **FLIGHT CONTROL RECOMMENDATIONS**

The flight controls you choose can vary widely. A simple joystick controller, such as the Logitech Extreme 3D Pro Joystick can be used, or for more realism, you can use a flight yoke, rudder pedals and throttle quadrant like those available from CH Products. For the ultimate in realism, a Flight Console such as the Elite Simulation Pro Panel can be used.



## **ACCESSORY RECOMMENDATIONS**

Accessories include items such as desks and monitor stands. Most setups can simply use a table or basic computer desk. If you're using dual monitors or a single monitor with the F1 Tech 1000 Integrated Training Panel, we recommend using a dual monitor desk stand to mount the monitors one above the other (or above the F1 Tech 1000 Integrated Training Panel). This allows for the most comfort and a more realistic viewing environment. If desired, instead of using a table or basic computer desk, a Versa table could be used. Versa tables often feature height adjustable racks, mounts, accessory trays and more, allowing you customize your setup for the ultimate in comfort and ergonomics.



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## **DETAILED SETUP RECOMMENDATIONS**

We feel that the products and PC specifications we recommend in this section will provide you with the best user experience for that particular setup. Recommendations are current at the time of writing and products and/or specifications may change at any time or no longer be available in the future. If a product is no longer available, please choose a current product that meets or exceeds the recommended specifications to ensure the best user experience.

### **BASIC SETUP RECOMMENDATIONS**

The Basic Setup shown in this section features the G1000 Student Simulator Standard version with a single PC, a single monitor and a joystick. With this setup, the monitor can be mounted on a desk or table and the keyboard and joystick can then be placed in front of the monitor.

In this configuration, both the flight simulation and the G1000 Student Simulator are run on the same PC. The flight simulation window is placed in the top half of the monitor and the G1000 Student Simulator PFD, MFD and Radio Stack windows are placed along the bottom half of the monitor.

 For added realism, a touchscreen monitor can be used instead of a standard monitor, allowing you to control the G1000 Student Simulator gauges by touch instead of using a mouse.



### **Suggested Components:**

- G1000 Student Simulator Standard Version
- Lockheed Martin® Prepar3D™ or Microsoft® Flight Simulator X
- One 27" or Larger Wide Screen Monitor (Touchscreen Monitor Optional)
- Logitech Extreme 3D Pro Joystick
- Single PC Setup:
  - Intel Core i7 (4th Generation) or Greater CPU with Intel Z87 Chipset Motherboard
  - 8GB DDR3 SDRAM at 1866MHz Memory or Greater
  - 2GB Nvidia GeForce GTX 770 or Greater Graphics Card
  - 650 Watt Power Supply or Greater
  - 120GB or Greater Solid State Drive (250GB Recommended)

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## **DETAILED SETUP RECOMMENDATIONS**

### **INTERMEDIATE SETUP RECOMMENDATIONS**

The Intermediate Setup shown in this section features the G1000 Student Simulator Standard version with a single PC (or optional dual PCs), dual monitors and a joystick or flight yoke with optional rudder pedals. With this setup, one monitor can be mounted on a desk or table and the second monitor can be mounted on a monitor stand above the first monitor. The keyboard and joystick (or flight yoke) can be placed in front of the lower monitor. In this configuration, the flight simulation window is placed on the upper monitor and the various G1000 Student Simulator windows are placed on the lower monitor.

Both the flight simulation and the G1000 Student Simulator can run on the same PC. However, if desired, two networked PCs can be used instead. In this configuration, one PC will run the flight simulation and the upper monitor, and the second PC will run the G1000 Student Simulator and the lower monitor. This dual PC configuration will provide improved performance.

 For added realism, a touchscreen monitor can be used to display the various G1000 Student Simulator windows, allowing you to control the G1000 Student Simulator gauges by touch instead of using a mouse.

### **Suggested Components:**

- G1000 Student Simulator Standard Version
- Lockheed Martin® Prepar3D™ or Microsoft® Flight Simulator X
- Two 27" or Larger Wide Screen Monitors (One Touchscreen Monitor Optional)
- Logitech Extreme 3D Pro Joystick or CH Products Flight Sim Yoke
- CH Products Pro Peddles Rudder Pedals (Optional)
- VIVO Stand V002L Dual Monitor Desk Stand for 13" to 27" Monitors
- Single PC Setup (or the Flight Simulation PC in Dual PC Configuration):
  - Intel Core i7 (4th Generation) or Greater CPU with Intel Z87 Chipset Motherboard
  - 8GB DDR3 SDRAM at 1866MHz or Greater Memory
  - 3GB Nvidia GeForce GTX 780 or Greater Graphics Card
  - 650 Watt Power Supply or Greater
  - 250GB or Greater Solid State Drive
- G1000 Student Simulator PC Setup (in Dual PC Configuration):
  - Intel Core i3 (4th Generation) or Greater CPU with Intel H87 or Z87 Chipset Motherboard
  - 4GB DDR3 SDRAM at 1333MHz or Greater Memory
  - Nvidia GeForce GT 620 Graphics Card
  - 500 Watt Power Supply or Greater and 120GB Solid State Drive



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## **DETAILED SETUP RECOMMENDATIONS**

### **ADVANCED SETUP RECOMMENDATIONS**

The Advanced Setup shown in this section features the F1 Tech 1000 Integrated Training Panel and the G1000 Student Simulator Pro version with dual PCs, a single monitor with a MIMO touchscreen portable monitor (or a tablet), a flight yoke, rudder pedals and optional throttle quadrant. With this setup, the F1 Tech 1000 Integrated Training Panel is mounted on a desk or table and the monitor is mounted on a monitor stand above the F1 Tech 1000. The keyboard, flight yoke and optional throttle quadrant can be placed in front of the F1 Tech 1000. A MIMO touchscreen portable monitor or tablet can be placed on the wing mount of the F1 Tech 1000 to view electronic charts and more.

In this configuration two networked PCs are used. One PC will run the flight simulation and the upper monitor, and the second PC will run the F1 Tech 1000 Integrated Training Panel, the G1000 Student Simulator Pro and the MIMO touchscreen portable monitor or tablet.



### **Suggested Components:**

- F1 Tech 1000 Integrated Training Panel with G1000 Student Simulator PRO Version
- Lockheed Martin® Prepar3D™ or Microsoft® Flight Simulator X
- One 27" or Larger Wide Screen Monitor
- One 7" MIMO Touchscreen Portable Monitor or Tablet with Matching USB Cable
- CH Products Flight Sim Yoke with Pro Peddles Rudder Pedals and Throttle Quadrant (Optional)
- Elite Simulation Pro Panel Flight Console (Replaces Yoke and Throttle Quadrant Listed Above)
- VIVO Stand V002L Dual Monitor Desk Stand for 13" to 27" Monitors
- PC Setup for the Flight Simulation External Display:
  - Intel Core i7 (4th Generation) or Greater CPU with Intel Z87 Chipset Motherboard
  - 8GB DDR3 SDRAM at 1866MHz or Greater Memory
  - 2GB Nvidia GeForce GTX 770 or Greater Graphics Card
  - 650 Watt Power Supply or Greater and 250GB or Greater Solid State Drive
- PC Setup for F1 Tech 1000 Integrated Training Panel:
  - Intel Core i3 (4th Generation) or Greater CPU with Intel H87 or Z87 Chipset Motherboard
  - 4GB DDR3 SDRAM at 1333MHz or Greater Memory
  - Two Nvidia GeForce GT 620 Graphics Cards
  - 500 Watt Power Supply or Greater and 120GB Solid State Drive
- To Connect the F1 Tech 1000 Integrated Training Panel to Your PC:
  - Three USB Type-B Cables and Two Monitor Cables of Desired Length with Matching VGA Display Adapters

For a pre-configured FAA-Approved Advanced Aviation Training Device featuring our G1000 Student Simulator Pro and VISPRO Instructor Station, please check out the Elite PI-1000. For more information, visit <http://www.flight1tech.com/Products/AvionicsSimulations/ELITEPI-1000.aspx>.

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## ADDITIONAL SOFTWARE

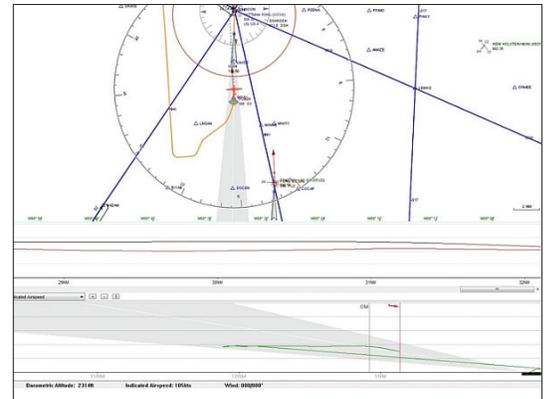
The G1000 Student Simulator in and of itself is a great tool to learn to use the Garmin G1000 and maintain proficiency, and when it's combined with Lockheed Martin® Prepar3D™ or Microsoft® Flight Simulator X, it provides G1000 avionics training in a realistic, dynamic simulation environment. It's the most unique G1000 training solution available.

With the addition of Flight1 Aviation Technologies FITS-inspired training solutions VISPRO and Scenario Builder, you'll have a truly cutting edge suite of training tools that will make learning and maintaining G1000 proficiency unlike anything you've used before.

### VIRTUAL INSTRUCTOR STATION PRO



Flight1 Aviation Technologies Virtual Instructor Station Pro (VISPRO) is standalone software that integrates with Lockheed Martin® Prepar3D™ and Microsoft® Flight Simulator X. VISPRO lets you control the simulation's environment, change the weather, reposition the student's aircraft and trigger malfunctions - all in real time as the simulation is running. It gives you professional-quality tools for monitoring, instruction and analysis.



Designed to be compliant with the FAA's Advanced Aviation Training Device (AATD) requirements for an instructor station, VISPRO can be used as part of an FAA approved training device that students can log hours in (when under the supervision of a certified instructor).

VISPRO and the simulation can be run on two separate PCs over a network, or on the same machine.

For more information or to purchase the Virtual Instructor Station Pro visit:

<http://www.flight1tech.com/Products/InstructorStationSoftware/VISPROVirtualInstructorStation.aspx>

### SCENARIO BUILDER

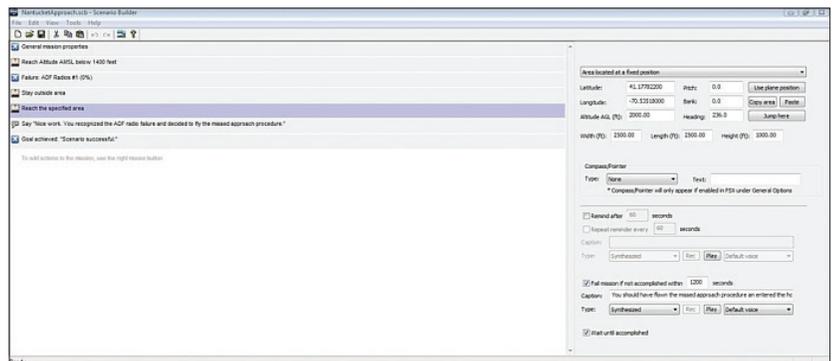


Scenario-based training (SBT) is changing the way pilots learn to fly and stay proficient. Flight1 Aviation Technologies Scenario Builder is a tool that lets you easily create immersive simulation experiences for Lockheed Martin® Prepar3D™ and Microsoft® Flight Simulator X.

Scenario Builder was designed with the FAA/Industry Training Standards (FITS) in mind and is a FITS-accepted product.

It's ideally suited for creating simulation scenarios that focus on Scenario-Based Training (SBT), Single-Pilot Resource Management (SRM), and Learner-Centered Grading (LCG).

Scenario Builder works just like you think, so you don't need to be a computer programmer to use it. With an intuitive interface that's much easier to use than the mission creation tool Lockheed Martin® and Microsoft® provide in their Software Development Kits, Scenario Builder will enable you to quickly create scenarios you can use in training.



For more information or to purchase Scenario Builder visit:

<http://www.flight1tech.com/Products/SimulationDevelopmentTools/ScenarioBuilder.aspx>



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General: [info@flight1tech.com](mailto:info@flight1tech.com)

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