Redbird Simulator Training Syllabus

Getting Started

This is a guide to preparing to use the Redbird FMX simulator. The goal is to introduce you to the simulator and its use as quickly as possible, while ensuring that you have the knowledge required to use it effectively and safely.

Your training will take place in three phases:

1. You will use Redbird's training resources to familiarize yourself with the Redbird Navigator application that manages the simulation environment. (Doing this in advance is cheaper than burning sim time.)
2. You will participate in a (roughly one-hour) hands-on training session with the simulator, led by a trainer who is familiar with the system. Once this is complete you can use the simulator on your own.
3. You can then explore the system, and the associated Redbird training resources as you use the simulator, either by yourself or with a qualified CFI.

The following sections provide information about training resources.

Redbird training resources

Before "flying" the simulator you need to prepare the simulated aircraft environment: aircraft position, weather, and (optionally) equipment failures. You will do this by either loading a prepared scenario (a pre-planned flight configuration) or setting up the simulator yourself.

The simulator flight environment is managed by a web interface—the "Redbird Navigator"—that you can access from the control computer or a mobile phone or tablet. Redbird provides a couple of ways to become familiar with the Navigator software.

Video

This introductory video from Redbird will introduce you to the simulator web interface. It's a bit dry, but it's a lot cheaper to watch this video first than to figure it out while paying for simulator time!

https://www.youtube.com/watch?v=Ur5Knz8B7RM

Web

If you prefer reading to watching a video, Redbird provides a support website that introduces the Redbird software:

https://support.redbirdflight.com/navigator-user-guide

While reading this material, feel free to ignore the discussions of "Login" and "Pilot Key". (You will only need to login to Navigator if you are participating in Redbird's optional GIFT or Pro programs.)

The Redbird support page also provides a link to a downloadable PDF Navigator User Guide.

Hands-on familiarization

The hands-on part of the sim training involves making you familiar with the EAA 292 simulator setup, the control software (Redbird Navigator), and the other resources you will use. The outline below provides the information that your trainer will cover with you.

1. Identify the components of the system (control computer, simulator, motion control system)
   a. Motion control on/off switch
   b. Motion control emergency stop buttons (outside and inside the simulator)
   c. Motion control optical sensors
   d. Areas to avoid when motion control is in operation
2. Power on the control computer
3. Login to the control computer using your Windows account (finger swipe)
4. Check your purchased and remaining time in the simulator control program
5. Start the simulator
6. Introduce the Redbird Navigator application sections (on control computer)
   a. Dispatch
   b. Instructor Station
   c. Scenario Store
   d. User Guide
7. Use the Redbird Navigator to dispatch the simulator:
   a. Free flight (dispatch from anywhere at selected time of day)
   b. Load a saved scenario
   c. Save a scenario
   d. Tag a scenario as one of your favorites
   e. Deleting scenarios (DON'T)
   f. Messing with other peoples' scenarios (DON'T)
   g. Redbird accounts and the Redbird GIFT and Redbird Pro programs
   h. Enabling/disabling motion control for a scenario
8. Use the Redbird simulator instructor station
   a. Reposition the aircraft (airport, intersection, navaid, approach, lat/long)
   b. Set aircraft heading, altitude, speed
   c. Set the simulated weather
   d. Simulated equipment failures
9. Pause and un-pause the simulator
   a. Interaction between loading a scenario and in-cockpit displays while paused
   b. Setting up instrumentation and radios while paused
10. Using the motion system
    a. Restrictions on maneuvering with motion system enabled
    b. Safety while motion system is operational
    c. Faults that require disabling the motion system
11. Simulator cockpit environment: seats, belts, essential controls, headsets
    a. In depth familiarization with cockpits and controls for new pilots is left to CFIs
    b. Headsets are primarily for CFII simulating ATC clearances and vectors
12. (Optional) Use a tablet or phone to control the simulator

      a. Wi-Fi settings (posted in sim room)

      b. Redbird Navigator URL (posted in sim room)

13. (Optional) Use a phone or tablet with Bad Elf GPS simulator

      a. Bluetooth settings

      b. Connection limits: disconnect and disable your device when done

14. (Optional) Switching the FMX panels

      a. Requires special training

      b. Requires two people: it's awkward (and expensive)

15. Use the instructor station to turn off the sim

16. Use the sim control program to re-launch the instructor station if FUBAR-ed

17. Exit from the sim control program

18. Turn off the control computer itself

Exploring on your own: G1000 familiarization

The simulated Cessna 172 is equipped with a G1000 EFIS (PFD, MFD, radios) and backup ASI, AI, and DG.

Some advice: Spend time outside the simulator learning how to use the G1000. You will save time, money, and frustration.

There are a huge number of resources (videos, online courses, books, posters) available for learning about the G1000; some are free, some are not. This list is a starting point to help you find what fits your needs and your wallet:

1. There is a printed G1000 training handbook in the sim room (please leave in the sim room)
2. Search for "G1000 tutorial" on YouTube
3. Search for "G1000 training" with your favorite search engine
4. Search for "G1000" at your favorite pilot store or bookstore
5. Search for "G1000" in the app store for your tablet device

You get the idea.