



11. APPENDIX B

11.1 PC Controller and FlightAdventures Software Setup

Our FlightAdventures Weekend-to-Solo™ Adventure is designed for the virtual pilot proficient with Microsoft Flight Simulator 2000®. We've found that the skills developed and knowledge gained from flying Flight Simulator will help you earn your wings. Here are some tips to help you prepare for your FlightAdventure.

Installing FlightAdventures Simulator Aircraft

If Flight Simulator is already running, please shut it down before proceeding.

Insert the Flight Adventures CD into your CD-ROM drive. The install will start automatically. If autorun has been disabled on your system, or it does not function, Explore the CD and double-click on the install icon. Follow the onscreen prompts to complete the installation.

Flying the new aircraft

Start Flight Simulator 2000 and the new aircraft will appear in the "Aircraft: Select Aircraft..." menu. Pertinent information such as checklists and V speeds are available in the aircraft kneeboard (press the F10 to toggle). Note: The instrument panel was created from a photograph from one of our aircraft. After starting the engine we recommend dragging the instrument panel down to reposition it so the letters RPM on the tachometer are just about flush with the bottom of the screen. Saving a Flight with the panel in this position will restore it to the same exact position the next time that you access this flight.

Flying the sample flights

Several sample flights that place you at the airports you'll be flying out of when you attend your Adventure have been included on the CD-ROM. These are accessed from the Flights: Select Flight... menu. We recommend that you begin with the flights with no wind before attempting to fly the flights that feature wind.

Adjusting Controllers

FlightAdventures requires flight yoke and rudder pedal controllers to be used for your simulator training. (You won't develop all of the required skills for flying a Cessna if you fly with a joystick.) But as with all other sims and games, if your controller isn't setup properly, you won't be able to enjoy the proper realistic experience. Here are some configuration notes and solutions for some common problems:

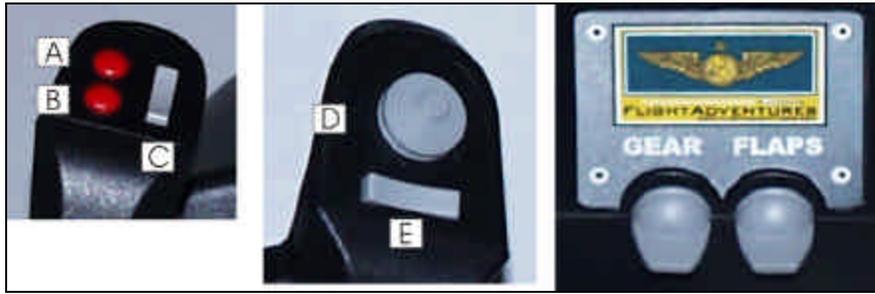
- **Jittering**—Open the Game Controllers applet in Control Panel and if the "Poll with interrupts" enabled box (on the Advanced tab) is checked, uncheck it.



- ✈ **Aircraft don't behave realistically**—Our aircraft were designed using the “Aircraft: Realism Settings...” set to Hard.
- ✈ **Don't have enough control**—Our aircraft were designed to fly correctly with controller sensitivities (found in Options: Controls: Sensitivities...) set to maximum. (See below.)
- ✈ **Control input lag**—Microsoft changed the way controller sensitivities behave right before release. However, not all controllers require this change. To change it from the time delay back to linear adjustment (which we recommend and use when necessary), add the line "stick_sensitivity_mode=0" into the [CONTROLS] section of the FS2000.CFG file.
- ✈ **Controls are too sensitive**—If you've added the “stick_sensitivity_mode=0” line to FS2000.CFG as outlined above, you now need to adjust the controller sensitivities. To properly adjust controller sensitivities, switch to spot view (Shift + S) and pan the view around using the Num Pad keys so that you're viewing the aircraft from the rear. Watch the control surfaces while moving each controller axis and adjust its Sensitivities slider so your controller physically reaches the end of its travel axis at the same exact moment that the control surface reaches its maximum deflection. (If the control surface bottoms out while your controller still has travel left, reduce that axis' sensitivities setting and vice versa.) Once you've got the sensitivities adjusted, reduce elevator sensitivities by four to six increments. (This compensates for the unrealistic over-sensitivity along the simulator's pitch axis.) It takes some effort to do all of this, but it's well worth it.
- ✈ **Unrecognized controllers**—If you can calibrate your controller in Windows Control Panels, Game Controllers applet, but Flight Simulator 2000 doesn't recognize it, rename the FS2000.CFG file from the FS2000 folder and restart Flight Simulator 2000 so it can generate a new version (and re-detect your controller hardware in the process). Be aware that you'll lose any configuration settings you may have made previously because they were stored in the renamed CFG file.

Recommended Control Assignments

The real world versions of the aircraft you'll be flying have many more controls than are available on our recommended flight yoke controllers. Nevertheless, we've found that there are many advantages to configuring your controller buttons to our standardized layout—which place the corresponding functions in their actual locations whenever possible. Please see your Flight Simulator documentation for details on how to reassign control assignments.



- A. Pan view down
- B. Pan view up
- C. Elevator trim (forward down, back up)
- D. Cockpit Views (the USB-version controller features an 8-way switch)
- E. Prop Pitch or Mixture depending on aircraft being simulated

➤ NOTE: For stand-alone use and training operation, we configure the trigger on the left grip as the Pause command.

Enabling Toe Brakes

To enable the toe brakes on our rudder controllers:

1. Launch Flight Simulator 2000.
2. From "Options: Controls: Assignments...", click on the Joystick Axes tab, and select CH Pro Pedals USB from Joystick type combo box.
3. Delete all of axis assignments.
4. Double click on the Rudder assignment, then move your rudder pedals using the left/right rudder movement. Axis 3 should appear as the assignment.
5. Shut down Flight Simulator.
6. Open the fltsim2000.cfg located in your Flight Simulator 2000 directory (i.e. c:\program files\microsoft games\fltsim2000\) using a text editor such as Notepad or Wordpad and search for the heading labeled either [JOYSTICK_00] or [JOYSTICK_01] that contains the rudder axis description "AXIS_EVENT_02=AXIS_RUDDER_SET" below it.
7. Insert the following lines just before the "AXIS_EVENT_02=AXIS_RUDDER_SET" entry:

```
AXIS_EVENT_00=BRAKES_LEFT  
AXIS_SCALE_00=1  
AXIS_NULL_00=127  
AXIS_EVENT_01=BRAKES_RIGHT  
AXIS_SCALE_01=1  
AXIS_NULL_01=127
```
8. Save the changes you have made to the configuration file.



TIP: FlightAdventures-approved yoke and rudder controllers can be purchased directly from FlightAdventures at <http://www.flightadventures.com>.

Maximizing Performance

Like previous versions of Flight Simulator, Flight Simulator 2000 will tax most every system available at the time of its release. There are four things you can do to increase Flight Simulator 2000's performance:

- Download and install the latest patch (upgrade) 2b from <http://www.microsoft.com/games/fs2000>
- Shut down any unnecessary programs—The simplest method is to run *msconfig* from the “Run... menu selection” (click Start, then Run), type in *msconfig*. Click the Startup tab and un-check all unnecessary programs (the only one FS2K requires to run is SystemTray), and restart your system. (Follow the same procedure and enable/check each program again to have these programs load again when you're finished playing FS2K.)
- Reduce the visibility setting in both the World: Weather menu to 10 miles (a realistic real world setting).
- Lower the graphics detail and resolution settings in Flight Simulator 2000 (Options: Settings: Display: Image Quality tab), and set Maximum unlimited visibility: to 60mi.

Online Checkout

To help ensure that you're fully prepared (we want you to solo as much as you do) to get the most out of your Flight Adventure, we'd like to fly with you over the Internet to evaluate your proficiency. Please email a FlightAdventures Instruction Professional at info@flightadventures.com to schedule an online checkout. Checkouts are held in the Flight Rooms on the FlightAdventures Virtual Pilot Center™ at <http://www.flightadventures.com>.

If you've never flown on the “VPC” before, please visit the site, sign up as a member (it's free), and download our software client, which is required to access the VPC Flight Rooms. Another neat program (which is also free) that we recommend is Roger Wilco (<http://www.rogerwilco.com>). Although it isn't required, this program allows you to communicate via voice over the Internet while flying Flight Simulator. Note that Roger Wilco requires a microphone to be fully functional.

—END—