

EAA Chapter 237 Flight Simulator – User Orientation Program (V5)

Introduction - This document describes the orientation program for facilitating the use of the Chapter 237 flight simulator by chapter members. Because the chapter has made a substantial investment in this equipment, the board would like to be sure that all users are properly trained in the safe and effective use of the system. To that end we have established five levels/areas of orientation. Each level includes a checklist to be followed to ensure that all topics have been covered. The orientation will be led by a qualified trainer. Each level is described below.

Level 1 – This level includes an introduction to the flight sim hardware and software. The orientation consists of a one-on-one session led by a qualified trainer (i.e. someone who has already received the level 1 and level 2 orientation). Topics include how to login and start up the sim software, how to operate the controls, and how to use the various features of the simulator to a basic level of competency. Upon completion of this orientation the student is expected to be able to operate the basic features of the sim without supervision from a trainer.

Level 2 – This level goes into further details of how to operate the various features and options of the sim in order to maximize the effectiveness and productivity of its use. The syllabus for this level consists mostly of viewing several on-line videos provided by PilotWorkshops. Initially, this will also be one-on-one training/viewing of the videos while at the chapter building due to licensing arrangements. Students are also encouraged to purchase their own copy of the training video (at a discount) which will allow the student to watch the videos at their leisure at home. Other options for video-based training will be demonstrated and discussed.

Instructor Level – For flight instructors who may be supervising the student on the sim there are some additional things to know. This includes how to use the Instructors Operating Station (IOS) user interface and how to setup various instrument and equipment failure scenarios for a student's practice flight.. Additional features for replaying and analyzing a previously stored flight will be covered. This primarily consists of video-based training followed by practice flight sessions and discussion. It is recommended that instructors go through the level 1 and level 2 orientation before taking the instructor level orientation.

Technician Level – This training will provide a more in-depth understanding of how the flight sim hardware and software works. This includes details on the X-Plane and Air Manager software and how they work together to make a complete flight sim training system. Various additional utility programs will be covered. Arduino-based interfaces will also be covered. Additional X-Plane and Air Manager configuration options will be covered. Methods of trouble-shooting system problems will also be covered. It is expected that persons who receive this level of training will help to provide on-going support and maintenance of the sim.

Trainer Level – We will need several volunteers to help train new users of the flight sim. To become a trainer you will first need to complete the Level 1 & 2 orientation. Next, you will conduct (i.e. lead) a Level 1 and a Level 2 training session under the supervision of a previously qualified trainer.